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Research Article

Tourism Website User Study: Measuring the Impact of System Quality and Information Quality Considering User Satisfaction to Obtain the Net Benefit

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Abstract: This research started from curiosity about the performance of tourism sector websites as an effort by researchers to give input to local governments in the field of tourism during the covid-19 pandemic. The purpose of this research is to find out the impact of system quality and information quality on Net Benefit by considering user satisfaction as an effort to succeed a website. This research was conducted at a tourist location in Maluku Province, Indonesia. Researchers met directly with respondents who come to the tourist attraction on considering information from the website. The number of respondents as many as 49 tourists is a sample of research. The research design is quantitative, using linear regression techniques to test structural models. Data analysis techniques are descriptive analysis and structural equation modeling. The results found information that the quality of information presented on tourism websites proved directly capable of creating decisions for users to visit tourist attractions in Maluku Province. Users as prospective visitors to tourist locations need information such as ease of travel to reach tourist destinations such as transportation, hotels, prices of various items, and tour guides.
Keywords: System quality, information quality, user satisfaction, net benefits, website Tourism.

INTRODUCTION

Tourism development and promotion are some of the areas that are intensively carried out by the government. The aim to benefit the government. To achieve the goal of organizing tourism that attracts tourists, various strategies must carry out. The most important strategy that must be considered in the community is to become a tourism player. As tourism actors, the community is equipped with a variety of knowledge about tourism management. Frequent tourism problems such as 1) boredom of visitors 2) deserted destinations or tourist destinations, 3) abandoned tourism destinations, unmanaged and abandoned and gradually damaged which is important. With the advancement of information technology as it is today, developing tourism promotion looks increasingly real. An information system is a system designed to produce information that is needed by the public and can be accessed from anywhere. One form of quality information is the internet.

The importance of analyzing the phenomenon of utilization and use of the community against the website is one of the factors or measures of success of any development of information systems. Better service quality is not only based on the point of view or precept of the service provider but also based on the point of view or perception of the community. People who enjoy service are people who can establish the quality of service. Public perception of service quality is a comprehensive assessment of the excellence of service.

The higher quality of information systems generated by an information system, the more user satisfaction [1]. The researchers of Kim and McHaney [2] supports this opinion), McKinney *et al.* [3], Rai *et al.* [4], Mc Gill *et al.* [5], Almutairi and Subramanian [6], and Livari [7]. If the end-user of the information system believes that the quality of information generated from an information system is good, then the end-user can feel satisfaction in using the information system.

Maluku Province as one of the archipelago provinces has quite different and unique natural characteristics when compared to other provinces, especially regarding maritime tourism and also tourism culture "Welcome to Maluku, spice island an exotic marine paradise" is the branding of Maluku Province. The community and managed by the community owns a

large tourist attraction in Maluku Province as a family, in cooperation with the district tourism office/city with a revenue - share system by local regulations. The diversity of tourist attractions should make tourism a leading icon that develops professionally.

An information system is a system that aims to produce information. The Internet is a global computer network around the world that can provide the information the public needs, and can access it from anywhere. The Internet makes it easy to access information. Tourism information can easily inform tourists through the website which is a very well-known part of the internet. Through the website, we can get to know various things about tourism. His research is a study of the perception of respondents who have used the exoticmaluku.com website as a consideration for tourists visiting tourist sites in Maluku province.

This study wants to test whether the correct quality of the system and the quality of information tourism website can give a positive impact on the Net Benefit of users and test how strong the level of user satisfaction of the website is. In the era of the covid-19 pandemic, the researchers wanted to find out if the theory model introduced by Delone and McLean [1] could still be accepted as an analysis model. The results of this study have an impact on the impact of information on stakeholders (travel managers, travel agencies, governments) related to tourism

LITERATUR STUDY

a. System quality is a combination of hardware and software in an information system. The quality of the system is also a characteristic of the information system that has always known about the system itself such as the ease of use of the system, as well as the sophistication of the system, and the time to respond to the system [5]. Quality system is a regulation in an organization to be regulated, controlled, and evaluated in every operational activity in order to produce a quality product. The quality system in ISO 9000 sets numerous things,such as steps to adapt the product quality with the market demands, documents, quality policies, quality system procedures, standard operating procedures and forms [8].

The quality of the system measures the process of the information system focusing on the results of user and system interaction. A Quality that has attributes such as equipment availability, equipment reliability, ease of use, and response time are the determining factors why an information system is used or not used. The quality of the information, the system can be understood using Reeves and Bednar quality frameworks [9, 18]. Excellence in information system quality involves using the latest technology, improving industry "best practice" software standards, and delivering "error-free" performance. The quality of the system is to measure the process of information through the system used, or the linkage between the characteristics of the system and the success of the system implementation [10].

