



Determinants of Electronic Word-of-Mouth among Line Users in Thailand

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Abstract

Electronic Word-of-Mouth (eWOM) plays an important role as a new marketing tool in many countries nowadays. eWOM has been used through social media such as Facebook, Instagram, etc. eWOM in social media allows a continuous connection to a broad audience. Line application is the latest social media introduced in 2011. This study thus explored factors impacting on the eWOM intention via Line application which is a famous social media used, especially in Thailand. The four factors (user preference, user similarity, user interaction and user concern for others) drawn from Consumer Behaviors theory and two factors (ease of use, and usefulness) drawn from Technology Acceptance Model (TAM) theory were used in this study. The samples of 196 respondents were collected by using convenience sampling method via Google form survey. Multiple regression with stepwise method was used to analyze the data. The results showed that user preference, Line ease of use and Line usefulness have positive relationship with eWOM, while user similarity, user interaction and user concern have no relationship with eWOM. For theoretical contribution, the study expanded the application of TAM to explore the changing consumer behaviors and eWOM. For managerial implication, this study could help marketer develop marketing strategies that allow businesses to build on communication platform.

Keywords: Electronic Word-of-Mouth, Consumer Behaviors Theory, Technology Acceptance Theory, Line Application

Introduction

Social media have high potential and are the most powerful relationship building, creating, and issuing a special type of content for improving the rising internet trend (Bartlett, 2010). This improvement has expanded from offline word of mouth (WOM) to online communication by enhancing electronic word of mouth (eWOM) (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004). The differences between eWOM communication and WOM are generating and sharing information through various media distribution channels. Besides altruistic drives, social media users may feel obliged to reciprocate with WOM when they feel obligated to a prospective information recipient or because they want the chance to compel the receiver in the same way (Gatignon & Robertson, 1985). eWOM communication is a fundamental online communication which focuses on sharing opinions and experiences of users due to its ease of access among the groups (Bickart & Schindler, 2001).

Various communication platforms such as blogs, electronic bulletin board system, forums, online communities and review website can communicate and share electronic word of mouth. Research from YouGov reports Thai social media users spend an average of 6.21 hours per day across platforms (Ho, 2019). As of 2019 Thailand has 39.8 million online shoppers, increasing 6.1% last year (Leong & Katrina, 2019). Moreover, Thai online shoppers (60.5%) buy online one or two times per month, while 24.3% buy once a week, and are more inclined to shop through social media across platforms than any nationality (Leong & Katrina, 2019). YouGov's research reveals that LINE is the most used platform in Thailand, with over 86% of Thais using Line at least once a week, followed by Facebook (84%), YouTube (78%), Facebook Messenger (64%) and Instagram (51%) (Ho, 2019). In this study, Line will be used as a communication platform because it is becoming the most important type of platform because there were 194 million users worldwide at the beginning of 2019 and about 44 million Thai



users as of 2Q2019 (Iqbal, 2019).

Line application is a freeware program on smart phones or electronic devices used for instant communication and was first launched in Japan 2011. Communication between line users through line mobile application was used to show the potential influence on and raise the quality of choice (Bronner & de Hoog, 2011). Hence, Line application and Line users can benefit from eWOM by sharing knowledge, experience, and attitude about products and services through line mobile application.

Currently, there are few studies examining technology acceptance and consumer behavior on eWOM behavior via Line application. Therefore, this study uses Consumer Behavior Theory, Technology Acceptance Model (TAM) and electronic Word of Mouth to develop the theoretical model which focuses on creating concepts and identifying the main variables influencing eWOM.

The main objectives of this research, therefore, were to explore the effects of Technology Acceptance Model and consumer behavior in terms of user preference, user similarity, user interaction and user concern for others on eWOM among Line users. It is hoped that the findings will benefit communication platform developers in designing better mobile application, social media or additional features of the line mobile application for eWOM communication to benefit both marketers and users.

Literature Review

Electronic Word-of-Mouth (eWOM)

Consumers receive information about company or product through the internet. Therefore, eWOM is an important tool and can be both positively or negatively made by genuine potential or previous customers about a product, service or company via the internet (Hennig-Thurau et al., 2004). eWOM is a fundamental platform for sharing the opinions of consumers (Godes & Mayzlin, 2004). eWOM is more effective than traditional word of mouth communication (Chatterjee, 2001). Reviews of product posted by internet users are the most applicable way of online word of mouth or eWOM communication (Sen & Lerman, 2007). Normally, consumers will gather information about product information and brand before they actually purchase the products by searching for online product reviews and acquire colleagues' (Jalilvand & Samiei, 2012; Adjei, Noble, & Noble, 2010). As a result, consumers often use eWOM to decide whether they will trust the company in online transactions. In this study, eWOM is defined as any positive or negative opinion about products or companies made available by prospective or previous customers to individuals and organizations (Stauss, 2000) via Line application

