

Antecedents of Online Information Adoption Behavior: An Empirical Study in Tourism Using Online Travel Agent Services

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ABSTRACT: The digitalization has changed the business paradigm, including the tourism industry. Tourists are becoming more familiar with using Online Travel Agent booking and leaving the traditional booking method. This study examined the antecedents of online information adoption behavior in travel booking. Four dimensions, namely source credibility, perceived risk, argument quality, and information usefulness, were analyzed to understand the consequences of tourists' online information adoption behavior. A total of 200 valid data from the respondents within the age range of 18-60 years old was gathered for this research. The results from SEM-AMOS statistical analysis indicated that three dimensions of e-WOM source credibility had a positive impact on consumer's perceived risk. Moreover, the perceived risk was also proven to have an impact on the consumer's argument quality and information usefulness. Furthermore, these two variables had a positive impact on a consumer's online information adoption.

Keywords: e-WOM source credibility, perceived risk, argument quality, information usefulness, information adoption.

1 INTRODUCTION

In the past few years, technology has generated a new business paradigm shift (Buhalis & Law 2008). E-commerce has affected the position of traditional travel agencies and created a new platform called Online Travel Agent (OTA). According to Sudyasjayanti & Setiobudi (2018), the activity of OTA as a branch of e-commerce has started to become popular these days. With the fast development of e-commerce, communication, and information exchange via cyberspace are also growing rapidly over time, creating a fast pace in business practices for companies in order to survive the competition. Amaro & Duarte (2013) argued that these technology developments also changed tourists' behavior into a more digitalized way. With the ease of access, potential consumers will be able to search, view, and create a purchase for the travel goods and services quickly (Law et al. 2001).

E-commerce, as part of the digitalization, is defined as the process of exchanging products and services through the internet (Bairagi 2011). One of the most developing and eminent businesses in the world of e-commerce is tourism and travel services. Tourism itself is reputed as the world's most enor-

mous industry. It is so huge and able to create revenue support in a significant amount for a country (Farkhondehzadeh et al. 2013). As revenue is significant, competition is also high. Places are competing not only among countries but also with their neighboring and other regions (Roostika 2019).

With a massive amount of information flows on the internet, the credibility of that e-WOM information is also essential as the trends of business digitalization have risen significantly. The credentials and credibility of information regarding touristic products are seen as highly critical and vital, as most consumers rely on the information on the internet before their purchasing intentions.

Moreover, the consumer's trust issues are also taken into account. The risks and uncertainties became the most significant problems. Meanwhile, many people tend to exchange information and read reviews of a particular product on the internet (Bataineh 2015). With such a condition, the extent of argument quality and information usefulness became necessary for the readers.

Given all of the importance that has been explained above, this research focused on the e-WOM source credibility, consumer's perceived risk, argument quality, information usefulness, and consum-

er's information adoption in the usage of Online Travel Agents in Indonesia. This research is important due to the 1) limited study in this context in the tourism sector and 2) the fast development of e-commerce needs to consider the benefits and the risks to all involved in the online business.

E-commerce, E-tourism, and online travel agent. The information and communication technologies (ICT) is enabling companies to directly connect with customers by sharing information and enabling instant transactions of products and services (Jeong & Choi 2004). Known as e-commerce, Nanehkaran (2013) stated that this concept has fundamentally changed how the business runs, as well as how consumers behave. Meanwhile, Khan (2016) explained that e-commerce itself is an emerging concept that describes the process of buying and selling or exchanging of products, services, and information via the internet.

Pitoska (2013) stated that the internet itself is the most efficient way to disperse, distribute, and also retrieve any information. According to Kanellopoulos, as cited in Pitoska (2013), the ICT development has created a new term, which is called as e-tourism. Pan (2015) argued that social media and mobile technologies had changed the way customers access information and carry out transactions. With a vast amount of internet users and their interest in tourism, the Online Travel Agent (OTA) has been available to ease the consumers. According to Sudyasjyanti & Setiobudi (2018), the advancement of technologies encourages the development of tourism. They claimed that tourist's perceptions toward its objects heavily influence the tourism industry.

