The effect of Green Service Delivery and Green Service Support on Green Loyalty mediated by Green Satisfaction in Travel Agent services

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Abstract— **The purpose of this study was to determine the influence of green service practice on green loyalty through green satisfaction in travel agent services. The research method used is a survey method using a questionnaire in the form of a google form. The research population is travel agent service users in the Bali region. The sampling technique used was purposive and accidental sampling. Data analysis was carried out quantitatively with the help of SmartPLS 3. This study found that green service delivery and green service support have a positive strong significant relationship with green satisfaction and green loyalty. Green satisfaction has a positive strong significant relationship with green loyalty. Green satisfaction is able to partially mediate green service delivery and green service support and has a positive strong significant relationship with green loyalty.**

Keywords— Green Service Delivery, Green Service Support, Green Loyalty, Green Satisfaction, Travel Agent services

I. INTRODUCTION

Most research on the impact of environmental management does not pay attention to the importance of green service practices. In addition, there is still little knowledge about how service-oriented companies can increase efforts in providing environmentally friendly services to achieve improved performance through existing environmental management systems [2].

Awareness of being highly committed to preserving the environment is an important factor. The surrounding environment must be maintained and preserved properly so as not to cause environmental problems such as global warming, environmental damage, habitat destruction, air and water pollution and resource depletion. In dealing with environmental problems, companies in various fields must develop new strategies that can ensure environmental preservation. Good consumers have considered green choices to do good for the earth. In carrying out service activities, it is necessary to consider environmental aspects, including in the field of tourism, especially travel agency services [3].

Not only tourism business actors who must be responsible for the impact on the surrounding environment, the implementation of green initiatives must be supported by the commitment and support of tourists. It is stated that the customer's decision to buy or not a green product has a strong influence on implementing green practices [4].

Along with the development of tourism, there are still many customers or consumers who are willing to use green travel agents, which is a market segment that is on the rise, not only because of the characteristics of green travel agents that are more environmentally friendly, but green travel agents can also differentiate themselves from their competitors so that can satisfy market needs.

Green service practice is a green travel agent strategy in increasing service value (added value). This is expected to fulfill customer satisfaction and ultimately influence customer loyalty [2], [5].

According to [7], there are six indicators that can be used to measure consumer loyalty, namely: (1) repeat purchases; (2) resistance to consuming the brand; (3) always like the brand; (4) still choose the brand; (5) belief that the brand is the best; and, (6) recommend the brand to others. If these six indicators are met, the customer concerned is considered to have a very high level of loyalty. [6].

The aim of the research is to obtain a more detailed understanding of the influence of green service practices on customer loyalty directly or through customer satisfaction at travel agencies. Green service practice consists of green service delivery or core service and green service support or after sales service.

II. LITERATURE REVIEW AND HYPOTHESES

A. Green Service Practice

[2] conducted research on green service procedures. This study builds a model that connects the two main green service practices—green service delivery and green service support—with cost and environmental performance using a natural review-

based perspective and contingency theory. The findings of the study demonstrate how offering and encouraging environmentally friendly services helps to lower costs and improve environmental performance. The use of an uncertified environmental management system (EMS) as opposed to a certified EMS, however, has greater effects on performance. This research adds to our understanding of how green service practices affect costs and environmental performance, as well as how EMS can help service-oriented businesses achieve such performance.

Research conducted by [3] on the relationship between green image and green trust, green image and green satisfaction, green trust and green loyalty, green satisfaction and green loyalty, green image and green loyalty, and to explain the role of environment friendly trust and environment friendly satisfaction in mediating the relationship between green image and green loyalty. Research samples were 100 guests who had stayed more than 2 times at the Bali Tropic Resort & Spa Hotel. Data analysis using Smart PLS. This study found that green image has a positive relationship with green trust, green satisfaction, and green loyalty. Green trust and green satisfaction have a positive relationship with green loyalty. Green trust and green satisfaction are able to mediate partially and have a positive relationship with green loyalty.

Research on green service was conducted by [6] with the title "The Influence of Green Marketing and Service Quality on Customer Loyalty with Customer Satisfaction as an Intervening Variable (Case Study at Starbucks Coffee Surabaya City)". A quantitative approach with descriptive and causal analysis using SmartPLS tool method. 385 customers of Starbuck Coffee of the city of Surara baya were taken as samples. Non-probability technique was applied. The finding concluded that environment friendly marketing and quality service create effect significantly and positively on loyalty of customers mediated by satisfaction of customers.