Consumer Behavior Theory

Consumer behavior theory is used to develop and organize information regarding purchase decision and evaluating products and services. In this research, user preferences, user similarity, user interaction and user concern for others will be examined. User preference is a tactic of persuasion and a self-presentation (Cialdini, 1993; Kenrick, Neuberg, & Cialdini, 2002). Increased preference for the source is generally associated with increased trustworthiness (O'Keefe, 2002) and resemblance to oneself improves the preference of the source (Byrne, 1971; Carli, Ganley, & Pierce-Otay, 1991; Hogg, Cooper-Shaw, & Holzworth 1993). User Similarity (Homophily) is the extent to which the personal attributes and characteristics of the dyad members are similar (Ibarra, 1992). Similarities cause attraction while dissimilarity causes resistance. Therefore, similar individuals tend to show a higher preference for similar people and want to interact with them more often (Byrne, 1971). Similarity-attraction (e.g., Byrne, 1971), social identity (Tajfel, 1974), and self-categorization (Turner, 1982)



combined strengthen individuals' self-esteem and preserve equilibrium or congruity in self-identity and promote relationships with comparable others. User interaction allows users to participate in personal social networking through the selection of content, timing and communication (Li, Daugherty, & Biocca, 2002). Line application empowers customers to take active control and enjoy two ways communication. Interpersonal relationships are associated with improved communication and mutual understanding (Hambrick, 1994). User interaction is necessary for the interchange of social values (Uzzi, 1997) and creates engagement and confidence in business relationships (Mouzas, Henneberg, & Naudé, 2007). Confidence is developed in people-to-people relationships and determines the performance of people's relationship with an organization (Child, 2001). User concern for others is described as a need to assist others (Price, Feick, & Guskey, 1995) or participate in altruistic behavior, meaning doing something for others without expecting anything in exchange (Sundaram, Mitra, & Webster, 1998). In the majority of WOM studies, user concern for others has been recognized, particularly in the context of social media, concern for others has been discovered to have a significant impact on visiting social networks online (Hennig-Thurau et al., 2004).

Technology Acceptance Model

Technology Acceptance Model (TAM) refers to the theory of rational action. TAM is a factor related to behavior (Ajzen & Fishbein, 1980). TAM indicates that believing in the usefulness and ease of use is the starting factor of organizational acceptance (Davis, 1986). Perceived usefulness and perceived ease of use show the attitude towards using a particular system which leads to the intention to use and then create the actual usage behavior of consumers. TAM is adapted by many researchers to comply with new technologies, including global internet systems and intranets (Agarwal & Prasad, 1997; Chau, 1996; Chau & Hu, 2001; Horton, Buck, Waterson, & Clegg, 2001; Hu, Chau, Sheng, & Tam, 1999; Jiang, Hsu, Klein, & Lin, 2000). As discussed above, this study focuses on the eWOM behavior via Line application. As a result, the two variables i.e. perceived ease of use and perceived usefulness will be modified to be called as Line ease of use and Line usefulness respectively in order to make them in line with the context of this study.

Line Ease of Use

Line ease of use has been defined by Davis (1989) as the degree to which users thought it was effortless to use a program. A potential user is more likely to choose one that is simpler to use and needs minimal physical or mental effort given the multiple alternatives available. As Venkatesh (2000) documented, ease-of-use usually referred to "user friendly", "easy to use", "accessible", and "convenient" as regards to Line application. In this study, Line ease of use defines the extent to which user thinks that using and posting on Line application is effortless, such as chats, pictures, video and audio, and conduct free VoIP calls and teleconferences, and etc.

Line Usefulness

Davis (1989) defined perceived usefulness as the degree to which users believed that the use of a particular system enhanced their work. Previous studies found that people are likely to adapt to a fresh technology if they consider it to be useful in attaining certain objectives and helping them to better perform the work (Ayeh, Au, & Law, 2013; Cheung, Lee, & Rabjohn, 2008; de Matos & Rossi, 2008). Within the Line context, Line is a network that offers numerous services including Line Pay, Line Today, Line TV, Line Manga and Line Webtoon. In this study, Line usefulness defines the extent to which users believed that the use of Line application enhanced their work through several services offered by Line application. It is an assessment believes in Line application that builds and retains interpersonal relationships and improves the efficiency of life.

Hypotheses Development

Users will continue to use or buy products or services that they prefer. In addition, they are likely to inform others about these products, affecting their brand perceptions and purchasing choices (Chatterjee, 2001). Increasing user preference is essential to improve user retention rates, higher market share and profitability (Lee, Lee, & Feick, 2001). The study of Halstead (2002) shows that user preference is an important factor for eWOM. Mazzarol, Sweeney, & Soutar (2007) also found user preference positively causes eWOM. Thus, this study hypothesizes as follow:

H1. User Preference has a Positive Relationship with Electronic Word of Mouth.

