The Influence of Travel Website towards the Decision-Making: A Case on Trip Advisor

Dimas Yudistira Nugraha and Idi Jahidi
Faculty Member of Entrepreneurship Department, BINUS Business School Undergraduate Program
Bina Nusantara University, Bandung Campus
Bandung Indonesia
dimas.nugraha@binus.edu, idi.jahidi@binus.ac.id

Dani Suandi
Faculty Member of Computer Science Department, School of Computer Science, Bina Nusantara University, Bandung Campus, Bandung, Indonesia
dani.suandi@binus.ac.id

Aris Darisman
Faculty Member of Visual Communication Design Department, School of Design
Bina Nusantara University, Bandung Campus, Bandung, Indonesia
adarisman@binus.edu

Abstract
The tourism industry is growing dramatically today. Many tourism industries provide information on the internet to the prospective tourists. Quality of information, quality of service and quality of design are components that build quality confirmation on the travel website. Quality confirmation, travel website satisfaction and decision-making are three main aspects for the industry and researchers to investigate how prospective tourists decide to visit tourism location through the travel website. Nevertheless, the prospective tourists address some problems in the travel website, such as the lack of information on the website, the design of the website and so on. As a result, prospective tourists are puzzled as they try to make a decision as to where they are going to visit. The aim of this research is to analyze the correlation between the quality of the travel website and the satisfaction of the travel website and the subsequent impact on the decision-making. The method is to analyze 300 respondents who have already used the Trip Advisor website. The data was analyzed using structural equation modeling (SEM). The findings indicate that quality of information, quality of service and quality of design have the positive effect on the quality confirmation of travel websites. Then the quality confirmation of the travel website affects the satisfaction. Finally, to this satisfaction, the prospective tourist decides to visit the tourism location. This study allows the industry and the researcher to realize more thoroughly what prospective tourists need when they plan to travel.

Keywords
Quality of Information, Quality of Service, Quality of Design, Tourism Website Satisfaction, Decision-Making.

1. Introduction
The digital information age has changed global tourism in profound ways. Information and Communication Technologies (ICT) are pervasive, and they have become inextricably linked with contemporary consumer cultures (Gössling, 2021). In the 21st century, 95% of prospective tourists have used website to collect travel-related information and 93% visited the travel website, approximately half of the tourists used e-mail to collect information about the places (Kauppinen-Räisänen et al., 2013). The Travel website sets the images and information of a specific destination for prospective tourists. The Internet is today a key source of information for the tourism industry. The distinctive characteristic of the travel website is that it has intangible elements, such as expertise or facilities (Koo et
al., 2016). Nowadays, the tourism industry is constantly evolving, new and new types of services are being introduced, which requires great strength, knowledge and skills (Sharifovich, 2021).

Prospective tourists collect information during the planning process through online travel booking websites, service provider websites, search engines and travel websites (Gretzel et al., 2015). The more insightful the travel website, the higher the value of the travel website. It will definitely encourage tourists to choose a tourist attraction and help them to make decisions (Kwai et al., 2012).

In the tourism sector, the importance of intensive knowledge for prospective tourists is considered. The tourism sensitivity of the information system is so critical to the success of the industry. Travel websites are platforms for prospective tourists to make their first perception on the tourism location (Zhang et al., 2017). As an effect, they are at the same time a convenient means of accessing destination information. If the quality of the website is weak, it is prominent examples that prospective tourists would leave a low-quality website, search for another source of information, or even shift their choice for travel destinations (Su & Huang, 2011).

The problems in travel websites are potential visitors also turn to these sites in order to will their information overload issues, both the number of sites and the sheer amount of user ratings, comments and suggestions available can potentially complicate the decision-making process (O’Connor, 2010). Travel website data should be conscious of a variety of relevant problems, such as network biases, data quality biases, and data reliability concerns (Xiang et al., 2018).

