The influence of website design, e-service quality, and e-recovery service quality of Lampung ecotourism on visitor satisfaction

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ABSTRACT
The most crucial factor is that tourism managers must be able to adapt to technological advances, which must make it easier for tourists or visitors to access or make transactions if tourists are going to travel to tourist areas. Given how strategic the tourism sector is, it can become a new model and strategy in national economic development, accompanied by digitalizing services to make it easier for consumers or tourists. This study intends to show the Effect of Website Design, E-Service Quality, and E-Recovery Service Quality Ecotourism Lampung on Visitor Satisfaction in Kiluan Bay and Pahawang Island. The research background is because many ecotourism areas are starting to adapt to increasingly rapid technological developments. However, differences do not match this in the design, good electronic services, and services when problems occur in electronic services. This study uses a quantitative research method with a correlational approach. Methods of data collection are done by distributing questionnaires and documentation. There are two research instrument testing methods, namely validity and reliability tests. The data analysis method is the Correlation Test and Multiple Linear Regression Analysis. The results showed a significant effect of Website Design, E-Service Quality, and E-Recovery Service Quality on Visitor Satisfaction, which was 0.245, and the coefficient of determination (R Square) was 0.090. It can be concluded that the Effect of Website Design, E-Service Quality, E-Recovery Service Quality Ecotourism Lampung on Visitor Satisfaction in Kiluan Bay and Pahawang Island is in a Low category.

KEYWORDS
Website Design; E-Service Quality; E-Recovery Service Quality; Visitor Satisfaction; Ecotourism

Introduction
The potential for natural tourism in Indonesia is enormous. However, the tourism industry cannot be alone and needs help from government organizations and other regions. In terms of tourism services, of course, simple access is needed, such as roads or transportation, excellent service, tourist objects that can be enjoyed both in terms of documentation or good taste, as well as places that are under the wishes of tourists. However, the most crucial factor is that tourism managers must be able to adapt to technological advances, which must make it easier for tourists or visitors to access or make transactions if tourists are going to travel to tourist areas. Given how strategic the tourism sector is, it can become a new model and strategy in national economic development, accompanied by digitalizing services to make it easier for consumers or tourists.

Lampung is the southernmost province of the island of Sumatra, Indonesia. A strategic geographical position, namely the transit gate between the islands of Sumatra and Java, which the Sunda Strait separates, makes Lampung Province a target for tourists both from the people of Lampung itself and even tourists from outside Lampung to foreign tourists. The Ministry of Tourism also carries out a marketing development strategy through the Ordinary Program (Branding, Advertising, Selling), namely Branding Wonderful Indonesia as a significant world tourism destination (Kemenparekraf, 2020). Of course, from this program, business actors, in this case, ecotourism managers, must present beautiful tourism designs accompanied by quality electronic services and solutions when problems occur with electronic services.

E-Service Quality is a questionnaire to measure the magnitude of service quality. For example, now tourist attractions are aware of the need for tourism websites which are increasingly important in the world of tourism. For companies to be competitive and to stay in business, they must satisfy and offer as good value as most competitors. Tourists are company assets, so the management of tourism companies must try their best to overcome service-related problems. Because researchers will conduct research on visitor satisfaction according to the website page, all this time, the services provided to ecotourism managers in Lampung have played a significant role. The role is in the realm of the information displayed that has accurate and relevant completeness accompanied by guarantees of privacy for visitors and gives an excellent impression to visitors—the visual appeal.

So to realize and measure customer satisfaction correctly, it is necessary to design a website, E-Service Quality, and E-Recovery Service Quality on visitor satisfaction. Management will get many benefits by making proper website...
design, E-Service Quality, and E-Service Quality recovery. In this case, Ecotourism Lampung, the results of website design, E-Service Quality, and E-Recovery Service Quality are valid for the progress of Lampung ecotourism, both evaluation and input. The reason is that in the future, management will make breakthroughs or innovations for the good and progress of Lampung ecotourism tourism concerning the environment’s external and internal market.

