

The Effects of Argument Quality and Sources Credibility on Ewom Credibility and Online Reviews Adoption

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Abstract: Online reviews have provided many benefits, one of which related the speed and ease that are offered to the consumer in finding a wide range of information related products or services without the limited time and space. This purpose of this study was to determine the influence of the argument quality and the sources credibility on eWOM credibility and online reviews adoption. The samples were 100 respondents from all over Denpasar taken with the purposive sampling method and Partial Least Square (PLS). The study found that argument quality (X_1) and source credibility (X_2) has a positive and significant effect on online reviews adoption (Y_2). Furthermore, eWOM credibility (Y_1) has a positive and significant effect on online reviews adoption (Y_2). Finally, argument quality (X_1) and source credibility (X_2) has a positive and significant effect on eWOM credibility eWOM credibility (Y_1).

Keywords: argument quality, source credibility, ELM, eWOM, eWOM credibility, online reviews adoption.

1. INTRODUCTION

The development of Web 2.0, which is able to create various types of social media, is the proof of how rapid the advancement of technology in this era. Not to mention the increasing of active consumers in sharing information about the experiences they feel, the opinions they can express, to how they respond products or services in the form of online reviews to be shared with other consumers which also support this phenomenon. Some researchers focus their research on the benefits of online reviews, where consumers generally examine the content of online reviews to shape perceptions of informative and persuasive reviews, thus improving their purchasing decisions (Zhang et al., 2014), and most others paying attention to how an evaluation may affect their decisions (Filiari, 2015).

We Are Social, a global survey institution that studies digital, social, trends and statistics data in 2016 reveals that the number of active internet users in Indonesia in January 2016 reached 88.1 million and for active social media users reached 79.0 million. Following the development globally, online shopping begins to become a popular activity in Indonesia. However, on the other hand, most internet users in Indonesia still have doubts in doing online shopping. According to survey by APJII in 2015, it is stated that internet users who conduct information search activities related with products or services that they will buy by 34 percent and internet users who do online shopping by 27 percent. The results of this study is quite interesting because although the internet users seek information on the internet about products and services it is not guaranteed that they will buy the product or service.

There are several factors that influence the adoption process in online reviews, one of those factors is eWOM credibility. eWOM credibility refers to how far a person views a recommendation or suggestion as a true and reliable information. Furthermore, Cheung and Thadani (2012) states that the role of eWOM credibility is increasingly important in determining which information is more suitable for consideration in decision making, trust, and purchase intentions.

The argument quality is part of the Elaboration Likelihood Model (ELM) related to attitude changes in two different routes: the central route and peripheral route, where the argument quality includes the central route which can be interpreted if one thinks the message content carefully, systematically and full of precision (Petty et al., 1983).

The source credibility of a message affects the process of defining a message. When the message source is respected, has objectivity and is honest, then the message delivered will be more reliable. Conversely, if the source of the message is incorrect and unreliable, then the message is most likely to be accepted skeptically or even denied (Suprapti, 2010:230). The source credibility itself is part of the ELM model as a peripheral route relating to consideration of the source of the message (Petty and Cacioppo, 1986).

2. THEORETICAL FRAMEWORK AND HYPOTHESES

1. *Electronic Word-Of-Mouth (eWOM):*

The communications of Electronic Word of Mouth leads to whether a statement is either positive or negative, created by the consumer, prospective customer or former consumer in relation with information about the product or company available to various people or an institution which is accessible to the virtual world or the internet (Henning-Thurau et al., 2004). Litvin et al. (2008) defines the communications of Electronic Word of Mouth as all non-formal communication directed at consumers with the use of internet media related to the use or good characteristic of a particular service or to the seller. One type of Electronic Word of Mouth that has an important role today is online review that is considered to provide important and reliable information (Sotiriadis and Zyl, 2013 and Teng et al., 2014).