[8] researched the Effect of Green Product, Servicescape and Service Quality on Consumer Satisfaction at Nature-Based Restaurants. In relation with accidental sampling quota, it was determined that 60 consumer respondents ate at the Kampoeng Rawa restaurant during March 2021. The results showed that there was a positive and significant effect of service quality and servicescape variables on restaurant customer satisfaction. Green products have no significant effect. Furthermore, sustainable restaurant service management will have an impact on its contribution to the economy of private owners, BUMDES owners and the surrounding community who become employees. Restaurants that are managed by paying attention to service quality and an attractive surrounding atmosphere can lead to satisfaction for restaurant consumers.

Research [9] on the Role of Environmental Care, Perception of Green Value, Norm Subjective and Environment Trust on Environment Hotel Buying intentions. This research uses an empirical study using a survey method using a questionnaire to verify the hypothesis and to explore its managerial implications. The results of the analysis reveal that all factors contribute significantly to green purchase intention.

The position of this research is different from the previous research. This research examines the influence of green service practices on customer loyalty directly or through customer satisfaction at travel agencies. The independent variables used in this research are green service delivery (X1) and green service support (X2), the mediator variable is green satisfaction (Y) while the dependent variable is green loyalty (Z).

B. Hypotheses

H1: Green service delivery has a significant effect on green loyalty in Travel Agent..

H2: Green service delivery has a significant effect on green satisfaction at Travel Agent.

H3: Green service support has a significant effect on green satisfaction at Travel Agent..

H4: Green service support has a significant effect on green loyalty in Travel Agent.

H5: Green satisfaction has a significant effect on green loyalty in Travel Agent.

III. RESEARCH METHOD

The method used in this study is a survey method using a questionnaire. Questionnaires were distributed to travel agent service users in the Bali region. The sample was determined by purposive sampling aimed at travel agent service users and by accidental sampling, questionnaires were given to respondents who happened to be found [1]. Literature study was also carried out in this research process.

Instrument testing will be carried out on the questionnaire to determine its validity and reliability before being used on the entire targeted sample. The purpose of the Test Instrument is to improve sentence structure and choose the right words so they don't have double meanings so that the questionnaire becomes clear and can be answered correctly by the respondent.

Validity means the ability of a questionnaire to measure variable indicators precisely and carefully. The validity test in this study was carried out on data from questionnaires that had been filled out by respondents using the SmartPLS 3 [23]. The questionnaire instrument will be declared valid if it has a loading factor item greater than or equal to 0.5, a KMO value greater than or equal to 0.5, cumulative explained variance less than or equal to 0.5 and an eigen factor value of at least 1.0.

Reliability Test aims to determine the reliability of the questionnaire. In the reliability test with SmartPLS 3, after being filled in by the respondent, the questionnaire is declared reliable or reliable if it has a construct reliability (CR) value greater than or equal to 0.7, and has an extracted (VE) value greater than or equal to 0.5. The questionnaire was tested on 30 respondents who were part of the population.

Valid data from the questionnaire is processed using SmartPLS 3. The structural model of this study can be seen in Figure 1. Data analysis in this study was carried out in three stages, namely measurement of outer model, inner model, and hypothesis testing. Outer model analysis is carried out to ensure that the measurements taken are feasible, valid, and reliable by determining the connection between vague variables and their measured parts. At this stage we look for convergent validity and discriminant validity. The convergent validity value is the loading factor value on the latent variable (construct) and its indicators.

The indicator is declared valid convergent if the value of the loading factor (λ) $>= 0.5$ [20]. The reliability test was carried out using Composite Reliability indicators and Cronbach's Alpha [21]. Inner model analysis is carried out after the evaluation of the measurement model has been successfully carried out so that it shows valid and reliable results on all research indicators. Path diagrams that have been valid are run again using the bootstrapping method. In the bootstrapping method there is an option to fill in the amount of resampling. [22] recommends using a total of 5000 data resampling. Structural model evaluation is carried out based on the value of R-Square ($R2$), and predictive relevance (model fit) [24]; [25]. Research hypothesis testing is measured by assessing the Path Coefficient (Mean, STDEV, T-Values) in the T-statistics column.

IV. RESULTS AND DISCUSSION

The first stage in data analysis is the outer model. This is done by measuring the validity and reliability. Validity measurement uses two regulatory indicators, namely using convergent validity and discriminant validity evaluations, while reliability measurement uses Cronbach's alpha and composite reliability.