Electronic word of mouth (e-WOM). Jalilvand et al. (2011) stated that word of mouth is a process where sharing information and opinions about specific products occur between consumers. The process of word of mouth is likely to occur in a natural way, where consumers who have experienced a brand or product shared their opinion with others (Kotler & Armstrong 2013, Nyilasy 2006). On the other hand, the enhancement of ICT has created a new term, which is an electronic word of mouth (e-WOM). E-WOM is defined as any positive or negative consumer's opinion about brands or products through the internet (Hennig-Thurau et al. 2004).

The Internet also allows consumers to partake and contribute to the content. By means, consumers can exchange product information through the internet (Cheung et al. 2008). As explained by Lavelle (2017), e-WOM is presumed to last longer than WOM due to its digital track record as consumers can also consume it over a long period of time.

Moreover, e-WOM is easily accessible if compared to conventional WOM because of the information available on the internet.

E-WOM source credibility. As proposed by Ohanian (1990), the e-WOM source credibility is defined as the trust of the receiver toward the source of information itself. Applbaum & Anatol (1972) also stated that both expertness and trustworthiness are included as the measurement of source credibility. The expertness designates relevant information, knowledge, beliefs, and also experience of the related sources (Park & Lee 2009). Meanwhile, trustworthiness is strongly correlated with the source credibility, which believed as a factor that can influence the views of the receiver (Yoo & Gretzel 2009).

Other factors of the credibility of e-WOM, such as objectivity and homophily, is both also included. Objectivity indicates the condition, which the information was written, where it also able to identify the depictive image of biases (Hussain et al. 2017). It might decrease the risk as well as increase the trust of the receiver. Besides, the homophily is determined because individuals are often tied themselves with other people who have similarities (Behrens 2014). Thus, the source credibility of e-WOM is believed as a vital factor due to its form. As it is made from a consumer who had ever experienced a product or service and delivered to other consumers, this kind of communication is perceived as reliable and trusted (Lavelle 2017).

Thus, as described above, these four variables, namely; Expertness, Trustworthiness, Objectivity, and homophily, are approved to be the elements of the E-WOM Source Credibility. Thus, in his research, Hussain et al. (2017) proposed that these four elements have a potential relationship with Perceived Risk due to its nature.

1. The expertness of e-WOM source credibility has a positive effect on consumer's perceived risk when creating the purchase.
2. The trustworthiness of e-WOM source credibility has a positive effect on consumer's perceived risk when creating the purchase.
3. The objectivity of e-WOM source credibility has a positive effect on consumer's perceived risk when creating the purchase.
4. The homophily of e-WOM source credibility has a positive effect on consumer's perceived risk when creating the purchase.

Perceived Risk. The perceived risk is strongly associated with uncertainty feelings and unpleasant consequences when someone is using a product or service (Featherman & Pavlou 2003, Cunningham 1967). In general, uncertainty and consequences are both considered as the components of perceived risk,

along with other dimensions such as performance risk, financial risk, time risk, psychological risk, and social risk (Cunningham 1967). On the other hand, when associating perceived risk with online shopping, potential risks regarding the product, internet, websites, economic, social, performance, security, and privacy, might occur (Jarvenpaa & Todd 1996, Lin et al. 2009).

According to Tseng & Wang (2016), people may rely on extensive information from reliable sources to reduce risks and, finally, adopt information to create a purchase decision. In other words, Zhang et al. (2012) implied that consumers might experience insecurities regarding the existence of tons of alternatives and choices in the market. In line with Hussain, et al. (2017) and Tseng & Wang (2013), these researchers stated that Perceived Risk might influence the other variables such as the argument quality and also the information usefulness.

H5. The consumer's perceived risk has a positive effect on e-WOM information argument quality.

H6. The consumer's perceived risk has a positive effect on e-WOM information usefulness.

