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Dharma Nur Sahira, Robert Kristaung, Faizah Eliza Abdul Talib, Wenny Chandra Mandagie

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Dharma Nur Sahira and Robert Kristaung*

Department of Management,
Faculty of Economics and Business,
Universitas Trisakti,
Jl. Kyai Tapa No. 1, Grogol Petamburan,
Jakarta Barat – 11440, Indonesia
Email: dhar.sahira@gmail.com
Email: robert_kristaung@trisakti.ac.id
*Corresponding author

Faizah Eliza Abdul Talib

Institute of Leadership and Development,
Universiti Teknologi MARA,
Lebu Enstek, Bandar Enstek, 71760 Nilai,
Negeri Sembilan, Malaysia
Email: eliza210@uitm.edu.my

Wenny Chandra Mandagie

Jakarta International College,
Jalan Imam Bonjol No. 61 Menteng,
Jakarta Pusat – 10310, Indonesia
Email: wenny.mandagie@jic.ac.id

Abstract: Electronic word-of-mouth (eWOM) communication is a part of a digital marketing strategy that has been used for a long time. This study examines the influence of eWOM of information on customers' online purchase intentions in social media and shopping websites. According to the results, the information acceptance model (IAM) determinants – information quality (IQ), information credibility (IC), and information usefulness (IU) were similar in the two groups. However, the information adoption (IA) in social media group had a significant impact, though not in group shopping websites. Although the results were different from past research, its model IAM provides new insights into information systems' study (IS). Future studies should use other research models considering the variation in the results of this research. Furthermore, this study helps understand the impact of eWOM in group social media and shopping websites, specifically regarding customers' purchase intentions in Indonesia.

Keywords: online purchase intention; social media; shopping websites; electronic word-of-mouth; eWOM.

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Biographical notes: Dharma Nur Sahira is a General Dentist based in Malaysia with a passion for social media-based business management and digital marketing. She believes the integration of health awareness and the ethical professional use of social media is an effective approach on promoting health awareness as well as generating business growth. She graduated with a Dental degree and a Master degree concentrating in Service Management from University of Trisakti, Indonesia and currently living in Malaysia.

Robert Kristaung is a Permanent Lecturer at the Faculty of Economics and Business, Universitas Trisakti in last 22 years. He completed his undergraduate education from the National University, a Masters from Universitas Trisakti, Jakarta, and Doctoral from Universitas Padjadjaran in the field of Marketing Management. His concern includes marketing management, consumer behaviour and research methodology. He is active in writing on various scientific publications, presenter for national and international seminars and is an instructor in research methodology training and multivariate analysis. Apart from being an editor of a national scientific journal, he is also a reviewer for the *Sage Open*.

Faizah Eliza Abdul Talib is currently a Fellow with the Institute of Leadership & Development (ILD), UiTM, Malaysia and a Senior Lecturer at the Academy of Language Studies, UiTM Dengkil. With more than 25 years of teaching experiences at various levels, her passion has always been in the field of language education and technology. Nevertheless, she believes the interdisciplinary approach to research in the education environments inspires vibrant learning and professional growth as an educator.

Wenny Chandra Mandagie is a Lecturer in Monash College – Jakarta International College, School of Business, Jakarta for Bachelor degree and Trisakti University for Master degree. Her interest of research and teaching is in the area of marketing, customer behaviour, entrepreneurship, service management and strategic management. In addition to her activities as a lecturer and founder of Monash College – Jakarta International College, School of Business in Jakarta, she also as a founder of some information technology company.

1 Introduction

Advertising is currently perceived to be the main tool for promoting products and services. Before a product or service is launched, they are introduced to customers through advertising, following an extensive communication process (Choudhury, 2014; Jalilvand et al., 2017; Sethuraman and Thanigan, 2019). Many communication processes occur after the exposure and have a considerable influence on consumers' purchasing decisions. In general, communication process often occurs interpersonally and may involve producers and customers, or customers with customers. Without advertising, a product can still attract customers. A good example is consumers' adoption of the internet of things (Bajaj et al., 2020; Patwardhan and Pillai, 2015).

