The Role of Green Marketing Innovation in Establishing Sustainable Tourism Based on Green Customers at An Indonesian Tourism Village

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ABSTRACT

The aim of this research was to analyze the direct effect of green marketing innovation and green customer on sustainable tourism, and to explore the mediating role of green customer on the effect of green marketing innovation on sustainable of tourism village in Kesiman Kertalangu, Denpasar, Bali. The population of this research was the tourists who visited Kesiman Kertalangu. There were 180 tourists being the respondents of this research. The data was analyzed using SEM-PLS. This study revealed that Green marketing innovation and green customer had positive and significant effects on sustainable tourism. Furthermore, Green customer significantly mediated the effects of green marketing innovation on sustainable tourism. Green marketing helps to create awareness and educate tourists about environmentally friendly tourism, while green customers drive demand and put pressure on the industry to adapt to sustainable practices. Collaboration between the two can create a more environmentally friendly tourism ecosystem and support the preservation of nature and culture in the future.

1. INTRODUCTION

The existence of natural and cultural resources in Bali has contributed greatly to the tourism industry. The scope of guidelines for sustainable tourism destinations based on the Regulation of the Minister of Tourism and Creative Economy of the Republic of Indonesia number 9 of 2021, concerning guidelines for tourism destination, including sustainable management, social and economic sustainability, cultural sustainability and environmental sustainability. The Regulation from Governor of Bali number 28 in 2020 regarding Bali Tourism Management, explains that tourism entrepreneurs are obliged to provide quality, competitive, natural and environmentally friendly tourism goods and services. Kesiman Kertalangu Tourism Village is one of the tourist villages in Denpasar that provides the nature of agriculture and culture through the culinary creative economy and an agriculture-based tourism destination.

Developing green customer in Kertalangu Tourism Village can be one way to support environmental sustainability and the local economy (Harris et al., 2002; Hawkins, 2004; Hjalager, 2010). Green customers refer to tourists or customers who care about sustainability, both in terms of choosing products, services, and activities they choose when visiting a place (Yusof et al., 2017). However, there are several problems faced in developing green customers in Kertalangu Tourism Village, namely 1) Many tourists do not understand the importance of environmentally friendly tourism and sustainability. Tourists do not know how to choose places or activities that support environmental conservation. Education about the importance of choosing sustainable tourist destinations needs to be improved. 2) Kertalangu Tourism Village, like most other tourism villages, has limited infrastructure to support the concept of green tourism. For example, waste management, water treatment, use of renewable energy, or facilities that support environmentally friendly tourism. Investment is needed to improve and

provide facilities that support the concept of sustainability. 3) Effective promotion and marketing are essential to attract green customers (Baktash & Talib, 2019; Chang & Fong, 2010; Yusof et al., 2017). However, if Kertalangu Tourism Village is not well-known enough or does not have the right marketing strategy to reach the environmentally conscious tourist segment, the development of green customers will be hampered. Counseling on the benefits of environmentally friendly tourism can be part of a broader promotion. 4) Tourists are accustomed to the concept of mass tourism which is more detrimental to the environment, such as high-consumption tourism and the use of single-use plastics. Changing this behavior can be a big challenge, as tourists need to be encouraged to change their habits and choose more environmentally responsible destinations.

Previous study revealed that green marketing mix has a positive and significant effect on green customers and tourists intentions to maintain the sustainability of tourist villages (Yusof et al., 2017). Green Marketing can improve environmental quality, company profitability and local community economic growth (Chang & Fong, 2010). Green marketing has a significant positive impact on sustainable tourism (Amir et al., 2015). However, other research revealed that there were several of marketing mix variables did not influence green customer behavior. Product and promotion influenced purchasing decisions, but variable price and place has no effect on purchasing decisions. Mediating factors were also shown in research regarding consumer attitudes, stating that attitude variables were also proven to be able to mediate the influence of green marketing on the intention to purchase environmentally friendly products, founds that the Kertalangu Cultural Village has not utilized an effective and efficient promotion mix. Based on the result of previous researches, there are gap in how innovative green marketing mix influence the development of sustainable tourism.

