

# MODERATING EFFECTS OF HOFSTEDE'S CULTURAL DIMENSIONS ON THE RELATIONSHIP BETWEEN AEWOM AND FEWOM IN THAILAND

Aya Fukushige<sup>1,\*</sup>, Mayuree Aryupong<sup>2</sup>, and Phacharaporn Phijaranakul<sup>3</sup>

## Abstract

This research aims to examine the moderating effects of Hofstede's cultural dimensions at the individual level on the relationship between acceptance and subsequent forwarding of electronic word of mouth (EWOM) in Thailand. EWOM is currently considered as one of the most influential communication channels for businesses, marketers, and various kinds of consumers. Cultural values can also be a factor to influence consumers' decision-making behaviors. Hypotheses were developed by adopting Hofstede's cultural dimensions, but with the newly developed scale, *Individual Cultural Values Scale* (CVSCALE) in order to observe the cultural diversity among Thai nationals at the individual level, and to investigate the moderating effect of Hofstede's five cultural dimensions on the relationship between *Acceptance of Electronic Word of Mouth* (AEWOM) and *Forwarding of Electronic Word of Mouth* (FEWOM). A structured online questionnaire was used to collect data from 204 respondents, all of which were Thai and currently using one or more social networking service (SNS). The results indicated that people who have accepted EWOM tend to forward the EWOM further, and among Hofstede's five cultural dimensions, *Power Distance*, *Collectivism*, and *Masculinity* significantly moderated the relationship between AEWOM and FEWOM.

**Keywords:** Acceptance-Forwarding Electronic Word of Mouth, Hofstede's Cultural Dimensions, Individual Cultural Values Scale, and Cultural Trait Psychology Theory

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<sup>1,\*</sup>Dr. Aya Fukushige obtains a Ph.D. in Management from University of Bradford, School of Management, U.K. Currently she is working as a lecturer in the Department of Management – Leadership and Entrepreneurship, Martin de Tours School of Management and Economics, Assumption University, Thailand. Email: afukushige@msme.au.edu

<sup>2</sup>Dr Mayuree Aryupong obtains a Ph.D. in Marketing from Thammasat University, Thailand. Currently she is working as a lecturer in the Department of Management – Leadership and Entrepreneurship, Martin de Tours School of Management and Economics, Assumption University, Thailand.

<sup>3</sup>Ms. Phacharaporn Phijaranakul obtains a Master degree in M.B.A Global Business Management, Thailand. Currently she is working as a managing director in Ploy Jewelry International Co., Ltd. in Chonburi, Thailand. She is a Ph.D. Candidate in Business Administration, Martin de Tours School of Management and Economics, Assumption University, Thailand.

## 1. INTRODUCTION

In recent years, an increasing number of internet and social media users spend more time on social networking services (SNS). Following this trend, the emergence of a new form of word of mouth has been recognized, that is, *electronic word of mouth* (EWOM), considered as one of the most influential, yet informal media among consumers and businesses as a whole (Huete-Alcocer, 2017). EWOM is defined as a new form of peer-to-peer communication via electronic means (Vilpponen, Winter & Sundqvist, 2006), which, as a strategy, plays an important role in marketing campaigns as well as in consumer decision-making (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004). When consumers “accept” EWOM, and in turn, “forward” EWOM to others on SNS, this action creates a further wave in spreading information. Therefore, understanding what factors strengthen the relationship between *acceptance of electronic word of mouth* (AEWOM) and *forwarding of electronic word of mouth* (FEWOM) is critical for marketers and their businesses.

As the term, EWOM, is relatively new, the conceptualizations of AEWOM and FEWOM have also been defined rather recently. AEWOM refers to “*the extent to which a recipient believes EWOM information to be true and is likely to consider it valid*” (Mahapatra & Mishra, 2017; p. 595), whereas FEWOM is defined as “*the intention of resending the information received*” (Gershoff et al., 2003; stated in Mahapatra & Mishra, 2017, p. 595). Mahapatra and Mishra (2017) point out that not so many studies have identified factors that lead to

AEWOM and FEWOM, and among these, some researchers employed concepts of culture in the scope of the research. Lam, Lee, and Mizerski (2009) explained that culture significantly impacts consumers’ engagement with word of mouth, and that the pattern, type, and target receivers of consumers’ WOM depends on their cultural values. In fact, the study of Goodrich (2014) used cultural dimensions to compare the use of social media and other information sources for consumer decision-making across 50 countries, and concluded that the use of information sources that influence online purchase decisions strongly varies by culture. The study of Ma (2013) also adopted cultural dimensions, and was further developed by Hofstede, who compared microblogging contents on Twitter in the US and Weibo in China. Furthermore, several studies have particularly focused on EWOM in the Thai context; such as examining the influence of EWOM on Chinese tourists visiting Thailand (Miao, 2015) and on IT product purchase intentions in Thailand (Pakapatpornpob, Vongurai, & Inthawadee, 2017).

National culture can influence many factors, knowledge of this is required to maintain a relationship with consumers and increase target market performance (Schau, Munniz, & Arnould, 2009). Hofstede’s constructs and metric have widely been adopted by researchers, and has therefore become one of the most cited sources on national culture for social scientists. However, given the current diversity which can be observed within one single nation, companies and marketers are usually required to conduct a market segmentation not only at the

country level but also at the individual level. Even though customers have the same nationality and are living in the same country, each individual could have a different background in terms of demographics, geographics, psychographics, as well as having behavioral differences; thus, simply applying Hofstede's index score of national culture to every member of that society may not work well. Indeed, Yoo, Donthu, and Lenartowicz (2011) explain that there has been a strong demand to develop a psychometrically sound measure of Hofstede's culture at the individual level, and went on to develop the *Individual Cultural Values Scale* (CVSCALE), a scale to assess Hofstede's five cultural dimensions at the individual level for a more general context, which should be able to achieve satisfactory psychometric properties.