Communication plays a vital role in marketing, specifically in increasing sales. It influences customers' purchasing decisions by helping them evaluate products and make choices (Thomas and Saenger, 2017; Bridger and Wood, 2017; Fernando, 2019). Word-of-mouth (WOM) is one of the most outstanding marketing techniques in the business. Definitively, this is a marketing campaign that relies on personal power to disseminate the information via word-of-mouth (Kim, 2016; Ismail, 2017). WOM is an important part of marketing communication strategies (Choudhury, 2014). eWOM refers to customers giving information regarding brands, products, and services to another person (or between individuals) via the internet. In the verbal form of word-of-mouth, this communication channel is an effective method in marketing because the information is usually conveyed from customers, through customers, and aimed at customers. Satisfied customers become part of the chain message, which many people appreciate (Wu and Li, 2017).

Social media has led to a new facet of eWOM that enables users to communicate with friends easily. Other online channels, such as public discussion forums, online review sites, shopping websites, and blogs, enable eWOM communication between unknown online users on the internet (Gardiner and Musto, 2016). The platform also allows people to facilitate their ideas about products and share personal information, interests, or favours regarding services with friends, the people they already know, and acquaintances on social media (Kim, 2016; Barreda, 2020). According to Chu et al. (2011), social media sites are relatively more effective platforms for eWOM. The less anonymity characteristics of the users make eWOM's information more credible and acceptable. Previous studies showed the possibility of eWOM on social media being more influential on customers' purchase intentions than any other online platform. This is strengthened by the fact that it usually occurs between known people (Wang et al., 2018). However, this is yet to be proven and detailed.

According to the Indonesian E-Commerce Association (idEA) (2018), around 171 million Indonesians are internet users. More than 50% of the country's population surfs the internet daily and might be a social media enthusiast (around 65%). The report also showed that 93.9% of the whole population used smartphones to access the internet daily. Social media (18.9%) was the second-highest means of communication after online messages (24.7%). Additionally, social media was ranked the highest (19.1%) reason for accessing the internet. The report suggests that social media users will continue to increase drastically with years. Many companies are motivated by social media to offer customer service, get new clients, and promote products.

Social media is a frequently used platform in conducting e-commerce transactions. According to a survey conducted by the idEA, 66% of online transactions occurred through social media, specifically Facebook and Instagram. Top position, Facebook took the market share of up to 43%. Only 16% of sellers and buyers used the marketplace platform, with only 7% opting for personal websites. The survey showed that buyers and sellers, most being micro-entrepreneurs, used social media more than other available marketplace platforms or personal websites as a place for e-commerce transactions. The survey was administered to 2,000 MSMEs in ten Indonesian cities in 2017.

Circling communication produces conversation that could stimulate buying intentions. The conversations between internet users on social media include frequent comments on brand perceptions, which significantly influence consumers' purchasing intentions (Landers et al., 2015; Leung, 2015; Wang et al., 2018; Hebbbar et al., 2020). However, it is challenging to predict all eWOM information factors with direct

influences, including the degree of anonymous information, received and shared the disclosure rate, and the consideration made on the information received before use. Although some earlier studies have revealed the influence of eWOM on social media, the deciding factors between the impact of social media and the user's intention to buy are still vague and not proven (Craig-Lees et al., 2013; Kadić-Maglajlić et al., 2017; Khadim et al., 2018). This study focuses on the information quality, credibility, usefulness, and the adoption of eWOM on social media and shopping websites and its effect on online purchase intention.

This study determines the empirical evidence in seeking information on the Internet on products and services based on quality, credibility, usefulness, and adoption through social media platforms or shopping websites. This might have a real contribution to the theory and application of digital marketing and e-commerce.

2 Literature review

The quality of information refers to the suitability of the level of good and bad data processed and used as a basis for appropriate decision making (Chen et al., 2015; Laketa et al., 2015; Abedi et al., 2019). Suppose the information produced is not of quality, it negatively affects users' satisfaction. According to Wong and Dioko (2013), when the service provided meets customers' expectations, satisfaction is attained. The quality of information refers to "the level at which information has the characteristics of content, form, and time that give certain end-users value. High-quality information has characteristics and attributes or qualities that make it more valuable" (Laketa et al., 2015).