2. *Elaboration Likelihood Model (ELM):*

There is a theory in the theory of social psychology related to cognitive processes which is studied in depth (Petty and Cacioppo, 1986). The theory is known as the Elaboration Likelihood Model (ELM), a theory that explains the two paths of cognition in an individual when thinking of a message. The first line is the central route, where on this route people tend to think more critically about the problem-related arguments on message information and examine deeper on the pros and cons associated with their previous arguments, thus forming a target behavior of a person. In contrast, peripheral route is related to individuals who have low motivation and ability to process a message.

3. *Argument Quality:*

The argument quality is expressed as a factor that receives information based on validity assessment during systematic processing, hence the quality of perception is either lower or higher. High argument quality leads to systematic adoption of information, while low quality of argument it can delay the adoption process (Ferren and Watts, 2008). According to Cheung and Thadani, (2012) and Xu and Yao, (2015) the argument quality has four commonly used dimensions, i.e. relevant, actuality, accurate and comprehensive.

4. *Source Credibility:*

The term sources credibility refers to the extent to which the communicator is deemed skillful and credible. The more expert and more credible the source of information, the more often observers perceive that the source is trustworthy (Mowen and Minor, 2002: 402). The source credibility of the message giver has an important role to play. A credible source will gain the trust of the message recipient (Sangadji and Sopiah, 2013: 216). The sources credibility itself has three main dimensions, based on Cheung and Thadani, (2012) and Teng, et al. (2017), including expertise, trustworthiness, and experience of information resources.

5. *eWOM Credibility:*

Flanagin and Metzger (2008) define the term credibility as the trust of the source or message. eWOM credibility itself is defined as how far a person can perceive an online information as reliable, factual, and objective information (Cheung et al., 2009 and Park et al., 2011). Hu and Sundar (2010) in Cheung and Thadani (2012) and the Prophet and Hendriks (2003) in Arif and Rohman (2015) state that the representation of messages in which it refers to factual, accurate, credible, trustworthy, objective, and not deviate.

3. RESEARCH HYPOTHESIS

Relations between argument quality with online reviews adoption:

The research conducted by Zhang and Watts (2008) found that the argument quality has a positive and significant effect on information adoption. Cheung and Thadani (2012) results of his study showed that, one of eWOM communications, i.e. the argument quality, has a positive and significant effect on eWOM adoption. This supports the research of Xu and Yao (2015) and Ferran and Watss (2008) which states that the argument quality affects online reviews adoption positively. Therefore, based on the results of these empirical studies, hypothesis 1 is as follows:

H₁: The argument quality has a positive and significant effect on online reviews adoption.

The relations between source credibility with online reviews adoption:

Utami et al. (2015) in their research explains that the source credibility or author is considered important to the consumer and also can strengthen consumer perceptions. It is also in line with the findings of Lis (2013), Arif and Rohman (2015) and Cheung and Thadani (2012) that state the source credibility has a positive and significant effect on eWOM adoption. So based on the results of these empirical studies, hypothesis 2 is as follows.

H₂: The source credibility has a positive and significant effect on online reviews adoption.

Relations between eWOM credibility with online reviews adoption:

Research conducted by Awad and Ragowsky (2008) emphasizes that credibility felt for the first time will be a determinant in the decision-making phase that will be done by consumers and also minimize uncertainty, both in social interaction and business interaction. Some of researchers claim that eWOM credibility has a positive and significant effect on online reviews adoption (Arif and Rohman 2015; Fan et al., 2013; Lis 2013; Cheung and Thadani 2012 and Lee and Koo 2012). So based on the results of these empirical studies, hypothesis 3 is as follows.

H₃: eWOM credibility has a positive and significant effect on online reviews adoption.

Relations between argument quality with eWOM credibility:

The argument quality which is the review element of consumers can influence consumer perceptions of eWOM credibility (Filieri 2015). The results of Fan et al. (2013) and Cheung et al. (2012) i.e. the argument quality has a positive and significant effect on eWOM credibility. Thus, based on the results of these empirical studies, hypothesis 4 is as follows.

H₄: The argument quality has a positive and significant effect on eWOM credibility.