The current study aims to explore only the Thai context; and in this regard, assumes that all Thai samples cannot be homogeneous. Therefore, the study also employs Yoo et al.'s (2011) individual cultural values scale which can measure Hofstede's dimensions of culture at the individual level, and examines the moderating effects of Hofstede's five cultural dimensions, *Power Distance*, *Uncertainty Avoidance*, *Individualism*, *Masculinity*, *Long-term Orientation* on the relationship between AEWOM and FEWOM. The structure of this paper is four-fold. Firstly, the literature is reviewed to present our hypotheses, followed by the research methodology. Then, findings are discussed, followed by an introduction of the implications of the results for marketing and business.

## **2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

### **2.1 Acceptance and Forwarding of Electronic Word of Mouth (AEWOM and FEWOM)**

As noted above, *acceptance* of *electronic word of mouth* (AEWOM) occurs when a recipient believes that the information received via EWOM is true and valid; therefore, a recipient who "accepts" will have intention to "forward" the information received, which refers to the *forwarding of electronic word of mouth* (FEWOM) (Mahapatra & Mishra 2017). One of the dominant approaches to examine the persuasive effect of EWOM in prior studies (e.g., Chan & Ngai, 2011; Park & Lee, 2008) is to apply the likelihood model of persuasion (ELM) (Petty & Cacioppo, 1986). ELM aims to explain the various routes taken by different individuals to process incentives, and to explain how their attitudes may change. Based on ELM, Sussman and Siegal (2003) proposed the information adoption model (IAM) to point out how people are influenced to adopt information on computer-mediated communication platforms, indicating that consumers decide to forward EWOM only when they accept the information's validity, which depends on its source and credibility. Cheung, Luo, Sia, and Chen (2009) also used IAM, clarifying that people should find perceived information useful; if so, they will decide to pass it forward to spread the information among their online communities. These studies support the link between AEWOM and FEWOM; therefore, the present study

proposes the following hypothesis:

*H<sub>1</sub> - AEWOM is positively associated with FEWOM.*

## **2.2 Hofstede's Five Cultural Dimensions**

The studies conducted by Geert Hofstede (e.g., 1980; 2001) are two of the most cited sources for social scientists in examining national cultures. Hofstede collected data from over 116,000 respondents in 72 different countries between 1967 and 1973 and identified initially four cultural dimensions, *Power Distance*, *Uncertainty Avoidance*, *Individualism*, and *Masculinity*. Later, around 1985, Hofstede added the fifth dimension, *Long-term Orientation*, by conducting a survey in 23 countries. Overall Hofstede classified differences and similarities in the national cultures of more than 50 modern nations.

The present research focuses on Thai nationals, and according to Hofstede's results (1980;2001), Thailand is relatively high on the cultural dimension of power distance; somewhere in the middle on uncertainty avoidance; classified as collectivism and femininity, and located in the middle between long-term and short-term orientation. However, a critical aspect to discuss here is its diversity and heterogeneity at each individual level which can also be observed in these dimensions (Goregenli, 1997; Oyserman et al., 2002). For example, Thailand, as a whole is high on power distance; yet, each individual in Thailand can still behave differently and decide to alter his or her behavior in certain conditions or environment. This idea can also be supported by the cultural trait psychology

perspective (Church, 2000; Church, Katigbak, del Prado, Valdez-Medina, Miramontes & Ortiz, 2006) where behavior is determined by a complex interaction of personal and situational variables such that personality can alter the perception of the environment where the individual is, as well as their reactions and responses towards that environment. As the cultural trait psychology theory (Church, 2000; Church, et al., 2006) has been used to identify moderators, in order to explain differences in individual actions and behaviors under similar situations, Hofstede's cultural dimensions have also been adopted as moderators treated at the individual level in various studies (e.g., Hui, 1988; Singelis, 1994; Triandis, 1995; Yoo, et al., 2011). Each of the five dimensions is reviewed separately below.

### **2.2.1 Power Distance**

Regarding the first dimension, *Power Distance*, Hofstede (2001, p. 98) defines it as "the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally". By using this cultural dimension as a moderator, Zhang (2010), compared the moderating effect on the relationship between empowerment and team participation of Chinese employees at Chinese R&D companies and those at China-based American R&D companies. Kirkman, Chen, Farh, Chen, and Lowe (2009) also used power distance as a moderator and found that this dimension moderated the cross-level relationship which Chinese or American transformational leaders had with procedural justice.

Moving now to the concept of EWOM, Yaveroglu and Donthu (2002) revealed that power distance affects the process of EWOM in a high power distance society. Moreover, Nair (2016) explains that conversations including EWOM with people who are not within their immediate social circles have an uneven exchange of information. Customers who possess higher power in their society are expected to have more information and knowledge compared to those who belong to the lower ends of power distribution. It should also be noted that when people belong to a culture with “high-power distance”, they have an understanding and acceptance of the phenomenon of inequalities in power, regardless of the power-level they possess. Lam et al. (2009) noted that such inequality in power can create more interaction, i.e., word of mouth. The current study also assumes that people who belong to a high-power distance culture are encouraged to interact with others more via EWOM to fill the gap in information and knowledge between individuals. The following hypothesis is therefore proposed:

*H<sub>2</sub> - The relationship between AEWOM and FEWOM is stronger among people with a culture of high-power distance.*

### **2.2.2 Uncertainty Avoidance**

The next dimension, *Uncertainty Avoidance*, is defined as “the extent to which the members of a culture feel threatened by uncertain or unknown situations” (Hofstede, 2001, p. 161). Jung and Kellaris (2004) used uncertainty avoidance as a moderator, along with product familiarity and the need for cognitive closure, finding that it

moderated the scarcity effect on purchase intent in the USA (a lower context culture) and France (a higher context culture). Reimann, Lunemann, and Chase (2008) also used this dimension as a moderator to examine the relationship between perceived service quality and customer satisfaction in Spain, Germany, and Sweden.