Argument Quality, Information Usefulness, and Information Adoption. According to Hussain et al. (2017), the argument quality is strongly associated with the strength to argue with a message, and also the relationship of message senders and message characteristics, either positive or negative. As it has been acknowledged before, word of mouth (WOM) communication is proven to be able to influence the decision of consumers. Due to its different types of characteristics, the WOM message may create a different perspective to its receiver (Sussman & Siegal 2003, Yap et al. 2013).

The information usefulness, on the other hand, is associated with a cognitive process inside their head. The same information may equally influence two different people, but via different cognitive processes (Ferran & Watts 2008). Moreover, Sussman & Siegal (2003) stated that usefulness is a key construct in the adoption level. On the other hand, information adoption is seen as an important variable because e-WOM might create various impacts on each individual (Cheung et al. 2008). This idea is also supported by Chaiken & Eagly (1976), who stated that the same message could create different outputs to different people, where it might be affected by their perception, understandings, and sources. Thus, the argument quality and usefulness are related to the consumer's adoption behavior (Sussman & Siegal. 2003, Tseng & Wang 2016). Hence, this idea brought up the seventh and eighth hypotheses.

H7. The e-WOM argument quality has a positive effect on the consumer's information adoption.

H8. The e-WOM information usefulness has a positive effect on the consumer's information adoption.

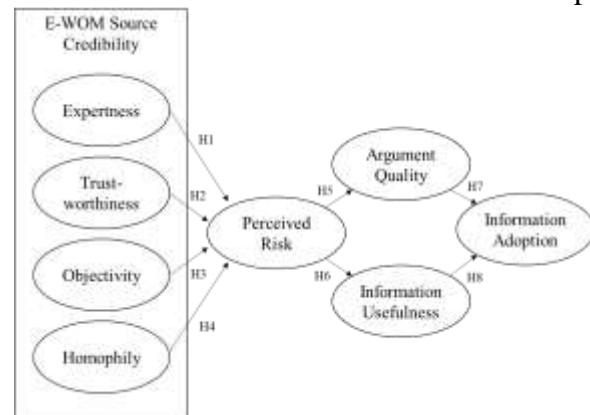


Figure 1. Conceptual Model

2 RESEARCH METHODS

The final questionnaire was developed based on previous studies and had been pretested on 30 OTA consumers. Of the 220 distributed questionnaires with an online survey, 200 were valid and further examined with AMOS 24 statistical tool. A non-random sampling technique with purposive sampling was chosen. The respondents should have experience in using OTA for their travel or tourism activities. Questionnaires for all the key variables were adapted from Hussain et al. (2017) using a 5-point Likert scale for measurement with 1 “Not very agree” to 5 “very agree”.

3 RESULTS AND DISCUSSIONS

Based on the descriptive statistical analysis, the majority of respondents were female, with a percentage of 52.5%, and the male respondents were 47.5%. According to the age range, the majority of respondents (82%) were around 18-30 years old. Meanwhile, the respondent's educational background was dominated by High school graduate with 43.5% and Bachelor graduate with 47%.

By using AMOS 24, the validity test can be drawn from the loading factor of each indicator. According to Hair et al. (2010), the minimum number of factor loading is ≥ 0.5 or ideally ≥ 0.7 . Based on the result, if only one indicator has a value below 0.5, thus it should be removed to reach the validity of the measure. Meanwhile, the reliability test relies on the construct reliability and variance extracted. According to Yamin & Kurniawan (2009), construc-

tive reliability is good if the construct reliability value is > 0.7 , and the extracted variance value is > 0.5 . Based on the result of the test, the construct reliability of all variables already shows ≥ 0.7 . Meanwhile, for the variance extracted in this research, each variable also has a value above 0.5, except one which is 0.4. Hatcher in Longino (2007) stated that variance extracted testing is conservative; thus, a reliability value is still acceptable even if the variance extracted is below 0.50.

