The effects of tourism information quality in shaping tourists’ visiting interest

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Abstract. This study examines the effects of information quality, presented in a tourist-destination website, towards tourists’ visiting interests. The fundamental research model here intertwined the establishment of information quality framework and destination image formation model. This research was specifically conducted as a case study in a tourism website operated by a local government, namely www.wakatobitourism.com. A total of 52 respondents, with a variety of demographic characteristics took part in this research. Statistical data were analyzed using PLS-SEM assisted with SmartPLS 3.0. This research found four hypotheses that significantly affect tourists’ interest to visit. Contextual information quality had a direct effect on affective image, while representational information quality had a direct effect on cognitive image. Cognitive image effected affective image which in turn had a significant effect on conative image.

Keyword—Tourism, Information Quality, PLS, SEM

1. Introduction

Information technology has a major impact on tourism and hospitality industry [1]. The Internet has provided a revolution to businesses which are involved in tourism, both as a source of information and as a medium of sale. The Internet has made tourist destinations closer than ever for prospective tourists, regardless of their geographical or country origin [2]. Websites that provide information which are related to tourist destinations have brought massive impacts to the way potential tourists select their next tourism destination to visit [3]. Despite such positive promises as determined by technology advances, the Wakatobi District Government, in Indonesia, has yet to reach their target number of visitors. One may presume that the information contained within their website has not had a significant impact on establishing tourists’ interests to visit. According to [4], the quality of information that relates to tourist destination is important because it plays a key role within tourists’ decision-making process. Other researches, such as [5] argue that tourists’ satisfaction and interest in visiting a destination is greatly influenced by the information they obtain.

This research will examine the influence of tourist destination information quality towards tourists’ visiting interests. This research distinguishes itself from similar works by using the information quality framework as a theoretical lens to explore the relations between informational component and destination image formation model.

2. Literature Review and Hypotheses Development

2.1. Destination Image Model
Destination Image Model (DIM) was originally devised by [6] and has been used in studies lately. It consists of three dimensions, which include cognitive, affective, and conative images, and are more elaborately defined as follows:

- **Cognitive image** relates to tourists’ beliefs and knowledge about the tourist destinations, based on the information obtained previously. Affective image relates to the tourists’s feelings and emotions, such as a sense of fun, interest, and comfort, related to the tourist destination. Conative image relates to tourists’ behavioral action that may lead them to act and develop their interests to visit.

2.2. **Information Quality Framework**

The information quality framework is a framework introduced by [7]. The information quality framework consists of contextual quality, intrinsic quality, representational quality, and accessibility quality. Contextual information quality argues that information should be relevant and provide value. Intrinsic information quality relates more to the quality of the data, such as its accuracy, believability and reputation. Representational information quality emphasizes the presentation of the data, in an interpretable and easy to understand way. Accessibility information quality relates to the ease of access and security aspects.

2.3. **Hypotheses Development**

To develop a fundamental research model, the authors establish parts of intertwined the components of the information quality framework [7] and the destination image formation model [6]. The hypotheses in this research were elaborated as follows:

- **H1.** Contextual quality positively affects affective image. Previous research has provided an example that contextual quality can have a positive effect on affective image [5]. Highly contextual information presented in a tourism website can affect tourists’ feelings and emotions towards a destination.

- **H2.** Intrinsic quality positively affects the cognitive image. Tourists’ trust in information on tourism websites will affect their belief and knowledge about the destination. The information should be factual, impartial, and deriving from websites with a good reputation [8].

- **H3.** Representational quality positively affects cognitive image. Tourists’ knowledge concerning a tourist destination will be better shaped if the information is presented in the easiest way to consume. This means that the information presented on the website is easily understood, consistent and easy to interpret [7].

- **H4.** Accessibility quality positively affects cognitive image. With the ease of access to information related to tourist destinations, tourists are more likely to gain ample of knowledge related to tourist destinations and will form tourists’ beliefs about the destination.

- **H5.** Cognitive image positively affects affective image. A tourist understanding and knowledge concerning a tourist destination will influence their perception or feelings towards the destination.

- **H6.** Affective image positively affects conative image. Tourists’ positive feelings can lead to the increase of their interest in visiting.

- **H7.** Cognitive image positively affects conative image. Additional information received by the tourists related to a tourism destinations can potentially increase their interests in visiting tourism destinations.