According to Lim et al. (2017), the concept of credibility is generally divided into two, including source and media credibility. Source credibility consists of interpersonal contexts, organisations, and mass media. It is often included in studies on how communicators' different characteristics affect message processing (Cornelis et al., 2014; Klein and Melnyk, 2016). According to the existing literature on information, source credibility determines communication effectiveness. Definitively, it identifies the information source considered credible by the reader (Lim et al., 2017). The indicators of the credibility of information include a convincing, strong, credible, and accurate kind of information

The usability of information occurs when readers understand the communication received as valuable and influences purchasing decisions (Alcántara-Pilar et al., 2018; Mishra et al., 2013; Fernando, 2019). Approximately 55% of online review readers look for comments from authors to benefit and use the information obtained when making purchasing decisions (Zhu et al., 2020). Useful information should increase knowledge and ability for users of information, conveyed informatively, and reduces uncertainty in making decisions.

Information adoption refers to how individuals receive a certain message content and believe it to be meaningful after assessing its validity (Lee and Yang, 2015; Kashyap and Kumar, 2019; Whiting et al., 2019). Information adoption refers to knowledge transfer, in which the recipient of information processes knowledge and meaning. The behaviour of information adoption is often searched for in online communities because it might influence consumers' purchase intentions (Rani and Shivaprasad, 2018; Hassan et al., 2019; Kripesh et al., 2020). Customers involved and adopting eWOM information are

more likely to have purchase intentions and actions. The indicators of information adoption include increased knowledge about products, making purchasing decisions easier, increasing effectiveness in purchasing decisions, and motivating customers to make purchasing decisions.

The moderation testing with digital service variables is based on Yusuf et al. (2018), Ruiz-Mafe et al. (2020) and Whiting et al. (2019). The theoretical model to be tested differs from previous studies, which perceives e-commerce information with online purchase intention more on a mediation function, such as a trust or perceived value. The theoretical model to be tested using digital service moderation variables, especially in social media platforms and websites or mobile applications. Moreover, digital service is often confused with e-service and web quality, as well as similar terminology. Digital services testing is conducted using a multi-group approach for better empirical evidence.

3 Hypotheses development

The information credibility and customers' purchase intentions had positive relationships (Rani and Shivaprasad, 2018). Information credibility is one of the determinants affecting online purchase intentions. For this reason, it was expected to have more positive effects on customers' online purchase intentions on social media compared to shopping websites (Lim et al., 2017). Information adoption also affects customers' purchase intentions (Yusuf et al., 2018; Lien et al., 2018; Chih et al., 2020; Wang et al., 2020). Therefore, the following hypotheses were developed

- H1 The *quality* of eWOM information on social media has a stronger effect on consumers' online purchase intentions than on shopping websites.
- H2 The *credibility* of eWOM information on social media has a stronger effect on consumers' online purchase intentions than on shopping websites.

The connection between information usefulness and consumers' purchase intentions in literature has necessitated the inclusion of eWOM information usefulness in this study. Information adoption affects consumers' purchase intentions (Chong et al., 2017; Rani and Shivaprasad, 2018; Abedi et al., 2019; Wang and Li, 2019). The consumers who consider, engage, and adopt the information of eWOM have a high online purchase intention. The circulation of information is more effective among friends on social media than between anonymous people from other online platforms. Therefore, adoption of eWOM information on social media may influence consumers' online purchase intentions compared to shopping websites. The following hypotheses were formulated.

- H3 The *information usefulness* of eWOM on social media has a stronger effect on consumers' online purchase intentions than on shopping websites.
- H4 The *information adoption* of eWOM on social media has a stronger effect on consumers' online purchase intentions than on shopping websites.

4 Methodology

For hypotheses testing, a survey was conducted using a questionnaire distributed to 242 high school and university students in Jakarta. These were also users of social media and shopping websites, though high school and university students were chosen based on the latest national survey. The age groups of 15–19, 20–24, and 25–29 were the top three age-range of internet users in Indonesia, hence assumed to be of the same people using the internet daily (Indonesian E-Commerce Association, 2018). The sample size of 242 was calculated using the unknown population formula at a 95% confidence interval and a margin of error of 6.3%. This research included respondents who used social media platforms, including Facebook, Instagram, Twitter, and shopping websites, such as Love Bonito, Cottonink, and Pomelo, to shop online at least once. Table 1 shows the respondents' traits.