A. Evaluation of the measurement model (outer model)

In connection with the indicators that make up the latent variables in this study are reflective, the evaluation of the measurement model (outer model), to measure the validity and reliability of these indicators is as follows:

1) Convergent Validity

The results of calculation for the outer loading show all indicators of construct have an outer loading value > 0.50. It means they valid [31].

2) Discriminant Validity

The calculation result shows that the AVE value of all constructs is > 0.50, so it meets the valid requirements based on the discriminant validity criteria [31].

3) Composite Reliability and Cronbach Alpha

The result of analysis denote that composite reliability and Cronbach alpha have a value greater than 0.70. as a measurement of reliability between indicator blocks in the research model. It meets the reliable requirements based on the composite reliability criteria.

B. Evaluation of the Structural Model (Inner Model)

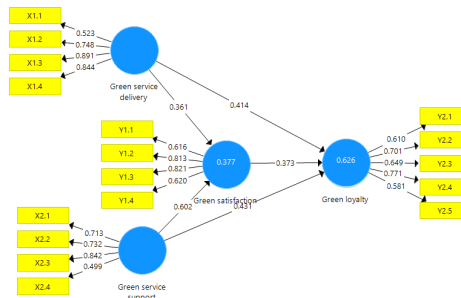Figure 1 shows the relationship between constructs, significance value and R-square.

Figure 1. The Structure of Model

C. Testing Hypothesis

TABLE 1. Testing Hypothesis

Variables	Original Sample (O)	T Statistics (|O/STDEV|)	P Values	Remarks
Green service delivery -> green loyalty in Travel Agent	0,414	2,609	0,009	accepted
Green service delivery -> green satisfaction in Travel Agent	0,361	2,134	0,033	accepted
Green service support -> green loyalty in Travel Agent	0,431	3,264	0,001	accepted
Green service support -> green satisfaction in Travel Agent	0,602	7,511	0,000	accepted
Green satisfaction -> green loyalty in Travel Agent	0,373	3,000	0,003	accepted

Table 1 above shows that all hypotheses are accepted because all of the significance values are <0.05.

Table 1 shows coefficient value of 0.414 with a t-value of 2.609 and a p value (significance) of 0.009 <0.05, which means that significant influence exists positively from Green service delivery on Green loyalty in Travel Agent services. The higher the Green service delivery, the higher the Green loyalty in Travel Agent services. This is in line with research from [6], [30], [2], [29], and [19].

Table 1 shows coefficient value of 0.361 with a t-value of 2.134 and a p value (significance) of 0.033 <0.05, which means that a positive significant influence from Green service delivery on Green satisfaction in Travel Agent services. The higher the Green service delivery, the higher the Green satisfaction in travel agency services. Analysis result was suitable with research result of [9], [27], [28], [21], and [2].

Table 1 shows the path coefficient value of 0.431 with a calculated t-value of 3.264 and a p value (significance) of 0.001<0.05, which means that there is a significant positive influence from Green service support on Green loyalty in Travel Agent services. The higher the Green service support, the higher the Green loyalty in Travel Agent services. This is in line with the research results of [6], [25], [22].

Table 1 shows coefficient value of 0.602 with a calculated t-value of 7.511 and a p value (significance) of 0.000 <0.05, which means a positive significant influence from Green service support on Green satisfaction in Travel Agent services. The higher the Green service support, the higher the Green satisfaction in Travel Agent services. This is in line with the research results of [3], [30], [14], [2], and [11]. That was the most influential determinant seen from the largest t-count number.

Table 1 shows coefficient value of 0.373 with a t-value of 3.000 and a p value (significance) of 0.003 <0.05, which means that it exists a positive and significant influence from Green satisfaction on Green loyalty in Travel Agent services. The higher the Green satisfaction, the higher the Green loyalty in Travel Agent services. This is in line with research from [8], [3], [26], [16], [17], [10] and [12].

V. CONCLUSSIONS AND SUGGESTIONS

Green service delivery makes a significant relationship with green satisfaction. The stronger the green service delivery at Travel Agent in Bali, the higher the level of green satisfaction from service users. Green service delivery owns a significant relationship with green loyalty. The stronger the green service delivery at travel agent in Bali, the higher the level of green loyalty from service users. Green service support owns significant relationship with green satisfaction. The stronger the green service support at travel agent in Bali, the higher the level of green satisfaction from travel agent service users. Green service support creates significant relationship with green loyalty. The stronger the green service support at travel agent in Bali, the higher green loyalty level from travel agent service users.

Travel agents' managers and stakeholders are suggested to implement green service practice and pay attention on the green service support or after sales services.

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