3. **Research Methods**

3.1. **Data Collection and Sample**

Data was collected by distributing questionnaires to visitors of www.wakatobitourism.com website and were also the followers of the official local government social media, named ‘visit-wakatobi’. The list of respondents was obtained from the administrators of the www.wakatobitourism.com site. Questionnaire distribution was done by sending emails, as well as direct messages through messaging services if available. This research collected 60 returned questionnaires. After validating the returned responses, such as completeness checks, the number of valid responses for further analysis was 52 responses.
3.2. Research Instrument
The question items in the research instrument were adapted from the previous researches [6], [7]. First, the question items related to information quality was mostly adapted from the work of [7]. Contextual quality consisted of several indicators which include added value, relevancy, up-to-date, and completeness. Intrinsic quality was described through trust, accuracy, objectivity, and reputation. Representative quality was indicated through interpretability, ease of understanding, and consistency. Accessibility was explained by the ease of access from many platforms, and the ease of finding information.

Furthermore, question items pertaining to the destination image model was adapted from the work of [6]. Conative image consisted of several indicators such as intention to visit, willingness to speak positively, and intention to recommend. Affective image was described through the feelings of pleasure, stimulation, and interest. Finally, cognitive image was explained by good accommodation, interesting cultural heritage, good shopping opportunities, and interesting cultural events.

4. Result and Discussion

4.1. Respondents’ Demography
The demographics of the 52 respondents who participated in this research were quite diverse. Most them were young adults, ranging from the age of 19 to 22 (23.1%) and 23 to 26 (57.7%). Proportional balance was achieved between male (51.9%) and female (48.1%) genders. Whereas most respondents admitted to occasionally accessing the tourism website (44.2%), with an inclination to lower the intensities (51.9%) of access.

4.2. Measurement Model Evaluation
Measurement model evaluation involves a reliability test and a validity test. The reliability test ensures the loading factor, indicators, and composite reliability values of all variables are greater than 0.7, as suggested by [9]. Additionally, this research also ensured convergent and discriminant validities. Upon evaluation, this research showed all average variance extracted (AVE) values exceeded 0.50, obliging to convergent validity requirements of [9]. Finally, the correlation values of every latent variable in this research were all greater than its correlation values with other latent variables, corroborating that our data were valid discriminant. The evaluation result of the measurement model is summarized in Table 1.

| Table 1. Measurement Model Evaluation |
|---------------------------------------|
| Variable                        | Indicator     | Loading Factor | Composite Reliability | AVE   |
| Conative Image                  | Intention to visit | 0.934 | 0.956 | 0.879 |
|                                 | Speak positively | 0.936 |         |       |
|                                 | Recommend      | 0.943 |         |       |
| Affective Image                 | Pleasant       | 0.951 | 0.959 | 0.885 |
|                                 | Stimulated     | 0.935 |         |       |
|                                 | Interested     | 0.937 |         |       |
| Cognitive Image                 | Accommodation  | 0.850 | 0.863 | 0.760 |
|                                 | Shopping       | 0.892 |         |       |
| Contextual Quality              | Value Add      | 0.872 | 0.912 | 0.724 |
|                                 | Relevant       | 0.944 |         |       |
|                                 | Up to date     | 0.720 |         |       |
|                                 | Complete       | 0.852 |         |       |
| Intrinsic Quality               | Credible       | 0.901 | 0.818 | 0.694 |
|                                 | Reputation     | 0.759 |         |       |
| Representational Quality        | Interpretable  | 0.875 | 0.909 | 0.770 |
|                                 | Easy to understand | 0.849 |         |       |
|                                 | Consistent     | 0.907 |         |       |
| Accessibility                   | Easy to access | 0.876 | 0.896 | 0.741 |
|                                 | Accessible     | 0.874 |         |       |
|                                 | Easy to search | 0.832 |         |       |
4.3. Inner Model Evaluation

Evaluation of the inner model involves measuring the coefficient of determination ($R^2$), predictive relevance ($Q^2$) and testing the hypothesis. The coefficient determination ($R^2$) values for all endogenous variables were ranging from 0.385 to 0.821. According to [9], the value of $R^2$ would be considered weak/substantial for having a value greater than 0.25, moderate for having a value greater than 0.50 and strong for having a value greater than 0.75. Hence, the $R^2$ value of the affective image is considered moderate (0.699), the cognitive image is considered substantial (0.385), while the conative image is considered strong (0.821).

Furthermore, predictive relevance ($Q^2$) testing shows that the $Q^2$ value obtained must be greater than 0, indicating that the exogenous variable has a predictive relevance to the endogenous variable [9]. This research obtained predictive relevance value ($Q^2$) of 0.966.

4.4. Hypotheses Testing

The hypotheses test is resulted in four hypotheses that have significant influences and three hypotheses are considered insignificant. The results of hypothesis testing can be seen in Table 2 and the discussion related to the test results will be explained in the discussion of each hypothesis. A visual representation of the hypotheses can be seen in Figure 1.