The proper fit model test was tested using the loading factor of each indicator and Goodness of Fit Index, which includes Chi-Square, probability, RMSEA, GFI, CFI, TLI, and CMIN/DF. The results can be seen from the cut-off value resulted in the test to find out whether it is good or not. The results are shown in Table 1 below:

Table 1. Goodness of Fit Results

Goodness of Fit Index	Cut-Off Value	Result	Valuation Model
X2 (Chi-Square)	Small value	668.757	Fit
Significance probability	≥ 0.05	0.064	Fit
RMSEA	≤ 0.08	0.023	Fit
GFI	≥ 0.90	0.880	Marginal Fit
AGFI	≥ 0.90	0.852	Marginal Fit
CMN/DF	≤ 2.00	1.110	Fit
TLI	≥ 0.90	0.987	Fit
CFI	≥ 0.90	0.988	Fit

Source: Primary Data (Computed), 2019

Hypothesis Testing

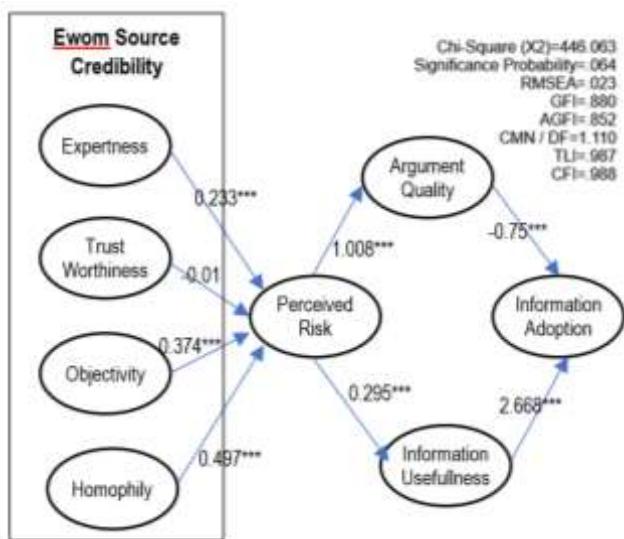


Figure 2. Full Results Model

Source: Primary Data (Computed), 2019

To see the influence between variables as hypothesized, the authors were looking at the path coefficients (Figure 2), the value of the Critical Ratio (CR), and the probability value (P) from the

results of data processing (table 2). If the test results show CR values above 1.96 and probability values (P) below 0.05/5%, the result will be significant.

Table 2. Hypothesis Testing

H	Variable Relationship	C.R	P-Value	Label
H1	SCE → PR	0.233	0.000	Significant
H2	SCT → PR	-.001	0.985	Not Significant
H3	SCO → PR	.374	0.000	Significant
H4	SCH → PR	.497	0.000	Significant
H5	PR → AQ	1.008	0.000	Significant
H6	PR → IU	.295	0.000	Significant
H7	AQ → IA	-.705	0.004	Significant
H8	IU → IA	2.668	0.000	Significant

Source: Primary Data (Computed), 2019

The first hypothesis shows that Expertness has a positive impact on the consumer's Perceived Risk. Feedbacks and reviews that were given to specific products by people who had experienced were considered as reliable by potential consumers. The previous research conducted by Park & Lee (2009) supported these findings, which stated consumers, especially when they try to buy experience goods such as hotel bookings, can reduce their uncertainty and risk by referencing e-WOM information that contains expert advice and comments.

The second hypothesis shows that Trustworthiness has a negative impact on the consumer's Perceived Risk. Trustworthiness might be related to consumer's trust issues regarding the reviews and feedback on the internet. The trust itself is defined as socio-psychological traits in communication that claim someone to be truthful and faithful (Magnusson 2017). There might be several factors in real business practice that make this hypothesis is not significant. A study conducted by Quambusch (2015) indicated that many reviewing sites have problems with fake reviews, which harm the consumers, the sites, or the companies involved. With those arguments, it can be said that some reviewers might write a false and fake review, whether positively or negatively, to create a perceived image of a brand or company that they wanted to build up. However, other studies conducted by many researchers are suggesting that trust still plays a vital role in order to avoid any risks in creating a purchase in the future.

