

Factors affecting e-WOM adoption

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Abstract

With the growing popularity of online shopping and social networking, it is more convenient to share their viewpoints online. Just like the word of mouth in the real world, the electronic word of mouth (e-WOM) exists in the virtual community and plays more and more important role in consumers' daily life. It impacts the reputation of a product and buyers purchase decisions. It could even be used as tools of e-marketing for companies. So we would like to explore the factors influencing the adoption of e-WOM, and how people digest the information contained in the online reviews.

To complete this task, a new research model is proposed based on the Information Acceptance Model (IAM). Furthermore according to our new research model and some previous papers, we developed a questionnaires (refers to Appendix A). The whole survey collects valid and usable 201 respondents, and all the data collected was analyzed using SPSS.

The research result shows that e-WOM adoption depends on the sufficiency, accuracy and validity of the argument quality and also some factors influencing the source credibility, such as sender's expertise, tie strength and prior experience. In addition, the moderating effect of recommendation consistency also exists in the relationship between the source credibility and the information usefulness.

This research provides some insights and implications to virtual community administrators and online stores for better managing their products and reputation. It also provides some advices to message receivers for easily and efficiently identifying the useful information, which will be used in the purchase decision making process.

1. Introduction

According to the consumer purchase decision making process, customers will search the related information of products or services before they make the purchase decisions. The traditional channels of information search are advertisements, leaflets, promotion events, personal selling and some informal channels like families, friends, colleagues or even strangers. All the information get from the communities falls into the concept of word of mouth (WOM).

Westbrook (1987) defines that WOM refers to information related to assess all the attributes, including tangible and intangible ones, of particular products and services circulated in the informal communications. So what's the difference between WOM and other traditional channels? The answer is that WOM is distinguished from other traditional channels by the communicator's independence from a commercial source. In addition, some research found that WOM even has a more significant impact, either in coverage or time, on the customers' behavior than those traditional means (Goldsmiths & Horowitz, 2006).

Since the prosperity and development of information technology, internet has become a platform for customers to share and communicate their opinions of products and services without the limitation of time and space. Moreover, the appearance of Web 2.0 creates some new communication channels, including review sites, private blogs and some social networking sites like face book and twitter (Goldsmith, 2006). The information communicated on those platforms is called electronic word of mouth (e-WOM) or word of mouse. Specifically, information online could influence readers' attitudes toward a product, finally, it could affect the intention to buy to product. That is online consumers' discussion is not only just a sharing, but also a significant power of influence on readers who intend to use online reviews as their purchase decisions reference. Consequently, the world of e-WOM goes far beyond simply a virtual meeting place for consumers, but it can also determine many consumer activities.

If we compare e-WOM with the traditional one, we can see a lot of differences between them. Firstly, the traditional WOM focuses on the immediate intimate communication, while e-WOM could not react in time due to the diversity of the time and places. The hysteresis of e-WOM impedes the vividness and efficiency of the informal communication (Dellacrocas, 2003). Secondly, WOM has relatively specific target, while e-WOM could be reached by unlimited internet users to share their opinions and experiences. Although breaking the limitation of the

time and space could bring some advantages to e-WOM users, it also could bring some troubles to the users. Because there is no limitation in expressing opinions, it induces the information explosion for the on-line world. The e-WOM users must spend a lot of time and effort in searching the useful and exact information they need. Thirdly, in most cases of traditional WOM, senders and receivers know each other; thereby the source credibility is relatively clear to the recipient. While due to the private nature of e-WOM, lots of unfiltered information is developed by unknown participants. So it is difficult for receivers to judge the source credibility. We noticed a lot studies only focusing on the traditional WOM, and due to the significant difference between e-WOM and traditional one, we decided to research on e-WOM. Additionally, different people have different standard to assess the information quality of e-WOM. For one particular message, different people may have different interpretations. Therefore, studying the factors influencing customers' adoption of e-WOM becomes an important and useful topic.