Table 1 Traits of respondents (n = 242)

<i>Traits</i>	<i>Frequency</i>	<i>Percentage</i>
Gender		
Female	181	74.8
Male	61	25.2
Education level		
Junior high school	1	0.4
Senior high school	6	2.5
Bachelor degree	214	88.4
Master degree	16	6.6
Doctor	5	2.1
Social media usage		
Everyday	211	87.2
4–5 days per week	7	2.9
Once or twice per week	16	6.6
Very rare	8	3.3
Shopping websites usage		
More than once a month	95	39.3
Once a month	80	33.1
Very rare	64	26.4
Never	3	1.2
Internet familiarity		
<1 years	5	2.1
1 to 3 years	2	0.8
4 to 6 years	27	11.2
>6 years	208	86.0

Table 1 Traits of respondents (n = 242) (continued)

<i>Traits</i>	<i>Frequency</i>	<i>Percentage</i>
Online reviews usage		
Always	161	66.5
Frequently	45	18.6
Sometimes	33	13.6
Never	3	1.2

Data were calculated using the SPSS application for validity and reliability tests. Cronbach's alpha is a commonly used technique for testing the internal reliability in over 70% of studies (Hair et al., 2010). Table 2 shows Cronbach's alpha figures for all the four variables of this study. According to the results, all the variables have high reliability. Cronbach's alpha value is more than 0.7, indicating internal consistency reliability for all the scales used in this study; hence, all the instrument items are considered reliable.

Table 2 Reliability test result in group shopping websites and social media

<i>Variables</i>	<i>Number of measures</i>	<i>Shopping websites</i>	<i>Social Media</i>
		<i>Cronbach's alpha value</i>	<i>Cronbach's alpha value</i>
Information quality	5	0.840	0.789
Information credibility	4	0.778	0.733
Information usefulness	2	0.772	0.765
Information adoption	4	0.885	0.877
Online purchase intention	4	0.828	0.815

The data were also checked for normality. To determine whether the data were normally distributed or not, skewness and kurtosis tests were conducted. The results indicated that the data was within the acceptable range for these tests (i.e., ≤ 2.58). Table 3 shows that the data is normally distributed since the mean, and the median scores have similar values.

Table 3 Skewness and kurtosis scores

	<i>N</i>	<i>Mean</i>	<i>Median</i>	<i>Skewness</i>	<i>Kurtosis</i>
Information quality	242	3.38	3.40	-0.455	0.400
Information credibility	242	3.18	3.25	-0.203	0.473
Information usefulness	242	3.53	3.50	-0.478	0.665
Information adoption	242	3.51	3.50	-0.296	0.495
Purchase intention	242	3.45	3.50	-0.368	0.682

The initial confirmatory factor analysis was conducted on five variables with 18 measures. All variables, including information quality (IQ), information credibility (IC), information usefulness (IU), information adoption (IA), and purchase intention (PI), are loaded with their measures and were examined through Confirmatory factor analysis (CFA). Table 4 shows the goodness of fit indices for initial CFA and recommended criteria for these tests (Hair et al., 2010).

This analysis has employed eight goodness of fit indices to test its structural model, which include chi-square (X^2) to the degree of freedom (Df), the goodness of fit index (GFI), adjusted goodness of fit index (AGFI), incremental fit index (IFI), Tucker-Lewis index (TLI), comparative fit index (CFI), root mean square error of approximation (RMSEA), and p-value of close fit (PCLOSE).

Table 4 The goodness of fit indices for initial CFA

	<i>Recommended criteria</i>	<i>Observed values</i>
X ² /Df	$1 < \chi^2/df < 3$	2.2010
GFI	>0.90	0.8797
AGFI	>0.80	0.8390
IFI	>0.90	0.9351
TLI	$0 < TLI < 1$	0.9210
CFI	>0.95	0.9344
RMSEA	<0.05 good fit	0.0499
PCLOSE	>0.50	0.5023

The results show that some goodness of fit indices was achieved on the initial CFA. However, GFI (0.8797) and PCLOSE (0.5023) are still below the recommended criteria. Therefore, a refinement of the model was conducted. According to Hair et al. (2010), the model fit indices could be enhanced by controlling the modification indices and standardised residuals. In this study, the model fit was improved by following the suggestions mentioned earlier and deleting some measures. After these steps, a further test was conducted, and Table 5 shows the goodness of fit indices for the final CFA.