Social identity is stimulated through positive attributions to in-groups and negative attributions to out-groups (Kramer, 1991). User similarity was discovered to encourage solidarity, collaboration and support within the group (Hogg & Abrams, 1990), increased communication, confidence, and reciprocity (Lincoln & Miller, 1979), and increased satisfaction and perception of relationship performance (Tsui & O'Reilly, 1989). Palmer & Bejou (1995) discovered distinctions between male-female, buyer-seller dyads in dimensions of relationship quality and relationship selling behaviors. User similarity has been associated to network development (Ibarra, 1992; Ibarra, 1995), communication (Lincoln & Miller, 1979), and relationship strength (Thomas, 1990). Thus, this study hypothesizes as follow:

H2. User Similarity has a Positive Relationship with Electronic Word of Mouth.

Hennig-Thurau et al. (2004) claimed that users post remarks to obtain social benefits from being part of a virtual community, and in their research, they discovered that social benefits have the greatest impact on users visiting these communities, as well as on the amount of written remarks. Burton & Khamash (2010) found that the user may originally participate passively in eWOM, but after becoming acquainted with other users, he/she begins sharing views. The fact that users meet and familiarize themselves with other users seems to have an effect on the level of eWOM. Growth in Line application can indicate the effect of familiarity and interaction on eWOM related to Line community. Thus, this study hypothesizes as follow:

H3. User Interaction has a Positive Relationship with Electronic Word of Mouth.

User concern for others derives from the willingness to act altruistically in helping other users to make a decision that can result in positive eWOM (Sundaram, Mitra, & Webster, 1998; Engel, 1993). Users driven by a concern for others generate eWOM through their experience to help friends and other users to attain maximum advantage (Han, 2008). Moreover, some users would like to share their experience about a specific product or service to help other users to receive some valuable references to prevent loss (Markus & Kitayama, 1991). Thus, this study hypothesizes as follow:

H4. User Concern for Others has a Positive Relationship with Electronic Word of Mouth.

eWOM involves various types of media and web sites which are the platforms for online users to share their ideas and reviews (Chatterjee, 2001; Sen & Lerman, 2007). The line mobile application is the most effective, easy to access to create eWOM. Moreover, perceived ease of use of OCRs as determined by their comprehensibility and clarity is suggested to affect client confidence in the e-seller, thus providing eWOM (Gefen & Straub, 2000; Gefen, Karahanna, & Straub, 2003). Thus, this study hypothesizes as follow:



H5. Line Ease of Use has a Positive Relationship with Electronic Word of Mouth.

Cooper (1979) stated that originality and usefulness affect Electronic word of mouth and influences ultimate adoption. It does not just increase product sales but improves the buzz about the products. Naidoo & Leonard (2007) examined the impacts of eWOM on the acceptance of product suggestions by customers. Their results verified that perceived usefulness was an important factor in accepting suggestions from customers. Thus, this study hypothesizes as follow:

H6. Line Usefulness has a Positive Relationship on Electronic Word of Mouth.

Methodology

Data Collection

Google survey was used because it is easy to prepare, record data automatically, avoid human error while entering data in case of mail survey, and cover large diversified respondents while Line mobile application and electronic mail were used to provide more channel to reach the respondents. One hundred and ninety-six respondents (196) was collected and they are considered representing Thai consumers using Line application since those three methods could reach wide range of people. The questionnaire was designed into two main parts: respondent profiles and the measurement parts. For respondent profile, respondents' age, education, occupation and income were obtained. The measurement part is consisted of sixth sections. The first section measured user preference, including 5 items from existing literature (Hutter, Hautz, Dennhardt, & Füller, 2013). The second section the respondents evaluated user similarity (Homophily), 6 items were adopted and modified from previous literature (Wallace, Buil, & de Chernatony, 2017). The third section measured user interaction, 5 items were employed and adopted from existing literatures (Chu & Kim, 2011; Zhang, Omran, & Cobanoglu, 2017). The fourth section user concern for others was measured with 5 items adapted from (Quan-Haase & Young, 2010). The fifth section measured line ease of use, including 4 items from (Rauniar, Rawski, Yang, & Johnson, 2014). The sixth section measured line usefulness which employed 5 items from previous literature (Yang, 2012). The last section measured electronic word-of-mouth which employed 6 items from (Chi, 2011; Chong, Khong, Ma, McCabe, & Wang, 2018; Zhang et al., 2017). All items were assessed via Likert scale from strongly disagree (1) to strongly agree (6).

The target population focused on Line mobile application's users who benefited from using Line mobile application in their daily life. Statistical analysis program was applied to the data to analyze and interpret the results. First exploratory factor analysis (EFA) was conducted using principal component analysis with varimax rotation. Second, Cronbach's alpha was used to test the consistency of the measurement. The convergent validity and discriminant validity of the constructs were also assessed. Finally, multiple regression with stepwise method was tested to examine the effects of the user preference, user similarity (Homophily), user interaction, user concern for others, Line ease of use, and Line usefulness on eWOM intention.