Our study will be based on the Information Acceptance Model. Information Acceptance Model (IAM) by Sussman & Siegal (2003) showed that argument quality and source credibility have positive effect on the information perceived usefulness and that the information usefulness leads to the information adoption. Current studies mostly emphasized on the antecedents driving consumers to share information online and the formation of e-WOM. However, very little attention was paid to the determinants driving consumers to use e-WOM. The objective of our study firstly is to figure out which factors could be used to measure the argument quality and source credibility, secondly is to see whether argument quality affect e-WOM usefulness differently when the product nature is different, thirdly is to see whether the relationship between source credibility and information usefulness will be moderated by the recommendation consistency of different pieces of messages. Thus this research will look into detailed factors that will influence the argument quality and the source credibility and will also look into the moderating effect of product nature and consistency in the process of evaluating information usefulness.

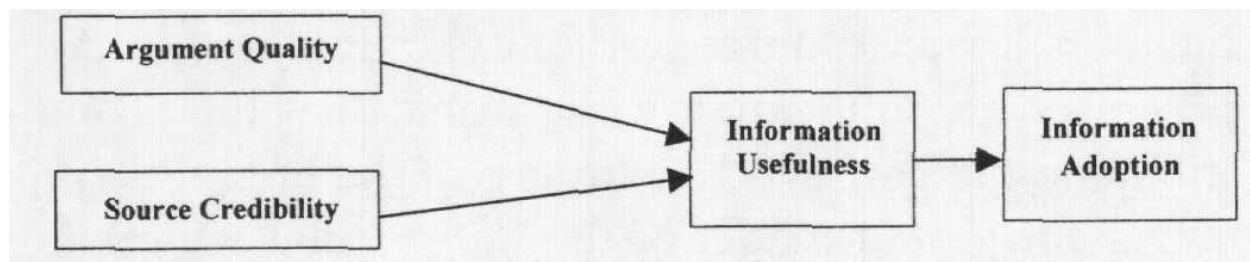
The remaining of this paper is demonstrated as follows. Firstly, we introduce our research framework by providing a review on the literature and then propose the hypotheses. Secondly, we describe the research methodology, which includes measures and data collection. Next, we analysis the collected data and examine the validation of hypotheses based on the statistical

results. Finally, we discuss the research, the implications, the limitations and the future perspective of our research. We believe this research shall provide some new insights in this research area, as well as some useful inspirations for online stores and online discussion forum administrators to better manage the online information.

2. Research Framework: A Modified Information Acceptance Model

IAM (*Information Acceptance Model*) focuses on the influence of argument quality and source credibility on information usefulness and finally causing the intention to adopt information (Sussman & Siegal, 2003). The model integrates dual process models of informational influence (Petty & Cacioppo, 1986) with Technology Acceptance Model (TAM) (Davis, 1989). Some researches applying TAM showed that perception about the information usefulness significantly influence the final step of adoption (Davis, 1989). Thus based on TAM, Sussman & Siegal (2003) proposed that perceived usefulness of information should forecasts intentions of adopting the information. Although TAM is useful in understanding the mechanism of intentions toward adopting information, it could not explain the differences in informational influence for different individuals and contexts (Petty & Cacioppo, 1986). On the other hand, according to Elaboration likelihood Model (ELM), in different contexts, the impact of a same message will vary in difference message recipients, and these differences of elaboration likelihood, together with other factors, determines the success of informational influence (Sussman & Siegal, 2003). ELM indicates that informational influence could happen in two elaboration levels with two routes: a central route of influence with the high elaboration level and a peripheral route of influence with the low elaboration level (Petty & Cacioppo, 1986). At high elaboration level, information recipient carefully considers the content of the message, which is the central route of influence, while at low elaboration level, peripheral route of influence become dominant in affecting consumers' beliefs, attitudes and perceptions. Thus like the central route of influence, if an information recipient is willing and able to perceive and process a message, the argument quality of the message will determine the strength of informational influence (Petty & Cacioppo, 1986). But if individuals follow the peripheral route, other factors beside the content of information will play the important role. Compared with ELM in the physical world, some factors are less likely