This study proposes green customer as a mediating variable to solve the research gap. Green innovation is the main driver in achieving development in a sustainable manner and aims to reduce the negative impact of each stage of the product life cycle on the environment and nature [9]. Green innovation is one strategy that can help to improve a company's reputation and added value [10].According to [11], marketing is a process of identifying ways to meet human and social needs. Green marketing is a marketing mix planning process that takes advantage of changes in consumer awareness towards more environmentally friendly products/services by changing products, manufacturing and packaging methods that are more environmentally friendly in order to satisfy and meet consumer needs and reduce negative impacts on the environment and also encourage consumers to care more about the environment. The marketing mix theory according to [12] suggests that the 4P marketing approach, namely product, price, place and promotion, is often successful for goods, but various additional elements require attention and a distribution system. The green marketing mix concept is an evolution of the marketing mix concept that was introduced previously, namely the 4P concept (product, price, place, promotion), with the addition of certain elements that can strengthen the green marketing concept. Triple bottom line theory according to [13], as economic prosperity, environmental quality, and social justice. Triple bottom line can be concluded as a disclosure concept consisting of three pillars in performance measurement, namely Economic, Environmental, Social (EES) or the general term 3P (Profit, People & Planet).

Green customer theory revealed that environmental friendly consumers are defined as people who adopt environmentally friendly behavior and who purchase environmentally friendly products over standard alternatives. Tourism is all tourism activities which have various disciplines and various dimensions to meet the needs of everyone, interactions between tourists and tourists, tourists and local communities, government and entrepreneurs involved (Spenceley et al., 2019). Sustainable tourism is tourism that takes into account current and future economic, social and environmental impacts, meets the needs of visitors, industry, the

environment and local communities and can be applied to all forms of tourism activities in all types of tourist destinations, including mass tourism and various other types of tourism activities (Harris et al., 2002; Hawkins, 2004). A tourist village is a village that has the potential for tourist attraction seen from the character of the natural and social environment of the community in the village which is managed and packaged in an attractive and natural manner supported by existing tourist facilities. The relationship between variables of this research, namely green marketing innovation, green consumers and sustainable tourism is shown on figure 1.
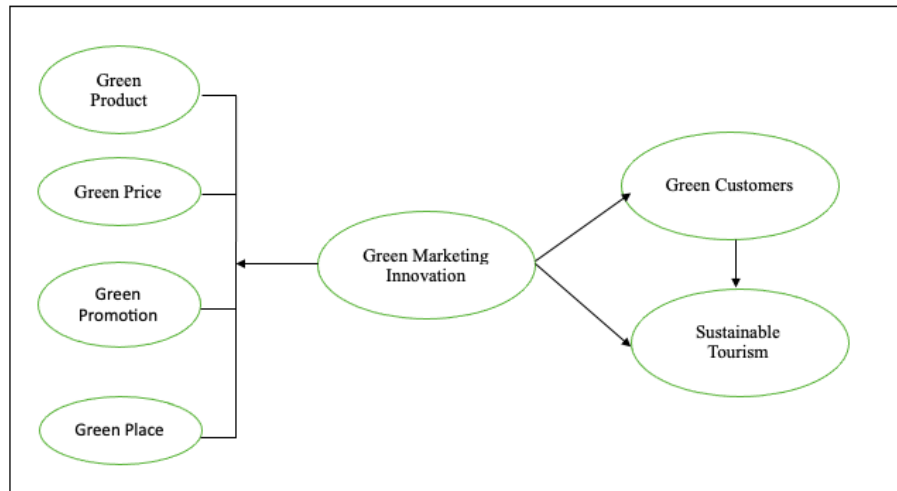

Figure 1. Research Conceptual

Based on the background, literature review, and research framework, there are 4 hypotesis of this research:

1. Green marketing innovation has significant and positive impact on sustainable tourism.
2. Green marketing innovation has significant and positive impact on green customer.
3. Green customer innovation has significant and positive impact on sustainable tourism.
4. Green marketing innovation has significant and positive impact on sustainable tourism mediated by green customer.

2. METHOD

This research was a quantitative analysis approach that used partial least squares structural equation modeling (PLS-SEM) (Hair et al., 2011). Taking the research location at Kesiman Kertalangu Tourism Village. The objects research were Teba Majelangu, Jogging Track Subak Padang Galak and Warung Nasi Tekor, all of which are in the tourist area of Kertalangu Cultural Village. The population of the research were the tourists who visited Kesiman Kertalangu Tourism Village. The respondents were chosen based on purposive sampling technique, with two criterias: 1) Visitors were over 18 years of age, 2) Tourists who have visited the either one of Warung Nasi Tekor, Teba Majelangu & Subak Padang Jogging Track. The total of respondents were 180 tourists.

3. RESULTS AND DISCUSSION

Results

Characteristics of Respondents; Table 1 below shows the characteristics of the respondents in this study classified by age, gender, and educational attainment. Table 1 shows that there were 46 respondents aged 18-28 years or 25.6%. There were 34 respondents aged >28-38 years or 18.9%. Respondents aged >38-48 years were 45 respondents or 25.0%.