Sample Profiles

Among the 196 respondents, the majority (39.8%) were aged between 26 and 30. This was followed by 17.5% aged lower than 20-25 years old; 11.4% aged between 31-35 years old; 16.3% aged between 36-40 years old; 4.7% aged between 41-45 years old; and 10.3% were older than 45 years old. A total of 49.0% of respondents had an educational level of bachelor's degree; 35.7% graduated with a master's degree; 8.7% attained the doctoral degrees and 6.6% studied below the bachelor's degree. For occupation, 48.5%, worked in private

companies, followed by 21.2% freelancers, 19.7% other occupations, 2.0% public sector employees and 6.1% students. A total 38.8% of respondents earned more than 50,000 THB per month, followed by 17.3% earning 30,000–39,999 THB; 15.3% earning 20,000–29,999 THB; 14.8% earning 10,000–19,999 THB; 10.7% earning 40,000–49,999 THB; and 3.1% earning lower than 10,000 per month

Data Analysis

This study analyzed the reliability and validity of the scales before testing the hypotheses. The measurement's reliability was measured by Cronbach's alpha and the constructs having Cronbach's alpha between 0.839 and 0.922. Each construct is recognized for the reliability which all values are higher than the threshold of 0.7, indicating acceptable internal consistency (Nunnally, 1978). Convergent validity indicated that the item measures relate to each other and they are conversed in the same construct. It was tested by the composite reliability (CR) and the average variance extracted (AVE). All composite reliability of item measures ranged from 0.887–0.939 higher than the 0.7 threshold and all AVE of item measures ranged from 0.605–0.746 higher than the 0.50 threshold, suggesting the convergent validity (Fornell & Larcker, 1981). Moreover, the factor loading scores ranged from 0.706 to 0.922, all item measures have a standard load factor higher than 0.50 at a significant level of 0.001 which also confirms the convergent validity (Hair, Anderson, Tatham, & Black, 1998).

In addition, discriminant validity was conducted to examine if two measures that should not be correlated/related are actually not related and found that the square root of AVE of each construct, shown on diagonal in table 1, are higher than the correlations between itself and other constructs, which indicates the discriminant validity (Fornell & Larcker, 1981).

Table 1 Discriminant Validity

	UP	US	UI	UC	UE	LU	EWOM
UP	0.782						
US	0.443**	0.778					
UI	0.553**	0.437**	0.844				
UC	0.452**	0.367**	0.559**	0.864			
LE	0.172*	0.249**	0.277**	0.213**	0.852		
LU	0.175*	0.235**	0.350**	0.209**	0.635**	0.838	
EWOM	0.306**	0.218**	0.333**	0.293**	0.446**	0.431**	0.849

Note: Diagonal values are the square root of AVE for each construct.

*p < .05, **p < .01, ***p < .001

Results

The researchers used a linear multiple regression instead of structural equation modeling since multiple regression analysis allows assessing the relative impacts of independent variables on dependent variable (Cohen, Cohen, West, & Aiken, 2003). The stepwise regression method is chosen to fit regression models in which the choice of predictive variables is carried out by an automatic procedure (Draper & Smith, 1981). Table 2 shows the three model outputs. The final model (model 3) included user preference, line ease of use, and line usefulness and excluded user similarity, user interaction, user concern for others and resulted adjusted R square = 27.1% while the analysis of variance (ANOVA), F value = 25.217 to be significant at p < 0.001.

**Table 2** Model Summary of Multiple Regression Analysis for Validating Models

Model	R	R ²	Adjusted R ²	Significant F Change	Durbin-Watson
1	.446	.199	.195	.000	1.601
2	.503	.253	.245	.000	
3	.532	.283	.271	.005	

To measure the effects of each independent variables on eWOM, the standardized beta of the three hypotheses were all significant which are user preference has positive relationship with eWOM ($\beta = 0.266$, $p = .001$); Line ease of use has positive relationship with eWOM ($\beta = 0.221$, $p = .000$); and Line usefulness has positive relationship with eWOM ($\beta = 0.223$, $p = .005$). In sum, H1, H5, and H6 are supported. Conversely, the rest of the three hypotheses were excluded from the final model which are user similarity has no relationship with eWOM ($\beta = 0.010$, $p = .888$); user interaction has no relationship with eWOM ($\beta = 0.093$, $p = .229$); user concern for others has no relationship with eWOM ($\beta = 0.116$, $p = .094$). In sum, H2, H3, and H4 are not supported.

The multi-collinearity issues among the independent variables were checked with the variation inflation factor (VIF) for each variable; VIFs for user preference, line ease of use, and line usefulness were reported as 1.687, 1.038, and 1.689 respectively, that were well within the acceptable limit ($VIF < 10$). The residual correlation was checked to be acceptable with the Durbin-Watson value of 1.601 (< 4) (Durbin & Watson, 1950). This study reported standardized beta instead of unstandardized beta for the clear comparison and interpretation purposes.

Discussion

The results of this study show that eWOM was influenced by user preference, line ease of use, and line usefulness. These findings are consistent with previous studies e.g. Anastasiei & Dospinescu (2019); Gefen et al. (2003), and Yang (2017), respectively. Anastasiei & Dospinescu (2019) found the effect of user preference on eWOM among Romanian students, who had experienced with online shopping. This effect can be described in Line context that Line users want to help Line corporation achieve its objectives by spreading words about it to their friends. Gefen et al. (2003) found the effect of perceived ease of use on eWOM among graduate and undergraduate students at a leading business school in the mid-Atlantic region of the United States who had experienced in shopping online. Yang (2017) found the effect of perceived usefulness on eWOM in an online platform about food and restaurants in Hong Kong and other countries in Asia.