The third hypothesis shows that Objectivity has a positive impact on the consumer's Perceived Risk. This indicates the higher the objectivity of e-WOM information, the higher the possibilities for consumers to avoid risk while they book a touristic product like a hotel room. Besides, a person with objective judgment about products will be able to create a pos-

itive opinion while also overcome risk and uncertainty toward it (Tuu et al. 2011). This idea was supported by Hussain et al. (2017), which stated that an objective written expression of experience could reduce bias for readers for them to create a better decision in the future. Likewise, emotions and any other unusual events like natural disasters could affect the touristic product's quality in general.

The fourth hypothesis shows that homophily has a positive impact on the consumer's Perceived Risk. The result shows that if the level of homophily in terms of the source of e-WOM is high, the consumers are likely to avoid risk related to purchase in a better way. People tend to believe in the opinions of those who have similarities with them. According to Behrens (2014), the homogeneous source is seen as necessary because people are often tied themselves with others who are of the same age, gender, situation, or interests. Hence, it can be concluded that any sources of e-WOM information are related to touristic products. If it was written by someone who has likeness and similarities with the readers, it would be considered as reliable by them.

The fifth and sixth hypotheses show that Perceived Risk has a positive impact both on the Argument Quality and Information Usefulness. The results show that the higher the perceived risk, the higher the Argument Quality and Usefulness demanded by the readers. The risk perceived by consumers itself is strongly associated with the uncertainty and consequences, and therefore, in practice, people tend to avoid risk as much as they can, either in terms of financial or time (Lin et al. 2009). Hence, people would believe in the reviews with high quality of arguments as well as actual and useful information if they want to avoid any means of risk in creating purchase (Tseng & Wang 2016).

The seventh and eighth hypotheses show that Argument Quality and Information Usefulness have a positive impact on Information Adoption. With a massive amount of information resources on the internet, people tend to choose not only the most reliable, relevant, and appropriate one but also the most up-to-date and complete information (Cheung et al. 2008). Additionally, Sussman & Siegal (2003) and Tseng &

Wang (2016) claimed that both Argument Quality and Usefulness are the key constructs related to the consumer's adoption behavior.

4 CONCLUSION

The research was conducted in order to find out the effects of the e-WOM source credibility on consum-

er's ability to adapt that information. Several mediating variables include perceived risk, argument quality, and also information usefulness. The relationships of these variables constructed were gathered from the online questionnaires through Google form.

The findings of this research indicated that there were significant relationships of several indicators of e-WOM source credibility on the consumer's level of information adoption. Moreover, other relationships of perceived risk, argument quality, and information usefulness were also significant on the consumer's e-WOM information adoption. However, the findings also showed that there was one insignificant relationship among one of the indicators of e-WOM source credibility, namely trustworthiness toward the perceived risk. From all of the results, there were seven accepted hypotheses and one rejected hypothesis.

This research revealed that most of the reviews provided by the majority of Online Travel Agent platforms had created reliable sources of information. People tend to use reliable resources as their references to avoid risks when purchasing a touristic product, in this case, hotel bookings as part of touristic products. Thus, the credibility of e-WOM information sources was critical to be considered.

The researcher suggests future studies to modify the framework to find new possibilities of the model that may explain the relationship of existed variables. Purchasing intention might be investigated in future research as this model only tested the information adoption.

As for the managerial implications, managers need to know that e-WOM communication can be a powerful tool to create exposure for a product. Although it is seen as powerful, yet it is hard to be controlled. Hence, the managers need to carry out their business processes carefully so that they can deliver their values in the best way possible. Therefore, people who already use the services and feel satisfied might create advocacy to other potential consumers. Second, the managers must be able to ensure the completeness and reliability of the information regarding the hotel they offered on their platform. Thus, in the future, positive and objective reviews from those who already experienced a certain hotel can be referred to as a reliable reference to others to create better future purchasing decisions.

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