A culture with high uncertainty avoidance discourages people from having conversations with other people whom they do not know personally (i.e., out-groups). In contrast, cultures with low uncertainty avoidance encourage people to take risks, be more tolerant, and more open to out-groups and new innovations (Nair, 2016). Generally, in the latter case (low uncertainty avoidance), people tend to be more open to the ideas of others, and therefore more likely to engage in WOM with their out-groups (Lam et al., 2009). Nair (2016) also clarifies that, on Facebook, people who belong to low uncertainty avoidance cultures are more likely to show referral behaviors. Thus, this study proposes the following hypothesis:

*H<sub>3</sub> - The relationship between AEWOM and FEWOM is stronger among people with a culture of low uncertainty avoidance.*

### **2.2.3 Individualism**

The third dimension is *Individualism* versus *Collectivism*. *Individualism* refers to “a society in which the ties between individuals are loose: Everyone is expected to look after him or herself and his or her immediate family only”, whilst *Collectivism* describes “a society in which people from birth onwards are integrated into strong, cohesive in-groups, which

throughout a person's lifetime continue to protect them in exchange for unquestioning loyalty." (Hofstede, 2001, p. 225). Yang et al. (2012) conducted a study in 24 countries, suggesting that the cultural dimension of individualism-collectivism works in a moderating role, in which it moderates the mediation effect of perceived workload between work hours, and influences both turnover intentions and job dissatisfaction. Furthermore, Erdogan and Liden (2006) measured collectivism at the individual level rather than the country level reporting that the collectivist dimension moderates the relation between interactional justice and leader-member exchanges in textile-manufacturing plants in Turkey.

The prior research explains that individualists tend to be more independent (Srite & Karahanna, 2006) and when they examine EWOM information, they prefer to believe their own evaluation and judgement (Lou, Wu, Shi, & Xu, 2014). In contrast, for people who belong to a collectivist culture, word of mouth is very important compared to mass media advertising (Yoo et al., 2011). People in collectivist cultures tend to follow opinions and evaluation from others instead of their own (Bond & Smith, 1996) and tend to accept the EWOM information as they place high value on their relationships with others (Triandis, 1995) as well as feel comfortable to follow social or group norms (Earley, 1993). Therefore, the following hypothesis is developed:

*H<sub>4</sub> . The relationship between AEWOM and FEWOM is stronger among people with a culture of collectivism.*

#### **2.2.4 Masculinity**

The fourth dimension is *Masculinity*, which is opposite to *Femininity*, and which is not synonymous with gender as defined as biological sex (men versus women) but rather focuses on the role distinction. *Masculinity* is defined as "a society in which social gender roles are clearly distinct: men are supposed to be assertive, tough, and focused on material success; women are supposed to be more modest, tender, and concerned with the quality of life", and *Femininity* is defined as "a society in which social gender roles overlap: both men and women are supposed to be modest, tender, and concerned with the quality of life" (Hofstede, 2001, p. 297).

The masculine-feminine dichotomy has also been used as a moderator; for example, a study by Bergman and Drasgow (2003) focuses on race as a representative of masculine and feminine character and adopted race as a moderator in a model of sexual harassment. Whereas the study by Bear and Babcock (2012) examined whether masculinity or femininity in a negotiation moderates gender differences in performance. The relationship between masculinity or femininity and EWOM has also been observed in several studies. Dwyer, Mesak, and Hsu (2005) report that individuals with a culture of masculinity are more likely to engage in EWOM than those with a culture of femininity. Lam et al. (2009) also explain that those from a masculine culture are more energetic in taking an active role in online discussions for new products and services; hence, the current study develops the following hypothesis:

*H<sub>5</sub> . The relationship between AEWOM*

and FEWOM is stronger among people with a culture of masculinity.

