# The Interaction between Electronic Word of Mouth Communications on Willingness, Trust, and Tie Strength

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# 探討網路口碑、信任、溝通意願、與關係強度之間的 關係研究

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## 摘 要

口碑一向是企業在打響一個產品的知名度最省錢,也最能快速達到成效的一個手段。如今在網路發達的社會,除了傳統的面對面的口碑傳播,我們更想要了解的是網路口碑的影響跟傳遞。本研究對於人與人之間分享網路口碑的原因作了一個探討,去測量個人的信任程度,是否會影響他願意去溝通以及對話的結果。另外,本研究也將關係強度當作一個重要的變數納入研究範圍。我們透過問卷調查,針對在台北縣市內的大學生作了一項調查,有效問卷樣本爲171份。本研究透過SPSS17之回歸分析、信度分析,與 Pearson 相關係數分析進行資料的分析與假說檢定。

研究結果顯示,信任與溝通意願有顯著的關係。而溝通意願與網路口碑活動及正面 口碑亦有顯住的關係。這代表我們假設的溝通意願的確是扮演中介變數的功能。同時, 關係強度與正面口碑和負面口碑皆有顯著的關係。這結果顯示個體之間的關係程度會影 響是否會主動去分享與傳播對於產品的心得。

關鍵字:網路口碑、信任、溝通意願、關係強度

## The Interaction between Electronic Word of Mouth Communications on Willingness, Trust, and Tie Strength

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#### **Abstract**

Word of mouth is one of the quickest and most efficient ways to help increase a product's awareness among consumers. Nowadays, people all have access to the internet and this has become another cable for information and experience sharing. In addition to traditional word of mouth, electronic word of mouth has been an extremely important issue due to the heavy use of internet in modern society. Therefore, this is the research topic that we aim to study and discuss. Our research aims to study if people share electronic word of mouth due to his degree of willingness to communicate by measuring an individual's trust. Furthermore, we also include tie strength as one of our variables to study its influence on electronic word of mouth. Using paper based questionnaires, we chose college students in Taipei as our participants. We use the statistical analysis software SPSS 17 to conduct Regression Analysis, Reliability Test, and Pearson Correlation Coefficient with a valid sample size of 171.

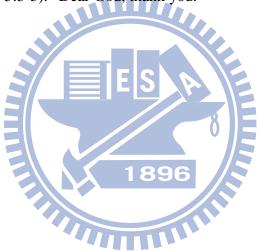
Our research results support our hypothesis of trust and willingness to communicate having a significant relationship. In addition, willingness to communicate and electronic word of mouth activity and positive electronic word of mouth also have significant relationships. This means that the most important part of our framework, willingness to communicate as a mediator between trust and electronic word of mouth is accepted.

Key Words: Electronic Word of Mouth, Trust, Willingness to Communicate, Tie Strength

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I realized that the most important thing is to believe in yourself and never lose faith of what you can achieve. "Hope does not disappoint us, because God has poured out his love into our hearts (Romans 5:3-5)." Dear God, thank you.



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## CHAPTER 1 INTRODUCTION

In Chapter 1, we will introduce the research background and give a brief introduction of the constructs that are studied in our study. First, the research motivation will be defined; explaining what drives us to conduct this study. Then, we state our research objectives which describe the main aim of our research. And finally, the process of our research is divided into 8 different steps and depicted as a graph for readers to understand.

#### 1.1 Research Motivation

The Internet provides a means of has become a new way of communication that substitutes of traditional ways of promoting products, brands, and services. Through Word of Mouth (WOM) communication, passing information and shared experience is well known as an efficient way of spreading commercial messages. Since, "pre-usage attitudes about a product can be influenced by WOM communications." (Bone, 1995), there is research interest in measuring and influencing WOM effects. WOM effects are even more important with the emergence of Internet. This research evaluates Internet based sources of WOM communications and proposes a study to measure and influence WOM commercial communications. Varying among different industries, the strength of WOM might have diverse effects yet the outcome is undoubtedly able to influence the purchase intentions of consumers. Due to the advanced technology nowadays, the internet has become a new platform where electronic word of mouth takes place. Different from traditional word of mouth where the information is passed on from person to person, electronic word of mouth is spread among a larger network of people where the geological distance and time barrier is

eliminated.

## 1.2 Research Objectives

This study intends to analyze interpersonal trust, willingness to communicate, and the tie strength among individuals. Also, we aim to examine whether or not willingness to continue is the mediator between trust and electronic word of mouth. If this is proven to be true, then in the future corporations will have a more concrete idea of how to control electronic word of mouth and the way it flows.



## 1.3 Research Process

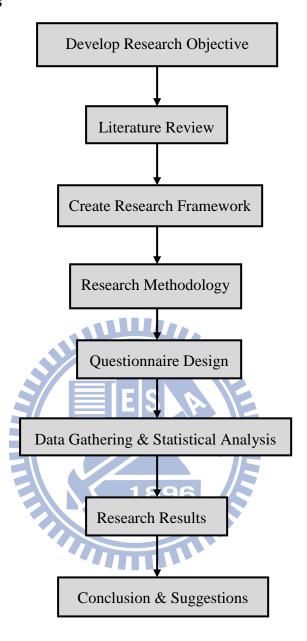


Figure 1-1. Research Process

## CHAPTER 2 LITERATURE REVIEW

Chapter 2 is the foundation of our thesis. It includes a very thorough review of all the past studies on the constructs concerning our study. Through this review of literature, we will have a clear insight of how these variables are established and defined. By understanding each construct and its influence it has with each other, we can then set our research framework.

#### 2.1 **Definition of Word of mouth**

Word of mouth can be traced back to ancient times of many different cultures and countries when there was not yet an effective way for both government and social communities to enable information or messages between people. Individuals relied on this as one of the main sources to gain access to information and news. Up to this day, word of mouth is still one of most familiar function anyone can use to spread and gain information on certain issues and topics. It is defined as "informal communication directed at other consumers about the characteristics, ownership, or their sellers (Westbrook, 1987)." From the marketing and advertising perspective, word of mouth is no doubt one of the most important mechanisms that have an impact over the purchase intentions of consumers. The production of output WOM is thought to be an outcome of customer experiences with a product or services (Buttle, 1998). Both positive and negative Word of mouth has influences on whether or not a potential consumer would choose to buy the product. The most obvious example is when we ask suggestions from friends or family and the information given could easily influence our purchase decision. A disappointed customer's reactions can be categorized into 3 different actions exit the relationship, complain to others, or make their dissatisfaction

known to the suppliers or company (Hirschman, 1970). Out of these three, complaining to others, also known in our literature as "negative WOM," is the most destroyable for a company's reputation and sales: Consumer purchase intentions lead to the search of shared experience which greatly influences the outcomes of their behavior, that is, to buy the product or service or not. Customers often depend on word of mouth to decide whether or not they should patronize. One of the most direct ways for consumers to find such shared information is through the search of word of mouth. It is mostly free and easy to access. Furthermore, consumers seem to find it hard to keep such information to themselves and they tend to like to share their experiences with others. According to statistical data, individuals usually only keep 10% of our emotional experiences, whether good or bad, to ourselves; the majority will be shared through the sharing of our conversation (Flynn, Goldsmith, and Eastman, 2006). Surprisingly, after acquiring word of mouth, sometimes consumers even exclude their own opinions and private information they already have and prefer the information given by others (Godes and Mayzlin, 2004). In other words, the effect and influence of word of mouth is stronger when the consumer is faced with an ambiguous experience which they have to make an immediate or delayed decision (Bone, 1995). This is one of the main reasons why word of mouth has become one of the major concerns of corporate organizations in hope to gain more customers. The advice from friends, family, or other individuals whom have persuasive power serves as an important factor for them. The significance and influence of word of mouth has long been documented. "Word of mouth communications (WOM) is an interpersonal communication in which none of the participants are marketing sources" (Bone, 1995) The

traditional depiction of word of mouth is divided into a model of 2 parts (Figure 1.), information given by the corporate and content based on their experience will be passed on from opinion leaders on to other potential consumers (Haywood, 1989). Yet word of mouth does not necessarily rely on opinion leaders to be passed on, ordinary consumers can also generate word of mouth. This research will focus on step 2, the spread of information and subjective point of view by consumers.

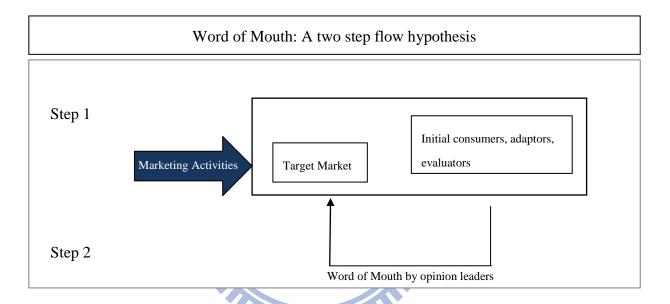


Figure 2-1. The Two Step flow of Word of Mouth

Reference: Haywood, K. Michael (1989), "Managing Word of mouth Communications" *The Journal of Services Marketing*, Vol.3, No.2, 55-67

According to Godes and Mayzlin (2004), the study of WOM can be categorized into three different streams: (1) a driver of consumer purchase behavior, (2) a result of consumer behavior, (3) the social structure in the flow of WOM. This study will focus on how word of mouth works as the driver of purchase behavior.

A decision maker looks at the former decision maker that has already chosen as a foundation and base for his own choice. This is a rational choice for him since the former decision maker must have some sort of information that the latter one lacks. Therefore, when a person does not have sufficient information to make a perfect choice, this is the most often chosen way to make a decision. Benerjee proposed a model on the 'herding' phenomenon which quite depicts the situation of reliance and trust of consumers on word of mouth, "if an agent has a signal, then he follows that signal, unless someone before him has already followed someone else. In that case, he follows suit" (Banerjee, 1992). For example, if we had to choose between two different restaurants and had neither information nor any sort of clue which was better, then normally we would choose to observe the choices of past customers. Assuming they made their choice according to some source of information, we then would also make the same decision. In contrast, if one person already had preferred to choose restaurant A over restaurant B, and yet knew that the customer in front of her chose B, then the struggle between the two restaurants would be ruled out, whereas he would then pick B, trusting and following the former consumer's choice.

