



The Effect of E-WOM on Customer Purchase Intention

Noraini Sa'ait¹, Agnes Kanyan² and Mohamad Fitri Nazrin³

^{1,2,3}Faculty of Business Management
Universiti Teknologi MARA, Sarawak, Malaysia

Corresponding email: : norai882@sarawak.uitm.edu.my

Article Information

Keywords

e-WOM, relevance, accuracy, timeliness, comprehensiveness, customer purchase intention

Abstract

In today's modern business, the practice of positive e-WOM is becoming more important to attract and sustain customers. Thus, this paper aim to identify the effect of e-WOM on customer purchases intention. Self-administered questionnaires were collected from 361 respondents and analyzed using correlation analysis and regression analysis. All the four main elements of e-WOM namely relevance, accuracy, timeliness and comprehensiveness were found to have significant relationship with customer purchase intention. A subsequent multiple regression analysis revealed that e-WOM has impact on customer purchase intention. The accuracy of e-WOM has the strongest relationship with customer purchase intention and most influencing elements among the four. Overall, this study provides a greater knowledge sharing in the subject of Consumer Behaviour whereby the elements of e-WOM have impact on the potential customer purchase intention.

INTRODUCTION

Nowadays, consumers especially teenagers are becoming more aware about products/services they purchase and consume. Before making a purchase decision they are often looking for previous customer review, rather than rely merely on the product advertisement itself. The fact today's consumers believe more on the customer word of mouth as it is unpaid source and mostly it is an honest review based on their experience. In the past, word of mouth (WOM) communication initially referred to the idea of conversation between people-to-people among consumers about the product (Chatterjee, 2001). People share opinion among each other about the product and services in their face-to-face conversation, and influence their friend to buy or to avoid the product or services.

As stated by Chatterjee, (2001), the Internet brought a form less personal but more extensive way of WOM communication, called e-WOM communication. This new type of WOM communication has become an important place for opinion score (Bickart and Schindler, 2001) and it is assumed to be more effective than in the offline world

WOM communication. It is due to greater and higher access (Chatterjee, 2001). Information can be obtained easily anytime and everywhere when there is an Internet connection.

E-WOM become more reliable as the people who spread word of mouth about the product not being paid and provided genuine experience, does not attached to any specific brand. After obtained the information from e-WOM people tend to believe and have their own perception toward the product or services. As a result, E-WOM can affect consumer purchase intention in a positive or negative way by influencing their purchasing decision either to purchase or not to purchase.

A number of researches have been done on impact of e-WOM on customer purchase intention. A research conducted by Jalilv and Samiei (2011) examined the extent to which e-WOM among consumers can influence brand image and purchase intention in the automobile industry. Besides that, ACNielson, (2007) and Rowley (2001) indicated how great of a potential impact eWOM can have on the consumer decision process. The web has created the opportunities for electronic word-of-mouth (eWOM) communication through electronic media, such as online discussion forums, electronic bulletin board systems, newsgroups, blogs, review sites, and social networking sites (Goldsmith, 2006).

Nonetheless, there are some of the importance areas that have not been covered. Thus, this study examines the four elements of e-WOM namely relevance, accuracy, timeliness and comprehensive which affecting the customer purchase intentions. The elements of e-WOM that affects the customer purchase intention. As suggested by Yayli (2009), further researches investigate an eWOM effect model on cross-cultural basis. Considering that eWOM is global, cross-cultural research on the eWOM effect would be an interesting issue.

Background of Study

In the past the practice of word of mouth (WOM) as the medium of reference is widely practiced by consumer. Whereas in today's modern world there is more advanced WOM that the consumer can refer to before making a purchasing decision know as e-Word of mouth (e-WOM). The e-WOM is the electronic type of WOM that has more wide coverage rather than WOM. The advancement of the latest cutting edge technology has given a new dimension in spreading the words of mouth. According to Harrison-Walker (2001), when the products or services are difficult to be evaluated, customers prefer to adopt e-WOM as the standard experience. There are tremendous amount of feedbacks or suggestion in the internet regarding any products or services. This kind of information often disseminated by previous consumers and that information is very useful for prospective consumer. Moreover, that e-WOM will be very beneficial to the sellers themselves as they can do development on their products or services based on the information gathered through e-WOM by consumers. The concept of positive word of mouth has been largely used by marketing professionals as it can serve both the purpose of measuring the effectiveness of the marketing tools like advertising and also at the same time be used as a credible source for gaining information relating to the product (Li and Zhan, 2011). Viewing online comments is helpful for consumers because it can make consumers feel more confident on purchase decision (Lin, Wu and Chen, 2013).