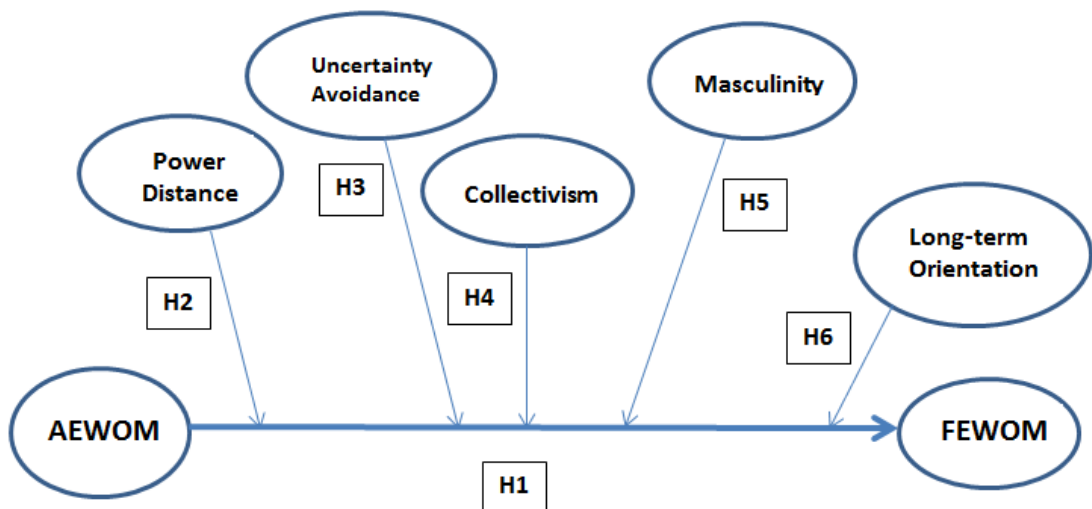
### 2.2.5 Long-term Orientation

The definition of *Long-term Orientation* is “the fostering of virtues oriented towards future rewards, in particular, perseverance and thrift”, and the opposite pole, *Short-term Orientation*, is defined as “the fostering of virtues related to the past and present, in particular, respect for tradition, preservation of ‘face’ and fulfilling social obligations” (Hofstede, 2001, p. 359). Alcántara-Pilar and Del Barrio-García (2015) chose these dimensions as moderators and reported that long-term orientation moderates the relationship between satisfaction online and perceived usefulness regarding attitudes towards websites among tourists from the UK and Spain. Van Everdingen and Waarts (2003), in turn, linked long-term orientation to innovation, and indicated that individuals with a culture of long-term orientation are more adaptable to new circumstances and more receptive to

change. Hofstede introduced one of the connotations of long-term orientation, which is the importance of horizontal coordination and networking. People in societies with long-term orientation find it extremely important to have a personal network of acquaintances as well as personal connections, which links the family sphere to the business one. In business too, those people value building relationships and market position (Hofstede, 2001). It can be presumed that such a way of thinking also supports EWOM communication, in order for them to maintain personal relationships, connections, and networks with others; hence, the following hypothesis is proposed:

*H<sub>6</sub> . The relationship between AEWOM and FEWOM is stronger among people with a culture of long-term orientation.*

Overall, based upon the above, a hypothesized model was created, as depicted in Figure 1.



**Figure 1. Conceptual Framework**

### 3. METHODOLOGY

In order to validate the hypotheses, data were collected in February 2018 by using a structured online questionnaire. A total of 204 respondents, all Thai nationals who were using social networking services (SNS) completed the questionnaire. Table 1 shows a summary of respondent profiles. The sample ( $n = 204$ ) consists of 63.2% female and 36.8% male respondents. Most of the respondents (75.0%) were aged 35 or under, while 86.3% had a high education level, defined as university or above. The majority of respondents were private employees (29.4%) or university students (39.2%). 23.0% spent their time using SNS for 1-2 hours a day, 41.2% for 3-5 hours a day, and 21.5% for 6-9 hours a

day.

Regarding sample size, Bentler and Chou (1987) recommended that five observations per estimated parameter is appropriate. There are 36 estimated parameters in this study; therefore, the sample size should be at least 180, while the actual data collected was 204, which is sufficient. In addition, in order to justify a sample size to examine the moderating effect, Table 2 can be used to indicate the criteria for statistical significance estimates of the minimum sample sizes required for the power of .80 and  $\alpha = .05$  to detect interactions in regression. In using this table, two effect sizes can be estimated:  $R^2$  for the main effect and  $R^2$  for the main effect plus interaction (Aiken & West, 1991).

**Table 1: Respondent Profiles ( $n = 204$ )**

		<b>Persons</b>	<b>%</b>
Gender	Male	75	36.8
	Female	129	63.2
Age	≤ 25 years old	82	40.2
	26-35	71	34.8
	36-45	38	18.6
	> 45	13	6.4
Education	High school	15	7.4
	Bachelor	135	66.2
	Master	41	20.1
	Doctoral	13	6.4
Occupation	Government Employee	11	5.4
	Private Company Employee	60	29.4
	Business Owner	32	15.7
	Freelance	18	8.8
	University student	80	39.2
	Others	3	1.5
Time spent using social media per day	half hour	3	1.5
	1-2 hours	47	23.0
	3-5 hours	84	41.2
	6-9 hours	46	22.5
	9 or more hours	24	11.8

**Table 2: Sample Size Required for Statistical Power of .80 to Detect Interactions in Regression Using  $\alpha = .05$**

$R^2$ for Main Effects Only	$R^2$ for Model with Main Effects and Interaction						
	0.5	.10	.15	.20	.25	.30	.35
.05		143	68	43	32	24	19
.10			135	65	41	29	22
.15				127	60	39	27
.20					119	57	36
.25						111	53
.30							103

SOURCE: Adapted from Aiken and West (1991)

For example, if  $R^2$  for the main effect is .10 and  $R^2$  for main effects plus interaction is .15, the sample size required for the power of .80 will be 135. In the current study,  $R^2$  for the main effect is .22 and the  $R^2$  for main effects plus interaction is .25, so the sample size required for the power of .80 is 119. Therefore, it is statistically appropriate to have a sample size of 204 to proceed this study, as it exceeds 119.