In our study, we believe that word of mouth consists of three different dimensions that make the construct complete which are word of mouth activity, positive word of mouth, and negative word of mouth. These three constructs can be seen as different aspects to a single and more generalized word of mouth construct that should be separately studied due to a certain level of independency each construct possesses (Harrison-Walker, 2001). Word of mouth activity is the level of enthusiasm and detail of the conversation content exchanged

between consumers on products. Each individual will choose according to his own preference, character, and other antecedents the content and frequency of sharing electronic word of mouth. Moreover, Richins (1984) argued that people are more likely to spread negative attitudes to others compared to positive attitudes. When unsatisfied or disappointed with a certain product, customers are likely to spread negative word of mouth by actions such as giving bad reviews or furthermore, even advising other customers not to make the same purchase.

Table 2-1. Definitions of Word of Mouth

	Scholar	Definition of word of mouth
	Scholar	Definition of word of moduli
Westbrook ,1987	E	Informal communication directed at other consumers about the characteristics, ownership, or their sellers
Haywood, 1989	1	Information given by the corporate and content based on their experience passed on
	THI	from opinion leaders on to other potential
		consumers
Bone, 1995		An interpersonal communication in which
		none of the participants are marketing
		sources
Buttle, 1998		An outcome of customer experiences with a
		product or services
Stern, 1994		The exchange of ephemeral oral or spoken
		messages between a contiguous source and a

Stern, 1994	recipient who communicate directly in real
	life(also)consumers are not assumed to
	create, revise, and record pre-written
	conversational exchanges about products or
	services
Armdt, 1967	Oral, person to person communication
	between a receiver and whom the receiver
	perceives as non-commercial regarding a
	brand, product, or service.

## 2.2 Electronic Word of Mouth (eWOM)

New media offers different ways of the spread of word of mouth. The Internet in particular has been the main portal of electronic word of mouth. It has greatly changed the marketing communications. Similar to traditional word of mouth, electronic word of mouth has even higher reliability and level of credit than other forms of marketing information and strategies on the web (Bickhart and Schindler, 2001). The rise of the Internet makes the access of information available more easily with different choices of platforms that consumers can choose from. Blogs, forums, and websites are some examples of where electronic word of mouth can be spread. This is different from the traditional spread of word of mouth since the barriers such as distance, time, and cost of expense on gaining information is decreased or eliminated. The Internet enables consumers to share their opinions on, and experiences with, goods and services with a multitude of other consumers; that is, to engage in electronic word of mouth (eWOM) communication (Hennig-Thurau et al. 2004). In addition, consumers can

gather in virtual forms of social communities and exchange opinions and share advice where the flow of content is free and wide. Consumers gather shared experiences posted on websites to learn more about a product before making a purchase (Doh and Hwang, 2009). Electronic word of mouth not only benefits consumers, but also is a new tool for players in the business and advertising industry. Media players can freely interact with consumers and advertisers through the new media. Electronic word of mouth shortens the distance between consumers and corporations and can reach out to a larger group of audience (Hung and Li, 2007).

Table 2-2. A Comparison of traditional word of mouth and electronic word of mouth

Different types of Word of Mouth	Communication platforms
Traditional word of mouth	P2P
	Bulletin Board System, Blogging, Micro-blogging,
Electronic word of mouth	8   =
	Instant Messaging

In traditional word of mouth, the source of information is more visible and people communicate in person whereas in electronic word of mouth, there are many more possibilities for information to be passed on. One of the most common used electronic platforms in Taiwan is the Bulletin Board System, or more commonly known as "BBS" for its initial abbreviations. Textual messages are the only kind of communication available in this platform. The main viewers are students and often gather together on different boards to share their purchase experience on certain products ranging from digital cameras to makeup and accessories. Weblogs, or more often called "blogs," are personal web pages that are frequently updated with new articles that can include photos, music, or even links to other

Internet sites (Nardi et al. 2004). New forms of micro-blogging that simplify the functions and make it easier for users to share their status and information is a new form of communication in which people can post short messages or upload pictures through mobile phones or the internet. The main difference between traditional blogging and micro-blogging is the later offers an even faster way of sharing information by encouraging users to keep their posts short. Not only does this lower the required time to share information, it also increases the frequency of posting. A traditional blog might have 1 or more articles per day, whereas in micro-blogging, users tend to renew their status several times a day. In addition, instant messaging is a type of technology on the Web that allows users to send and receive mainly short text based messages and check to see who of their friends are also online and available (Cameron et al. 2004).

Table 2-3. Comparison of different types of electronic word of mouth

Different types of eWOM	Example(s)
Bulletin Board System (BBS)	PPT
Blogs	Wretch, Yam, Blogger
Micro-blogs	Twitter, Facebook, Plurk
Instant Messaging	MSN, Yahoo Messenger, AIM

## 2.3 Definition of Willingness to Communicate (WTC)

Each person has different levels of tendency whether or not they like to speak, write, or in any other form communicate with other people. The willingness to communicate is a personality trait that underlies the communication process (MacIntyre, 1994) which is a

tendency to approach or avoid communication with others. This construct most originally originated from Burgoon's 1976 research on the unwillingness to communicate which was based on factors such as introversion, lack of communication competence, alienation, anomie, and communication apprehension (MacIntyre, 1994). Mortenson, Arntson, and Lustig (1977) used this construct to farther develop it into the construct "willingness to communicate" to measure predisposition towards verbal communication. McCroskey and Baer gave a more detailed description of this construct as "the intention to initiate communication when given the opportunity." The word "intention" here should be highlighted and emphasized since this slight change in definition brings this construct makes it more complete. Past research has shown that the willingness to communicate is also positively related to how much a person chooses to listen and comprehend with others. The willingness to communicate is a personality variable that decides how much or how little a person likes to talk. The willingness to communicate will result in good personal images in the work place. Yet, it varies in different situations, from the mood of the speaker to whom he is speaking to. More certainty leads to a higher level of willingness to communicate and develop interpersonal relationships (McCroskey, 1985).

The two different layers of willingness include L1 and L2. L1 is our native language, whereas L2 the second or foreign language one learns (MacIntyre et al. 1998). ManIntyre and other scholars focus more on L2 as the area of research for willingness to communicate, yet there has been a gap of research between the willingness to communicate and spread of word of mouth in L1. This is what this study intends to understand. The construct of willingness to

communicate was first conceptualized based on L1 by McCroskey and Baer in 1985.

Although this construct has more commonly been studied as personality trait that might vary across different situations rather than a situational variable, we do not have to limit the construct and its character.

Willingness to communicate is a study that has been researched thoroughly under different constructs. According to McCroskey (1992) these different constructs, the willingness to communicate can be divided into three different groups that focus on various aspects. First group of constructs focuses on the anxiety or apprehension about communication. Second group of constructs focuses on the frequency of talking. The third group of constructs centers on the preference to avoid or approach communication.

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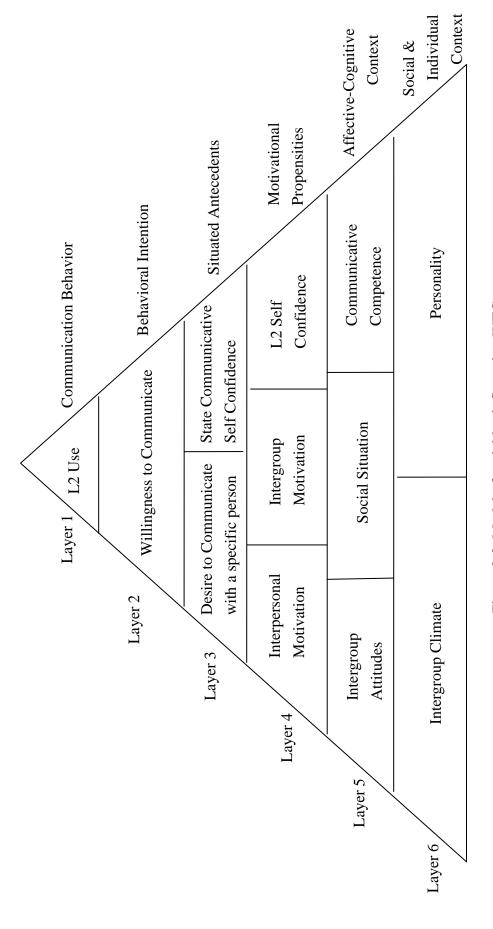


Figure 2-2. Model of variables influencing WTC

Reference: MacIntyre P.D. and Z. Dornyei and R. Clement and K.A.Noels (1998) "Conceptualizing Willingness to Communicate in a

L2: A Situational Model of L2 Confidence and Affiliation". The Modern Language Journal 82 545-562

This model with 6 layers represents the two basic structures that underlie willingness to communicate. Layers 1 to 3 describe how individuals will react under certain circumstances or situations. On the other hand, layers 4 to 6 represent the stable influencing factors that influence our willingness to communicate.

## Layer I

In the top layer, layer 1, we have the use of a second language, L2. Communication behavior using the second language can be observed by the frequency of how an individual chooses to engage in behaviors that use L2. Reading magazines and articles in L2 language, or choosing to speak up in a L2 class are signals that the L2 education has succeeded in this level of willingness to communicate.

## **Layer II**

An interesting example can be used to explain the second layer, willingness to communicate.

If we have a group of students taking a foreign language class, those who choose to answer or respond to the teacher's question, regardless whether or not they are chosen to answer, but as long as they raise their hands, this is a demonstration of their willingness to communicate.

Layer 2 tends to explore the urge of raising one's hands to express oneself in L2. A combination of different reasons behind this motivation has been given: self-confidence, affiliation and control motives.

## Layer III

Layer 3 proposes 2 different precursors of willingness to communicate, desire to communicate with a specific person and state communicative self-confidence. Both affiliative

and control motives can influence one's desire to communicate. Yet, it is not always definite that these two factors will be potent every time. According to research in the psychology field, affiliative motives usually exist when those we communicate with are close to us, have more common attributes, or are more physically attractive to us (Lippa, 1994). In other words, when we encounter a person who attracts us, we will be more willing to communicate with him. According to Clement, the two key constructs that are the foundation of state communicative self-confidence are "perceived competence" and "lack of anxiety". Perceived competence means that "the feeling of competence one has to communicate efficiently at a When one has a confident feeling that he will be particular moment" (MacIntyre et al. 1998) able to talk and communicate in a certain situation, that signifies he is in a state of perceived competence. The state of anxiety is a mixture of tension and apprehension that also arouses the autonomic nervous system (Spielberger, 1983). Any cause that triggers the nervous system and raises the sense of anxiety will cause the confidence in communication to decrease, which will lead to the weakening of one's willingness to communicate.