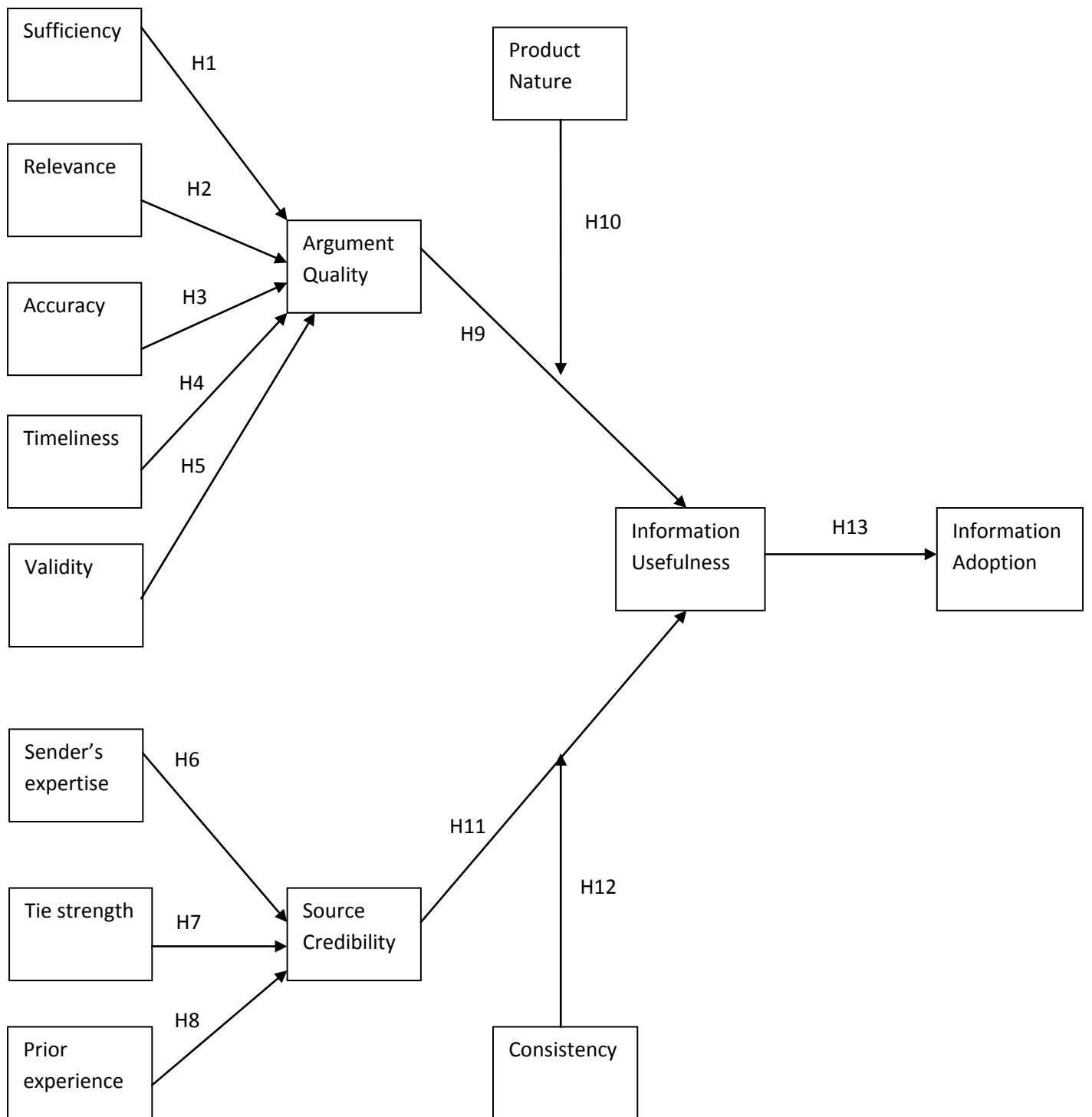
to be significant when applied in the contexts of computer-mediated communication (CMC), which is different from face to face or other visually richness communications (Sussman & Siegal, 2003). Therefore, in the CMC contexts, Sussman & Siegal (2003) suggested argument quality as one critical factor of information usefulness at high elaboration level and source credibility as another significant determinant at low elaboration level. Argument quality represents a central route to influence information usefulness, while source credibility represents a peripheral route. Figure 1 shows the Information Acceptance Model.