The relationship of source credibility with eWOM credibility:

The source credibility in online reviews has some disadvantages i.e. the consumer will have difficulty in distinguishing which is true, trustworthy and original (Arif and Rohman, 2015). The source credibility always has a direct relationship with eWOM credibility (Qiu et al., 2012). Some research results suggest that source credibility positively affects eWOM credibility (Luo et al., 2015; Arif and Rohman, 2015; Fan et al., 2013 and Lis 2013). Therefore, based on the results of these empirical studies, hypothesis 5 is as follows.

H₅: The source credibility has a positive and significant effect on eWOM credibility.

Based on explanation of the hypotheses above, it can be described conceptual framework in the research in Figure

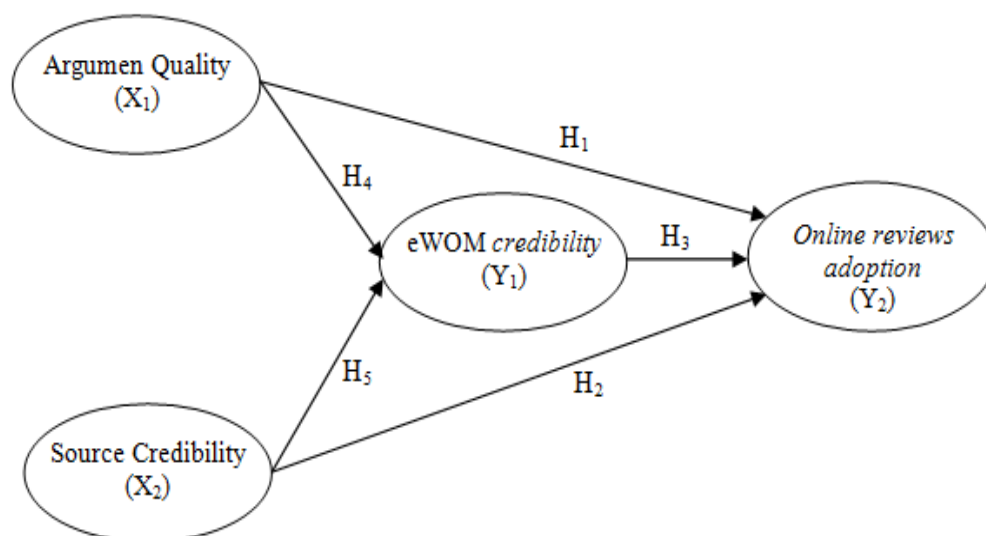


Figure 1. Conceptual Framework of Research

Source: Xu and Yao (2015), Cheung and Thadani (2012) and Arif and Rohman (2015)

4. RESULTS AND DISCUSSION

1. The Characteristic of Respondents:

Based on the results of the survey, people from category 18 to 25 years old dominate with 44 percent, followed by ages 26 to 35 by 42 percent, 36 to 45 years old by 11 percent, 46 to 55 years old by 1 percent and age > 56 years with 2 percent. The sex category is dominated by women with 70 percent, followed by men with 30 percent. From the education level, the majority of respondents are Bachelor with 59 percent, second position is high school 33 percent, Diploma with 7 percent, and Post Graduate with 1 percent. In category of employment, the majority of respondents are private employees of 51 percent, the second position is students / students with 28 percent, followed by entrepreneurs with 8 percent, then housewives by 7 percent, civil servants by 4 percent and others by 2 percent. Next category is based on the frequency of online reading reviews. The highest respondents do online reading reviews 4 to 6 times with 40 percent, followed by 1 to 3 times with 33 percent, 10 or more times with 16 percent, and 7 to 9 times with 11 percent. Finally, based on the reasons respondents use the internet as a medium to find information products or services. The first position occupied by the reason because it is easier and faster with 47 percent. Second position is because respondents can access more information. The next position is ability to choose products or services with 19 percent, the information is more accurate with 4 percent and last place is another category with 1 percent.