This study employed three constructs: AEWOM as the independent variable, FEWOM as the dependent variable, and Hofstede's cultural dimensions: *Power Distance*, *Uncertainty Avoidance*, *Individualism*, *Masculinity* and *Long-term Orientation* as moderators. Scales and items from

previous studies were utilized to develop the survey questionnaire for measuring these constructs. The four items measuring AEWOM were adopted from Wu and Shaffer (1987) and Gershoff et al. (2003). The five items measuring FEWOM were adopted from Sun, Youn, Wu, and Kuntaraporn (2006). Hofstede's cultural dimensions were measured by using the CVSCALE adopted from Yoo et al. (2011), as this is the scale to measure Hofstede's cultural dimensions at the individual level, consisting of five dimensions with twenty-six-item measures. Our questionnaire applied a five-point Likert scale for all items starting from 1 (strongly disagree) to 5 (strongly agree). The description of measurements is presented in Table 3.

**Table 3: Description of Measurements**

Constructs	Factor Loadings	Means	SD
<i>AEWOM: Acceptance of Electronic Word-Of-Mouth</i> ( $\alpha = .839$ , AVE=.576, CR=.758)	.687-.823	3.191-3.441	0.86-1.03
<i>FEWOM: Forwarding of Electronic Word-Of-Mouth</i> ( $\alpha = .910$ , AVE=.664, CR=.868)	.768-.846	2.971-3.412	1.12-1.14
<i>PD: Power Distance</i> ( $\alpha = .893$ , AVE=.601, CR=.819)	.631-.820	2.157-2.627	1.23-1.31
<i>UA: Uncertainty Avoidance</i> ( $\alpha = .848$ , AVE=.537, CR=.757)	.695-.788	3.779-4.284	0.77-1.03

<b>IC:</b> Individualism/Collectivism ( $\alpha = .822$ , AVE=.532, CR=.784)	.661-.803	3.510-4.132	0.82-0.98
<b>MF:</b> Masculinity/Femininity ( $\alpha = .806$ , AVE=.798, CR=.818)	.613-.861	2.946-3.578	1.12-1.33
<b>LTO:</b> Long term orientation ( $\alpha = .874$ , AVE=.562, CR=.812)	.679-.815	3.627-4.176	0.79-1.01

From our data, exploratory factor analysis (EFA) extracted seven factors whose eigenvalues were exceeding 1. The loading value of each item measure ranged between 0.613 and 0.861, and no cross loading existed. Those factors were AEWOM, FEWOM, Power Distance, Uncertainty Avoidance, Individualism, Masculinity, and Long-term Orientation. The EFA tests explained 67.35% of the variance in the data. The value of the Kaiser, Meyer, Olkin (KMO) measure was 0.866, demonstrating a satisfactory measure of sampling accuracy. In addition, the Bartlett's chi-square was significant [ $\chi^2 = 4567.64$ ,  $df = 630$ ,  $p$  value = .000], showing that the result was acceptably valid.

This study evaluated the accuracy of measurement by testing reliability with Cronbach alpha, which should be above 0.7 (Nunnally, 1978), and which showed the range from 0.806 to 0.910. Moreover, this study used multiple reliability

indicators, e.g. for average variance extracted (AVE): the value ranged between 0.576 and 0.818, while the composite reliability (CR) value ranged between 0.757 and 0.868, both of which are acceptable when they are above 0.5 (Anderson & Gerbing, 1988). Construct validity was assessed through convergent and discriminant validities. The convergent validity presented a high loading value for each item measure when loaded in its own construct with no cross loading (Hair, Anderson, Tatham, & William, 1998). (see Table 3). For discriminant validity, this study applied the method recommended by Fornell and Larcker (1981) who suggested comparing the square root of the AVE of each construct, with the correlations between constructs, as shown in the highlighted diagonal in table 4. If the value of square root AVE is greater, the measurement has discriminant validity.

**Table 4: Discriminant Validity Test**

	FEWOM	AEWOM	PD	UA	CI	MF	LT
FEWOM	0.815						
AEWOM	0.472***	0.759					
PD	0.392***	0.398***	0.775				
UA	0.154*	0.286***	-0.022	0.733			
CI	0.322***	0.367***	0.240**	0.525***	0.729		
MF	0.320***	0.297***	0.538***	0.108	0.341***	0.798	
LT	0.199**	0.242***	0.168*	0.454***	0.472***	0.235**	0.750

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

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

The results shown in Table 4 met this suggestion, thus indicating sufficient discriminant validity. Moreover, this study replicated the CVSCALE and found similar findings when culture was measured at the individual level

#### 4. RESULTS

The results of the simple regression analysis showed that AEWOM had a significant positive relationship with FEWOM [ $\beta = 0.472$ ,  $p < .001$ ; with  $R^2 = 22.2\%$ ]. This result supports Hypothesis 1, which indicates that people who had accepted EWOM tend to forward EWOM more.

Baron and Kenny (1986) have suggested that hierarchical regression analysis is an appropriate method to test moderating effects, and it has been adopted by many researchers (Ha & Jang, 2010; Lin & Chen, 2013; Ryu & Han, 2010). Therefore, this study used hierarchical regression analysis to explore the moderating effect of Hofstede's cultural dimensions, and also the mean centered predictor variables, instead of

composite scores to reduce the multicollinearity effect (West & Aiken, 1991). To assess the main effects of AEWOM on FEWOM, as well as the moderating effects of the Hofstede's cultural dimensions, hierarchical regression analysis was performed in three steps. The first step started with estimating the main effects of the independent variable (AEWOM). The second step estimated the main effects of AEWOM and the moderating variables of the Hofstede's cultural dimensions to the regression equation. Finally, the third step estimated the interactive effect between the independent and moderating variables.

Regarding the moderating effects of the Hofstede's cultural dimensions, the results revealed that *Power Distance*, *Collectivism*, and *Masculinity* significantly moderated the relationship between AEWOM and FEWOM (see Table 5-10). These results support Hypothesis 2, Hypothesis 4, and Hypothesis 5; however, they do not support Hypothesis 3 or Hypothesis 6.