Literature review

Management

According to Henry Fayol, management is the process of planning, organizing, coordinating, and supervising or controlling existing resources to achieve goals effectively and efficiently. According to G.R. Terry, management is a separate process which consists of actions such as planning, organizing, implementing, and controlling, which are carried out through the use of human resources and other resources to achieve the goals that have been set. Management is a very ideal concept. Management is the process of planning, organizing, directing and controlling the efforts of members of the organization and the use of other organizational resources in order to achieve the stated organizational goals (Stoner, 1982). Management is a distinct process and consists of planning, organizing, actuating and controlling which are carried out to determine and achieve stated goals through the utilization of human resources and other sources (Winardi, 2002). If viewed from the perspective of tourism management in general, including ecotourism, it will include three components, namely the place as the regional landscape with its eco-lodge and ecotourism products (destination), visitors and local communities (host community) (Muchrodi et al., 2017).

Marketing Management

According to (Philip, 2003), marketing management is the art and science of selecting target markets and acquiring, retaining, and growing customers by creating, communicating, and delivering superior customer value. Furthermore, the American Marketing Association (AMA) defines marketing management as the planning and implementing of pricing, promotion, and distribution of ideas, goods, and services to create exchanges that meet individual and organizational goals. Furthermore (Philip, 2003) also stated that marketing is the art of creating genuine customer value, and marketing is helping customers to be better. According to Porter M. E., (1998), Marketing management employs tools from economics and competitive strategy to analyze the industry context in which the firm operates. These include Porter’s five forces, analysis of strategic groups of competitors, value chain analysis and others.

Website Design

Web design is an integral part of developing a website, as a website is considered high quality if it is not only functional but also artistic and aesthetic, as well as the user interface of the website itself. According to Boone (Thomson), web design is a collection of graphical and interconnected resources on the great Internet. According to Gregory (2000), a collection of linked web pages and their documents are interrelated. Usually, a web consists of pages or pages commonly called home pages. Web design is key to achieve positive outcomes on users online shopping behaviour (Garett, 2016).

E-Service Quality

E-Service Quality, according to Zeithaml, Parasuraman, and Maholtra (2002), is characterized as the capacity of a website to provide an attractive and productive office for web-based shopping, online purchasing, and obtaining labour and products. Usual Help Quality is different than expected and implemented in an ebanking administration framework. This is because there are differences and unique cycles in the regulation of e-banking operations. The importance of administrative quality and difficulties faced by e-banking administration requires knowledge for the board concerning client attributes that will be used in assessing the nature of this electronic administration (Yang & Peterson, 2004).

E-Recovery Service Quality

According to Anton Tirta Komara’s (2014) research, E-Recovery Service Quality is a service provided by consumers when there is a service failure or consumer dissatisfaction with services provided electronically. Widiatmika et al. (2017) interpret E-Recovery Service Quality as intended to overcome discrepancies in service quality expectations below customer expectations. Riski Taufik Hidayah et al. (2017) state that E-Recovery Service Quality is service efforts provided by online service providers to consumers when experiencing failure and dissatisfaction experienced by customers for all forms of services provided.

Customer satisfaction

According to Kotler, they quoted from Rangkuti, interpreting consumer loyalty as an individual’s sensation of joy or disappointment because of the check between the chainsaw and the anticipated execution of goods. So from the definition above, it has implications for a person’s sentiment fulfilling or even exceeding the assumptions; then, at that time, the individual can be said to be fulfilled. Zeithaml and Bitner propose that compliance is a much broader notion than simply evaluating administrative quality but is also influenced by various factors. Guiltinan stated that
consumer loyalty is the result of correlations made by clients that compare the level of benefits seen with the benefits expected by the client. Hoyer and MacInnis (2001) said that satisfaction can be associated with feelings of acceptance, happiness, relief, excitement, and delight. There are many factors that affect customer satisfaction. According to Hokanson (1995), these factors include friendly employees, courteous employees, knowledgeable employees, helpful employees, accuracy of billing, billing timeliness, competitive pricing, service quality, good value, billing clarity and quick service.

**Methods**

The method used in this research is a descriptive verification method with an ex post facto approach and a survey method. Sugiyono (2011) ex post facto is an approach in research that is carried out based on an event that has occurred and reviews the factors that caused the event to occur. A survey is an approach implemented to obtain data for conducting a study by visiting a place appropriate to the problem to be studied. The data can be obtained by distributing questionnaires or conducting interviews with the local community.

The Quantitative Descriptive research method is a technique which means making a description or description of a situation using numbers, starting from the selection of information, understanding of the information, as well as the appearance and results (Arikunto, 2006).