A quality system is an appropriate system, established standards, and constantly follows the times and technological advances. To avoid rejection of the system developed, the quality of the system must be good, and this will affect the level of user satisfaction of the system [11].

b. Information Quality is the output of the information system used. The quality of information can be in the form of the output of such information as easy to understand information, good accuracy, sufficient completeness, and accuracy [5]. The quality of using information technology should be able to provide information to support decision-making for its users [12]. The quality of information used to measure information generated from an information system with quality that can provide value for users of certain systems with information characteristics that need of users [13].

c. Blending the results obtained (products or services) with results based on experience by using the product or only [14] can determine user satisfaction. Content, format, and accuracy form User satisfaction. The thing that supports the satisfaction of visitors is the format reflected in the information submitted on the website is easy to read. User satisfaction is the response or feeling of the user after using an information system, overall user satisfaction. So that the instruments used to assess the level of user satisfaction are to pay attention to the level of satisfaction about the output and reports obtained, websites, and services from the provider's system [15].

d. Net Benefit is the result or profit that is targeted by individuals and organizations implementing the information system [16]. Learning the quality of decisions, time, decisions, productivity and work tasks reflected from the information *on* the Maluku Provincial tourism office website that can access *to* other computer devices, as Jogianto [17] *said* about Net Benefits because of the existence and use of information systems on the quality of performance of both organizations and *individuals, including* productivity, increasing knowledge and reducing the length of time in search of *the information form net* Benefit.

RESEARCH METHODS

The design of the research is quantitative using a comparative cavalry approach to test a model of structural equations. Description analysis techniques are used to explain the respondent's perception of the

instrument being measured. Besides, using multiple linear regression tests a model of *structural* equations. Path analysis is used to explain the power of influence between free variables, mediation, and hanging.

Research location in Maluku Province, Indonesia. The researcher deliberately met with tourists visiting tourist attractions and measured them directly with questionnaires. The questionnaire instrument uses a *Likert* scale with five options from highly disagreeing options (score 1) to strongly *agree* (5). A score of 3 indicates a neutral option. *The SPSS statistics program* is used to perform statistical calculations on primary data.

Based on information from www.exoticmaluku.com *in* July 2020, shows that 1470 tourist visitors as a picture of the research population. Researchers use purposive techniques to determine samples, with the reason in the pandemic *era, there* is a decrease in tourism so that researchers use the minimum limit of analysis units determined by linear regression techniques as the basis for determining research samples.

This study used two free *variables, namely* quality system, and quality information. One variable depends on net *benefit* and one mediation variable is user satisfaction. Structural equation model presented in Figure 1.
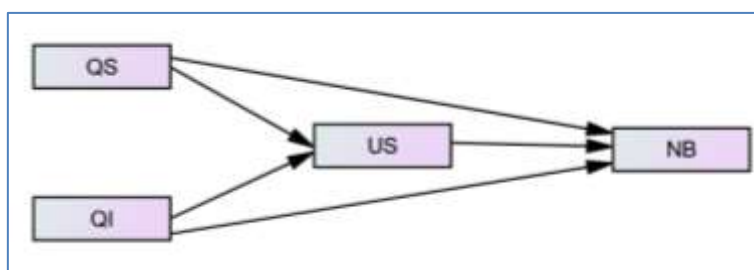

Fig-1. Structural equation model of research
Note: QS is a Quality System, QI is Quality of Information, US is User Satisfaction, NB is Net Benefit

The study used twelve measurements to measure two free variables, one mediation variable, and one dependent variable. Validity and reliability tests are required to test several research measurements. Mean values need to be presented in data analysis to explain the perception of respondents. Explanation of variables and their measurements are presented in Table 1 below:

Table-1: Research instruments

Variables	Measurement
QS-Quality System	QS1- Relevant
	QS2- Accuracy
QI- Information Quality	QI1- Completeness of information
	QI2- Match needs
	QI3- Accuracy of information
	QI4- Ease of information
	QI5- Update of information
US- User Satisfaction	US1 – Content
	US2 – Accuracy
	US3 – Format
NB- Net Benefit	NB1- Quality of decisions
	NB2- Productivity quality

RESEARCH RESULTS

The data collected by 49 unit's means that the researcher has met 49 tourists who have opened a web page and decided to visit Maluku Province for a tour. Linear regression analysis techniques allow to process data as many as 49 units of analysis. The primary data derived from the questionnaire answers were tabulated using excel programs and transferred to the SPSS program for further analysis of validity, reliability, description, and linear regression. The results of the statistical analysis are presented in Table 2.

Table-2: Results of research statistical analysis

Variables	Measurement	r $_{stat.}$	Mean	Mean Variable
QS-Quality system	QS1- Relevant	0.876*	3.73	3.59
	QS2- Accuracy	0.875*	3.45	
QI- Information Quality	QI1- Completeness of information	0.798*	3.82	3.70
	QI2- Match needs	0.845*	3.69	
	QI3- Accuracy of information	0.700*	3.65	
	QI4- Ease of information	0.789*	3.67	
	QI5- Update of information	0.825*	3.67	
US- User Satisfaction	US1 – Content	0.843*	3.45	3.48
	US2 – Accuracy	0.788*	3.57	
	US3 – Format	0.745*	3.43	
NB- Net Benefit	NB1- Quality of decisions	0.918*	3.48	3.29
	NB2- Productivity quality	0.829*	3.10	
* indicate that level of significant probability under 0.05 Chronbach's Alpha for 12 measurements is 0960 r $_{table}$ is 0.235				

Table 2 explains that twelve measurements have a probability level of less than 0.05 indicating that the measurement of research variables proved valid. Chronbach's Alpha level for 12 measurements is 0.960 greater than the r table (0.235) proving all research variable measurements have a good degree of consistency. According to the respondent perception system quality variables are represented by relevant, quality information represented by suitability needs, user satisfaction represented by content, and variable net benefit represented by the quality of decisions. According to respondents' perception that information quality has the highest level of perception compared to system quality variables, user satisfaction, and net benefit.