## **Layer IV**

Layer 4 includes three different variables which are interpersonal motivation, intergroup motivation, and L2 confidence and are all motivational propensities. Motivational propensities are defined as "stable individual differences that can be applied in different situations" (MacIntyre et al. 1998). Based on cognitive and affective contexts of one's interpersonal interaction with others, motivational propensities decide the degree of one's confidence and desire to interact and communicate with others. Interpersonal motivation can

be categorized under two different motives, control and affiliation. As a motivational aim, control restricts the cognitive, affective and behavioral freedom of the other person. Often this type of communication occurs more in hierarchal relationships such as workplaces or situations where one has more authority over the other. For example, during the beginning of exams, teachers communicate in order to let students understand the rules and restrictions on exams. Different from control's task oriented situations, affiliation originates from the desire to establish a relationship with another. Although the motive to control cannot be entirely eliminated, yet the degree is limited. The degree of affiliation is influenced by different personal characteristics such as attractiveness, similarity, yet it is most often relevant with one's personality. Past research on the differences of personality points out that "the personality trait of an individual leads to the different preference of the need for affiliation (or control)." In addition, intergroup relations can also be divided into control and affiliation. The orientation and definition is the same except for the interlocutors in this dimension are groups of people instead of individuals. In Layer 4, interpersonal and intergroup relations are more concerned with the affective and social aspects of motivational propensities, whereas L2 self-confidence studies the relationship between an individual with L2. The two elements that make up L2 self-confidence is one's perception of L2 efficiency and anxiety when communicating in L2. These two components also are classified as cognitive and affective. The concept of one's evaluation and anxiety of L2 usage also is linked to the willingness to communicate in L1. The core idea of Layer 4 is that control and affiliation are important deciding factors which decide how an individual will interact with other.

## Layer V

Layer 5 includes variables that diverse according to each individual and his attitudes and motives. The three components, intergroup attitudes, social situation, and communicative competence are less influenced by situational differences; instead, they are individually based. The first component, intergroup attitudes consists of three different constructs: integrativeness, fear of assimilation, and motivation to learn L2. Integrativeness is the desire to mix with different ethnic groups and learn their language in order to be identified as "one of the group." It is a desire to be part of the L2 group which will lead to positive results such as increased involvement with the group. However, when gaining the recognition of the L2 group, the individual also has a fear of assimilation, of turning into a member of the L2 group and losing identification or companionship in his L1 group. The two construct mentioned are reverse elements that an individual has to face. The third construct concerning intergroup attitudes is the motivation to learn L2 which can be either a positive or negative attitude, depending on the individual. Yet a positive attitude sometimes has to do with the type of language you are learning.

The second variable in Layer 5 is the social situation one faces. When the identity of the interlocutor or the content of our conversation is different, one might behave differently in attitude and confidence when using L2. For example, when college students in Taiwan use English to chat with each other in the classroom, it appears to be casual and fun. Yet when the occasion is in a foreign land or at the Airport, it is often that we shy away from speaking in L2. Communicative competency, defined as the L2 proficiency of an individual, is the third

variable in layer 5. Since an individual's L2 proficiency will have a very influential effect on his willingness to communicate, this component is part of the cognitive-affective context.

## Layer VI

Under Layer 6, communication is divided into two broad dimensions: society and individual. According to Gardner and Clement (1990), intergroup climate is made up of "two complementary elements which are the structural characteristics and their perceptual and affective correlates. The structural characteristics of a group are made up of the enthnolinguistic vitality and personal communication networks. Enthnolinguistic vitality, defined in Giles et al. in 1977 is the "relative demographic representation of both L1 and L2 groups and their socioeconomic power in the society." Generally, a language which has higher ethnolinguistic vitality would be more commonly learned and used. On the other hand, a personal communication network is the group of people whom we communicate with most often in daily life. This construct is important since the people with whom we communicate more often can be influenced by our promotion of L2. The second element of intergroup climate is the perceptual and affection correlates which are the attitude and value towards a L2 group and the motivation to adapt to their community. A positive attitude towards the L2 community will have a positive effect on an individual's interaction with people in a L2 group. Furthermore, positive learning motives such as hoping to gain knowledge on another culture or making friends will also lead to positive effects.

Although personality does not have a direct influence on language learning communication, yet certain personality traits can predict how one will react when facing

members of L2 group. Altemeyer's study in 1981 and 1988 used two different personality patterns as examples to describe the difference of language learning. An Authoritarian type of person considers is more conventional and would not likely engage in language learning if he thought the other group to be inferior. This type of personality can be explained by the construct "ethnocentrism," meaning having strong pride in one's ethnic group and looking down on others.

Table 2-4. Definition of willingness to communicate

Scholar	Definition
MacIntyre, 2001	Intention to initiate a communication when one has choice
McCroskey, 1992	A tendency to approach or avoid communication with others
McCroskey & Baer, 1985	The intention to initiate communication when given the choice

## **2.4 Trust**

Trust is a very abstract construct that has been the interest of many fields of scholars. It is because of this construct that one chooses to believe another person's words or advice.

Therefore, it is also a crucial element whether word of mouth is accepted by consumers or not.

One of the classical definitions of trust is that it is "a generalized expectancy held by an individual that the word of another...can be relied on (Rotter, 1967)." When we find that we

can rely on the information given to us by others our trust towards them will gradually build up. Our establishment of willingness to share our information and expectancy towards that certain person can be seen as the foundation that trust builds upon. The role of trust is an important factor to understand the consumer behavior. For example, since it is the degree of willingness we have to rely on someone we have confidence in (Moorman et al., 1993); it is unmistaken that we must have a certain amount of confidence in the people we trust. In addition, not only do we choose to put our confidence in them, but often some sort of positive outcome is also expected although negative outcomes cannot be ruled out. Pruitt (1981) bests describe this attribute of the construct as, "the belief that one party's word is reliable and that it will fulfill its obligation in an exchange." This paradoxical attribute is one of the main reasons why it is not easy to earn a person's trust. The first party will still have a feeling of fear for negative outcomes or loss if they do not have a certain amount of trust in the one they choose to rely on.

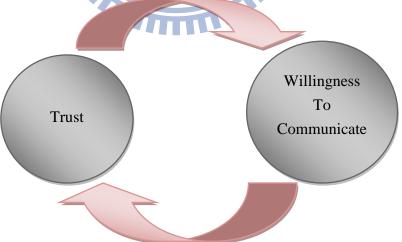


Figure 2.3 Relationship of trust and willingness to communicate

Our study focuses on Interpersonal Trust, which is "the expectancy held by an individual or a party that the word, promise, verbal, promise, or written statement of another individual or party can be relied on (Rotter, 1967.)" According to Rotter's widely used definition of Interpersonal Trust, it is a construct that can be used across different situations and is part of our personality traits.

Table 2-5. Definition of Trust

Scholar	Definition
Rotter (1967)	A generalized expectancy held by an individual that the word of anothercan be relied on.
Pruitt (1981)	Trust is the belief that one party's word is reliable and that it will fulfill its obligation in an exchange
Moorman (1993)	Trust is defined as a willingness to rely on an exchange partner in whom one has confidence.
Morgan (1994)	We conceptualize trust as existing when one party has confidence in an exchange partner's reliability and integrity.
McKnight &	A relative feeling of security in a situation of risk
Chervany (2002)	

Trust is a very complex and multi-dimensional construct that has been studied from different views including psychology and sociology. As long as risk and information sharing exists, the issue of trust will be studied because of its importance in both interpersonal and business relationships. Although scholars have very similar definitions of trust, yet there has not yet been a complete model that includes all the different fields of study until 2002.

McKnight and Chervany proposed an interdisciplinary model of high-level constructs of trust

in 2002 which included different areas of definitions (Figure 3). This model was revised and modified from McKnight, Chervany, and Cummings research on trust in organizational relationships in 1998. Three different constructs are dispositional, institutional, and interpersonal trust which are alike yet have very distinct differences in their definitions and usage. These three constructs of trust differs from one another for the following reasons (McKnight & Chervany, 2002). Psychologists believe that disposition to trust comes mainly from past experience that shapes our character. For example, our actions origin from childhood derived attributes. Institutional trust is molded from different situations which allow one to act according to different situations. The factor that decides our action is not our personality or inner traits, but the environmental factors. As for interpersonal trust, it can be divided into two parts: trusting beliefs and trusting intention which defines interpersonal trust as the relationship that is constructed through the interpersonal communication and interactions which arouse our cognitive-emotional reactions. An unique trait of this model that should be noticed is that "trust related behaviors" is not inside of the model since it is already described in other labels that often are under the category of "cooperation, information" sharing, risk taking, etc."

According to research done by Rempel and Holmes (1985), there are four key conclusions that can sum up the features of trust. First, it is built upon past experience and a series of events that strengthen the feeling of trust. Second, dispositional characteristics are made towards the trustor, including attributes such as reliability, dependability, and predictability. The third conclusion is that one must be willing to be put at risk, whether it is

the risk of being hurt, or loss of something either abstract or concrete material. The last conclusion raised from past researches is that trust can be defined by the sense of security and confidence in the responses given and the intimacy and strength of the relationship.

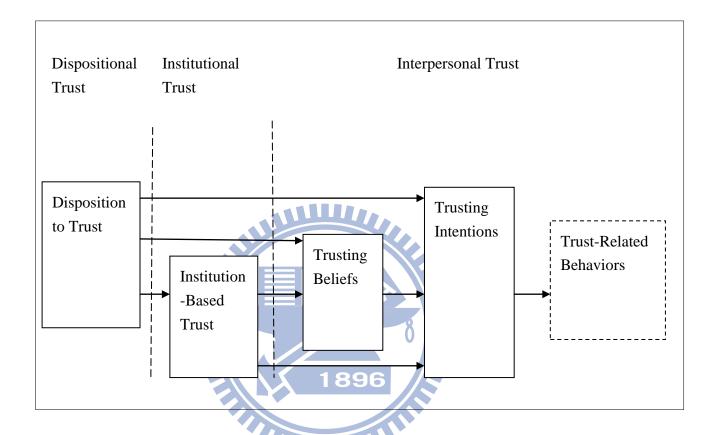


Figure 2-4. The Interdisciplinary Model of High-Level Trust Constructs

(Reference: McKnight, D.H. & Chervany, N.L. (2002) What Trust means in e-commerce customer relationships: An Interdisciplinary Conceptual Typology International *Journal of Electronic Commerce* 6(2)35-59)

There have always been three basic questions of trust development which are often asked.