**Table 5: Results of Hierarchical Regression Analysis for Power Distance as Moderator**

	Model1	Model 2	Model3
AEWOM	.472***	.375***	.347***
Power Distance		.243***	.173*
Interaction			.157*
F value	57.788***	37.588***	27.192***
R <sup>2</sup>	.222	.272	.290
Adjusted R <sup>2</sup>	.219	.265	.279
$\Delta R^2$	.222	.050	0.18

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$  Note: The value is standardized coefficient

**Table 6: Results of Hierarchical Regression Analysis for Uncertainty Avoidance as Moderator**

	Model1	Model 2	Model3
AEWOM	.472***	.466***	.439***
Uncertainty Avoidance		.021	.032
Interaction			.084
F value	57.788***	28.816***	19.821***
R <sup>2</sup>	.222	.223	.229
Adjusted R <sup>2</sup>	.219	.215	.218
Δ R <sup>2</sup>	.222	.000	.006

\*p&lt;.05, \*\*p&lt;.01, \*\*\*p&lt;.001 Note: The value is standardized coefficient

**Table 7: Results of Hierarchical Regression Analysis for Collectivism as Moderator**

	Model1	Model 2	Model3
AEWOM	.472***	.408***	.348***
Collectivism		.173**	.168*
Interaction			.200**
F value	57.788***	33.177***	26.478***
R <sup>2</sup>	.222	.248	.284
Adjusted R <sup>2</sup>	.219	.241	.274
Δ R <sup>2</sup>	.222	.026	.036

\*p&lt;.05, \*\*p&lt;.01, \*\*\*p&lt;.001 Note: The value is standardized coefficient

**Table 8: Results of Hierarchical Regression Analysis for Masculinity as Moderator**

	Model1	Model 2	Model3
AEWOM	.472***	.413***	-.288
Masculinity		.198**	.174**
Interaction			.722*
F value	57.788***	34.950***	25.704***
R <sup>2</sup>	.222	.258	.278
Adjusted R <sup>2</sup>	.219	.251	.267
Δ R <sup>2</sup>	.222	.036	.020

\*p&lt;.05, \*\*p&lt;.01, \*\*\*p&lt;.001 Note: The value is standardized coefficient

**Table 9: Results of Hierarchical Regression Analysis for Long-term Orientation as Moderator**

	Model1	Model 2	Model3
AEWOM	.472***	.450***	.413***
Long-term Orientation		.090	.102
Interaction			.104
F value	57.788***	30.031***	21.011***
R <sup>2</sup>	.222	.230	.240
Adjusted R <sup>2</sup>	.219	.222	.228
Δ R <sup>2</sup>	.222	.008	.010

\*p&lt;.05, \*\*p&lt;.01, \*\*\*p&lt;.001 Note: The value is standardized coefficient

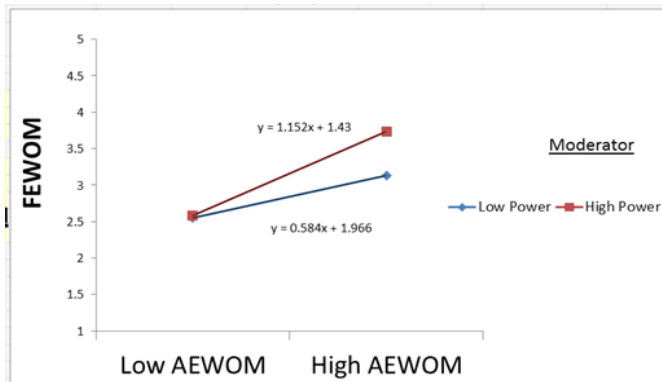
**Table 10: Summary of Results of Moderator Testing**

	Power distance	Uncertainty avoidance	Collectivism	Masculinity	Long-term orientation
<b>Independent variable</b>	.434(.000)	.548(.000)	.433(.000)	-.360(.342)	.516(.000)
<b>Moderator</b>	.158(.018)	.045(.625)	.235(.010)	.156(.007)	.143(.113)
<b>Interaction</b>	.142(.028)	.148(.201)	.307(.002)	.142(.019)	.186(.114)
<b>F value</b>	27.192***	19.821***	26.487***	25.704***	21.011***
<b>R<sup>2</sup></b>	.290	.229	.284	.278	.240
<b>Adjusted R<sup>2</sup></b>	.279	.218	.274	.267	.228
<b>Hypotheses</b>	Supported (H2)	<b>NOT</b> supported (H3)	Supported (H4)	Supported (H5)	<b>NOT</b> supported (H6)
<b>Interpretation</b>	The relationship between AEWOM and FEWOM is stronger among people from a high power distance culture.	The relationship between AEWOM and FEWOM is <b>NOT</b> stronger among people with low uncertainty avoidance.	The relationship between AEWOM and FEWOM is stronger among people with a culture of collectivism.	The relationship between AEWOM and FEWOM is stronger among people of a culture with masculinity.	The relationship between AEWOM and FEWOM is <b>NOT</b> stronger among people with long-term orientation.

\*\*\* p<.001 Note: The value outside parenthesis is unstandardized coefficient and the value in the parenthesis is p value.

In addition, the moderating role of the Hofstede's cultural dimensions is outlined graphically in Figures 2-6 using the data in Table 10. This study follows the works of Aiken and West (1991),

Dawson (2014), and Dawson and Richter (2006) through their website, [www.jeremydawson.co.uk/slopes.htm](http://www.jeremydawson.co.uk/slopes.htm) in order to draw all these interaction effects.