This research is explanatory and descriptive; Sugiyono (2004) states that explanatory research is expected to interpret the position of the variables studied and the relationship between one variable and another variable by distributing questionnaires. The type of research used in this research is quantitative because the data needed is a number, and to process it is using statistical analysis. The location of this research was carried out in Kiluan Bay and Pahawang Island because these two places are ecotourism areas that are busy visiting, and researchers see that there are still deficiencies in electronic-based services Kiluan Bay and Pahawang Island are included in the Top 3 Ecotourism Areas in Lampung.

**Results**

Visitor data collection in this study used an accidental sampling technique, namely a sampling technique based on coincidence, that is, anyone who happens to meet the researcher. Therefore, the samples taken were Lampung ecotourism visitors who happened to meet researchers and were willing to take the time to fill out questionnaires during the research period, approximately six months. This research was conducted on 200 visitors who had visited Lampung ecotourism; in this case, 100 people who had visited Pahawang Island and 100 who had visited Kiluan Bay. The following is an overview of the data obtained from the results of research that has been carried out using the SPSS 25 and Microsoft Excel programs. Visitor data collection in this study used an accidental technique, namely collecting samples of anyone who included the criteria than used as a sample. This research was conducted on 200 visitors who had visited the research location.

Criteria for acceptance and rejection of the hypothesis are of the sig value < 0.05, or t count > t table, there is an influence between variable X and Y. Buy, if the sig value > 0.05, or the t count < t table, there is no influence between the X variable and the Y variable. The t-table value in this study is 2.645.

<table>
<thead>
<tr>
<th>Numbers of Item</th>
<th>r value</th>
<th>r table</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.632</td>
<td>0.138</td>
<td>Valid</td>
</tr>
<tr>
<td>2</td>
<td>0.497</td>
<td>0.138</td>
<td>Valid</td>
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<tr>
<td>3</td>
<td>0.366</td>
<td>0.138</td>
<td>Valid</td>
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<td>4</td>
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<td>Valid</td>
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<tr>
<td>5</td>
<td>0.450</td>
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<td>Valid</td>
</tr>
<tr>
<td>6</td>
<td>0.349</td>
<td>0.138</td>
<td>Valid</td>
</tr>
</tbody>
</table>

**Table 2. E-Service Quality Variable Validity Test Results (X2)**

<table>
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<tr>
<th>Numbers of Item</th>
<th>r value</th>
<th>r table</th>
<th>Conclusion</th>
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<tbody>
<tr>
<td>1</td>
<td>0.494</td>
<td>0.138</td>
<td>Valid</td>
</tr>
<tr>
<td>2</td>
<td>0.582</td>
<td>0.138</td>
<td>Valid</td>
</tr>
<tr>
<td>3</td>
<td>0.625</td>
<td>0.138</td>
<td>Valid</td>
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</tbody>
</table>

**Table 3. E-Recovery Service Quality Variable Validity Test Results (X3)**

<table>
<thead>
<tr>
<th>Numbers of Item</th>
<th>r value</th>
<th>r table</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.550</td>
<td>0.138</td>
<td>Valid</td>
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<tr>
<td>2</td>
<td>0.752</td>
<td>0.138</td>
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</tr>
<tr>
<td>3</td>
<td>0.731</td>
<td>0.138</td>
<td>Valid</td>
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</table>
Table 4. Website Design Variable Reliability Test Results (X1)  

<table>
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<th>Reliability Statistics</th>
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<td>Cronbach’s Alpha</td>
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<td>0.768</td>
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Table 5. E-Service Quality Variable Reliability Test Results (X2)  

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<th>Reliability Statistics</th>
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<tr>
<td>Cronbach’s Alpha</td>
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<td>0.681</td>
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Table 6. E-Service Quality Variable Reliability Test Results (X3)  

<table>
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<th>Reliability Statistics</th>
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<tr>
<td>Cronbach’s Alpha</td>
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<tr>
<td>0.720</td>
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</table>

Acceptance or rejection of the hypothesis:

a. **First Hypothesis Testing (H1)**  
   It is known that the Sig value for the influence of website design (X1) on visitor satisfaction (Y) is 0.058 > 0.05, and the t value is 1.909 < 2.645.  
   So it can be concluded that H1 is rejected, which means there is no effect of website design (X1) on visitor satisfaction (Y). This is evidenced by the sig value greater than 0.05 and the calculated t value more significant than the t table.