Trip Advisor is a travel website that provides information about tourism location. The user can post pictures, reviews, and comments about a tourism location. This can be a reference for other consumers in determining the choice of tourist destinations (Jeacl & Carter, 2011). Much of reviews and picture posting from the consumer brings some impacts in term of decision making. Trip Advisor must try to convince some e-commerce platforms of the issue of fictitious or low-quality evaluations. In contrast, by evaluating the amount of strange ratings of each hotel (restaurant) listed on Trip Advisor, it is possible to identify whether manipulation has taken place (Schuckert et al., 2016). In Trip Advisor, poor comments of a particular destination have a negative effect on the destination and prospective tourists are always confused with an unclear response while visiting the website (Cunningham et al., 2010). In addition, the functionality of the Trip Advisor website is too complicated, as the effect is difficult for prospective visitors to access the information clearly and they must make some effort to access it (Whitehead, 2011).

Trip Advisor.com makes a high and powerful position as a remarkable domain name in the search for travel information in Google. Trip Advisor encourages more than 463 million travelers in 49 markets and 28 languages. Trip Advisor.com provides its services as an advertisement agency and companies, giving vehicle marketers access to Trip Advisor's wide range of customers (Xiang et al., 2018). Trip Advisor.com occupies the top position in user online travel recommendations and will therefore be the focus of an examination of potential online user travel review results, in especially with regard to the reviewer’s attitude (Kavoura & Stavrianea, 2015). It makes Trip Advisor.com an essential travel platform for scientific purposes.

1.1 Objectives
The objectives of this research, therefore, is to measure and examine how the quality of the travel website affects the quality confirmation of tourists and its impact on the satisfaction of tourists with the website and how it motivates prospective tourists to choose a tourist hotspot.

2. Literature Review
Travel website involves the promotion and marketing of a particular destination for potential visitors. It can be a city, a state, a province, or a country, or even a place of residence (Kauppinen-Räisänen et al., 2013). Travel websites that motivate users to access necessary information, to pilot through different text and visual designs, and to make a digital first experience (Pindarwati & Wijayanto, 2016). To reach prospective tourists easily and explicitly, the travel website will catch prospective tourists' attention long enough to tell the story of the destination. Travel websites should be planned to meet the needs of prospective tourists. The website must demonstrate a very entertaining virtual experience. Effective websites will appeal to the feelings, needs and desires of prospective tourists. As a result, it can empower
the interest of various tourists and differentiate the destination from many other tourist attractions (Gretzel et al., 2015).

Effective statement of information technology to prospective tourists is becoming a major element in marketing communication performance (DeLone & McLean, 1992). DeLone & McLean (1992) explores and develops the performance factors of information systems, including the success model of DeLone and McLean's information systems. The success model for information systems proposes two variables. They are quality of the program and quality of knowledge. System quality and knowledge quality have an effect on "usage" and "user satisfaction" both individually and jointly. The quality of the system and the quality of the information have an impact on the individual and the organisation. The quality of the service is an independent variable and the purpose to be used for calculating the behavior is a moderating variable. Information systems have an effect on "individual impact" and "organizational impact," which have merged as a net profit, and have developed into a single independent variable (DeLone & McLean, 2003).

System quality of the information system success model leads to positive features of the application and its metrics are ease of use, accessibility, reliability, efficiency, quality of data, flexibility, connectivity and significance. The information quality of the information systems performance model is the production characteristics of the information management. This is calculated by accuracy, timeliness, completeness, significance and continuity. Customer satisfaction is linked to the quality and responsiveness of the information systems and their performance and knowledge (DeLone & McLean, 2003).

Consumer satisfaction and post-purchase behavior were a real issue in consumer behavior research (McKercher et al., 2012). Expectation–confirmation is the level of satisfaction of the customer with the product/service that reflects the desire to re-purchase (Sheng & Chen, 2012). The level of satisfaction of the customer is established by a measurement of the preseason estimates of the product/service. The tourist will be delighted when the result meets expectations. As a result, it influence the activity of post-consumption motivations (Ahn et al., 2013).