These are the basic foundations of this construct and must be understood in order as the foundation of researching this construct: How it is defined, where does "trust" come from, and why it changes over time. Since we have already defined trust and our focused construct,

Interpersonal trust, we will mainly discuss the latter two questions.

In early studies, most results pointed out that trust begins at zero, that is, when we are unfamiliar or strangers with a person then there is a lack of trust between us. Since there is no past experience that we can use as indicators or reference, individuals have to rely on their own analysis and objective view of the situation whether to rely or not. Different experiments mainly labeled "trust game" were conducted in the research of trust to explain and explore how initial trust worked in relationships. When exploring how the level of trust changes over time, most studies show that trust will build gradually as time goes by. This means that we will undergo a process in which we evaluate the circumstances and individual carefully to be sure that we are placing out trust in the right position. If not, then we could withdraw our trust as soon as possible.

## 2.5 Tie Strength

1896

The social relationship of individuals can be categorized according to the frequency of contact, and how well you know each other. This is known as the "potency of a bond between members of a network (Granovetter, 1973)," or "tie strength." Strong tie sources are friends and family, whereas weak ties are mainly acquaintances and strangers (Duhan, 1997). The influence of tie strength can affect the outcomes in consumer decision such as the spreading of word of mouth, intergroup interactions, and other relationship relevant issues (Mittal, 2008). Word of mouth communication is a social behavior that includes mainly the exchange of information between individuals. Past research has proven that tie strength has an influence on the flow of information. According to Brown et al., individuals who are in a strong tie

relationship, or more intimate relationship have more opportunities to interact and share information. On the contrary, in a weak tie relationship, there is a very limited amount of chances for individuals to spread information to each other. Due to this reason, it is reasonable to believe that strong ties will lead a positive relation with the spread of word of mouth and vice versa. There is a higher amount of word of mouth generated in a network or group which has strong ties (Bone, 1995). There is a complex relationship between tie strength and word of mouth due to the consideration of one's personal image. Since complaints and negative reviews might have a negative effect on one's personal image, an individual might not want to express his unsatisfactory to an acquaintance or stranger. Instead, those that have a stronger tie with the individual have a more likely possibility of accessing both positive and negative word of mouth about a product, service, or purchase made. Yet in cyberspace where internet is the medium for communication, the network that people communicate consists of a greater population and has weaker ties. Thus it is proposed that perhaps unlike in the physical world where the strength of ties has a positive relationship on the spread of word of mouth; weak ties might have a positive relation towards electronic word of mouth.

## CHAPTER 3 METHODOLOGY

In Chapter 3, we establish our research framework based upon the literature review and the hypotheses in our study. Scales used and generated from past researchers will be used in our research as tools to evaluate the constructs we want to measure. Organized into a paper-based questionnaire, 2 pretests are conducted before sending out the official questionnaire to our participants.

#### 3.1 Research Framework

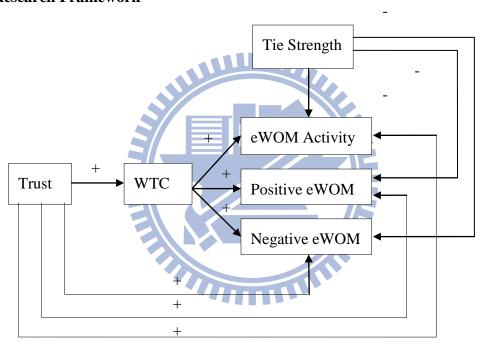


Figure 3-1. Proposed research framework

Our research aims to explore the interaction between electronic word of mouth, communication on willingness, trust, and tie strength. A thorough introduction and description on the constructs has already been given in the previous chapter which is the foundation of this study. According to past research, there is a strong reason to believe that a definite relationship between these constructs exists. This belief will be examined and tested in order to bring the issue of electronic word of mouth into a more complete view.

In Ben-Ner and Putterman's 2009 study on trust and communication's interaction in economic behaviors, they believed that if there is a contract relationship that one desires to establish, then individuals will take the communication process more seriously. This is because they believe in depth communication will promote the trustworthy behaviors. And indeed, their study proves their hypothesis to be correct; communication does promote the level of trust and trustworthiness. In addition, communication is seen as an antecedent factor in trust in Morgan and Hunt's. Various other researchers have also proven the interaction between trust and communication in different fields of study. "Communication is critical to build a trusting relationship which will create stability (Anderson et al., 1989)." However, few studies have explored the relationship of how the level of interpersonal trust affects willingness to communicate. Although the content of communication is not completely associated with personal privacy or other matters that one might be cautious about, yet it is still reasonable to believe that the more one is willing to be exposed, the more he will be willing to share information with other. Therefore our study proposes that interpersonal trust will have a positive effect on willingness to communicate.

Word of mouth is an initiative action where an individual chooses to express his opinions or share past experiences with others. One must be willing to communicate in either reality or in cyberspace to perform the act of word of mouth. Since this is an action that depends on the individual's intention of whether he would like to spread the word, we believe that an individual's willingness to communicate with another person should have a positive effect on the degree of word of mouth he contributes. This then requires the need to include

"willingness to communicate" as the third construct in our framework.

The strength of social relationships between individuals, known as "tie strength," is an interesting variable since modern technology and use of internet has already expanded our social networks and those that we communicate with on the internet does not necessarily have strong ties with us. Already in Granovetter's 1983 research, he proved that weak ties actually have a contribution that strong ties do not; (in a social system) those that lack weak ties will have difficulty integrating with people that are less similar than themselves. When exploring the interaction between tie strength and electronic word of mouth, Granovetter's research can be used to imply that there should be a negative relationship between tie strength and electronic word of mouth.

## 3.2 Research Hypotheses

**Hypothesis 1**: Trust has a significant and positive relationship with an individual's willingness to communicate.

**Hypothesis 2a**: Trust has a significant and positive relationship with an individual's electronic word of mouth activity.

**Hypothesis 2b**: Trust has a positive relationship with an individual's positive electronic word of mouth.

**Hypothesis 2c**: Trust has a significant and positive relationship with an individual's negative electronic word of mouth.

**Hypothesis 3**: Willingness to communicate will mediate the relationship between trust and electronic word of mouth.

**Hypothesis 4a**: An individual's willingness to communicate has a significant and positive relationship with an individual's electronic word of mouth activity.

**Hypothesis 4b**: An individual's willingness to communicate has a significant and positive relationship with an individual's positive electronic word of mouth.

**Hypothesis 4c**: An individual's willingness to communicate has a significant and positive relationship with an individual's negative electronic word of mouth.

**Hypothesis 5a**: An individual's tie strength with another individual on the internet has a significant and negative relationship with electronic word of mouth activity.

**Hypothesis 5b**: An individual's tie strength with another individual on the internet has a significant and negative relationship with positive electronic word of mouth.

**Hypothesis 5c**: An individual's tie strength with another individual on the internet has a significant and positive relationship with negative electronic word of mouth.

# 3.3 Sampling Design

Our study's main primary targets is the mass population, since internet is already a common tool for people living in the metropolitan area, the population of this study will be defined as the college students in Taipei. The sample size of our study is decided by Roscoe's 4 principles in sampling design as listed below. Due to the population size, and limited time and resources, our study uses convenience sampling, or also known as subjective sampling. Convenience sampling is often taken place near school campus, parks, or other places where the population density is high (Anderson, 2001). According to Roscoe's sampling rule of

thumb, there are several principles to be followed. A sample of more than 30 and less than 500 is appropriate for most studies, and the size must be 10 times or more of the researched variables for multiple regression analysis to be applied (Chew et al., 2009).

# 3.4 Questionnaire Design

All our data will be collected by paper-based questionnaires. Most items will be answered on a five-point Likert scale ranging from 1 to 5, with 1 being "strongly disagree" and 5 being "strongly agree." Willingness to communicate to others is a self-report scale which is scored by the participants themselves. All the original items were in English and then translated into Traditional Chinese and then back into English by another native speaker who is also fluent in Chinese to ensure the content and meaning remained the same during the translation process. There are two different parts of this questionnaire design. According to Churchill, "once a construct is clearly defined, the next step is to generate a set of items that clearly capture the domain of the construct (Churchill, 1979)." A pre-test has to be conducted in order to be sure the wording and expressions are clear to our participants. The first step of our questionnaire is to have 30 college students fill out the questionnaire and give opinions and suggestions on the wording and content. After making appropriate adjustments, a revised version will be handed out to college students in Taiwan.

Our official questionnaire is divided into 5 sections, electronic word of mouth, trust, willingness to communicate, tie strength, and demographic variables. Electronic word of mouth activities will be measured by Churchill 1979's word of mouth scale. Originally there

were 13 items to measure the construct, yet Harrison-Walker (2001) eliminated 7 items after performing a scale purification process which refined the scale into a "more reliable and meaningful scale in assessing word of mouth (Harrison-Walker, 2001)." Positive electronic word of mouth was measured by 3 items from Liljander and Strandvik (1997)'s loyalty scale which demonstrated high reliability statistics. On the other hand, the scale used to measure electronic negative word of mouth was originally used in Liu and McClure's research on cross-cultural customer complaint behavior study. The scale was adapted to suit the contextual characteristics of this particular study. In order to help our participants be clear of the difference between electronic and traditional word of mouth, examples of electronic platforms and the definition of traditional word of mouth was given at the beginning of section 1 and section 2. The original set of items was measured on a 7 point Likert type scale. Yet to help improve the efficiency and increase the unity of our questionnaire, scales were modified from 7 point to 5 point.

# Section 1: Demographic Variables

Table 3-1. Demographic variables

Construct	Scales of measurement	Item
Gender	Nominal scale	1. Male
		2. Female
Age	Ordinal scale	1. Under 18
		2. 19~23
		3. 24~28
		4. 29~33

Construct	Scales of measurement	Item
		5. 34~38
		6. Above 39
University		

# **Section 2: Electronic Word of Mouth**

Table 3-2. Measuring an individual's electronic word of mouth items

Construct	Dimension	Scales of Measurement	Ite	ms
Electronic	Electronic	5 point Likert type scale	1.	I mention the product which I
word of	word of			use to others quite frequently.
mouth	mouth	WILLIAM .	2.	I've told more people about
	activity			certain products than I've told
	3/,	I E I E I E		about most other products.
			3.	I seldom miss an opportunity
		1896		to tell others about certain
				products.
		William.	4.	When I tell others about a
				certain product/service, I tend
				to talk about it in great detail.
	Positive		1.	I only have good things to
	Electronic			say about certain
	word of			products/services.
	mouth		2.	I am proud to tell others that I
				use certain products/services.