b. **Second Hypothesis Testing (H2)**  
   It is known that the Sig value for the effect of E-Service Quality (X2) on visitor satisfaction (Y) is 0.064 > 0.05, and the t-count value is 1.862 < 2.645.  
   So it can be concluded that H2 is rejected, which means there is no E-Service Quality (X2) effect on visitor satisfaction (Y). Because the significant value is greater than 0.05 and the calculated t value is greater than the t table.

c. **Third Hypothesis Testing (H3)**  
   It is known that the Sig value for the effect of E-Recovery Service Quality (X3) on visitor satisfaction (Y) is 0.005 < 0.05, and the t value is 2.869 > 2.645.  
   So it can be concluded that H3 is accepted, which means that E-Recovery Service Quality (X3) influences visitor satisfaction (Y). The calculation results show that the significant value is less than 0.05, and the calculated t value is more significant than the t table.

Table 7. Hasil Uji Parsial Desain website, E-Service Quality, E-Recovery Service Quality Terhadap Kepuasan Pengunjung  

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficients</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Constant)</td>
<td>3.553</td>
<td>5.511</td>
<td>2.645</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Website Design (X1)</td>
<td>.261</td>
<td>.137</td>
<td>.135</td>
<td>1.909</td>
</tr>
<tr>
<td></td>
<td>E-Service Quality (X2)</td>
<td>.464</td>
<td>.249</td>
<td>.131</td>
<td>1.862</td>
</tr>
<tr>
<td></td>
<td>E-Recovery Service Quality (X3)</td>
<td>.596</td>
<td>.208</td>
<td>.201</td>
<td>2.869</td>
</tr>
</tbody>
</table>

Discussion

**Effect of website design on visitor satisfaction ecotourism lampung**  

The results of testing the hypothesis prove that there is no positive and significant influence between Website Design on Ecotourism Lampung Visitor Satisfaction. The hypothesis test results above can be interpreted if Lampung Ecotourism provides Website Design, such as the ease of obtaining information such as contacts, addresses, e-mails, and others. The eco-tourism managers, general details, and any supporting services and facilities in the Lampung eco-tourism area. However, the authors see a source of problems or deficiencies in the Lampung eco-tourism website. This condition can be seen from the results of the hypothesis testing and if the authors focus on why there is no visitor satisfaction with the Lampung eco-tourism website design. The reason is that many visitors feel dissatisfied when searching for information related to visitor policies, such as private details when visiting eco-tourism areas. This condition illustrates that the website design function as a communication function which is a means to make it easier
for visitors to communicate has been going well but not with the information function, which according to the author, failed to maximize the utilization of the Lampung eco-tourism website.

The results of this study also illustrate that Lampung eco-tourism visitors feel that the Lampung eco-tourism area, through its Website, has provided unfavourable website design services to eco-tourism visitors. So Lampung eco-tourism visitors feel dissatisfied with the performance of websites that do not display information regarding visitor policies in the meaning of the details of privacy. It is miserable if we look at the statistical data on the current trend of tourism tourists, namely, travelling to areas that are empty of visitors. This study’s results are based on the hypothesis presented by Ajay Kaushik Noronha & Potti Srinivas Rao (2017), which states that Website Design does not significantly affect visitor satisfaction.

The author sees that this can be judged by the failure to convey information to visitors, which is less complex. This should be an important note for the Lampung eco-tourism area to pay attention to aspects of its functionality such as communication, information, entertainment, and transaction functions because website design is a document. Electronics convey information to visitors or consumers so that it is easy to capture in a visual form and comfortable to see.

**The effect of e-service quality on ecotourism lampung visitor satisfaction**

The results of hypothesis testing prove that there is no positive and significant influence between E-Service Quality on Ecotourism Lampung Visitor Satisfaction. The results of the hypothesis test above can be interpreted if Ecotourism Lampung provides quality electronic services (E-Service Quality) such as ease and fluency in accessing and using the site properly (Efficiency), all kinds of transactions carried out can be completed as expected (Fulfillment), and all kinds of available technical functions can run smoothly (System Availability), as well as provide security and guarantees for individual/personal data (Privacy). This will increase visitor satisfaction for Ecotourism Lampung.

The results of this study also describe that Ecotourism Lampung visitors feel that the Lampung eco-tourism area needs to provide better quality electronic services to them through its electronic services. So, Lampung eco-tourism visitors feel dissatisfied with the Lampung Ecotourism electronic service system. The results of this study are in accordance with the hypothesis described by Kim & Jackson, (2009) which states that Fulfillment, Efficiency, and System Availability are not significant with consumer satisfaction, in this case, Lampung eco-tourism visitors.