Expectation-Confirmation Model (ECM) is a theoretical mode that information system continuity. It assumes that the assumption, accompanied by the process of learning of specific details, will proceed to validation by consideration of the variable amount. The ECM is built on the basis of the ICT, but it has three particular features. First, ECM highlights post-approval expectations rather than initial expectations of the information technology. Users keep up-to-date their knowledge and skills when using it. Experiences have made the aspirations of consumers of information system distinct from aspirations before the acceptance of information system (Garau, 2014). The variables that assess the early acceptance of IT are considered to have already been considered part ECM’s approval and satisfaction. Second, ECM proposed the behavioral intention of ECT in place of post-adoption expectations. The performance expectancy is a valid alternative to expectations. Third, ECM does not provide any factors required for the performance of the management system (Bhattacherjee & Barfar, 2011).

In the field of tourism, the travel website must provide information about tourism location and images on the Internet. The quality of the travel website has an impact on the confirmation. The quality of the website may influence the expectations of the potential tourist towards the location. As a consequence, prospective tourists using the website may react to pre-visit perceptions. The better the quality of the travel website, the higher the quality of the travel website (DeLone & McLean, 2003). Confirmation in ECM is a concept that demonstrates a behavioral arrangement between expectations of customers and achievement. If the results of the travel website satisfy the needs of prospective tourists positively, they will be pleased with the travel website. Alternatively, if the results of the travel website satisfy their expectations in a negative way, they would be disappointed. It will bring them to choose a different travel website. Confirmation is a greater predictor of satisfaction that affects prospective tourists' desire to visit tourism location. (Bhattacherjee & Barfar, 2011).

The preliminary information on the travel website gives high priority to the assumption of a potential tourist (Jeacle & Carter, 2011). The prospective tourists search online for details by entering the location-related search terms engine (e.g. Google) or by entering the web address (URL) directly on the travel website. Due to lack of understanding about the location, most prospective tourists are searching for the former solution and searching for information online. During the search stage, prospective tourists use their knowledge and abilities to identify keywords to extract data from a search engine. The first page of the search engine hits after they receive the information. The prospective tourists enter the stage of importance during which they select and visit favorable websites. When prospective tourists
get their first impressions of the homepage, they either explore or leave websites during the development phase. The design of the destination refers to the level of involvement of the tourist towards the tourism location. Destination concept has a significant impact on the cognition of the website (Pallud & Straub, 2014)

It is essential to examine the visual elements on the travel website, including the quality of the information, the quality of the service and the quality of design. Furthermore, the quality of the information, the quality of the service and the quality of the design have an impact on the confirmation of the travel website (Mohseni et al., 2018; Qian et al., 2019; Sun et al., 2016). Satisfaction of prospective visitors is influenced by whether or not the quality of the travel website satisfies their goals. Confirmation of the travel website is positively connected to satisfaction with the information system, as consumers know that the intended advantages of the information system are being used (Bhattacherjee & Barfar, 2011). Confirmation of the travel website has a positive effect on the future satisfaction of visitors. Whether the performance following the use of the travel platform meets or exceeds the expectations of the prospective tourist, prospective tourists are planning to travel to the location. Prospective tourists with a higher level of engagement with the location acknowledge the design of the website and the quality of the information will promote a strong attitude towards the website. As a consequence, prospective tourists plan to visit the location (Pereira et al., 2017; Wang & Li, 2019).

Hypothesis 1. Information quality of the travel website influences the prospective tourists' confirmation.

Hypothesis 2. Service quality of travel website influences the prospective tourists' confirmation.

Hypothesis 3. Design quality of travel website influences the prospective tourists' confirmation.

Hypothesis 4. The prospective tourists' confirmation influence travel website satisfaction.