Dellarocas (2006) pointed out that online consumer reviews have become an important means of marketing communication because many consumers search for online reviews as the first step in shopping. There are several benefits of using e-WOM. As compare with verbal WOM, rumours spread more fast and within short period of time through e-WOM. Besides than that, e-WOM also can act as another medium for advertisements for any products and services. Typically, sellers or marketers will spent a lot of money in doing advertisement for their respective products and services. For instance, they always come up with big banners across the roads, buildings or even brochures. However, these methods are not working out these days because of the existence of new technology. Let say, a seller put up banners across the road but if you think rationally, who will have time to read those banners when they are driving that requires full concentration? Even if they had the chance to read those banners, they are unable to read every single detail written on it. That is why e-WOM is used widely these days as they can take their time in analysing what previous consumers have said. It is better saving the money spent in doing verbal advertisement to be used for development of the products and services.

From the managerial perspective, e-WOM among customer is very important as e-WOM can affect them either in a positive or negative way. A positive e-WOM will influence customer, and may be influence them to purchase, as the positive e-WOM an honest unpaid opinion from previous customer. Therefore, the future customers perceive it is more reliable and trustable than the product or services advertisement itself. Rowley (2001) also suggested that commercial enterprises should try to organize online communities and not to just advertise on the Internet. Meanwhile, the negative e-WOM will bring a very large impact, not only for future customer, but the existing

customer might switch to other product or services. Wee, (2002) showed that negative word-of-mouth have much more impact than positive ones due to the negative commentaries attracting more attention and will raise up the consumers' bad experience.

From the educational perspective view, e-WOM is one of the consumer behaviour, which is a learning behaviour, learning from previous consumer experience before purchasing the product or services. Wangenheim and Bayon (2004) indicated that when consumers perceive high social or psychological risk of a purchase, they would search for credible information that is more diagnostic or referential, such as e-WOM information; from a source that they believe to be reliable. This research will help to make the consumer more clearly about the e-WOM and its usage.

Undeniable e-WOM is one of powerful methods to gather honest customer review before making a purchasing decision either to purchase or not to purchase. In fact, today's marketers are spreading e-WOM from their customer through their online advertisement. However, people tend to question the reliability of e-WOM as some parties might spread false information for their own benefit and there would be some people tried to spread false rumours in the effort of condemning others. Thus it is important to examine the impact of eWOM on customer purchasing intention.

LITERATURE REVIEW

e-WOM

Word of mouth (WOM) is verbal type of communication of person-to-person between the receiver and the transmitter, which involves a product, service, or brand. To the receiver, the message does not have strong commercial intent (Anderson, 1998), which is why consumers trust the credibility of WOM is higher than commercial advertisements (Herr *et al.*, 1991). WOM is a non-commercial source of information is widely accepted those have a significant effect on the formation of consumer proposals and purchase decisions (Richins, 1983). This type of interpersonal communication affects decisions marketers (Hennig-Thurau *et al.*, 2004).

As the technology are getting more advance, most user nowadays are browsing the Internet to dig for some information about the product or company, and e-WOM has emerged as a result. As defined by Hennig - Thurau *et al.*, (2004), "e-WOM is any positive or negative statement made by potential, actual, or former customers about a product or a company that is available to large groups of people and institutions through the Internet". A recent survey found that most consumers look for online opinion to be as reliable as the brand's website (ACNielsen, 2007). Rowley (2001) also suggested that commercial enterprises should try to organize online communities and not to just advertise on the Internet. These studies show how great the potential impact of e-WOM can have on consumer decision process. Senecal and Nantel (2004) examined how the choice of e-WOM influence product using experimental studies proposed the use of an online resource guide. Own multiple platforms that facilitate e-WOM, such as discussion boards and other online communication tools that also increasingly recognized for how they influence the acceptance and use of products and services (Subramani and Rajagopalan, 2003).