However, the results did not show effects of user similarity, user interaction, and user concern for others on eWOM which were inconsistent with previous literatures e.g. Ibarra (1992); Burton & Khamash (2010); Hennig-Thurau et al. (2004). Some studies have also questioned the overall impact and showed that the constructs might not be strong determinants of eWOM in some circumstances (Tsao & Hsieh, 2012; Jiang, Gretzel, & Law, 2010). Therefore, the relationships certainly require further examination on a different data set with eWOM to determine causalities.

Unexpectedly, user similarity (homophily) did not show any effects on eWOM. This could be ascribed to the nature of the internet, especially Line application, and how users now easily communicate with other users they have never encountered. For user interaction, it is unclear why the effect is not found. A possible explanation could be that users who would like to interact with other users are willing to rely on the Line community for emotional engagement, but they are not necessarily satisfied with Line offerings. In summary, the results show that the impact



of user interaction requirements is complex due to the type and content of Line marketing. Surprisingly, user concern for others has not been discovered to be a significant factor in affecting eWOM in Line usage, as opposed to research by Ho & Dempsey (2010) on eWOM, which has discovered a favorable connection between altruism and eWOM. Hennig-Thurau et al. (2004) also discovered concern for others as the second-highest predictor of social platform visits for eWOM. The possible explanation could be that user concern for other in Line application behave differently from other social media e.g. Instagram or Facebook

The implications of this study are as follows: for theoretical contribution, this study expanded the application of TAM to explore the changing consumer behaviors and eWOM; for practitioner, the results of this study could help marketer to understand Line Thai consumer behaviors, adapt their product to satisfy customers, and develop marketing strategies that allow businesses to build on communication platform.

There are some limitations in this study. Firstly, sample size (196) could be too small as time and money constraints, thus, future research is suggested to draw more sample to have a good representative of Thai population to generate more reliable result. Secondly this study did not find the effect of user similarity, user interaction, and user concern for other on eWOM, the future research could explore the new variable like appreciation from other or financial reward. Finally, future research could discover mediator or moderator adding in this model to increase power of explanation since this study is lack.

References

- Adjei, M. T., Noble, S. M., & Noble, C. H. (2010). The Influence of C2C Communications in Online Brand Communities on Customer Purchase Behavior. *Journal of the Academy of Marketing Science*, 38(5), 634–653. DOI: 10.1007/s11747-009-0178-5
- Agarwal, R., & Prasad, J. (1997). The Role of Innovation Characteristics and Perceived Voluntariness in the Acceptance of Information Technologies. *Decision Sciences*, 28(3), 557–582. DOI: 10.1111/j.1540-5915.1997.tb01322.x
- Ajzen, I., & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- Anastasiei, B., & Dospinescu, N. (2019). Electronic Word-of-Mouth for Online Retailers: Predictors of Volume and Valence. *Sustainability*, 11(3), 814. DOI: 10.3390/su11030814
- Ayeh, J. K., Au, N., & Law, R. (2013). Predicting the Intention to Use Consumer-Generated Media for Travel Planning. *Tourism Management*, 35, 132–143. DOI: 10.1016/j.tourman.2012.06.010
- Bartlett, M. (2010). How to Use Social Media to Develop Realtor Relationships. *Credit Union Journal*, 14(39), 4.
- Bickart, B., & Schindler, R. M. (2001). Internet Forum as Influential Source of Consumer Information. *Journal of Interactive Marketing*, 15(3), 31–40. DOI: 10.1002/dir.1014
- Bronner, F., & de Hoog, R. (2011). Vacationers and eWOM: Who Posts, and Why, Where, and What? *Journal of Travel Research*, 50(1), 15–26. DOI: 10.1177/0047287509355324



Burton, J., & Khammash, M. (2010). Why do People Read Reviews Posted on Consumer–Opinion Portals? *Journal of Marketing Management*, 26(3–4), 230–255. DOI: 10.1080/02672570903566268

Byrne, D. E. (1971). *The Attraction Paradigm*. New York: Academic Press.

Carli, L. L., Ganley, R., & Pierce–Otay, A. (1991). Similarity and Satisfaction in Roommate Relationships. *Personality and Social Psychology Bulletin*, 17(4), 419–426. DOI: 10.1177/0146167291174010

Chatterjee, P. (2001). Online Reviews: Do Consumers Use Them? In M. C. Gilly, & J. Meyers–Levy (Eds.), *NA–Advances in Consumer Research Volume 28* (pp. 129–133). Valdosta, GA: Association for Consumer Research.