# **Section 3: Trust**

Rotter's Interpersonal trust scale is an extremely often used tool to measure the level of trust one has towards others. Developed in 1967 with 25 items measuring trust, and 15 filler items, this scale is "designed to measure a person's generalized expectancy that the promises of another individual which can be relied on (Rotter et al., 1971)"

Table 3-3. Measuring an individual's interpersonal trust items

Construct	Dimension	Scales of Measurement	Items
Trust	Interpersonal trust		<ol> <li>Hypocrisy is on the increase in our society.</li> <li>This country has a dark future unless we can attract better</li> </ol>
		1896	people into politics.  3. Using the honor system of <i>not</i> having a teacher present during exams would probably result in increased cheating.  4. Taiwan will never be an effective force in keeping world
			peace.  5. Most people would be horrified if they knew how much news the public hears and sees is distorted.

Construct I	Dimension	Scales of Measurement	Items
Construct	Dimension	Scales of Measurement  IES  1896	Items  12. Parents usually can be relied upon to keep their promises.  13. The judiciary is a place where we can all get unbiased treatment.  14. It is safe to believe that in spite of what people say most people are primarily interested in their own welfare.  15. The future seems very promising.  16. Most elected public officials are really sincere in their campaign promises.  17. Most experts can be relied upon to tell the truth about the limits of their knowledge.  18. Most parents can be relied upon to carry out their threats of punishment.  19. In these competitive times one has to be alert or someone is likely to take advantage of you.

**Section 4: Willingness to Communicate** 

In 1985, McCroskey proposed a scale to measure willingness to communicate which is a personality-based trait like scale that is consistent across between different receivers and different communication contexts. McCroskey has proved that the level of willingness of a particular context (small group) is correlated with this individual's willingness in a different context (with individuals and large meetings). In addition, the willingness to communicate

with a certain type of audience (for example, friends) is also correlated with the willingness to talk with other different types of people (strangers and acquaintances). Yet this does not mean that a person will be equally willing to communicate in all different contexts and receivers. What this means is that they will be correlated. This scale has 20 items, with 8 items being filler items that will not count nor influence the final results of our scale. The willingness to communicate scale includes four communication contexts and three different receivers. The scale can measure the overall willingness to communicate represents an individual's general personality orientation to communicate with others as well as 7 different sub-scores.

Participants will fill out the percentage of how much they are willing to communicate in each different scenario.

Table 3-4. Measuring an individual's willingness to communicate items

			V	
Construct	Dimension	Scales of	Ite	ms
	31	1996		
		Measurement 1896		
Willingness	Talking with		1.	Present a talk with a group of
C				
to	strangers			strangers
	2			21-11-16-12
communicate			2.	Talk in a small group of
Communication				rum in a sman group or
				strangers
				Strangers
			3.	Talk with a stranger while
			٥.	Taik with a stranger winte
				standing in line
				standing in fine
			1	Talls in a large meeting of
			4.	Talk in a large meeting of
				-4
				strangers
	m 11 1 1 1 1		1	TO III
	Talking with		1.	Talk with an acquaintance
	acquaintances			while standing in line

Construct	Dimension	Scales of	Ite	ms
		Measurement		
Willingness	Talking with		2.	Talk in a large meeting of
to	acquaintances			acquaintances
communicate			3.	Talk in a small group of
				acquaintances
			4.	Present a small talk to a group
				of acquaintances
	Talking with		1.	Talk in a large meeting of
	friends	WILLIAM .		friends
			2.	Talk with a friend while
		ESP		standing in line
			3.	Present a talk to a group of
		1000		friends
		1896	4.	Talk in a small group of friends
	Filler items		1.	Talk with a service station
				attendant
			2.	Talk with a physician
			3.	Talk with a salesperson in a
				store
			4.	Talk with a
				policeman/policewoman
			5.	Talk with a waiter/waitress in a
				restaurant
			6.	Talk with a secretary

Construct	Dimension	Scales of	Items
		Measurement	
Willingness	Filler items		7. Talk with a garbage collector
to			8. Talk with a spouse
communicate			(girlfriend/boyfriend)

Section 5: tie strength between individual and electronic word of mouth receiver

In section 4, we study the tie strength of each participants and the electronic word of mouth receiver whom he has interacted with most recently. Hansen's two item scale measuring the closeness of a working relationship and frequency of contact developed on 1999 is used in our study to measure tie strength. According to Levin's pre-test, instructions were given to "choose 7 for these two questions if you have never had prior contact with this person (Levin, 2002)." Again, to help simplify the procedure of filling out this questionnaire, this set of items were modified from a 7 point Likert scale to a 5 point scale.

Table 3-5. Measuring an individual's tie strength with another person in eWOM items

Construct	Dimension	Scales of measurement	Items
Tie		5 point Likert scale	1. How close was your relationship
Strength			with him/her?
			2. How often did you communicate
			with him/her?

# 3.5 Questionnaire Pretest

Two pretests were done before the official questionnaire was handed out to participants.

Our study tested the reliability of the scales in our questionnaire with a standard of a

Cronbach Alpha of 0.7. The reliability of a scale means the consistency and stability of a scale. In 1951, Cronbach proposed that a method that is now known as "Cronbach Alpha" that could measure the reliability. The standard of how much the Alpha has to be for the instrument to be accepted is different for each area of research. In most studies, 0.6 is enough for the instrument to be declared acceptable. In the first pretest executed, many participants responded that the items of the trust scale were hard to understand and confusing. Therefore there was no surprise when the internal consistency of this scale received a fairly low score of 0.593. Item 8 had a negative item to total correlation, and was removed since the scale could achieve a 0.657 Cronbach Alpha if this was done. The original electronic word of mouth scale consisted of 2 dimensions which are word of mouth activity and positive word of mouth. Electronic word of mouth activity reached a Cronbach Alpha of 0.622, with the last item having a negative correlation with the entire scale. If the item were to be deleted, the Cronbach Alpha would rise to 0.886. Therefore, the fourth item was deleted in our second pretest. Along with the replacement of a new positive word of mouth scale that consisted of 3 items, 2 more items measuring negative word of mouth were added to strengthen the contribution of our study. As mentioned, the positive word of mouth scale was replaced by a new one due to the extremely low Alpha of 0.197 which could not be fixed by removing items or revision of translation and wording. Although electronic word of mouth activity also achieved a low internal consistency score, yet participants also responded that the wording was difficult and hard to understand. For the same reason, this scale was given another chance believing that it would operate better in our second pretest after careful revision. Willingness

to communicate achieved a high Alpha of 0.803 as well as tie strength's 0.910.

Table 3-6. Reliablity statistics of first pretest

Construct	Dimension	Cronbach α	Item(s) removed	Cronbach $\alpha$
				after item
				removed
eWOM	eWOM activity	0.622	Item 4	0.886
	Positive eWOM	0.197	Scale Removed	
Tie Strength	-	0.910		
Trust	3/ <sub>E</sub>	0.593	Item 8	0.657
Willingness to	- 5/	0.803	-16	
Communicate			8   =	

# 1896

In our second pretest, the questionnaire made several revisions. First, demographic variables were moved from Part 1 to Part 5. This was because most scholars believe that demographic questions might be more sensitive and lead to a low return rate of questionnaires if they were placed at the beginning of the survey. Second, electronic word of mouth was rated with a total of 8 items including newly added 2 item scale on negative electronic word of mouth. Third, 1 item was removed from our trust scale in hope of improving the internal consistency. Furthermore, more directions were added to each section to help our participants understand each part of the questionnaire and how to respond to the questions better. A total of 15 questionnaires were used to run a statistical analysis in our second pretest.

Table 3-7. Reliability statistics of second pretest

Construct	Dimension	Cronbach $\alpha$	Item removed	Cronbach α
				after item
				removed
eWOM	eWOM activity	0.792		
	Positive eWOM	0.806		
	Negative	0.957		
	eWOM			
Tie Strength		0.958		
Trust		0.553	Items 4, 10. 17	0.713
			19	
Willingness to		0.712	-\[	
communicate			8	

The results for our second pretest all passed the bar of 0.7 internal consistencies except for "trust." Four items that were negatively correlated with the scale were removed, which resulted in a Cronbach's  $\alpha$  0.713 if so. The final official questionnaire had a total of 53 questions, including demographic variables.

In our study, we will use several types of statistical analysis method to explain the collected data and help understand our research framework. These methods include:

- 1. Regression Analysis: Regression analysis is used to explore the relationship between dependent and independent variables. In our study, we will use regression analysis to analyze the relationships hypothesized in our study.
  - 2. Cronbach's  $\alpha$  Coefficient: Cronbach's  $\alpha$  is used to test the reliability of the data

we have retrieved. It will test whether or not the data is internally consistent. Therefore, the higher the constructs achieve on this score, the higher the constructs are internally related and reliable. According to Roberts and Wortzel, the alpha coefficient between 0.7 and 0.98 reflects high reliability. Therefore 0.7 will be the standard to examine whether out constructs are internally consistent.

3. Pearson Coefficient: Pearson Coefficient Correlation is used to examine the relationship between the variables in our study. Whether they are positively or negatively correlated, and if there is a significant relationship and the strength of that relationship is discussed using Pearson analysis.



# CHAPTER 4 RESEARCH RESULTS AND DATA ANALYSIS

With the help of acquaintances who are students in different colleges in Taipei, questionnaires were distributed in classrooms and a total of 171 valid questionnaires were retrieved. Using SPSS version 17 software, the procedure of statistical analysis will be conducted to examine our study and test the hypotheses.

#### 4.1 Reliability Analysis

Our study conducted a reliability analysis for the 4 different variables included in the study. The results were fairly good, with each constructs' Cronbach's  $\alpha$  above 0.7. This means that the items in the questionnaire are highly correlated and also consistent. Electronic word of mouth activity reached a Cronbach  $\alpha$  of 0.783, positive electronic word of mouth 0.775, negative electronic word of mouth 0.811. Our trust scale has a Cronbach  $\alpha$  of 0.756, scoring much higher than the 2 pretests conducted. Furthermore, the 12 items of willingness to communicate had an internal consistency of 0.810, while tie strength had the highest internal consistency of all, 0.921.