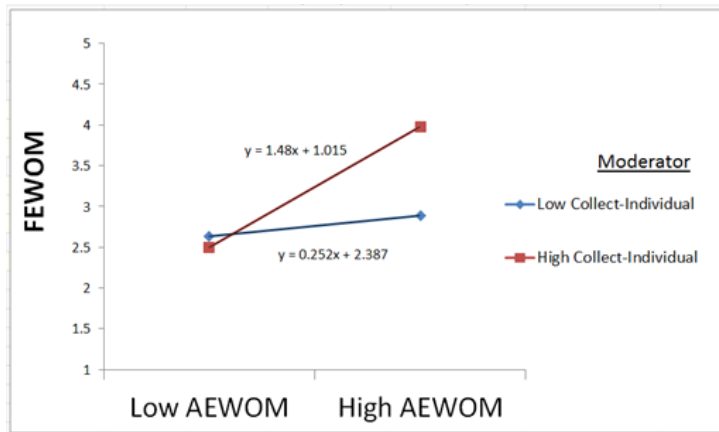


**Figure 2: Power Distance as a Moderator of the Relationship between AEWOM and FEWOM**

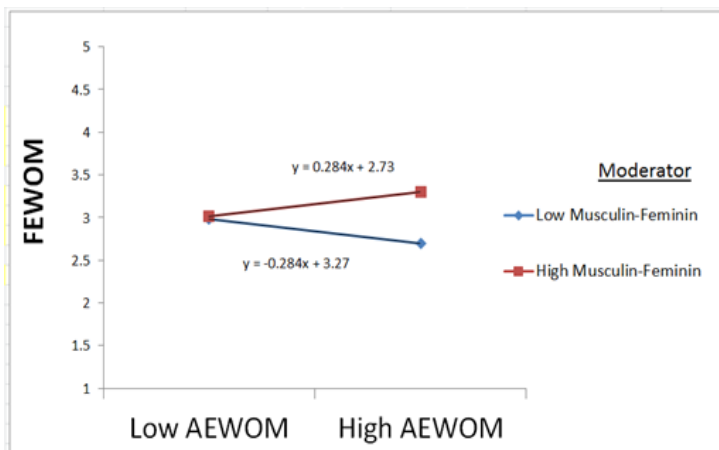
In Figure 2, the value of FEWOM was higher for people with a high power distance dimension for any level of AEWOM, indicating that high power distance was effective at generating FEWOM. In addition, the slope for high power distance was steeper than that of low power distance, revealing that people with the high power distance tend to FEWOM more rapidly than people with

low power distance at any level of AEWOM.

Similarly, Figure 3 shows that collectivism efficiently moderated the relationship between AEWOM and FEWOM. Compared to individualism, collectivism increases the likelihood of forwarding EWOM for most levels of acceptance of EWOM.



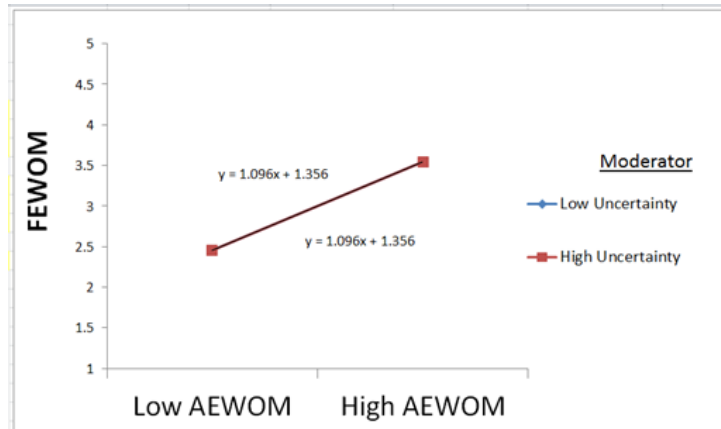
**Figure 3: Collectivism as a Moderator of the Relationship between AEWOM and FEWOM**



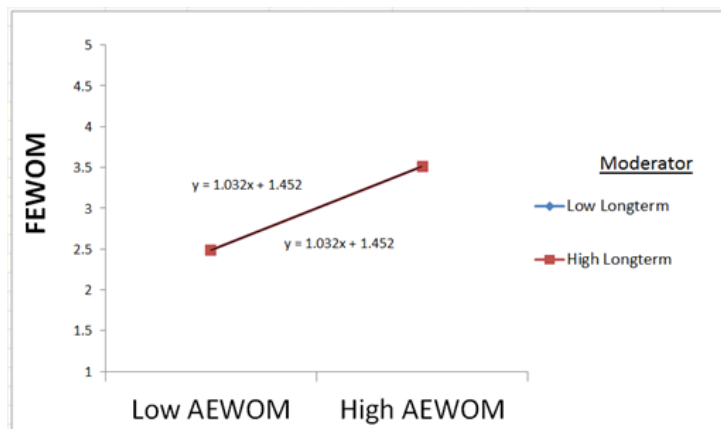
**Figure 4: Masculinity as a Moderator of the Relationship between AEWOM and FEWOM**

Another dimension, masculinity, also presents the moderator effect. As shown in the Figure 4, people connected with a more masculine culture tend to forward EWOM in any levels of AEWOM. However, as illustrated in the Figures 5 and 6, the cultural dimensions of

uncertainty avoidance and long-term orientation do not moderate the relationship between AEWOM and FEWOM as hypothesized in the present study. In both figures, the two lines are illustrated in parallel, showing no interactive effect.