Chau, P. Y. K. (1996). An Empirical Assessment of a Modified Technology Acceptance Model. *Journal of Management Information Systems*, 13(2), 185–204. DOI: 10.1080/07421222.1996.11518128

Chau, P. Y. K., & Hu, P. J.–H. (2001). Information Technology Acceptance by Individual Professionals: A Model Comparison Approach. *Decision Sciences*, 32(4), 699–719. DOI: 10.1111/j.1540–5915.2001.tb00978.x

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. DOI: 10.1108/10662240810883290

Chi, H.–H. (2011). Interactive Digital Advertising vs. Virtual Brand. Community: Exploratory Study of User Motivation and Social Media Marketing Responses in Taiwan. *Journal of Interactive Advertising*, 12(1), 44–61. DOI: 10.1080/15252019.2011.10722190

Child, J. (2001). Trust: The Fundamental Bond in Global Collaboration. *Organizational Dynamics*, 29(4), 274–288. DOI: 10.1016/S0090–2616(01)00033–X

Chong, A. Y. L., Khong, K. W., Ma, T., McCabe, S., & Wang, Y. (2018). Analyzing Key Influences of Tourists' Acceptance of Online Reviews in Travel Decisions. *Internet Research*, 28(3), 564–586. DOI: 10.1108/IntR–05–2017–0212

Chu, S.–C., & Kim, Y. (2011). Determinants of Consumer Engagement in Electronic Word–of–Mouth (eWOM) in Social Networking Sites. *International Journal of Advertising*, 30(1), 47–75. DOI: 10.2501/IJA–30–1–047–075

Cialdini, R. B. (1993). *Influence: Science and Practice* (3rd ed.). New York: Harper Collins Publishers.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences* (3rd ed.). Mahwah, New Jersey, US: Lawrence Erlbaum Associates Publishers.



- Cooper, R. G. (1979). The Dimensions of Industrial New Product Success and Failure. *Journal of Marketing*, 43(3), 93-103. DOI: 10.1177/002224297904300310
- Davis, F. D. (1986). *A Technology Acceptance Model for Empirically Testing New End-User Information Systems: Theory and Results*. (Unpublished doctoral dissertation). Massachusetts Institute of Technology, Sloan School of Management, Cambridge, MA.
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *Mis Quarterly*, 13(3), 319-340. DOI: 10.2307/249008
- de Matos, C. A., & Rossi, C. A. V. (2008). Word-of-Mouth Communications in Marketing: A Meta-Analytic Review of the Antecedents and Moderators. *Journal of the Academy of Marketing Science*, 36(4), 578-596. DOI: 10.1007/s11747-008-0121-1
- Draper, N., & Smith, H. (1981). *Applied Regression Analysis* (2nd ed.). New York: John Wiley & Sons.
- Durbin, J., & Watson, G. S. (1950). Testing for Serial Correlation in Least Squares Regression: I. *Biometrika*, 37(3/4), 409-428. DOI: 10.2307/2332391
- Engel, J. B. (1993). *Consumer Behavior* (8th ed.). Fort Worth: Dryden Press.
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39-50. DOI: 10.2307/3151312
- Gatignon, H., & Robertson, T. S. (1985). A Propositional Inventory for New Diffusion Research. *Journal of Consumer Research*, 11(4), 849-867. DOI: 10.1086/209021
- Gefen, D., & Straub, D. W. (2000). The Relative Importance of Perceived Ease of Use in IS Adoption: A Study of E-Commerce Adoption. *Journal of the Association for Information Systems*, 1(1), 1-30. DOI: 10.17705/1jais.00008
- Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in Online Shopping: An Integrated Model. *MIS Quarterly*, 27(1), 51-90. DOI: 10.2307/30036519
- Godes, D., & Mayzlin, D. (2004). Using Online Conversations to Study Word-of-Mouth Communication. *Marketing Science*, 23(4), 545-560. DOI: 10.1287/mksc.1040.0071
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate Data Analysis*. Englewood Cliffs, NJ: Prentice Hall.
- Halstead, D. (2002). Negative Word of Mouth: Substitute for or Supplement to Consumer Complaints? *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 15, 1-12.



Hambrick, D. C. (1994). What if the Academy Actually Mattered? *Academy of Management Review*, 19(1), 11–16. DOI: 10.5465/amr.1994.9410122006

Han, S. M. (2008). *Motivations for Providing and Seeking eWOM: A Cross Cultural Comparison of U.S. and Korean College Students*. (Unpublished doctoral dissertation). Department of Advertising, Michigan State University, East Lansing.

Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic Word-of-Mouth via Consumer-Opinion Platforms: What Motivates Consumers to Articulate Themselves on the Internet? *Journal of Interactive Marketing*, 18(1), 38–52. DOI: 10.1002/dir.10073

Ho, J. Y. C., & Dempsey, M. (2010). Viral Marketing: Motivations to Forward Online Content. *Journal of Business Research*, 63(9–10), 1000–1006. DOI: 10.1016/j.jbusres.2008.08.010

Ho, K. (2019, April 30) *Thais Spend Over a Quarter of their Day on Social Media*. Retrieved from <https://th.yougov.com/en-th/news/2019/04/30/thais-spend-over-quarter-their-day-social-media/>

Hogg, M. A., & Abrams, D. (1990). Social Motivation, Self-Esteem and Social Identity. In D. Abrams, & M. Hogg (Eds.), *Social Identity Theory: Constructive and Critical Advances* (pp. 28–47). New York: Harvester Wheatsheaf.