Table 2. Hypotheses Test Result

| H    | Variable Paths         | Path Coeff. | t-value | p      | Result      |
|------|------------------------|-------------|---------|--------|-------------|
| H1   | Contextual Quality     | Affective Image | 0.039   | 0.179  | 0.858       | Not significant |
| H2   | Intrinsic Quality      | Cognitive Image | 0.513   | 3.333  | 0.001       | Significant    |
| H3   | Representational Quality | Cognitive Image | 0.610   | 3.255  | 0.001       | Significant    |
| H4   | Accessibility Quality  | Cognitive Image | -0.047  | 0.266  | 0.821       | Not significant |
| H5   | Cognitive Image        | Affective Image | 0.417   | 3.254  | 0.001       | Significant    |
| H6   | Affective Image        | Conative Image | 0.794   | 8.180  | 0.000       | Significant    |
| H7   | Cognitive Image        | Conative Image | 0.146   | 1.378  | 0.168       | Not significant |

5. Discussion

The hypotheses test results in Table 2 shows that, contextual quality will positively affect affective image. Perhaps, the information received by the tourist gives an idea of an interesting and pleasant visit. This is like the findings of [10], in which the contextual quality affects affective image. Furthermore, the results in this research supports the findings of [11], which argue that useful, novel, new, complete and accurate information pertaining to tourist destination, which are presented in websites, will facilitate potential tourists in their decision-making process of actual visit.

This research also shows that accessibility quality does not have a significant effect on cognitive image. The work of [8] also shows that a tourist’s level of trust or cognitive image of any information obtained is not only influenced by the ease of access, but also its timeliness, relevance, clarity and completeness. Furthermore, representational quality is shown to significantly affect cognitive image. The results of this research are similar to previous work [5], arguing that a tourist’s level of knowledge about tourist destinations is strongly affected by the consistency and the ease of digesting the information offered.
Figure 1. Resulting Model

This research also demonstrated that intrinsic quality does not have a significant effect towards cognitive image. Perhaps the respondents in this research assumed that no further explanation can be gathered from any other reputable sources, other than what has been posted on the wakatobitourism.com website. Since this is a government-run website, tourists tend to have a pre-conceived positive intrinsic characteristic towards the information they gather from the website. When searching for information, tourists will be very selective in accessing the sites that provide information related to the tourist destination [8]. This is due to tourists’ expectations that information from a reputable source will be more likely to have good quality. This research found that cognitive image does not have a significant effect on conative image. This is in contrasts to the results of research conducted by [5], [10]. One logical explanation is perhaps the respondents in this research consider wakatobitourism.com has less information. Whereas the tourists, generally will look for information related to the services and destinations that they are pursuing [12]. Finally, cognitive image has a significant effect on affective image, which in turn affects conative image. Tourists’ understanding of information and knowledge related to a tourist destination can potentially produce positive feelings such as pleasure and comfort, which leads to the increase of motivation to visit. Such findings are similar to previous research, such as [5], [10].

5.1. Implications

This research has several theoretical implications keys. First, it provides empirical evidence and extends our understanding of the relationship between the information quality and the destination image model, more specifically on tourist destination websites. The results of this research indicate that not all components of information quality affects tourists’ interest in visiting. The results of this research corroborate previous work, such as the Destination Image Model [6], and its relevance to the Information Quality Framework [7], and the intertwined effects they make by shaping tourists’ visiting interest. Furthermore, this research also has numerous practical implications that are worth mentioning, and can be an input towards the improvements of tourism websites, for example as follows:

Information related to tourist destinations should always be actual, consisting to the latest information, both in terms of description and in pictures to provide more a mental pictures of the current condition of the destination. In addition, the information should also be complete and clear, with discussions of various topics, such as available accommodations and interesting destinations to visit. The information should be presented in an interesting way, for example by using a variety of formats that are not only showing images related to the tourist destinations, but also be a more interactive medias, or short videos, that may be better on describing the actual condition of the destination. Finally, the information presented should also provide additional benefits for the tourists. For example, instead of just providing information about a particular tourist destination, the information should be enriched with additional explanations such as an explanation of how to get there.
6. Conclusion
This research was conducted to examine the effects of information quality towards the destination image model that may shape the tourist’s interest to visit certain destinations. From the results, we can conclude that a tourists’ interest to visit (conative image) is positively affected by affective image, whereas cognitive image has only indirect effects. Affective image was affected by contextual quality. Cognitive image was affected only by representational quality. On the contrary, intrinsic quality and accessibility quality did not have significant effects in shaping cognitive image.

Finally, a few suggestions can be realized to improve further research on this topic. The authors want other researchers to test different variables that can shape a tourists’ interest to visit a destination. Furthermore, it may also be useful to test the same model on different tourist destination websites and gain a more general result.

Acknowledgements
This research is funded by the 2018 PITTA Research Grant, Universitas Indonesia, Contract Number: 1887/UN2.R3.1/HKP.05.00/2018.

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