Table 4-1 Cronbach Alpha Analysis Results

Construct	Cronbach α	Number of Items
Trust	0.765	20
WTC	0.810	12
Tie Strength	0.921	2
eWOM Activity	0.783	3
Positive eWOM	0.775	3
Negative eWOM	0.811	2

# 4.2 Regression Analysis

Table 4-2 Regression Analysis Results

Independent Variable	Dependent Variable	P-Value	R-Square
Trust	WTC	0.048	0.023
WTC	eWOM Activity	0.001	0.059
WTC	Positive eWOM	0.003	0.051
WTC	Negative eWOM	0.271	0.007
Trust	eWOM Activity	0.547	0.002
Trust	Positive eWOM	0.677	0.001
Trust	Negative eWOM	0.461	0.003

Through table 4-2, we can see that the R-square is relatively low. This means indicates that the research framework can only explain a very low percentage of the dependent variables. However, these results do not mean that the model should be rejected since there might be other possibilities that influence the result. The regression analysis also points out that four of our hypotheses are accepted with a P-Value that is significant. Trust has a significant effect on willingness to communicate, whereas willingness to communicate has a significant relationship with electronic word of mouth activity and positive electronic word of mouth.

# 4.3 Pearson Coefficient Analysis

Table 4-3. Pearson Coefficient Analysis of Variables

	eWOM activity	Positive eWOM	Negative eWOM	Tie Strength	Trust	WTC
eWOM activity	1	0.425**	0.348**	0.128	0.046	0.243**
Positive eWOM		1	0.268**	0.212**	0.032	0.226**
Negative eWOM			1	0.181*	0.057	0.085
Tie Strength				1	-0.071	0.137
Trust			Ши		1	0.152*
WTC						1

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Using Pearson Correlation Coefficient to analyze the correlation between our variables, 1896
we can explain the relationships between them and examine whether or not our hypotheses are accepted. Table 4-3 gives a clear view of the correlations between our constructs.

Electronic Word of Mouth Activity has a positive relationship of 0.425 with Positive Electronic Word of Mouth, 0.348 with Negative Electronic Word of Mouth, and 0.243 coefficients with willingness to communicate. This means that participants who engage in electronic word of mouth activity more often share positive feedback and advice instead of spreading out negative opinions. On the other hand, electronic word of mouth activity does have a highly positive significant relationship with willingness to communicate. Positive electronic word of mouth has a positive relationship with negative word of mouth, yet not as

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

highly correlated as it is with electronic word of mouth activity. This might be individuals who tend to spread the good about products either keep the bad shopping experience to themselves or don't have unhappy purchase experiences. Positive word of mouth also has a positive relationship with tie strength and willingness to communicate. This means that the stronger the relationship between two individuals, the more they are likely to share their experiences of good product purchases with each other. Also, the higher of communication willingness, the more an individual will share positive word of mouth with. To our surprise, negative electronic word of mouth is the only dimension of Electronic Word of Mouth that does not have a significant relationship with willingness to communicate. We assume a logical explanation might be that perhaps the people tend to keep quiet about negative experiences. Therefore, even if one is willing to communicate and trusts another individual, this does not represent that they will share their negative experience with you. Yet this result is contrary to the past literature, since customers are known to spread negative opinions further and wider compared to their positive experiences.

Tie strength has a positive and significant relationship with both positive and negative electronic word of mouth, yet not with electronic word of mouth activity. An explanation might be people who have stronger tie strength spend less time engaging in the same cyberspace taking about products, while they do give more straightforward comments to each other about products they like or dislike. Although the results of the data analysis does not support hypotheses 2a, 2b, and 2c, yet trust does have a significant relationship of 0.152 correlation with willingness to communicate. This shows that there needs to be a mediator to

bridge the relationship between trust and willingness to communicate and also that the main argument of our study is accepted, the higher of interpersonal trust an individual has towards, the more he is willing to communicate and talk with others.



# CHAPTER 5 CONCLUSION AND DISCUSSION

Our primary goal is to study whether or not willingness to communicate is a mediator between trust and electronic word of mouth. The results show that our hypothesis is accepted. In Chapter 5, we will discuss our research results and also provide suggestions on future research in this area.

# Trust O.181\* Tie Strength O.212\*\* eWOM Activity Positive eWOM O.226\*\* Positive eWOM

Figure 5.1 Correlations and Significance Relationship proven to exist

Negative eWOM

The purpose and aim of our research focused on the interaction of electronic word of mouth, trust, willingness to communicate and tie strength. After a thorough procedure of testing our hypotheses, several of the hypotheses established by literature review were proven to be accepted. In other words, there was a significant relationship found between several variables. First and most importantly, we find a significant positive relationship between trust and willingness to communicate. This means that willingness to communicate is indeed a mediator that acts like a bridge between trust and electronic word of mouth activity, and positive electronic word of mouth. However, it does not have the same effect on negative

word of mouth. We search for a reasonable explanation for this research result and find that there might be two possibilities. There is a famous Chinese saying called: "Praise the good, and hide the evil" which means that there is a tendency in people that wants to portray the best of themselves in front of others. Giving positive comments and praising products might give such a desired impression and help build a positive personal image. On the contrary, consumers might take into account the more negative self image or character that might be seen as a reflection if given complaints and negative reviews. The second explanation is the level of unsatisfactory each consumer faces varies. It is likely that most of the consumers have not had the experience of a product that was such an unpleasant purchase they felt the urge and desire to share this information with others.

There is no significant relationship found that directly exists between trust and any of the three dimensions under electronic word of mouth. This means that there is a need for a mediator to connect these two constructs together. In our study, we hypothesized from the reviewing of past studies that this mediator should be willingness to communicate, which is proven from statistical analysis to be accepted.

Tie strength is proven to have a significant and positive relationship with both negative and positive electronic word of mouth. This proves that the strength of the social relationship between two individuals will have a direct relationship with the level of sharing positive and negative word of mouth. Yet, there is no relationship found that exists between tie strength and electronic word of mouth activity. We can derive from this conclusion that perhaps the internet is not the main communication platform or most often used way to communicate

between individuals who are more intimate with each other. Face to face traditional word of mouth or other forms of communication such as the telephone should be much more highly used since those with strong ties should have more intimate ways of communication apart from the internet.

# **5.2 Suggestions & Managerial Implications**

Our research brings several new insights to how corporations can use electronic word of mouth as part of their strategic marketing campaign in gaining new consumers and holding onto the ones they already have. First of all, we now understand that electronic word of mouth should not be generalized to aim into one target audience. Instead, when intending to reach out to a mass audience, we can divide the consumer types into those that have a strong tie strength with our initial consumers, and those that have a weak tie strength. There are many more routes to persuade and convince those that are closer to the initial consumers instead of just internet. Therefore, it is suggested that traditional word of mouth is still important to marketing events and strategies. More importantly, our research shows that the consumers we have sampled usually participate more in positive electronic word of mouth rather than negative. This means that it is not hard to reach out to new consumers and extend a product's familiarity if we keep the consumers content.

Another suggestion is to find how we can manipulate the level of trust between our initial consumers so that they are more willing to "talk up" the company's products to other people. This should be quite a difficult task that yet has to be studied further to have a clearer image of how to act. Yet what we already know is that if we raise the level of willingness to

communicate of an individual, then it is almost definite that this will bring a positive effect on the electronic word of mouth spread to the consumers that have not yet purchased our product. For example, trust is still a quite abstract construct, but if we think of ways to encourage and motivate the initial consumers, so that they have a strong motive to want to talk and share the experience of our products with others, then this is a very effective form of free advertising.

#### **5.3 Suggestions for Future Research**

For future research, we have several suggestions that can carry our topic into a wider perspective. First, it is advised that we can also add in "Traditional Word of Mouth" as another variable with also three dimensions. From the results shown, there is still a certain proportion of consumers that use traditional word of mouth and not electronic to share their shopping experience with others. This should be included in the future study to have a more thorough understanding of how word of mouth can contribute to the business industry and ways to manipulate it using it as a tool to reach and educate consumers.

#### **5.4 Research Limitations**

Due to the limited financial and human resources, there are several limitations in our research. First, our research subjects are selected only in Taipei. In the future research, studies can test whether or not there will be different results if the research is conducted in different parts of Taiwan. Another research limitation is that we aim directly for college students in Taiwan without a further investigation of the level of internet usage or how much they depend on the internet in their daily life. As a result, it is not known whether the results will be different if this was considered into our research.

# **REFERENCES**

- Anderson, D.R., "In my opinion: The need to get the basics right in wildlife field studies", <u>Wildlife Society Bulletin</u>, Vol.29, No.4, pp 1294-1297, 2001.
- 2. Anderson, E. and Weitz, B., "Determinants of Continuity in Conventional Industrial Channel Dyads", Marketing Science, Vol.8, No.4, pp 310-323, 1989.
- 3. Banerjee, A.V., "A simple model of herd behavior", <u>The Quarterly Journal of Economics</u>, Vol.107, No.3, pp 797-817, 1992.
- 4. Ben-Ner, A., and Putterman, L., "Trust, Communications and Contracts: An Experiment", <u>Journal of Economic Behavior and Organization</u>, Vol.70, No.1-2, pp 106-121, 2009.
- Bickhart, B., and Schindler, R.M. (2001), "Internet Forums as Influential Sources of Consumer Information," <u>Journal of Interactive Marketing</u>, 15(3), 31-40
- Buttle, F.A., "Word of mouth: understanding and managing referral marketing",
   Journal of Strategic Marketing, Vol.6, No.3, pp 241–254, 1998.
- 7. Bone, P.F., "Word-of-Mouth effects on short term and long term product

  Judgments", Journal of Business Research, Vol.32, No.3, pp 213-223, 1995.