2. Analysis of Research Model:

A. Evaluation of Measurement Model (Outer Model):

The first stage of data analysis is the outer model. This is done by measuring validity and reliability. The validity measurement use two indicators of the provisions, i.e. use the evaluation of convergent validity and discriminant validity, while reliability measurement use cronbachs alpha and composite reliability. Measurement model's results are shown in Table 1.

Table 1. Outer Model

Constructs	Item	Loading	Cronbach's alpha	Composite Reliability	AVE
Argumen Quality (X ₁)	X _{1.1} : Relevant	0,841	0,875	0,914	0.727
	X _{1.2} : Actuality	0,845			
	X _{1.3} : Accurate	0,884			
	X _{1.4} : Comprehensive	0,839			
Source Credibility (X ₂)	X _{2.1} : Expertise	0.903	0,869	0,920	0.793
	X _{2.2} : Trustworthiness	0.904			
	X _{2.3} : Experience of information resources	0.864			
eWOM Credibility (Y ₁)	Y _{1.1} : Factual	0.850	0,905	0,927	0.680
	Y _{1.2} : Accurate	0.829			
	Y _{1.3} : Credible	0.832			
	Y _{1.4} : Trustworthy	0.801			
	Y _{1.5} : Objective	0.869			
	Y _{1.6} : Not deviate	0.761			
Online Reviews Adoption (Y ₂)	Y _{2.1} : Make it easier for me to make a purchase decision	0.902	0,903	0,939	0.838
	Y _{2.2} : Effectiveness in making a purchase decision	0.911			
	Y _{2.3} : As a consideration for decision making	0.933			

Source: Result of Data Processing of the Research, 2017

B. Evaluation of Structural Model (Inner Model):

The second stage of data analysis is the inner model. This is processed to see the relations between construct, significance value and R-square of the research models. Based on Table 2, the argument quality and the source credibility are able to explain eWOM credibility with 0.669 or 66.9%, while 33.1 percent is explained by other constructs. Furthermore, argument quality variables, source credibility and eWOM credibility are able to explain online reviews adoption variables with 0.723 or 72.3%. The remaining 27.7 percent is explained by other constructs.

Goodness of fit model is also measured by Q-square predictive relevance as a measure of how well the observed values obtained by the model and also the parameter estimation, it is necessary to calculate Q-square with the formula:

$$\begin{aligned}
 Q^2 &= 1 - (1 - R1^2) (1 - R2^2) \\
 &= 1 - (1 - 0.669) (1 - 0.723) \\
 &= 1 - (0.447) (0.522) \\
 &= 1 - 0,233 \\
 &= 0.766
 \end{aligned}$$

The value of $Q^2 = 0.766 > 0$, it can be interpreted that the research model is predictive relevance.

Tabel 2. Inner Model

Konstruk	R-Square
eWOM Credibility (Y_1)	0,669
Online Reviews Adoption (Y_2)	0,723

Source: Result of Data Processing of the Research, 2017

Hypothesis Testing Results:

The basis applied in testing the hypothesis is the value found in the results of the path coefficients presented in Table 3.

Hypothesis testing is done by using t-statistics. If the value of t-statistics \geq t-table value (1,96), then H_0 is rejected and hypothesis is accepted. Based on Table, 3 the hypotheses in this study are accepted.

Tabel 3. Path Coefficients

Constructs	Correlation Coefficient	t Statistics	Remarks
Argument Quality (X_1) → Online reviews adoption (Y_2)	0,248	2,260	Accepted
Source Quality (X_2) → Online reviews adoption (Y_2)	0,325	2,353	Accepted
eWOM credibility (Y_1) → Online reviews adoption (Y_2)	0,357	3,000	Accepted
Argument Quality (X_1) → eWOM credibility (Y_1)	0,465	3,711	Accepted
Source Quality (X_2) → eWOM credibility (Y_1)	0,414	3,253	Accepted

Source: Result of Data Processing of the Research, 2017

DISCUSSION:

The effect of argument quality on online reviews adoption:

Based on the data obtained from Table 3, it shows that the effect of argument quality on online reviews adoption has a coefficient path of 0.248 with a t-statistic value of 2,260. It can be interpreted that the higher the argument quality given by e-marketplace sites, the higher the rate of online reviews adoption for the users of e-marketplace sites. These results support the concepts of Petty and Cacioppo (1986) as well as empirical studies of Zhang and Watts (2008), Ferran and Watts (2008), and Xu and Yoa (2015). Thus, the first hypothesis that the argument quality has a positive and significant effect on online reviews adoption is accepted.