Table 5 The goodness of fit indices for final CFA

	<i>Recommended criteria</i>	<i>Observed values</i>
X ² /Df	$1 < \chi^2/df < 3$	1.8295
GFI	>0.90	0.9127
AGFI	>0.80	0.8763
IFI	>0.90	0.9624
TLI	$0 < TLI < 1$	0.9520
CFI	>0.95	0.9619
RMSEA	<0.05 good fit	0.0415
PCLOSE	>0.50	0.9863

All goodness of fit indices were achieved on the final CFA, including GFI, RMSEA, and PCLOSE, which are not at the initial CFA requirement level. The final figure for X²/Df (1.8295), GFI (0.9127), AGFI (0.8763), IFI (0.9624), TLI (0.9520), CFI (0.9619), RMSEA (0.0415), and PCLOSE (0.9863) all satisfied the recommended criteria. Table 4 and Table 5 show the initial and final CFA's of the study.

According to Table 6, all the factor loadings are greater than 0.50, and all critical ratios are above 1.96. CR of each variable is more than 0.70 (0.815 to 0.883), while AVE is more than 0.50 (0.592 to 0.745), indicating that convergent validity is achieved.

Table 6 Convergent validity in eWOM model on online purchase intention

<i>Variable</i>	<i>Measure</i>	<i>Factor loading</i>	<i>Critical ratio (t-value)</i>	<i>CR</i>	<i>AVE</i>
Information quality	IQ3	0.727	-	0.724	0.351
	IQ4	0.698	9.92		
	IQ5	0.623	8.566		
Information credibility	IC1	0.593	-	0.695	0.367
	IC2	0.473	8.509		
	IC3	0.681	8.337		
	IC4	0.654	8.105		
Information usefulness	IU1	0.846	-	0.774	0.316
	IU2	0.741	12.569		
Information adoption	IA2	0.742	-	0.880	0.647
	IA3	0.804	12.541		
	IA4	0.845	13.188		
	IA5	0.824	12.746		
Online purchase intention	OPI1	0.635	-	0.819	0.531
	OPI2	0.790	9.999		
	OPI3	0.725	9.086		
	OPI4	0.758	9.224		

Notes: IQ – information quality, IC – information credibility, IA – information adoption, IU – information usefulness, CR – composite reliability, AVE – average variance extracted.

Table 7 shows the goodness of fit indices for the structural model and the recommended criteria for these tests (Hair et al., 2010). According to the results, all goodness of fit indices was achieved on the structural model's tests. The figures for X^2/Df (1.8259), IFI (0.9623), TLI (0.9522), CFI (0.9619), RMSEA (0.0414), and PCLOSE (0.9872) all met the recommended criteria.

Table 7 The goodness of fit for structural model

	<i>Recommended criteria</i>	<i>Observed values</i>
X2/Df	$1 < \chi^2/df < 3$	1.8259
NFI	>0.90	0.9022
IFI	>0.90	0.9623
TLI	$0 < TLI < 1$	0.9522
CFI	>0.95	0.9619
RMSEA	<0.05 good fit	0.0414
PCLOSE	>0.50	0.9872

5 Results and discussions

The first phase examined the direct positive effect of the four variables, including information quality (IQ), information credibility (IC), information usefulness (IU), and information adoption (IA), on customers' online purchase intention among social media and shopping websites users. These variables contributed to eWOM information, which affect consumers' purchase intentions.

The research hypotheses were verified via path estimates, critical ratios (t-values), and *p*-values. The relationships between variables are considered significant when the *t*-values are above 1.96, and *p*-values are below 0.05. Table 8 shows the results of path estimates of the four hypotheses of this study. According to the table, the four hypotheses of this study were statistically insignificant in social media. Three out of four hypotheses were statistically insignificant in shopping websites as *t*-values were below 1.96, and the *p*-values above 0.05. Only one of the hypotheses was found significant. This means that there is a significant difference between consumer groups using digital service platforms between social media and websites (including mobile applications) for information adoption.