Relevance

As suggested by Madu and Madu (2002), Internet users rarely read web pages they surf in detail, but they scan the page to find out only for the information they need. They want to search the information they want faster, and with little effort put on (Nah and Davis, 2002). Meanwhile, they are actually read what they feel important to them. So, it is important to have only presented the most relevant information in the online community. Dunk (2004) also suggests that the relevance is an important element in decision-making, as the relevance of the decision-making is made based on the relevance of the information collected.

Accuracy

Wixom and Todd, (2005) said that, the accuracy of message concerns their reliability, and it also represents the user's perception of the information is correct. According to Daft and Lengel, (1986), the quality, accuracy, and reliability of information exchange are important across the medium, as the more accurate the message is, the more useful it is by the customer.

Timeliness

The timeliness of the message concerns whether the messages are current, timely, and up-to-date. As suggested by Madu and Madu (2002), when the online customer review that is not consistently updated, it cannot deliver the desired results and therefore provide no added value to the user. The messages that are not up to date, will make the customer that read the online review confuse, either the message is still valid to be referred or not.

Comprehensiveness

Comprehensiveness refers to the completeness of the message delivered. Sullivan (1999) suggests that, the more detailed information brings a wider breadth of user categories and user orientation of the online customer review, resulting the greater likelihood of user acquisition and user retention. More detail the messages; the more customers would understand and satisfy their consciousness about the product or services. The comprehensiveness is also important as the incomplete message also can bring to different interpretation by customers.

Purchase Intention

Morwitz and Schmittlein (1992) showed that purchase intentions could be a measure to predict the behavior of consumers buying decision. The earliest definition of purchase intention is the subjective probability that users perform certain behavior (Ajzen & Fishbein, 1972). If the users are interested to get the product or services, it means that, there is a purchase intention in their mind; they wish to get the product or services, either in long term or short term. When consumers have a positive attitude or expression toward brand products or services, purchase intentions will happen, as they are influenced by their positive attitude towards the product or services. This is why word-of-mouth will affect purchase intentions, as it gives the good example and manners.

e-WOM Affect Purchase Decision

In the real world, it is much more complicated than school world. Many firms hire experts to create commercial information word-of-mouth. Customers' nowadays also perceived fake e-WOM is more than before. The unpaid word-of-mouth, which is not published by companies advertising and public relations are perceived to be more trustworthy. But the most important thing that it is hard for the customer to distinguish which one is real or fake. Bickart and Schindler (2001) discovered that customers have more interest about the product, which they search online. When the products or services are difficult to be evaluated, customers prefer to adopt e-WOM as the standard experience. (Harrison-Walker 2001). This is because; most of e-WOM is from previous customer experience. It is hard to find the service related information, because of it intangibility. In addition, services are also concerned as the experiential products. Under this kind of situation, e-WOM will change consumer-buying behaviour, such as hotel accommodation, travel, or the meal (Jones, 2002). Moreover, some studies also showed that negative word-of-mouth have much more impact than positive ones (Wee, 2002) due to the negative commentaries attracting more attention and will raise up the consumers' bad experience.

Using the e-WOM, customers can get much more interaction with other consumers and get faster response about the product information. When the products or services information are not clear, consumers tend to seek more information and references from other sources, apart from the official sources of product information. Isenberg (1986) indicate that interpersonal interaction will change or revise consumers' purchase decisions through collecting information from others or Internet. Hence, this study considered the electronic word-of-mouth can spread much more information to consumers that will give impact on their purchase intention.

RESEARCH METHODOLOGY

This study aims to identify the relationship of e-WOM with customer purchasing decision and the impact of e-WOM on customer purchasing intention. The primary data was obtained mainly from questionnaires. The questionnaire were distributed to 361 respondents in Kota Samarahan, Sarawak, Malaysia. The total population for Kota Samarahan town land is 6,142 people. Based on Krejcie & Morgan, (1970) the sample size should be $n = 361$. The respondents are selected on a random basis, as everyone is a potential customer.