- 8. Bansal, H.S. and Voyer, P.A., "Word-of-Mouth Processes Within a Services Purchase Decision Context", <u>Journal of Service Research</u>, Vol.3, No.2, pp 166-177, 2000.
- Cameron, A.F. and Webster, J., "Unintended consequences of emerging communication technologies: Instant Messaging in the workplace", <u>Computers in Human Behavior</u>, Vol.21, Vol.1, pp 85-103, 2005.
- 10. Chew, M.M. and Sun. L.N.V.L., "Retailer-Supplier Relationship in Hong Kong: Asymmetry, Power Play, and Supply Chain Management", <u>International Journal of Business and Management</u>, Vol.4, No.8, pp 3-10, 2009.
- 11. Churchill, G.A. Jr., "A Paradigm for developing better measures of marketing constructs",

  Journal of Marketing Research, Vol.16, pp 64-73, 1979.
- Doh, S.M.S. and Hwang, J., "How Consumers Evaluate eWOM
   (Electronic Word-of-Mouth) Messages", <u>CyberPsychology & Behavior</u>, Vol.12, No.2, pp
   193-197, 2009.
- 13. Duhan, D.F. and Johnson, S.D. and Wilcox, J.B. and Harrell, G.D., "Influences on Consumer Word-of-Mouth Recommendation Sources", <u>The Journal of Academy of Management Science</u>, Vol.25, No.4, pp 283-295, 1997.
- 14. Flynn, L.R. and Goldsmith, R.E. and Eastman, J.K., "Opinion Leaders and Opinion Seekers: Two New Measurement Scales", Journal of Academy Marketing Science, Vol.24,

- No.2, pp 137-147, 1996.
- 15. Gardner, R.C. and Clement, R., "Social psychologists perspectives on second language acquisitions", In H. Giles & P. Robinson (Eds.), <u>The handbook of language and social psychology</u>, pp 495-517, 1990.
- 16. Granovetter, M. S., "The strength of weak ties". The American Journal of Sociology, Vol.78, No.6, pp 60-1380, 1973.
- 17. Granovetter, M., "The strength of weak ties: A network theory revisited", <u>Sociological Theory</u>, Vol.1, pp 201-233, 1983.
- 18. Godes, D. and Mayzlin, D., "Using Online Conversations to Study Word-of- Mouth Communication", Marketing Science, Vol.23, No.4, pp 545-560, 2004.
- 19. Harrison-Walker, L.J., "The Measurement of Word-of-Mouth Communication and an Investigation of Service Quality and Consumer Commitment as Potential Antecedents", <u>Journal of Service Research</u>, Vol.4, No.1, pp 60-75, 2001.
- 20. Haywood, K. M., "Managing Word of mouth Communications", <u>The Journal of Services</u>

  Marketing, Vol.3, No.2, pp 55-67, 1989.
- 21. Hennig-Thurau, T. and Gwimmer, K.P. and Walsh, G. and Gremler, D.D., "Electronic word-of-mouth via consumer–opinion platforms: what motivates consumers to articulate themselves on the internet?", <u>Journal of Interactive Marketing</u>, Vol.18, No.1, pp 38-52, 2004.

- 22. Hirschman, A.O., "Exit, Voice, and Loyalty", Cambridge MA: University Press, 1970.
- 23. Hung, K.H. and Li, S.Y., "The Influence of eWOM on virtual consumer communities: social capital, consumer learning, and behavioral outcomes", <u>Journal of Advertising</u>

  <u>Research</u>, Vol.47, No.4, pp 485-495, 2007.
- 24. Levin, D.Z., "The Strength of weak ties you can trust: the mediating role of trust in effective knowledge transfer", Management Science, Vol.50, No.11, pp 1477-1490, 2004.
- 25. Lippa, R.A., "Introduction to social psychology", (2nd ed.). Belmont, CA, US: Thomson Brooks/Cole Publishing Co., 1994.
- 26. MacInyre, P.D., "Variables Underlying Willingness to Communicate: A Casual Analysis", Communication Research Reports, Vol.11, No.2, pp 135-142, 1994.
- 27. MacIntyre, P.D. and Dornyei, Z. and Clement, R. and Noels, K.A., "Conceptualizing Willingness to Communicate in a L2: A Situational Model of L2 Confidence and Affiliation", The Modern Language Journal, Vol.82, No.4, pp 545-562, 1998.
- 28. MacIntyre P.D. and Baker,S.C. and Clement, R. and Conrod, S., "Willingness to Communicate, Social Support, and Language-Learning Orientations of Immersion Students", <u>Studies in Second Language Acquisition</u>, Vol.23, No.3, pp 369-388, 2001.
- 29. Mayer, R.C. and Davis, J.H. & Schoorman, F.D., "An Integrative Model of Organizational Trust", <u>Academy of Management Review</u>, Vol.20, No.3, pp 709-734, 1995.

- 30. McCroskey, J.C. and Baer, J.E., "Willingness to Communicate: The Construct and its Measurement", Paper presented at the annual convention of the Speech Communication

  <u>Association</u>, Denver, Colorado, 1985.
- 31. McKnight, D.H. & Chervany, N.L., "What Trust means in e-commerce customer relationships: An Interdisciplinary Conceptual Typology", <u>International Journal of Electronic Commerce</u>, Vol.6, No.2, pp 35-59, 2002.
- 32. Mittal, V. and Huppertz, J.W. and Khare, A., "Customer Complaining: The role of tie strength and information control", <u>Journal of Retailing</u>, Vol.84, No.2, 2008.
- 33. Moorman, C. and Deshpande, R. and Zaltman, G., "Factors Affecting Trust in Market Research Relationships", <u>Journal of Marketing</u>, Vol.57, pp 81-101, 1993.
- 34. Morgan, R.M. and Hunt, S.D., "The Commitment-Trust theory of Relationship Marketing", <u>Journal of Marketing</u>, Vol.58, No.3, pp 20-38, 1994.
- 35. Mortensen, C. D., and Arntson, P. H., and Lustig, M., "The Measurement of Verbal Predispositions: Scale Development and Application." <u>Human Communication Research</u>, Vol.3, No.2, pp 146-158, 1977.
- 36. Nardi, B.A. and Schiano, D.J. and Gumbrecht, M., "Blogging as Social Activity, or would you let 900 million people read your diary?", <u>Proceedings of the 2004 ACM conference</u> on Computer supported cooperative work, Vol.6, No.3, pp 222-231, 2004.
- 37. Pruitt, D. G., "Negotiation behavior", New York: Academic Press, 1981.

- 38. Rempel, J.K. and Holmes, J.G. and Zanna, M.P., "Trust in Close Relationships", <u>Journal of Personality and Social Psychology</u>, Vol.49, No.1, pp 95-112, 1985.
- 39. Richins, M. L., "Negative Word-of-Mouth by Dissatisfied Consumers: A Pilot Study", <u>Journal of Marketing</u>, Vol.47, pp 68-78, 1983.
- 40. Rotter, J. B., "A new scale for the measurement of Interpersonal Trust", <u>Journal of Personality</u>, Vol. 35, No.4, pp 651-65, 1967.
- 41. Rotter, J. B., 1971. "Generalized Expectancies for Interpersonal Trust", American Psychologist, Vol.26, No.5, pp 443-452, 1971.
- 42. Spielberger, C.D., "Manual for the State-Trait Anxiety Inventory", Palo Alto, CA: Consulting Psychologists Press, 1983.

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43. Westbrook, R.A., "Product/Consumption-Based Affective Responses and Post purchase Processes", <u>Journal of Marketing Research</u>, Vol.24, No.3, pp 258-270, 1987.

### APPENDIX A- English Version Questionnaire

# Dear Respondents:

First, we thank you for taking time to participate in this questionnaire. This is an academic questionnaire survey examining the relationship between electronic word of mouth, tie strength, trust, and willingness to communicate. There are a total of 5 parts in this questionnaire. Please answer according to the directions. There is no standard answer. Keep in mind the data and any personal information you provide is solely for academic research purposes and will be kept completely anonymous

Your time and opinions will be a great assistance and contribution to our study. Thank you!

National Chaio Tung University, Institute of Management and Business

Advisor: Dr.Charles V. Trappey
Student: Conna Yang

There are a total of 5 sections, please answer according to the directions.

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# Part 1: Electronic Word of Mouth

Please recall the times when you talk to others in the Internet about products you have used. Internet platforms include Blogs, MSN, BBS, Facebook, Plurk, etc.

#### Please circle (○) your answer

1.	I mention the products that I use to others on the Internet quite frequently
2.	strongly disagree <u>1 2 3 4 5</u> strongly agree There are certain products that I mention more about on the Internet
3.	strongly disagree $\frac{1}{2}$ $\frac{2}{3}$ $\frac{3}{4}$ $\frac{4}{5}$ strongly agree When I use the Internet, I seldom miss the opportunities to talk about a certain product
4.	strongly disagree 1 2 3 4 5 strongly agree I will use the Internet to recommend a product I like
5.	strongly disagree 1 2 3 4 5 strongly agree On the Internet, I will give positive reviews about a product I like
6.	strongly disagree 1 2 3 4 5 strongly agree On the Internet, I will encourage others to the buy or use products that I like
	strongly disagree <u>1 2 3 4 5</u> strongly agree

7.	On the Internet, I will share my experience of those products that I don't like
8.	strongly disagree <u>1 2 3 4 5</u> strongly agree On the Internet, I will try to convince others not to use or purchase products I don't
	like
	strongly disagree <u>1 2 3 4 5</u> strongly agree
Part 2:	Tie Strength
Please re	ecall the last time when you have shared electronic word of mouth with another person.
If you ha	ave not had any prior contact with this person before this, please choose "1" for this
part.	
Please ci	ircle ( <u>○</u> ) your answer
When yo	ou seek information from someone else,
1.	How close were you with that person?
2.	How often did you communicate with that person?  1 2 3 4 5  (1=Once every 3 months or less(or never); 2=Once every 2 months; 3=Once a month; 4=Once a week; 5=Everyday)
Part 3:	Trust
Please ci	ircle ( <u>○</u> ) your answer
6.	Hypocrisy is on the increase in our society.
7.	strongly disagree $\underline{1}$ $\underline{2}$ $\underline{3}$ $\underline{4}$ $\underline{5}$ strongly agree In dealing with strangers one is better off to be cautious until they have provided evidence that they are trustworthy.
8.	strongly disagree <u>1 2 3 4 5</u> strongly agree  This country has a dark future unless we can attract better people into politics.
9.	strongly disagree <u>1 2 3 4 5</u> strongly agree Using the honor system of <i>not</i> having a teacher present during exams would probably result in increased cheating.
10.	strongly disagree <u>1 2 3 4 5</u> strongly agree Parents usually can be relied upon to keep their promises.
	strongly disagree <u>1 2 3 4 5</u> strongly agree
11.	The UN will never be an effective force in keeping world peace.