Table 8 The results of multi-group (digital services) group analysis

<i>Hypotheses</i>	<i>Group</i>	<i>Estimates</i>	<i>SE</i>	<i>CR</i>	<i>p-value</i>
IQ → OPI	Social media	0.816	1.093	0.746	0.455
	Shopping websites	-0.145	1.291	-0.122	0.910
IC → OPI	Social media	-0.777	1.535	-0.506	0.613
	Shopping websites	-0.675	2.603	-0.259	0.795
IU → OPI	Social media	-0.160	0.450	-0.355	0.722
	Shopping websites	1.614	2.178	0.741	0.459
IA → OPI	Social media	0.893	0.336	2.656	0.007
	Shopping websites	-0.260	1.236	-0.210	0.833

Notes: IQ – information quality, IC – information credibility, IA – information adoption, IU – information usefulness, estimate – path estimate, SE – standard error, CR – critical ratio, *p*-values – significance values.

Based on the analysis in Table 8, all hypotheses were not significant ($p > 0.005$). The correlation between *information quality* and *online purchase intention* in social media and shopping websites was statistically insignificant ($\beta = 0.816, p > 0.05$; $\beta = -0.145, p > 0.05$), hence H1 is rejected. Similarly, the correlation between *information credibility* and *online purchase intention* in social media and shopping websites was statistically insignificant ($\beta = -0.777, p > 0.05$; $\beta = -0.675, p > 0.05$), hence rejected. The correlation between *information usefulness* and *online purchase intention* was statistically insignificant for both groups, specifically social media and shopping websites, ($\beta = -0.160, p > 0.05$; $\beta = 1.614, p > 0.05$), respectively. However, in social media, the correlation between *information adoption* and *online purchase intention* had positive effect on customers, but rejected in shopping websites ($\beta = 0.893, t \text{ value} = 2.656, p = 0.007$; $\beta = -0.260, t \text{ value} = -0.210, p = 0.833$).

The quality of information on social media was thought to positively impact the purchase intentions of customers than on shopping websites. However, the outcome shows no difference between the two groups. Comparing the estimated values,

information quality on social media ($\beta = 0.816$) was more influential on customers' purchase intentions than in shopping website ($\beta = -0.145$), hence H1 is rejected. H2 was rejected because the outcome shows no difference between the two groups. However, the credibility of information in shopping websites ($\beta = -0.675$), compared to the estimated values, had more influence on the purchasing intentions than in social media ($\beta = -0.777$). H3 was rejected because the results show no distinction between the two groups. The information usefulness on shopping websites ($\beta = 1.614$) had more influence on customers' purchase intentions than on social media ($\beta = -0.160$). H4 was accepted because the information adoption of eWOM on social media positively affects customers' purchase intentions than on group shopping websites. As predicted, the information adoption on social media ($\beta = 0.893$) influenced customers' purchase intentions rather than on shopping websites ($\beta = -0.260$).

Previous analyses have evaluated the effect of eWOM on multiple online social media channels, such as personal media (Lee and Shin, 2014; Erkan and Evans, 2016; Sethuraman and Thanigan, 2019) and internet shopping website reviews (Landers et al., 2015; Kripesh et al., 2020). eWOM influenced the purchasing intentions of customers (Lee and Yang, 2015). Social media allows eWOM to happen between individuals who know each other. Internet reviews on shopping websites happened between anonymous individuals, mostly online shopping customers (Erkan and Evans, 2016; Lee and Yang, 2015). Therefore, a notable difference in the effect of eWOM on social media and shopping websites, as opposed by Erkan and Evans (2016), was expected.

Shopping via online sites and social media was consistent with the findings of a survey of the idEA in 2016 (Indonesian E-Commerce Association, 2018). The data showed that Indonesian consumers prefer shopping via social media than websites. A total of 132.7 million internet users in Indonesia, 82.2 percent, or 62 million people go to online shops. However, 46.1 million people said that the frequency of online shopping transactions made was more than once a month. This is supported by the fact that most internet users in Indonesia, nearly 130 a million people, more often use smartphones to access the internet. Apart from interaction, buying and selling transactions through online sites are more popular because of safety and practicality. However, this research has not found any significant results contrary to its hypotheses. For both groups, the information on eWOM determinants does not influence the customers' online purchase intentions. Also, the results showed that social media has no positive effect on customers' online purchase intention compared to shopping websites.