Cross-sectional design is employed in this study, which involved the collection of information from any given sample of population elements only once. In the single cross-sectional design, only one sample of respondents is drawn from target population, and information is to be obtained and concluded from this sample only. In this study, the data are collected from the respondent from Kota Samarahan area.

The questionnaire was adapted from previous researches and studies. The questionnaire consists of Rating Scales, which include Nominal and Ordinal Scale.

In section A respondents were asked six questions on background information whereby they need to select their gender, range of age, what race, income level, marital status and education.

In section B, construct being measured by a few items for construct validity and reliability. Measurement of Relevance, Accuracy, Timeliness, and Comprehensiveness will be carrying out by a five-point Likert scales, ranging from strongly agree (1), agree (2), neutral (3), disagree (4), and strongly disagree (5). The measures are presented in the operational definition table.

In section C, there is one question on identifying the customer purchase intention. Five point Likert scales, ranging from strongly agree (1), agree (2), neutral (3), disagree (4), and strongly disagree (5) used to measure the customer purchase intention. Data was analyzed using correlation analysis to test the relationship between elements of e-WOM and further multiple regression was employed to identify the impact of e-WOM on customer purchasing decision.

RESULTS AND FINDINGS

Correlation Analysis

Table below shows the relationship between the elements of e-WOM namely relevance of e-WOM, Accuracy of e-WOM, timeliness of e-WOM, comprehensiveness of e-WOM and customer purchase intention.

Table 1. Pearson Correlation test among variables

		Total Rel	Total Acc	Total Tim	Total Com	Purchase Intention
Purchase Intention	Pearson Correlation	.605**	.759**	.565**	.688**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	361	361	361	361	361

It was found that Accuracy and Purchase Intention has the highest score of Correlation which is 0.759, this shows that this relationship is the strongest relationship among all the elements of e-WOM. The lowest score is between Timeliness and Purchase Intention with the score of 0.565. It shows that the relationship is least affecting each other. This is similar with the study conducted by Fu et. Al (2011), whereby information timeliness on purchase intention is significant. However, the result is contradicted findings by Zheng (2008) where the influence of eWOM information timeliness on consumer purchase decision is insignificant.

Regression Analysis

TABLE 2. MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.854 ^a	.730	.727	.387

Table 2 above is the result of regression analysis model summary. The R² is 0.730, indicates that 73 per cent of the IV, the e-WOM relevance, accuracy, timeliness and comprehensiveness give impact on the DV, which is purchase intention. This result is similar with the studies conducted by Cheung, Lee, and Rabjohn (2008), where theoretical model account for only about 46 per cent of the variance of information adoption.

TABLE 3. COEFFICIENT

Model	Unstandardized Coefficients		Standardi-zed Coefficien-ts	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.314	.079		-3.966	.000
TOTAL ACC	.199	.017	.496	11.955	.000
TOTAL TIM	.100	.009	.325	10.872	.000
TOTAL COM	.098	.013	.286	7.321	.000
TOTAL REL	-.016	.015	-.045	-1.072	.285

Table 3 above is the result of coefficient analysis. Purchase Intention is linearly related to the e-WOM's accuracy, timeliness and comprehensiveness. The strongest impact on the purchase intention is on total accuracy, with the beta value of .496, highly significant with 0.000 significant values, which the same result as the Pearson's correlation test that indicates the strongest relationship is between accuracy and purchase intention. According to media richness theory (Daft and Lengel, 1986), quality, accuracy, and reliability of the information exchanged are important across a medium. The result supports findings on Fu et al., (2011), where timeliness has found to have significant impact towards purchase intention. However, the result is contradicted with Zheng Xiaoping (2008) findings where the influence of eWOM information timeliness on consumer purchase decision is insignificant. Although Dunk (2004) suggested that relevance is an important element in consumer decision making, this research has different findings, as the total relevance has no significant impact on the purchase intention, as the beta value is -0.045, not significant with significant value of .285.