Researchers perform linear regression as follows

Regression I   : US = b1QS +b2QI +e1
         US =   0.30QS +0.13QI +e1
             R Square is 0.59

Regresison II   : NB = b3QS +b4US + b5QI +e1
         NB = 0.31QS + 0.80US+ 0.52QI +e1
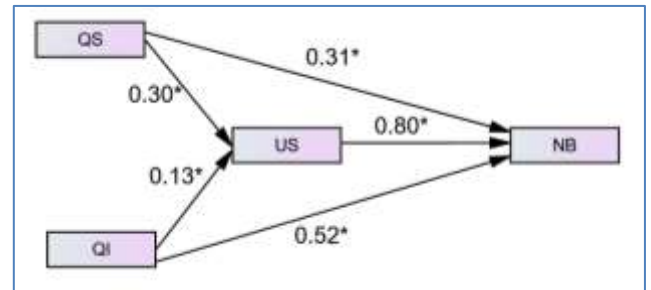   R Square is 0.61

Fig-2: Results of the research structural equation model

Note:* is a level of significant probability under 0.05

The Formula: $R^{m^2} = 1 - (\sqrt{1-R^2} \cdot \sqrt{1-R^2})$.

This formula is used to test the structural equation model so that the number R^{m^2} (R^2 model) is obtained by 0.60. This number is sensitive enough to aim at the problem of phenomena studied. This figure exceeds the cut-off by 0.5 as the standard size of the model. This means that the research structural equation model can explain the phenomenon measured by 60%. The remaining 60% are other variables that are not measured in this structural equation model.

Table-3: Research variable path analysis

Variable			Direct effect	Indirect effect	Total effect	note
Independent	Mediation	Dependent				
QS	US	NB	0.30	0.30 X 0,80 = 0.24	0.30 + 0.24 = 0.54	All path is significant
QI	US	NB	0.52	0.13 X 0.80 =0.10	0.52 + 0.10 = 0.62	All path is significant

The total effect of information quality variables on net benefit with the mediation of user satisfaction is 0.62. This figure is greater when compared to the effect of total information quality on net benefit with user satisfaction mediation of 0.54.

It explained that the quality of information has a better role compared to the quality of the system in influencing net benefit with the mediation of user satisfaction.

Directly influence of information quality on user satisfaction of 0.52. This figure is greater than the indirect influence of information quality variables on net benefit with user satisfaction mediation of 0.10. So in structural equation modeling in this study found the strongest path is the quality of information can directly affect net benefit.

DISCUSSION AND CONCLUSION

The quality of the system in shape by measurement is relevant and accurate. The relevance level of the website as a tourism information system shows quite good positive results according to the perception of visitors. The accuracy of information ranks perception lower than the relevant level of information. Overall the quality of the system on tourism websites in Maluku province shows positive skewness, meaning that the information obtained from the website is correct.

The quality of tourism website information in Maluku Province is measured through the perception of completeness of information, suitability, the accuracy of the information, ease, and novelty of information. Of these five measurements, according to the perception of tourist site visitors that the information presented on the website is under the level of their needs. Those who come to the tourist site want to prove the truth of the information obtained from the website.

Three visitor perceptions of content, accuracy, and format measures user satisfaction with the website. Respondents prefer content from the website to find the information needed. Website content can most shape respondents' perception when they open and search for information on the website.

Net benefit measurement results for visitors seem more likely to make decision-making aspects to make plans to visit tourist sites. The level of perception of decision making to visit tourist sites is stronger than the level of productivity to find more detailed information on the websites they visit.

Among the quality of the system and the quality of the website, the information proved that the quality of the system is more dominant in creating user satisfaction that ultimately impacts positively on net benefit. Among the quality of the system and the quality of the website, information is proven that the quality of website information can

create a net benefit for visitors. The results of this study are in line with Jogianto's statement [17] which explained that the quality of information from a system can create net benefits. The quality of information tourism website can present information that suits the needs of the user.

Users prefer a variety of content presented on the website so that the user feels the net benefit from the website. One of the net benefits obtained by users is when they decide to visit a tourist location. In this discussion, it was concluded that the quality of information presented in the tourism website has been directly able to create a decision for users to visit tourist sites in Maluku Province. User satisfaction on website content is not optimal enough to get attention from users to conduct decision making actions. Users as prospective visitors to tourist locations need prices of various items and tour guides. The presentation of various interesting photos does not necessarily guarantee that the user decides to visit the tourist location, they are more interested in the detailed information of the tourist location.

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