Hogg, M. A., Cooper-Shaw, L., & Holzworth, D. W. (1993). Group Prototypicality and Depersonalized Attraction in Small Interactive Groups. *Personality and Social Psychology Bulletin*, 19(4), 452–565. DOI: 10.1177/0146167293194010

Horton, R. P., Buck, T., Waterson, P. E., & Clegg, C. W. (2001). Explaining Intranet Use with the Technology Acceptance Model. *Journal of Information Technology*, 16(4), 237–249. DOI: 10.1080/02683960110102407

Hu, P. J., Chau, P. Y. K., Sheng, O. R. L., & Tam, K. Y. (1999). Examining the Technology Acceptance Model Using Physician Acceptance of Telemedicine Technology. *Journal of Management Information Systems*, 16(2), 91–112. DOI: 10.1080/07421222.1999.11518247

Hutter, K., Hautz, J., Dennhardt, S., & Füller, J. (2013). The Impact of User Interactions in Social Media on Brand Awareness and Purchase Intention: The Case of MINI on Facebook. *Journal of Product & Brand Management*, 22(5/6), 342–351. DOI: 10.1108/JPBM-05-2013-0299

Ibarra, H. (1992). Homophily and Differential Returns: Sex Differences in Network Structure and Access in an Advertising Firm. *Administrative Science Quarterly*, 37(3), 422–447. DOI: 10.2307/2393451

Ibarra, H. (1995). Race, Opportunity, and Diversity of Social Circles in Managerial Networks. *Academy of Management Journal*, 38(3), 673–703. DOI: 10.2307/256742



Iqbal, M. (2019). *Line Revenue and Usage Statistics*. Retrieved from <https://www.businessofapps.com/data/line-statistics/>

Jalilvand, M. R., & 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. DOI: 10.1108/02634501211231946

Jiang, J., Gretzel, U., & Law, R. (2010). Do Negative Experiences Always Lead to Dissatisfaction? – Testing Attribution Theory in the Context of Online Travel Reviews. In U. Gretzel, R. Law, & M. Fuchs (Eds.), *Information and Communication Technologies in Tourism 2010* (pp. 297–308). Vienna, Austria: Springer.

Jiang, J. J., Hsu, M. K., Klein, G., & Lin, B. (2000). E-Commerce User Behavior Model: An Empirical Study. *Human Systems Management*, 19(4), 265–276.

Kenrick, D. T., Neuberg, S. L., & Cialdini, R. B. (2002). *Social Psychology: Unraveling the Mystery* (2nd ed.). Boston: Allyn & Bacon.

Kramer, R. M. (1991). Intergroup Relations and Organizational Dilemmas: The Role of Categorization Processes. In B. M. Stawand, & L. L. Cummings (Eds.), *Research in Organizational Behavior*, 13 (pp. 191–228). Greenwich, CT: JAI Press.

Lee, J., Lee, J., & Feick, L. (2001). The Impact of Switching Costs on the Customer Satisfaction–Loyalty Link: Mobile Phone Service in France. *Journal of Services Marketing*, 15(1), 35–48. DOI: 10.1108/08876040110381463

Leong, B., & Katrina, B. (2019, July 23). *Who are Thailand's eCommerce Consumers?* Retrieved from <https://janio.asia/articles/who-are-thailands-ecommerce-consumers/>

Li, H., Daugherty, T., & Biocca, F. (2002). Impact of 3-D Advertising on Product Knowledge, Brand, Attitude, and Purchase Intention: The Mediating Role of Presence. *Journal of Advertising*, 31(3), 43–57. DOI: 10.1080/00913367.2002.10673675

Lincoln, J. R., & Miller, J. (1979). Work and Friendship Ties in Organizations: A Comparative Analysis of Relational Networks. *Administrative Science Quarterly*, 24(2), 181–199. DOI: 10.2307/2392493

Markus, H. R., & Kitayama, S. (1991). Culture and the Self: Implications for Cognition, Emotion, and Motivation. *Psychological Review*, 98(2), 224–253. DOI: 10.1037/0033-295X.98.2.224

Mazzarol, T., Sweeney, J. C., & Soutar, G. N. (2007). Conceptualizing Word-of-Mouth Activity, Triggers and Conditions: An Exploratory Study. *European Journal of Marketing*, 41(11/12), 1475–1494. DOI: 10.1108/03090560710821260

Mouzas, S., Henneberg, S., & Naudé, P. (2007). Trust and Reliance in Business Relationships. *European Journal of Marketing*, 41(9/10), 1016–1032. DOI: 10.1108/03090560710773327



Naidoo, R., & Leonard, A. (2007). Perceived Usefulness, Service Quality and Loyalty Incentives: Effects on Electronic Service Continuance. *South African Journal of Business Management*, 38(3), 39–48. DOI: 10.4102/sajbm.v38i3.587

Nunnally, J. C. (1978). *Psychometric Theory* (2nd ed.). New York: McGraw-Hill.