Experts have taken an interest in the assessment and efficacy of the travel industry in order to ensure a good place in a dynamic business setting. Prospective visitors with a high degree of engagement with the tourism location consider the functionality of the website and the quality of the information to shape an attitude towards the website. With destination cognition as a predictor, tourists shape a behavior towards the tourism location. In addition, prospective tourists often choose a destination if the travel website satisfies them, and this is in the perspective of information, service, design and all content. As a result, it builds desire to visit the place (Aksoy & Yetkin Ozbuk, 2017; Briandana & Dwityas, 2018; Pinto & Castro, 2019).

Hypothesis 5. The travel website satisfaction influence decision-making.

3. Methods
The demographic characteristics include sex, age, employment, and nationality. Measurements have been developed based on previous studies. All items were assessed on a Likert scale of five scales, from strongly dissatisfied (1) to strongly approved (5). In addition, the study includes 22 interview questions.

4. Data Collection
The methods used is to analyze 300 tourists that have already used the Trip Advisor website.

5. Results and Discussion

5.1 Numerical Result
Table 1 displays the demographic information of research participants.

<table>
<thead>
<tr>
<th>Profile Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>178</td>
<td>59.33%</td>
</tr>
<tr>
<td>Female</td>
<td>122</td>
<td>40.67%</td>
</tr>
</tbody>
</table>

© IEOM Society International
Table 1 shows that most of the respondents are 59.33% male. The age of respondents is dominated by productive youth, which is 33% under 20 years old, followed by 20-29 years old with 26.67%, and 30-39 years old with 26%. In this study, respondents were dominated by students 50%, followed by entrepreneurs 30%, and the rest were workers who worked in private companies 10% and public companies 10%. Respondents in this study were dominated by European Countries 30%, followed by Asian Countries 26%, American Countries 21.67%, Australia 19.33%, and African Countries 3%.

The validity of our study was developed from the relevant research, and our measures were formulated by the adoption of constructs validated by previous research. As seen in Table 2, all the designs used for the model met the criteria. The reliability of the calculation means that the reliability value meets the criteria.

Table 2. Validity and Reliability

<table>
<thead>
<tr>
<th>No</th>
<th>Constructs</th>
<th>Measurement Items</th>
<th>Validity</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Overall quality</td>
<td>Information quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Trip Advisor website is fun to read</td>
<td>0.877</td>
<td>0.922</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>The Trip Advisor website is full of things to read</td>
<td>0.723</td>
<td>0.977</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>The Trip Advisor website is not boring</td>
<td>0.872</td>
<td>0.923</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>The Trip Advisor website is pleasant to use</td>
<td>0.803</td>
<td>0.915</td>
</tr>
<tr>
<td>5</td>
<td>Service Quality</td>
<td>The Trip Advisor website give answer when I am posting a question</td>
<td>0.645</td>
<td>0.972</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>The Trip Advisor website provides the latest information</td>
<td>0.622</td>
<td>0.977</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>The Trip Advisor website offers responses from the respondents in a timely way</td>
<td>0.613</td>
<td>0.926</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>The website of Trip Advisor offers adequate e-mail answers containing all</td>
<td>0.520</td>
<td>0.911</td>
</tr>
<tr>
<td></td>
<td>Design Quality</td>
<td>The Trip Advisor website provides user-friendly on visual graphic</td>
<td>0.523</td>
<td>0.920</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>10</td>
<td>The display on the Trip Advisor website is appropriate</td>
<td>0.633</td>
<td>0.922</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>The design of Trip Advisor website is easy to understand</td>
<td>0.655</td>
<td>0.921</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>The Trip Advisor website is easy to search the information</td>
<td>0.675</td>
<td>0.936</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Travel website quality confirmation</td>
<td>The Trip Advisor website gives better experience than what expected</td>
<td>0.580</td>
<td>0.920</td>
</tr>
<tr>
<td>14</td>
<td>Service level of the Trip Advisor website is higher than expected</td>
<td>0.631</td>
<td>0.952</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Content on the Trip Advisor website is better than expected</td>
<td>0.584</td>
<td>0.922</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Travel website satisfaction</td>
<td>Satisfaction level after using the Trip Advisor website</td>
<td>0.610</td>
<td>0.934</td>
</tr>
<tr>
<td>17</td>
<td>Pleasant level after using the Trip Advisor website</td>
<td>0.654</td>
<td>0.957</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Decision-making</td>
<td>The Trip Advisor website influence me to visit the tourism location for personal leisure</td>
<td>0.634</td>
<td>0.978</td>
</tr>
<tr>
<td>19</td>
<td>The Trip Advisor website suggest me to visit the tourism location on a group tour</td>
<td>0.678</td>
<td>0.915</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>The Trip Advisor website inspires me to visit the tourism location with my family</td>
<td>0.612</td>
<td>0.938</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>The Trip Advisor website persuades me to visit the tourism location because of its culture</td>
<td>0.721</td>
<td>0.932</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>The Trip Advisor website excites me to visit the tourism location because of its nature</td>
<td>0.677</td>
<td>0.921</td>
<td></td>
</tr>
</tbody>
</table>