Meanwhile, respondents aged >48-58 years were 44 respondents or 24.4%, and >58 years were 11 respondents or 6.1%. From this data, the majority of respondents were visitors aged 18-28 years, indicating that this age group is interested in educational tourism, wellness through jogging tracks and culinary tourism. Based on gender, it shows that of the 180 respondents, there were 67.8% or 122 people who were male and 32.2% or 58 people who were female. And based on the latest level of education, respondents with a senior high school education were 22.8% or 41 people. Respondents with a diploma education were 10% or 18 people. Respondents with an education level of bachelor were 41.1% or 74 people. Respondents who had postgraduate education were 26.1% or 47 people.

Table 1. Characteristics of Respondents

Age	18–28 years old	46	25.6
	>28–38 years	34	18.9
	>38–48 years	45	25
	>48–58 years	44	24.4
	>58 years	11	6.1
	Total	180	100
Gender	Male	122	67.8
	Female	58	32.2
Education	Senior High School	41	22.8
	Diploma	18	10
	Bachelor	74	41.1
	Postgraduate	47	26.1
	Total	180	100

Validity Test Results

Validity testing is carried out to measure whether a questionnaire is valid or not. A measured variable is said to be valid if it has a convergent validity value greater than 0.50. The validity test results are shown in table 2 below. Table 2 shows that all statement items in the Green Marketing Innovation variable have value Average Variance Extracted (AVE) more than 0.5, statement item on the variable green customer also has value Average Variance Extracted (AVE) more than 0.5. Likewise, all statement items in the sustainable tourism variable have an Average Variance Extracted (AVE) value of more than 0.5, so all statement items in the research instrument are valid and suitable for use as a research instrument.

Table 2. Validity Test Results

No	Variable	Indicator	Pearson correlation	Remark
1m	Green Marketing Innovation (X)	X1	0.529	Valid
		X1.1	0.768	Valid
		X1.2	0.677	Valid
		X1.3	0.799	Valid
		X1.4	0.687	Valid
2	Green Customer (Y1)	Y1	0.646	Valid
		Y1.1	0.79	Valid

		Y1.2	0.828	Valid
		Y1.3	0.818	Valid
3	Sustainable Tourism (Y2)	Y2	0.787	Valid
		Y2.1	0.607	Valid
		Y2.2	0.724	Valid
		Y2.3	0.796	Valid
		Y2.4	0.906	Valid
		Y2.5	0.919	Valid

Reliability

The reliability test for an instrument is a measure of the stability and consistency of respondents in answering matters related to the question dimensions of a variable and arranged in a questionnaire form, which is presented in table 3 below.

Table 3. Reliability Test Results

No.	Variable	Composite Reliability	Cronbach Alpha (a)	Remark
1	Green Marketing Innovation	0,930	0,918	Reliable
2	Green _Product	0,908	0,849	Reliable
3	Green_Place	0,862	0,759	Reliable
4	Green_Price	0,923	0,874	Reliable
5	Green_Promotion	0,868	0,772	Reliable
6	Green Customer	0,943	0,931	Reliable
7	Environmental_Awareness	0,919	0,867	Reliable
8	Green_Consumer Behavior	0,935	0,896	Reliable
9	Attitudes Towards Sustainable	0,931	0,888	Reliable
10	Sustainable Tourism	0,912	0,896	Reliable
11	Tourist_Satisfaction	0,823	0,778	Reliable
12	Socio_Economic Impact	0,884	0,789	Reliable
13	Cultural_Impact	0,921	0,868	Reliable
14	Environmental Impact	0,966	0,947	Reliable
15	Sustainable Tourism Destination Management	0,972	0,956	Reliable

The reliability test results presented in Table 3 show that all research instruments have a Composite Reliability coefficient above 0.60 and have a Cronbach's Alpha coefficient of more

than 0.70. So it can be stated that all variables have met the reliability or reliability requirements so that they can be used to conduct research.

Measurement Model Evaluation (Measurement Model/Outer Model)

Convergent Validity

An indicator is considered valid if it has an outer loading value above 0.5 and a T-Statistic value above 1.96 (at large degrees of freedom or n = 500, the statistics are close to Z. Meanwhile, α = 0.05 is a critical value of 1.96). Based on the results of the PLS method data processing, each of the remaining indicators ranges from 0.755 to 0.981, so all the research indicators that form the research variables are valid. All indicators are capable of measuring variables. p value is 0.000 which is significant at an alpha level of 0.07. This proves that the indicators that form the latent variable are valid and significant.