The effect of source credibility on online reviews adoption:

Based on the data obtained in Table 3, it shows that the effect of source credibility on online reviews adoption has a path coefficient of 0.325 with t-statistic value of 2.353. It can be interpreted that the higher the source credibility given by the site e-marketplace, the higher the rate of online reviews adoption. These results support the concepts of Petty and Cacioppo (1986) as well as empirical studies from Utami et al. (2015), Cheung and Thadani (2012) and Zhang and Watts (2008). Thus, the second hypothesis of source credibility has a positive and significant effect on online reviews adoption is accepted.

The effect of eWOM credibility on online reviews adoption:

Based on the data obtained in Table 3, it shows that the effect of eWOM credibility on online reviews adoption has a path coefficient of 0.357 with a t-statistic value of 3,000. It can be interpreted that the higher the source credibility given by the

site e-marketplace, the higher the rate of online reviews adoption. The result is consistent with the findings of Arif and Rohman (2015), Fan et al. (2013), Lis (2013) and Lee and Koo (2012). Thus, the third hypothesis of eWOM credibility has a positive and significant effect on online reviews adoption is accepted.

The effect of argument quality on eWOM credibility:

Based on the data obtained in Table 3, it shows that the effect of argument quality on eWOM credibility has a coefficient path 0.465 with t-statistic value is 3,711. It can be interpreted that the higher the argument quality given by the e-marketplace site, the higher the eWOM credibility level. This result is consistent with the findings of Arif and Rohman (2015), Cheung et al. (2012), and Fan et al. (2013). Thus, the fourth hypothesis that the argument quality has a positive and significant effect on eWOM credibility is accepted.

The effect of source credibility on eWOM credibility:

Based on the data obtained in Table 3, it shows that, the effect of source credibility on eWOM credibility has a path coefficient of 0.414 with t-statistic value is 3.253. It can be interpreted that the higher the source credibility given by the e-marketplace site, the higher the eWOM credibility level. These results are consistent with the findings of Arif and Rohman (2015), Luo et al. (2015), and Fan et al. (2013). Thus, the fifth hypothesis of source credibility has a positive and significant effect on eWOM credibility is accepted.

5. CONCLUSIONS AND SUGGESTIONS

Based on the research objectives, it is concluded that: First, the argument quality and source credibility have a positive and significant effect on online reviews adoption. Second, eWOM credibility has a positive and significant effect on online reviews adoption. Finally, variable of argument quality and source credibility have a positive and significant effect on eWOM credibility.

Some suggestions that can be recommended to management are to continue making good improvements in terms of source credibility by providing information from credible source identities, having expertise in their field and having experience in online shopping. This is because the users make source credibility as reference before finally adopting those various informations.

The management must pay attention to the argument quality related to eWOM credibility. The management should be able to provide accurate, current, complete and in-depth information with an information retrieval system that is easy to be operationalized in general.

Finally, eWOM credibility affects online reviews adoption. The researcher's suggestion to the management is to provide information with the best and credible quality. There are two ways that management can do. First is by reading and analyzing in detail and second is by being selective to reviews or comments provided by e-marketplace users.

Suggestions for further researchers to be able to develop other variables such as type reviews, homophilous sources, recommendation framing, recommendation sidedness, usefulness of information, and purchase decisions as a further impact after consumers adopt previously obtained information and be able to add categories of websites and social media such as sites of buying and selling community, central / regional government sites, Instagram, YouTube and other sites.

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