CONCLUSIONS AND RECOMMENDATIONS

This study has successfully achieved the objectives to identify the relationship between e-WOM and customer purchasing intention and investigate the impact of relationship on customer purchasing intention. It was found the elements of e-WOM namely relevance of e-WOM, Accuracy of e-WOM, timeliness of e-WOM, comprehensiveness of e-WOM have positive relationships with customer purchase intention. A subsequent multiple regression analysis revealed e-WOM has an impact on customer purchase intention. Among all the elements of e-WOM, accuracy has the strongest relationship with purchase intention and most impact on purchase intention. However, the relevance of e-WOM has the negative value of beta coefficient, which indicates that the relevance of e-WOM has no significant impact on customer purchase intention.

Based on this result, it is important for marketers to focus on their customer e-WOM's accuracy, as the more accurate the message are, the more customer purchase intention are influenced. They can set up a section on their website, with their previous customer testimonial about the product or services they bought, with some evidence such as a video or photo. This can boost up the future customer confidence about their product or services.

Accuracy is the most important element of e-WOM's. So, the marketer has to be more sensitive on the e-WOM's accuracy issue, such as the false hoax separated by some irresponsible person to get their business down. The marketer must be aware of all that inaccurate e-WOM's as this situation will harm their business when the potential customers simply believe the false hoax is true. So, the marketer must be able to handle this situation such as by doing conference to make the things clear.

REFERENCES

- Aaker, D.A. (1991). *Managing Brand Equity: Capitalizing on the Value of a Brand Name*, The Free Press, New York, NY.
- ACNielsen (2007). *Trust in Advertising: A Global Nielsen Consumer Report*, October, ACNielsen, New York, NY.
- Ajzen, I., & Fishbein, M. (1972). Attitudes and normative beliefs as factors influencing behavioral intentions. *Journal of Personality and Social Psychology*, 21(1), 1-9.
- Anderson, E.W. (1998). Customer satisfaction and word of mouth. *Journal of Service Research*, 1(3), 5-17.
- Bambauer-Sachse, S. and Mangold, S. (2011). Brand equity dilution through negative online word-of-mouth communication. *Journal of Retailing and Consumer Services*, 18, 38-45.
- Bickart, B. & Schindler, R.M. (2001). Internet forums as influential sources of consumer information. *Journal of Interactive Marketing*, 15(3), 31-40.
- Cervino, J., Sanchez, J. & Cubillo, J.M. (2005). Made in effect, competitive marketing strategy and brand performance: an empirical analysis for Spanish brands. *Journal of American Academy of Business*, 6(2), 237-243.
- Chatterjee, P. (2001). Online reviews: do consumers use them?. *Advances in Consumer Research*, 28(1), 129-133.
- Cheung, C.M.K., Lee, M.K.O. & Rabjohn, N. (2008). The impact of electronic word-of-mouth: The adoption of online opinions in online customer communities. *Internet Research*, 18(3), 229-247.
- Chevalier, J.A. & Mayzlin, D. (2006). The effect of word of mouth on sales: online book reviews. *Journal of Marketing Research*, 43(3), 345-354.
- Daft, R.L. & Lengel, R.H. (1986). Organizational information requirement, media richness and structural design. *Management Science*, 32(5), 554-571.