**Figure 5: Uncertainty Avoidance Not as a Moderator of Relationship between AEWOM and FEWOM**



**Figure 6: Long-term Orientation Not as a Moderator of Relationship between AEWOM and FEWOM**

#### 4. DISCUSSION

As noted above, the results of the analyses supported Hypothesis 1, indicating that people who had accepted EWOM tend to forward EWOM further, which is consistent with the previous study of Cheung et al. (2009). In this regard, it can be noted that when people accepted the information online from others, they try to subsequently spread the information to others among their online communities. Regarding the cultures which can enhance this behavior, among Hofstede's five cultural dimensions, *Power Distance*, *Collectivism*, and *Masculinity* significantly moderated the relationship between AEWOM and FEWOM.

As for the power distance, people who are identified as following the high on the power distance dimension tend to forward the information to others more. This result also supports Yaveroglu and Donthu's research (2002) showing that power distance affects the process of EWOM in the high-power distance society. Also, the present research assumed that when people are aware of inequalities in power, more interaction via EWOM can be created in order to fill in the information gap existing between high and low power levels. The results also support this idea and it can be noted that in such circumstances, people may promote EWOM interactions more, in order to obtain more information as an individual.

Regarding individualism versus collectivism, collectivism plays a moderating role in the relationship between AEWOM and FEWOM. The present study indicates that people who

are identified with the collectivist dimension tend to forward EWOM more when they have accepted EWOM. As discussed in the previous studies (e.g., Yoo et al., 2011; Bond & Smith, 1996; Earley, 1993), those people who belong to a culture of collectivism value EWOM communication more, as they tend to believe opinions and evaluations from others rather than their own judgement.

The last dimension which shows a moderating effect on the relationship between AEWOM and FEWOM is the cultural dimension of masculinity. The present study found that people who are connected with the masculinity dimension tend to forward EWOM at any level of AEWOM, which is consistent with previous studies (Dwyer et al., 2005; Lam et al., 2009). It can be interpreted that, compared to people who are in a femininity culture, those individuals with the masculinity culture are more likely to engage in EWOM and are more energetic in accepting and forwarding the information received.

Finally, there was no evident moderating effect of low uncertainty avoidance or long-term orientation in this study which was rather surprising as such ideas had been hypothesized and supported in previous studies (e.g., Nair, 2016; Lam, Lee & Mizerski, 2009; Alcántara-Pilar & Del Barrio-García, 2015). One possible reason may be discussed by going back to the national culture – Thailand positions at neither high nor low but in the middle of uncertainty avoidance and the middle of long/short-term orientation, which might create difficulties in observing cultural differences in this study. Lyu (2017) pointed out the similarity between China

and Canada of their uncertainty avoidance scores as a reason to fail in generating a significant result on the moderating role of uncertainty avoidance. A few other studies also reported insignificant moderating effects of uncertainty avoidance (e.g., Goularte & Zilber, 2019) and long-term orientation (e.g., Lin, 2015) with various reasons. We therefore assume that uncertainty avoidance and long-term orientation cannot be the focal point to discuss AEWOM/FEWOM - whether or not people accept or forward EWOM is perhaps not related to the elements of risk-taking, unknown situations, or perseverance in this study.

## **5. IMPLICATIONS**

This research provides implications and insights for business managers and marketers allowing them to understand the impact of Hofstede's cultural dimensions on electronic communication – people in which cultures should be keen to accept and forward their received information and opinions in Thailand. For example, marketers can target consumers with a high power distance culture, in order for them to promote their products and services to a greater consumer network. According to the condition of high-power distance, once these consumers accept the comments and opinions on the website, they pass those comments along to other contacts actively. Similarly, when marketers want to target collectivist consumers, it is suggested to develop loyalty programs linked to their SNS or company website, to enhance the cohesiveness in consumers' contacts and network. Using a point-reward scheme where both

information senders and recipients in their network can benefit, as well as developing a membership system with a favorable public image, can be effective for consumers of a collectivist culture who value the group's prestige. In line with the characteristics of collectivism, once they recognize their own group, it can be assumed that they will not mind spending their time in making efforts to disseminate the information. Lastly, the present study suggests that it is more effective for marketers to target consumers with a masculinity culture via SNS, as they are more energetic in taking an active role in online discussion for new products and services. According to the masculinity culture, there should be a clear distinction between male and female consumers, e.g., men prefer to solve problems with logical analysis, whereas women usually solve problems with intuition. Therefore, for instance, when marketers need to distribute information regarding product or service, female consumers may be more attracted by a psychological pricing strategy which encourages their purchasing based on emotional rather than rational responses to price. Overall, by understanding the impact of cultural dimensions on electronic communication, business managers and marketers can effectively design their social network service to promote their products and services to the right target in various market segments.

This study focuses on Thai nationals in the Thai context; thus, in terms of academic implications, it can help researchers to understand the cultural diversity existing inside a single nation, Thailand. The moderating effects of high-power distance, collectivism, and

masculinity on the relationship between AEWOM and FEWOM were identified, whilst those of low uncertainty avoidance and long-term orientation could not be observed in this study. This finding however does not simply deny the influence of culture. Future research can therefore re-attempt such an investigation, with a modified framework by incorporating, for example, more from the cultural trait theory (Church, 2000; Church et al., 2006) mentioned earlier in order to study cultures at the individual level but in a wider scope.

Furthermore, the knowledge and framework of this study can be applied not only to Marketing divisions for customers but also Management teams to further study the cultural diversity of employees inside their organizations, so that they can provide adequate guidance such as training programs in line with the cultures of employees at the individual level.

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