(Figure 1)

In this study, we will explore our extended model (Figure 2) by showing factors that influence argument quality and source credibility, as well as the moderating effect of product nature and consistency. We discuss the every detailed hypothesis as follows:

As there is very few studies investigating the antecedents of argument quality, we base our own hypothesis on research by Fulkerson (1996), which teaches readers how to write a proper argument, study by Areni (2003) and some other previous literatures. After a little adjustment, we firstly identify three antecedents, which are sufficiency, relevance and accuracy, from the researches related to information quality and the research by Fulkerson (1996). There is a large overlap between the information quality and the argument quality, because both the contents consist of words. Thus we can see that those factors influencing the information quality also appear in the studies researching the argument quality. Then due to the nature of the internet world, timeliness is another major issue for the argument quality of e-WOM. The last antecedent but not the least one is the validity, which is identified from Areni's (2003) study. It highlights the difference between the argument quality and the information quality.



(Figure 2)

Sufficiency and Argument Quality

The *sufficiency* of an argument means the extent to which the volume of the information in the argument is enough and appropriate for the purpose of the argument (Xu & Koronios, 2004/2005). Although it is not easy to figure out how much information a sound and logical argument requires, the purpose of an argument is to persuade receivers to accept the sender's opinion. For this reason, the argument need enough and appropriate amount of evidence and facts to support it. Wixom and Todd (2005) also suggested that sufficiency is an important element in deciding the argument quality. Therefore, the more sufficient the messages are, the more persuasive and the higher quality of the argument will be:

H1: the higher degree of the perceived sufficiency of an argument, the higher the argument quality will be.

Relevance and Argument Quality

The *relevance* is defined as the extent to which an argument meets the recipients' needs for both coverage and content (Brackstone, 1999). In other words the relevant information is applicable and helpful for the e-WOM' users (Xu & Koronios, 2004/2005). Past researches has found that Internet users rarely read the whole content of the eWOM, the recipients prefer to scan those eWOM that related to the information they need or desire (Madu & Madu, 2002). Recipients of eWOM want to spend the least effort to find information they want. (Nah & Davis, 2002). Some previous researches (Dunk, 2004 and Citrin, 2001) also support that relevance plays a dominant role in the argument quality under the concept of e-WOM. Thus the more relevant an argument is, the less effort the user will put, the more persuasive and the higher quality of the argument will be:

H2: the higher degree of the perceived relevance of an argument, the stronger the argument will be.

Accuracy and Argument Quality

The *accuracy* of arguments refers to the degree to which argument express the reality correctly (Xu & Koronios, 2004/2005). Usually accuracy is assessed by how much an argument agrees with identified verified, qualified and correct facts or evidences (Loshin, 2006). For instance, if

the evidence used in an argument is not accurate, the argument will be judged unsound, the persuasive strength of the argument will weaken, and the quality of the argument will decline. Therefore the more accurate an argument is, the truer the argument will be to the fact, the more trust the recipients will put, the higher quality of the argument will be. The results of Wixom & Todd (2005) and Citrin (2001) also support this hypothesis:

H3: the higher degree of the perceived accuracy of an argument, the higher the argument quality will be.

Timeliness and Argument Quality

The *timeliness* refers to whether the information of e-WOM is sufficiently up to date with the latest world of news or knowledge (Xu & Koronios, 2004/2005). Because there is too many obsolescent information on-line, recipients need to put more effort to distinguish the updated message for those outdated ones. If the e-WOM is not updated consistently, the outdated information cannot catch up the recipients' attention and cannot satisfy the recipients' needs, the persuasive strength of the argument will reduce, and the quality of the argument will decline (Madu & Madu, 2002). Wixom & Todd (2005) and Citrin (2001) also found the positive relationship between timeliness and argument quality. Therefore, the more up-to-date the argument of e-WOM is, the more attention the recipients will put, the higher quality of the argument is:

H4: the higher degree of the perceived timeliness of an argument, the stronger the argument will be.