strongly disagree <u>1 2 3 4 5</u> strongly agree
12. The judiciary is a place where we can all get unbiased treatment.
strongly disagree <u>1 2 3 4 5</u> strongly agree
13. Most people would be horrified if they knew how much news the the public
hears and sees is distorted.
strongly disagree <u>1 2 3 4 5</u> strongly agree 14. Even though we have reports in newspapers, radio, and T.V., it is hard to get
objective accounts of public events.
strongly disagree 1 2 3 4 5 strongly agree
15. The future seems very promising.
strongly disagree 1 2 3 4 5 strongly agree
16. If we really knew what was going on in international politics, the public would
have reason to be more frightened than they now seem to be.
strongly disagree 1 2 3 4 5 strongly agree 17. Most elected public officials are really sincere in their campaign promises.
strongly disagree <u>1 2 3 4 5</u> strongly agree 18. Many major national sports contests are fixed in one way or another.
strongly disagree 1 2 3 4 5 strongly agree 19. Most experts can be relied upon to tell the truth about the limits of their
knowledge.
strongly disagree 1 2 3 4 5 strongly agree
20. In these competitive times one has to be alert or someone is likely to take
advantage of you.
strongly disagree 1 2 3 4 5 strongly agree
21. Most salesmen are honest in describing their products.
strongly disagree $1 2 3 4 5$ strongly agree
22. Most students in school would <i>not</i> cheat even if they were sure of getting away
with it.
strongly disagree 1 2 3 4 5 strongly agree
23. Most repairmen will not overcharge even if they think you are ignorant of their
specialty.
1
strongly disagree 1 2 3 4 5 strongly agree 24. Large shares of accident claims filed against insurance companies are phony.
strongly disagree 1 2 3 4 5 strongly agree  24. Large shares of accident claims filed against insurance companies are phony.  strongly disagree 1 2 3 4 5 strongly agree
strongly disagree 1 2 3 4 5 strongly agree 24. Large shares of accident claims filed against insurance companies are phony.

# Part 4: Willingness to Communicate

There are 20 different situations below. Please choose the percentage of times you would choose to communicate under that situation. Write down the percentage of times you would communicate on the blank space next to each scenario.

#### Ex: 0=Never 100=Always) Talk with a train station attendant. 2. Talk with a physician. 3. \_\_\_\_ Present a talk to a group of strangers. 4. \_\_\_\_ Talk with an acquaintance while standing in line. Talk with a salesperson in a store. 6. \_\_\_\_ Talk in a large meeting of friends. Talk with a police officer. Talk in a small group of strangers. 9. \_\_\_\_ Talk with a friend while standing in line. Talk with a waiter/waitress in a restaurant. 10. \_\_\_\_ 11. \_\_\_\_ Talk in a large meeting of acquaintances. 12. \_\_\_\_ Talk with a stranger while standing in line. 13. \_\_\_\_ Talk with a secretary. 14. \_\_\_\_ Present a talk to a group of friends. Talk in a small group of acquaintances. 15. \_\_\_\_ 16. \_\_\_\_ Talk with a garbage collector.

(Please choose the percentage of time you would communicate, from 0 to 100.

# **Part 5: Personal Information**

17. \_\_\_\_ 18. \_\_\_\_

19. \_\_\_\_

1. Gender	$\square$ Male $\square$		
2. Age	□ Under 18	□ 19~23	□24~28
	□ 29~33	□34~38	□Above 39
3. University			

Talk in a large meeting of strangers.

Talk in a small group of friends.

20. \_\_\_\_ Present a talk to a group of acquaintances.

Talk with a spouse (or girl/boy friend).

This is the end of our questionnaire, thank you!

# APPENDIX B- Chinese Version Questionnaire

# 您好:

首先,非常感謝您撥空填寫這份問卷。這是一份學術性問卷,主要目的用來研究網路口碑、關係強度、人際信任、以及溝通意願之間的關係。本問卷共有五部分。請依據題目指示做答,沒有標準答案。本問卷僅供學術研究使用,您所提供的資料並不會個別披露,對外絕對保密。

您的意見對本研究有極大貢獻,非常感謝您的幫助!

國立交通大學經營管理研究所

指導老師: 張力元 博士

研究生: 楊孝康

敬上

本問卷共有五部分,請依照指示依序作答。

# 第一部分: 網路口碑

1896

請試圖回想平時在網路上跟別人聊到不同產品的情形。有可能是部落格、MSN、BBS、Facebook、Plurk…等等不同形式的網路平台。

# 請用圈選 (○)的方式作答。

9.	我時常在網	]路上跟別人提到	我使	用的	產品	或服	務	
		極度不同意	1	2	3	4	5	極度同意
10.	有某些產品	。 ,我會特別常在	網路	上提:	到。			
		極度不同意	1	2	3	4	5	極度同意
11.	當我使用網	路的時候,我盡	量不	錯過	可以	聊到	某個特別	定產品的機會
		極度不同意	1	2	3	4	5	極度同意
12.	我會透過網	]路去推薦一個我	喜歡	的產				
		極度不同意	1	2	3	4	5	極度同意
13.	對於我喜歡	的產品,我會在	網路	上給	予它	正面	的評價	
		極度不同意	1	2	3	4	5	極度同意
14.	對於我喜歡	的產品,我會在海	網路	上鼓	勵別	人去	購買或	使用它
		極度不同意	1	2	3	4	5	極度同意

16. 對於我不喜歡的產品,我會在網路上說服別人不要購買或使用 極度不同意 1 2 3 4 5 極度同意 第二部分:關係強度 請試圖回想最近一次您透過網路平台,分享網路口碑的對象。 如果您在這之前從沒和此人有過任何接觸,此部分答案請選擇"1"。 請用圈選(○)的方式作答。 當你就某件事情從他人那裡尋求資訊, 你和對方的關係有多親密? 生疏 非常親密 你們之間溝通的頻率爲何? 4. (1=三個月一次,或更少(或從不); 2=兩個月一次; 3=一個月一次; 4=一個禮拜一次; 5=每天) 第三部分: 人際信任 請用圈選 (○)的方式作答。 在我們的社會之中,偽善的人越來越多 1 2 3 4 5 極度不同意 極度同意 與陌生人接觸時,除非確定他可以被信任,否則最好是謹言慎行 極度不同意 1 2 3 4 5 極度同意 除非我們能吸引更好的人進入政壇,否則國家前景堪憂 3. 極度不同意 1 2 3 4 5 極度同意 4. 在考試時,沒有老師在場監考,而讓學生施行自律的作法,只會使作弊行爲增加 極度不同意 1 2 3 4 5 極度同意 一般而言,父母都會信守諾言 5. 極度同意 極度不同意 1 2 3 4 5 6. 對於維持世界和平,聯合國永遠不會是有效的力量 1 2 3 4 5 極度不同意 極度同意 7. 法院是一個我們都能夠得到公正對待的地方 極度不同意 1 2 3 4 5 極度同意

15. 對於我不喜歡的產品,我會在網路上跟別人分享心得

極度不同意

1 2 3 4 5

極度同意

	8.	大部份的人如果得知他們所聽到及看到的新聞,大多是歪曲的報導時,將會非常 震驚
	9.	極度不同意 <u>1 2 3 4 5</u> 極度同意 雖然我們可以從各種媒體中得到訊息,但事實上我們很難看到一個對公眾事件的 客觀報導
	10.	極度不同意 <u>1 2 3 4 5</u> 極度同意 整體而言,未來似乎是充滿希望的
	11.	極度不同意 <u>1 2 3 4 5</u> 極度同意 假如公眾真的得知國際政治的內幕,那麼大家會比現在更害怕
	12.	極度不同意 <u>1 2 3 4 5</u> 極度同意 大多數獲選的官員都是真的想實現他們許下的競選諾言
	13.	極度不同意 <u>1 2 3 4 5</u> 極度同意 許多全國性體育比賽的結果其實都早已內定
	14.	極度不同意 <u>1 2 3 4 5</u> 極度同意 我們可以相信大多數專家,對於自己不懂的地方都會誠實承認
	15.	極度不同意 <u>1 2 3 4 5</u> 極度同意 在這競爭的年代,每個人必須提高警覺,否則有些人就會來佔你便宜
	16.	極度不同意 <u>1 2 3 4 5</u> 極度同意 大多數的推銷員在推銷其產品時是誠實的
	17.	極度不同意 <u>1 2 3 4 5</u> 極度同意 大多數學生即使確信作弊不會被抓到,也不會去作弊
	18.	極度不同意 <u>1 2 3 4 5</u> 極度同意 大多數維修人員即使明知你對他們的專業一竅不通,也不會多收修理費
	19.	極度不同意 <u>1 2 3 4 5</u> 極度同意 很多向保險公司提出的事故索賠,事實上都是假的
	20.	極度不同意 <u>1 2 3 4 5</u> 極度同意 大多數人對民意調查報告都會如實作答
		極度不同意 1 2 3 4 5 極度同意
<u>第四</u>	部分	<b>):溝通意願</b>
		)個不同的情境,請依自己的意願去選擇溝通機率,並在空格處寫下在各種不同情境選擇溝通的機率。
(請從	色 0	至 100 中,填寫您會溝通的機率 例:0=從不溝通 100=總是溝通。)
		和車站服務站人員溝通
		和醫生溝通
		_ 對一群陌生人發表言論 _ 在排隊等候時和認識的人說話
		在商店內和銷售人員溝通

6. \_\_\_\_ 在大型會議上,而當在座都是朋友時,與他們說話 7. \_\_\_\_ 和警察溝通 8. \_\_\_\_ 和一小群陌生人說話 9. \_\_\_\_ 在排隊等候時和朋友說話 10. \_\_\_\_ 在餐廳內跟服務生溝通 11. \_\_\_\_ 在大型會議上,而當在座都是認識的人時,與他們說話 12. \_\_\_\_ 在排隊等候時和陌生人講話 13. \_\_\_\_\_ 跟一位秘書溝通 14. \_\_\_\_ 對一群朋友發表言論 15. \_\_\_\_ 和一小群認識的人說話 16. \_\_\_\_\_ 跟垃圾清潔員說話 17. \_\_\_\_ 在大型會議上,而當在座都是陌生人時,與他們說話 18. \_\_\_\_\_ 跟你的配偶 (或男朋友/女朋友) 溝通 19. \_\_\_\_ 和一小群朋友講話 20. \_\_\_\_\_ 對一群認識的人發表言論 第五部分:基本資料 1. 性別 □ 男 □ 19~23 歲 □24~28 歳 2. 年齡 □ 18 歲以下 □ 29~33 歳 □34~38 歳 □39 歳以上 3. 就讀學校 \_

本問卷到此結束,感謝您的作答!