O'Keefe, D. J. (2002). *Persuasion: Theory & Research*. Thousand Oaks, CA: Sage Publications.

Palmer, A., & Bejou, D. (1995). Tourism Destination Marketing Alliances. *Annals of Tourism Research*, 22(3), 616–629. DOI: 10.1016/0160-7383(95)00010-4

Price, L. L., Feick, L. F., & Guskey, A. (1995). Everyday Market Helping Behavior. *Journal of Public Policy and Marketing*, 14(2), 255–266. DOI: 10.1177/074391569501400207

Quan-Haase, A., & Young, A. L. (2010). Uses and Gratifications of Social Media: A Comparison of Facebook and Instant Messaging. *Bulletin of Science, Technology & Society*, 30(5), 350–361. DOI: 10.1177/0270467610380009

Rauniar, R., Rawski, G., Yang, J., & Johnson, B. (2014). Technology Acceptance Model (TAM) and Social Media Usage: An Empirical Study on Facebook. *Journal of Enterprise Information Management*, 27(1), 6–30. DOI: 10.1108/JEIM-04-2012-0011

Sen, S., & Lerman, D. (2007). Why are you Telling me this? An Examination into Negative Consumer Reviews on the Web. *Journal of Interactive Marketing*, 21(4), 76–94. DOI: 10.1002/dir.20090

Stauss, B. (2000). Using New Media for Customer Interaction: A Challenge for Relationship Marketing. In T. Hennig-Thurau, & U. Hansen (Eds.), *Relationship Marketing: Gaining Competitive Advantage through Customer Satisfaction and Customer Retention* (pp. 233–253). Berlin: Springer. DOI: 10.1007/978-3-662-09745-8_13

Sundaram, D. S., Mitra, K., & Webster, C. (1998). Word-of-Mouth Communications: A Motivational Analysis. *Advances in Consumer Research*, 25, 527–531.

Tajfel, H. (1974). Social Identity and Intergroup Relations. *Social Science Information*, 13(2), 65–93. DOI: 10.1177/053901847401300204

Thomas, D. A. (1990). The Impact of Race on Managers' Experiences of Developmental Relationships (Mentoring and Sponsorship): An Intra-Organizational Study. *Journal of Organizational Behavior*, 11(6), 479–492. DOI: 10.1002/job.4030110608

Tsao, W.-C., & Hsieh, M.-T. (2012). Exploring how Relationship Quality Influences Positive eWOM: The Importance of Customer Commitment. *Total Quality Management & Business Excellence*, 23(7–8), 821–835. DOI: 10.1080/14783363.2012.661137



Tsui, A. S., & O'Reilly, C. A. (1989). Beyond Simple Demographic Effects: The Importance of Relational Demography in Superior-Subordinate Dyads. *Academy of Management Journal*, 32(2), 402–423. DOI: 10.2307/256368

Turner, J. C. (1982). Toward a Cognitive Redefinition of the Social Group. In H. Tajfel (Ed.), *Social Identity and Intergroup Relations* (pp. 15–40). Cambridge: Cambridge University Press.

Uzzi, B. (1997). Social Structure and Competition in Interfirm Networks: The Paradox of Embeddedness. *Administrative Science Quarterly*, 42(1), 35–67. DOI: 10.2307/2393808

Venkatesh, V. (2000). Determinants of Perceived Ease of Use: Integrating Control, Intrinsic Motivation, and Emotion into the Technology Acceptance Model. *Information Systems Research*, 11(4), 342–365. DOI: 10.1287/isre.11.4.342.11872

Wallace, E., Buil, I., & de Chernatony, L. (2017). Consumers' Self-Congruence with a "Liked" Brand: Cognitive Network Influence and Brand Outcomes. *European Journal of Marketing*, 51(2), 367–390. DOI: 10.1108/EJM-07-2015-0442

Yang, K. (2012). Consumer Technology Traits in Determining Mobile Shopping Adoption: An Application of the Extended Theory of Planned Behavior. *Journal of Retailing and Consumer Services*, 19(5), 484–491. DOI: 10.1016/j.jretconser.2012.06.003

Yang, F. X. (2017). Effects of Restaurant Satisfaction and Knowledge Sharing Motivation on eWOM Intentions: The Moderating Role of Technology Acceptance Factors. *Journal of Hospitality & Tourism Research*, 41(1), 93–127. DOI: 10.1177/1096348013515918

Zhang, T., Omran, B. A., & Cobanoglu, C. (2017). Generation Y's Positive and Negative eWOM: Use of Social Media and Mobile Technology. *International Journal of Contemporary Hospitality Management*, 29(2), 732–761. DOI: 10.1108/IJCHM-10-2015-0611