eWOM on shopping websites had more influence due to information credibility and usefulness. Comparably, social media's information quality and adoption had more influence. Social media was expected to be more influential for all the determinants compared to any other social platform. According to Chu et al. (2011), eWOM usually occurred and exchanged between people knowing each other. This made it more influential, as hypothesised by Rani and Shivaprasad (2018). The customers often find eWOM information on shopping websites to be more informative and satisfying. They feel online reviews on shopping websites provide more detailed and informative information compared to daily conversations recommended by friends (Bajaj et al., 2020). Furthermore, customers believed that the online reviews posted on the shopping website as more detailed and complete. Therefore, they preferred shopping websites more than the recommendations on social media. Social media often have a more visualised platform than detailed explanations on the products, compared to shopping websites.

From the multi-group analyses, that approval made by the known individuals on social media is as influential as the anonymous reviews on shopping websites on consumer's online purchase intentions.

6 Conclusions

This research aimed to determine whether information quality (IQ), information credibility (IC), information adoption (IA), and information usefulness (IU) adapted based on IAM influence customers' online purchase intentions in social media and shopping websites. The results show that the information quality and credibility, and usefulness of eWOM information do not influence customers' online purchase intention on group social media and shopping website groups. However, there is a direct influence on information adoption in social media groups, but not in the shopping websites group. However, based on the results, all the findings were rejected, i.e., the results obtained did not match the initial expectations.

7 Managerial implications, limitation and future research

This study has proposed valuable insights, specifically for marketers focusing on online businesses by explaining the recent eWOM conflicts (Knoll, 2016). The study has given clear and general perspectives of eWOM within online platforms, explicitly emphasising the factors influencing customers' purchase intentions. Social media sites and shopping websites are essential for marketers. There is a need for them to enhance their understanding of online marketing due to the large numbers of internet users worldwide, especially in Indonesia (Indonesian E-Commerce Association, 2018). This research has provided a wider insight to enhance the knowledge on the positive impact of eWOM has on social media. Marketers may develop better marketing strategies. The study allows them to gain more understanding of the markets in Indonesia.

This research has provided some practical and theoretical contributions with some limits for consideration in future studies. From this research, the chosen age-group range was based on the latest national survey but not explicitly defined internet users in Indonesia. It was assumed that those age-range use the internet daily and constitutes most social media and shopping website users in Indonesia. Therefore, they might not be precisely representing the whole population. Additionally, the sampling size estimation technique might have a limitation with respect to generalising the results to a bigger and larger population. The statements from each variable might evoke a different perspective from each reader. This research was conducted in Indonesia, and mainly the targeted respondents were internet users in Jakarta. They use Indonesian language more often in daily speech instead of English. Therefore, respondents faced difficulties in understanding the statement from the questionnaires, leading to uncertainties in answering the questionnaires.

The empirical evidence showed that information regarding quality, credibility, usefulness, and information adoption has a real contribution to the theory and application of digital marketing and e-commerce. The quality, credibility, and usefulness of information for Indonesia's consumers can be used without any significant difference. There is a fit between the theory and the empirical model. There is a need for further

studies to expand the group of consumers to be tested, including the possibility of taking into account the current variable, perceived value, and commitment. In this regard, testing can be conducted in multi-group or moderation and mediation.

There is a real and significant difference in information adoption for consumers using the digital service platform between social media and websites, including mobile applications. This shows that social media is easier for consumers to adopt than websites. It is a challenge for developing the website and other short, multi, or super applications to answer this challenge.

Other types of online shopping platforms can be considered, such as the third-party online platform like Shopee, Bukalapak, and Lazada. A survey from APJII 2018 reported that Shopee, Bukalapak, and Lazada are the top three most used internet content to shop online in Indonesia. To learn and improve marketing strategy online, specifically in Indonesia, all online platforms should be included in future research. The items in each variable might evoke a different perspective to an individual reader, inflicting subjectivity. Therefore, this research suggests a qualitative study (in-depth interview) to obtain a different view and more detailed reason on the consumer's perspective. A different model of information is necessary to determine the elements that affect the intent to buy online in Indonesia, as shown by the insignificant result. The model IAM selected from a referred journal might not be suitable for different targets or country. Further research on the selection of the model that affects consumer's eWOM is highly recommended.

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