The data were analyzed by using Structural Equation Modelling (SEM). The data were tested to confirm the correlation between overall quality of the website, confirmation of travel website, satisfaction of travel website, and decision-making.
The R2 values includes overall quality of the website, travel website confirmation, travel website satisfaction, and decision-making. The R2 value of information quality is 0.4922 = 0.24 or 24%. It indicates that Hypothesis 1 was approved. Information quality of the travel website influences prospective tourists' confirmation in the amount of 24%. The R2 of service quality is 0.4472 = 0.19 or 19%. This suggests the Hypothesis 2 was approved. Service quality impacts the confirmation of the travel website at a pace of 19%. The R2 of design quality is 0.6852 = 0.46 or 46%. This proves that Hypothesis 3 was approved. Design quality influences the 46% travel confirmation on the website. The R2 of travel website confirmation is 0.6062 = 0.36 or 36%. Travel website confirmation influences 36% website satisfaction. It represents that Hypothesis 4 was approved. The findings in this study are the same as those conducted by DeLone & McLean (1992), Bhattacherjee & Barfar (2011), Mohseni et al. (2018), Qian et al. (2019), and Sun et al. (2016). Information quality, service quality, and design quality need to be considered by tourism website managers so that website visitors get the expected information and get a pleasant experience in terms of service and design when searching for tourism on the website. In addition, the impact of good management of information quality, service quality, and design quality is that website visitors will be satisfied with the website.

Travel website confirmation impact positively travel website satisfaction in the amount of 36%. The R2 of travel website satisfaction is 0.5852 = 0.34 or 34%. It explains that the Hypothesis 5 was approved. Travel website satisfaction influence decision-making in the amount of 34%. The results of this study are similar to the findings of Aksoy & Yetkin Ozbuk (2017), Briandana & Dwityas (2018), and Pinto & Castro (2019). Website visitors will make a visit decision after they are satisfied with browsing on a tourist website.
Figure 2 shows that the highest cross load is 0.877. It is in the item No. 1 (Information Quality). This means that most prospective tourists think that the Trip Advisor website is fun to read. In contrast, the smallest cross loading is 0.520. It is in the item no. 8 (Service Quality). It indicates that most of the prospective tourist think that Trip Advisor less offer adequate e-mail answers containing all information about future tourist needs.

6. Conclusion
This research explores how the Trip Advisor website affects prospective tourists to visit tourism location. The research concerns with information quality of Trip Advisor website, service quality of Trip Advisor website, design quality of Trip Advisor website, quality confirmation of Trip Advisor website, satisfaction of Trip Advisor website, and decision-making of Trip Advisor website. The measurement is based on some of the theories previously stated. The results indicate that most tourists think that Trip Advisor website is fun to read. They enjoy when read the information from the website. However, the tourist suggests that the Trip Advisor website should offer adequate e-mail answers containing all information about future tourist needs. In addition, Hypothesis 1 to Hypothesis 5 are accepted.