Validity and Argument Quality

The *validity* of an argument highlight relationship between conclusions and premises (Areni, 2003). That means an argument is valid if the truth of its conclusion follows from the truth of its premises. Thus for a logic argument, the validity is necessary. But very few studies investigate the relationship between validity and argument quality. We picked up validity from Areni (2003) and then proposed this hypothesis based on the definition of validity. Therefore, the more valid the argument is, the higher quality of the argument:

H5: the higher degree of the perceived validity of an argument, the stronger the argument will be.

Sender's Expertise and Source Credibility

Sender's Expertise refers to the extent to which the information sender is perceived to be capable of providing correct message. Sender's expertise tends to lead to persuasion because the receivers trust the sender's authority and don't double check the sender's assertion by using their own thoughts and knowledge (Bristor, 1990). According to our past experience, consumers prefer to trust an information sender who is knowledgeable and experienced in a specific field. And in normal situations, adoption of that expert's information could enhance the consumers purchase decision process. Bansal & Voyer (2000) have also found that when the degree of sender's expertise is higher, the received message will be more positively perceived. An expert with higher expertise is more knowledgeable to product alternatives in current market (Mitchell & Dacin, 1996). Thus, sender's expertise is useful for receiver when receiver is searching information to make a purchase decision (Bansal & Voyer, 2000):

H6. The higher degree of the perceived sender's expertise, the higher degree of perceived source credibility will be.

Tie strength and Source Credibility

Tie strength is defined to be a multidimensional construct that shows the strength of interpersonal relationships (Money, Gilly & Graham, 1998). When consumers receive information from different types of sources, the effect is unlikely to be the same. If the information is from those with whom the consumer has close relationship, the likelihood that the consumer will adopt the information is very high. According to the research of Duhan et al. (1997), WOM sources could be classified by the extent of closeness of the relationship between the message receiver and sender. Brown & Reingen (1987) found that strong ties have greater impact on the message receiver than weak ties and information seekers tend to be more actively seek information from strong tie sources than weak tie sources. In the online world, there are also many virtual social networks and online discussion communities. In this research, we apply concept of tie strength to the electronic world. Steffes & Burgee (2009) classifies social tie into strong ties and weak or non-existence ties. Some research state that many social relationships are weak ties, but some ties in virtual forms could also change to strong ties, especially when they lead to face-to-face physical meetings (Pénard & Poussing, 2010). Frenzen & Davis (1990)

suggested four interpersonal dimensions of tie strength: closeness, intimacy, support and association. In the electronic world, we interact with families and friends offline and online; we also meet new friends with whom we share same interests and interacted frequently. Therefore such relationships could also be classified as strong tie. It is stated by Bansal & Voyer (2000) that the stronger tie strength between the information sender and receiver, the more credible the WOM information:

H7. The stronger the tie strength, the higher degree of perceived source credibility will be.

Prior experience and Source Credibility

Prior experience means customers' previous experience with the message sender. There is possibility that the message recipient have read and used the sender's e-WOM before. Here because our definition of prior experience is different from others', we hardly find studies that support this hypothesis. So according to common sense, when the message recipient meets with a previous sender, the prior feelings and judgments will affect his or her perception about the current credibility of the sender. If the previous message is adopted and finally found to be very helpful and trustworthy, the message sender will be assumed to be more credible. On the other hand, if the previous message is found to be a less helpful or even a fake message after adopting, the message sender will be evaluated to be less credible:

H8. The better prior experience with the sender, the higher degree of perceived source credibility will be.