The author sees this from the value of the service characteristics of E-Service Quality; from here, we can see variations of intangible service characteristics (Intangibility) and varied services (Heterogeneity. The author needs to look at the characteristics of inseparable service (Inseparability) and Perishability. Therefore, in this study, researchers also look at the value of the type of behaviour of Lampung eco-tourism visitors who do not take advantage of the importance of customer needs and demands.

**The effect of e-recovery service quality on ecotourism lampung visitor satisfaction**

The hypothesis testing results prove a positive and significant influence between E-Recovery Service Quality and Lampung Ecotourism Visitor Satisfaction. The hypothesis test results mean that Ecotourism in Lampung provides service quality when problems occur, commonly called E-Recovery Service Quality. This condition includes the quality of electronic service recovery services, which is Responsibility, Compensation in the form of new experiences obtained by visitors with the costs and time spent visiting Lampung eco-tourism, as well as new knowledge and experience as Accumulated Contacts with Tourism Managers.

The results of this study also define that Lampung eco-tourism visitors feel that Ecotourism Lampung has provided quality recovery services if electronic problems occur, which is good for them, so they feel satisfied with using the E-Recovery Service Quality system. This study’s results are based on the hypothesis put forward by Pandjaitan et al. (2020), which states that e-recovery service quality has a positive and significant effect on consumer satisfaction, in this case, Lampung eco-tourism visitors. The results of this study also support other research conducted by Kim & Jackson (2009), which shows that the E-Recovery Service Quality variable has a significant effect on consumers or the same eco-tourism visitors to Lampung.

Increasing consumer satisfaction has implications for improving the quality of recovery services when electronic problems occur. This can be done by improving and evaluating the problems received by the recovery service system, which are then used to take what steps are appropriate to overcome them so that the problems that occur will not be repeated in the future. The successful strategy of the Lampung eco-tourism area above will create added value for Lampung eco-tourism following Hasan’s (2013) statement, namely that companies that can survive are companies that can increase customer loyalty on an ongoing basis, which is the key to the company’s competitive advantage—starting with the steps above.

**Conclusion**

Based on the analysis described in this study regarding the influence of website design, E-Service Quality, and E-Recovery Service Quality ecotourism Lampung on visitor satisfaction on Pahawang Island and Kiluan Bay Lampung, it can be concluded that Website Design (X1) owned by ecotourism areas Lampung, in general, has a negative influence or relationship because there are still many website design deficiencies in information related to visitor policies such as privacy details. E-Service Quality (X2) has no influence or relationship to visitor satisfaction. This can be proven by the answers from Lampung ecotourism visitors, where the majority of visitors are dissatisfied with the quality of electronic services provided by the Lampung ecotourism area. E-Recovery Service Quality (X3) found in the ecotourism
area of Lampung, such as responsibility, compensation, and accumulation of contacts, makes it easy for respondents or visitors.

Based on the results of the discussion and conclusions that have been presented, suggestions that can be given for tourists, and suggestions that can be given to tourist visitors, namely: maximizing the features of website design, electronic services, and recovery services if problems occur. Meanwhile, the government must take three steps to treat tourism in Indonesia, which can be done using three steps. First, in short-term management, the government makes rules that can support the tourism industry in Indonesia, primarily financial or financial support and encouragement of operational costs, and establish health protocols, especially in the new average era. Second is the art of medium-term management, medium-term strategy through a pentahelic strategy, which means collaborative management between Academic, Business, Government, Customer and Media (ABGC). Finally, or third, with the art of long-term management, this strategy can be carried out by designing an operation management system for the tourism industry. For Lampung ecotourism managers, after seeing the big picture from the results of this research, the authors suggest ecotourism areas continue improvising with policies and completeness of privacy information in local ecotourism areas. This means the facts in the Lampung Ecotourism area pay less attention to visitor policies regarding privacy details to protect visitors' data because the manager collects, records, and manages, or we can call it processing. Moreover, Students must prepare everything more thoroughly before conducting research, such as materials, topics, and identification of problems that exist in research. Moreover, do pre-research first to make it easier when you go directly to the field.

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References


Sutarman, (2009), Pengantar Teknologi Informasi, Bumi Kasara: Jakarta.