The research contributes theoretical and practical implications. Theoretically, this research supports the theory about information system in tourism. Then practically, the findings of this study include advice about how to best handle websites on the travel website. It is expected that the travel website should increase information quality, service quality, and design quality. As the impact, the prospective tourist will decide to visit the tourism location.

References
Aksoy, S., & Yetkin Ozbuk, M., Multiple criteria decision making in hotel location: Does it relate to postpurchase consumer evaluations?, Tourism Management Perspectives, 22, 73–81, 2017.
Kavoura, A., & Stavrianea, A., Following and belonging to an online travel community in social media, its shared characteristics and gender differences, Procedia - Social and Behavioral Sciences, 175, 515–521, 2015.
O’Connor, P., Managing a hotel ‘s image on TripAdvisor, Journal of Hospitality Marketing and Management,
19(October), 754–772, 2010.

**Biographies**

**Dimas Yudistira Nugraha** is a faculty member of Entrepreneurship Department at Bina Nusantara University. He is also a tutor of Cooperative and Small Business Service in West Java Province. He has taught more than 1,000 small entrepreneurs from West Java. He earned B.A. in English Linguistics from Padjadjaran University, Indonesia, Masters in Marketing Management from Winaya Mukti University, Indonesia, and Doctor in Management from Indonesian Education University, Indonesia. He has conducted training and received certificates from international institutions, namely Digital Marketing Certified from HubSpot Academy (2021), Google Analytics from Google (2020), Social Media Certified from HubSpot Academy (2020), The Fundamentals of Digital Marketing from Google (2020). He is a member of the Indonesian Research Methodology Lecturer Association.

**Idi Jahidi** is a Faculty Member at the Creativepreneurship Study Program at Bina Nusantara University. Doctoral Education in Administration / Management, Faculty of Social and Political Sciences, Padjadjaran University, Bandung, West Java, Indonesia. Academic position as Associate Professor. Another activity as Chairman of the Management of SMART KKS cooperative of the Cimahi City since 2017. Small business facilitator and instructor at Cooperative and Industrial Trade Office of the Cimahi City since 2017. Member of the Cimahi City Regional Indonesian Cooperative Council since 2021. Member of Masyarakat Ekonomi Syariah (MES) of the Cimahi City since 2020. Assessor of the Badan Akreditasi Nasional Sekolah dan Madrasah of West Java Indonesia since 2021. And expert trainers and facilitators of the Program Sekolah Penggerak (PSP) Ministry of Education and Culture Technology Research of the Republic of Indonesia since 2022.

**Dani Suandi** is a faculty member of Computer Science department at Bina Nusantara University. He obtained a bachelor's degree in mathematics at the State Islamic University of Sunan Gunung Djati, Bandung. He earned Masters and Doctoral degrees in mathematics at the Faculty of Mathematics and Natural Sciences, Bandung Institute of Technology. After graduating from the doctoral program, He attended a postdoctoral program at the same campus,
namely the Bandung Institute of Technology. In addition, He also received a digital talent scholarship from the Ministry of Communication and Information of the Republic of Indonesia (Kominfo) in 2021 in the professional academy program in the field of data science. His interest research topics are numerical analysis, mathematical modeling, computing, and data science. He is a member of the Indonesian Biomathematical Society.

Aris Darisman earned bachelor’s degree in the field of Fine Arts and Design, deepening his specialty in the field of Fine Arts at the Faculty of Fine Arts and Design, ITB. His interest then developed into the scientific field of Design, especially Product Design and he continued his master's studies in the field of Product Design Studies at Trisakti University. Apart from being a lecturer, he also has a great interest in the world of fine arts, as evidenced by his participation in a number of art exhibitions on a national and international scale. Until now, he still serves as the Head of the Visual Communication Design Study Program at BINUS, Bandung campus.