Discriminant Validity

An indicator is declared valid if it has the highest loading factor on the target construct compared to the loading factor on other constructs. Based on the PLS data processing in the research, it shows that the loading factor for the green marketing innovation indicator has a higher loading factor than the construct with other green customer and sustainable tourism variables. Likewise, the green customer variable is higher than green marketing innovation and sustainable tourism. Then the sustainable tourism variable is higher than green marketing innovation and green customer.

Composite Reliability

A variable has good reliability if it has a value composite reliability above 0.60 and value alpha (α) Cronbach above 0.70. Calculation results composite reliability and Cronbach alpha in this research the process with the SmartPLS program in this research is explained in table 4 below. Based on Table 4 regarding the calculation results composite reliability And Cronbach alpha, shows that value composite reliability ranged between 0.912 - 0.943 and value Cronbach alpha ranges between 0.896 – 0.931 Good composite reliability nor Cronbach alpha shows a value above 0.70, this means that the variables in this research model are reliable.

Table 4 Calculation Results Composite Reliability And Cronbach Alpha

Variable	*Composite Reliability*	*Cronbach's Alpha*
Green Customer	0,943	0,931
Sustainable Tourism	0,912	0,896

Structural Model Evaluation (Structural Model/Inner Model)

The Structural Model or Inner Model consists of Goddess of Fit The model is measured using R-square predictive relevance for structural models. Q-square predictive relevance for structural models, measuring how well the observation values are produced by the model and also the estimated parameters. The value $Q2 > O$ indicates the model has predictive relevance. The quantity $Q2$ has a value in the range $0 < Q2 < 1$.

Evaluation of Structural Models Through R-Square (R^2)

Table 5 shows the R2 value Green Customer 0.768 means that green marketing innovation has a strong influence on green customer The R2 value of sustainable tourism is

0.498 which is classified as moderate, indicating that green marketing innovation has a moderate effect on sustainable tourism.

Table 5 R-Calculation Results Square and AVE

Variable	R- *Square*	AVE
Green Customer	0,768	0,646
Sustainable Tourism	0,498	0,787

Structural Model Evaluation

Q-Square Predictive Relevance (Q2)

The Q-Square Predictive Relevance (Q2) value ranges from 0 (zero) to 1 (one). The closer the value of Q-Square Predictive Relevance (Q2) is to 0, it indicates that the research model is weak, while on the contrary, the closer it is to the value of 1 (one), this means that the research model is strong. The formula for calculating Q-Square Predictive Relevance (Q2), Latan and Ghozali (2015: 80) is:

$$Q2 = 1 - (1 - R^2_1)(1 - R^2_2)$$
$$= 1 - (1 - 0,768)(1 - 0,498)$$
$$= 1 - (0,232)(0,502)$$
$$= 1 - (0,1164)$$
$$= 0,8836$$

The Q2 calculation result of 0.8836 shows that 88.3% of the model can be explained through the relationship between variables in the research model, while the remaining 11.7% is other factors outside the research model. Referring to the criteria for the strength and weakness of the model based on the Q-Square Predictive Relevance (Q2) value, this model is classified as a strong model.

Hypotheses Evaluation

Based on the results of data processing, the following relationships can be made between variables

Table 6 The relationship between green marketing innovation, green customer and sustainable tourism

Hypotheses	Interrelationships variable	Path Coefficient	T Statistics	P Values	Remark
H1	Green Marketing Innovation ➡ Green Customer	0,876	44,089	0.000	Accepted
H2	Green Marketing Innovation ➡ Sustainable Tourism	0,308	2,359	0,019	Accepted
H3	Green Customer ➡ Sustainable tourism	0,419	3,495	0,001	Accepted

H4	Green Marketing Innovation → Green Customer	0,367	3,460	0,001	Accepted

Based on the data in table 6, it can be described that the value between green marketing innovation and green customers is 0.876 with a t-statistic coefficient of 44.089 and a significance value of 0.000 <0.05. The results of this test prove hypothesis 1 (H1), which states that green marketing innovation is green customers have a positive and significant influence on green customers, which is acceptable. The second influence regarding the value of the green marketing innovation variable on sustainable tourism is 0.308 with a t-statistic value of 2.359 and a significance value of 0.019 <0.05. This means that hypothesis 2 (H2), which states that green marketing innovation has a positive and significant effect on sustainable tourism can be proven. And the value of the variable green customer to sustainable tourism of 0.419 with a t-statistic value of 3.495 and a significance value of 0.001 <0.05. This means that hypothesis 2 (H2), which states that green customer a positive and significant effect on sustainable tourism can be proven. The influence of green marketing innovation on sustainable tourism through green customers as a mediating variable, shows a t-statistic coefficient of 3.460 and a significant of 0.001 <0.05, so it can be concluded that hypothesis 4 (H4), which states that Green Customers significantly mediate the influence of green marketing innovation on sustainable tourism, can be accepted.