- Dellarocas, C. (2006). Strategic manipulation of Internet opinion forums: Implications for consumers and firms. *Management Science*, 52(10), 1577–1593.
- Dunk, A.S. (2004). Product life cycle cost analysis: the impact of customer profiling, competitive advantage, and quality of IS information. *Management Accounting Research*, 15(4), 401-414.
- Farquhar, P.H. & Herr, P.M. (1993). Identifying brand image dimensionality and measuring the degree of brand globalization: a cross-national study. *Journal of International Marketing*, 10(2), 46-67.
- Fu Xiaorong, Zhang Bin, Xie Qinghong, Xiao Liuli, & Che Yu (2011). Impact of Quantity and Timeliness of EWOM Information on Consumer's Online Purchase Intention under C2C Environment. *Asian Journal of Business Research*, 1(2), 38-48.
- Gilly, M.C., Graham, J.L., Wolfenbarger, M.F. & Yale, L.J. (1998). A dyadic study of interpersonal information search. *Journal of the Academy of Marketing Science*, 26(2), 83-100.
- Goldsmith, R.E. & Horowitz, D. (2006). Measuring motivations for online opinion seeking. *Journal of Interactive Advertising*, 6(2), 1-16.
- Hennig-Thurau, T., Gwinner, K.P., Walsh, G. & Gremler, D.D. (2004). Electronic word-of-mouth via consumer-opinion platform: what motivates consumers to articulate themselves on the internet?. *Journal of Interactive Marketing*, 18, 38-52.
- Herr, P.M., Kardes, F.R. & Kim, J. (1991). Effects of word-of-mouth and product-attribute information on persuasion: an accessibility-diagnostics perspective. *Journal of Consumer Research*, 17(4), 454-462.
- Hsieh, M.H. & Lindridge, A. (2005). Universal appeals with local specifications. *The Journal of Product and Brand Management*, 14(1), 14-28.
- Keller, K.L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1-22.
- Laroche, N., Kim, C. & Zhou, L. (1996). Brand familiarity and confidence as determinants of purchase intention: An empirical test in a multiple brand context. *Journal of Business Research*, 37(10), 115-120.
- Li, J. & Zhan, L. (2011). Online persuasion: How the written word drives WOM, evidence from consumer-generated product reviews. *Journal of Advertising Research*, 51(1), 239- 257.
- Lin, C., Wu, Y.S., & Chen, J.C.V. (2013). Electronic Word-of-Mouth: The moderating roles of product involvement and brand image. *Proceedings of 2013 International Conference on Technology Innovation and Industrial Management*, 2-14.
- Madu, C.N. & Madu, A.A. (2002). Dimensions of e-quality. *International Journal of Quality and Reliability Management*, 19(3), 246-258.
- Mohammad Reza Jalilvand & Samiei N. (2012). The effect of electronic word of mouth on brand image and purchase intention: An empirical study in the automobile industry in Iran. *Marketing Intelligence & Planning*, 30(4), 460-476.
- Morwitz, V.G. & Schmittlein D.C. (1992). Using Segmentation to Improve Sales Forecasts Based on Purchase Intent: Which "Intenders" Actually Buy?. *Journal of Marketing Research*, 29, 391-405.
- Nah, F.F.-H. & Davis, S. (2002). HCI research issues in e-commerce. *Journal of Electronic Commerce Research*, 3(3), 98-113.
- Richins, M. (1983). Negative word-of-mouth by dissatisfied consumers: a pilot study. *Journal of Marketing*, 47(1), 68-78.
- Rowley, J. (2001). Remodelling marketing communications in an internet environment. *Internet Research*, 11(3), 203-212.
- Senecal, S. & Nantel, J. (2004). The influence of online product recommendations on consumers' online choices. *Journal of Retailing*, 80(2), 159-169.
- Subramani, M.R. & Rajagopalan, B. (2003). Knowledge-sharing and influence in online social networks via viral marketing. *Communications of the ACM*, 46(12), 300-307.
- Sullivan, C. (1999). Marketing the web in other media. *Editor & Publisher*, 132(9), 30.
- Wangenheim, F.V. & Bayon, T. (2004). The effect of word of mouth on services switching: measurement and moderating variables. *European Journal of Marketing*, 38(9/10), 1173-1185.
- Webster, F.E. & Keller, K.L. (2004). A roadmap for branding in industrial markets. *Brand Management*, 11(5), 388-402.
- Wixom, B.H. & Todd, P.A. (2005). A theoretical integration of user satisfaction and technology acceptance. *Information Systems Research*, 16(1), 85-102.

- Wu, P.C.S., Yeh, G.Y.Y. & Hsiao, C.R. (2011). The effect of store image and service quality on brand image and purchase intention for private label brands. *Australasian Marketing Journal*, 19, 30-39.
- Yayli, A. & Bayram, M. eWOM: The Effects of Online Consumer Reviews on Purchasing Decision of Electronic Goods. 6-14.
- Yoo, B. & Donthu, N. (2001). Developing and validating a multidimensional consumer-based brand equity scale. *Journal of Business Research*, 52(1), 1-14.
- Zheng Xiaoping (2008). An Empirical Study of the Impact of Online Review on Internet Consumer Purchasing Decision. China People's University, 5.