Discussion

This research revealed that green marketing innovation has significant and positive effect on green customers. It shows that green marketing mix innovations, namely green product, green place, green price and green promotion have a positive and significant influence on green customers. This means that green marketing innovation can increase green consumers' decisions to visit the Kesiman Kertalangu Tourism Village. The influence of green marketing innovation on sustainable tourism shows that green marketing innovation has a positive and significant effect on sustainable tourism. This means that green marketing innovation in the green marketing mix (green product, green price, green place, green promotion) can strengthen sustainable tourism by having a good impact on the natural, environmental, social, cultural and economic communities around the village (Baktash & Talib, 2019; Font & Tribe, 2001; Furqan et al., 2016; Meler & Ham, 2012).

The influence of green customers on sustainable tourism in the Kertalangu tourist village shows that green customers have a positive and significant influence on sustainable tourism. It is in line with the research findings by. This means that green consumer behavior when visiting the Kesiman Kertalangu Tourism Village has a positive influence and impact in supporting sustainable tourism. The influence of green marketing innovation on sustainable tourism through green customers as a mediating variable, stating that green customers significantly mediate the influence of green marketing innovation on sustainable tourism. This shows the behavior of green customers as a bridge between the influence of green marketing innovation on green customers and sustainable tourism (Chang & Fong, 2010; Ibnou-Laaroussi et al., 2020; Soesanta et al., 2023).

Green marketing innovation is the most influential variable in sustainable tourism. Indicators of strategic and green locations support public awareness of environmental care and indicators of venues that are traditionally designed using environmentally friendly building materials received the greatest assessment. These green places are a strength for tourist destinations in the Kesiman Kertalangu Tourism Village, so they should be maintained by the

management in their operations. So that the goals of sustainable tourism are understood by green customer (Furqan et al., 2016; Yusof et al., 2017). This innovation in green marketing can be further enhanced by increasing the ability of content creators to be able to explain the power of local wisdom in protecting nature and culture in the promotions carried out (Ibnou-Laaroussi et al., 2020; Singsomboon, 2014). The content was created to provide more detailed education regarding the uniqueness and advantages of traveling to the Kesiman Kertalangu Tourism Village in concept green tourism with dimensions in green marketing innovation, including green product, green price, green place and green promotion. Green customer as a mediating variable, it has a role in realizing sustainable tourism, seen from the interest of tourists in visiting the Kesiman Kertalangu Tourism Village because business actors use environmentally friendly products (Meler & Ham, 2012). This is a green product innovation that is unique compared to other villages, whose quality needs to be maintained and strengthened by the management. (Font & Tribe, 2001; Furqan et al., 2016). To be able to convey messages directly to green customers, managers can add environmental awareness messages and maintain local natural and cultural wisdom through local guides who interact directly with visitors. It can also be grown through sign boards that call for preserving nature and culture, as well as signs that contain a brief explanation of spots with tourism potential offered at Teba Majelangu, Jogging Track and Warung Nasi Tekor as well as strengthening digital in each of these destinations.

4. CONCLUSION

The purpose of the research was to analyze the influence of green marketing innovation and green customer towards sustainable tourism. This study revealed that green marketing innovation has a significant and positive influence on green customer and sustainable tourism. Green customer has a positive and significant effect on sustainable tourism. Green customer significantly mediates the influence of green marketing innovation on sustainable tourism. It means that green marketing innovation and green customer play key roles in order to develop sustainable tourism at Kesiman Kertalangu Tourism Village.

Solutions to increase awareness of managers and tourists regarding the importance of green tourism to realize sustainable tourism are 1) Holding educational programs and campaigns that emphasize the importance of sustainability in tourism. This can be done through social media, seminars, or collaboration with schools and communities. 2) Investing in infrastructure that supports sustainability, such as good waste management, renewable energy systems, and the provision of environmentally friendly facilities. 3) Using online platforms and social media to promote Kertalangu Tourism Village as an environmentally friendly destination that offers unique experiences and supports nature conservation. 4 Involving local communities in the management and development of environmentally friendly tourism to create a better sense of ownership and sustainability. If these problems can be resolved properly, Kertalangu Tourism Village has the potential to develop as an environmentally friendly tourist destination that is attractive to green customers. Future research directions should focus on improvement of green place quality related to waste management and tourists' green awareness.

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