Argument Quality and Information Usefulness

Bhattacharjee & Sanford (2006) defined *argument quality* as the persuasive strength of an argument. According to the ELM, when an individual processes some persuasive information, the quality of the argument will play a critical role (Sussman & Siegal, 2003). If the argument is a high quality argument (strong argument), it will be more persuasive than a low quality argument (weak argument). In the Internet world, e-WOM can influence the consumer purchase decisions and behavior. Based on the investigation of the "China Internet Community User Development Report 2006" (iResearch Consulting Group, 2006), "Content" is treated as the most important factor for e-WOM. Once the informational argument meets the recipients' needs and requirements, it will be considered to be useful. It is also stated by Sussman & Siegal (2003)

that the higher the quality of an argument is, the stronger the persuasive strength of the argument is, the more useful of the information the recipient will perceived to be:

H9: The stronger of an argument is, the higher degree of the perceived usefulness of the information will be.

Product Nature as a moderator of the effect of Argument Quality on Information Usefulness

Different product type will generate different product information under e-WOM, leading to different customer perceptions and behaviors. While examine a product, customer may categorize its attributes into two groups: Objective and Subjective. Attributes like capacity, warranty and power falls into objective standards, whereas attributes like color and design style stands for the subjective standards (Lee, Lee & Shin, 2011). The fundamental difference between the two types of evaluation standards is whether there is a unified and universal standard for the product's evaluation or not (Moers, 2005). If a customer wants to buy an MP3 player and other attributes such as promotion and price are the same, a 2 G MP3 player is more favorable than 1 G MP3 player in terms of the capacity. Because there are accepted ranking-based standards among different products, the types of these products are regarded as objective ones. On the other hand, because different people have different taste, attributes like design style and color cannot have a unified evaluation standards. Some customers may prefer blue clothes to a yellow one while others may like the yellow one much more than a blue one. As there is no objective-based ranking for blue and yellow, we can conclude that color, design style and other similar attributes are considered to be subjective ones. Because different people have different tastes and preferences about particular product types, it is not easy for recipient to make a decision based on the subjective standards. Therefore the effect of argument quality on information usefulness will be higher while recipient is searching for the information of an objective product rather than a subjective product.

H10: The argument quality will affect the perceived information usefulness more while e-WOM recipient is reviewing information about an objective product instead of a subjective product.

Source credibility and information usefulness

Source Credibility refers to an individual's perceived credibility of the information source, no matter what the information content is. It represents a peripheral route to affect information usefulness in ELM. Although it is not related to the information itself, it influences customer's perception of the information usefulness. Customer's perception of information usefulness will decrease, if the source is less credible. Cheung, Lee & Rabjohn (2008) stated that in online world people could post any argument comment without disclosing the real identity. That's why it is harder for consumers to identify the useful information for their purchase decisions in Internet. According to McKnight & Kacmar (2007), when customers search the information in the virtual community, they would find it more useful to make purchase decision if they think the information to be credible:

H11. The higher degree of perceived source credibility, the more useful the information will be.

Consistency as a moderator of the effect of Source Credibility on Information Usefulness

According to Zhang & Watts (2003), *consistency* is the degree to which one particular e-WOM review is consistent with other message sender's reviews. In the electronic world, it is convenient for people to search information about one product from different sources. As a result, users will judge the credibility of the information source by seeing whether there is any difference between one particular piece of message and other received messages. If the online review is consistent with other reviews, the effect of source credibility for the particular message on information usefulness will be higher (Zhang & Watts, 2003). On the other hand, if the online reviews in the discussion forum have lower degree of consistency for the same product, the effect of the source credibility on information usefulness will be lower (Vandenbosch & Higgins, 1996):

H12. The higher consistency of the received information with other received information, the more perceived source credibility affects perceived information usefulness.

Information usefulness and information adoption

Information usefulness means information receivers believe that using the information will improve their performance (Davis, 1989). And information adoption is the final step of IAM, where information receivers finally use the information. The relationship between information usefulness and information adoption is easy to interpret. If the information is more useful, the consumer is more likely to use the information in making purchase decision. The study of Cheung, Lee & Rabjohn (2008) also supported our hypothesis. Therefore, the higher perceived information usefulness perceived by customers, the higher intention they have to adopt the information for purchasing decision. (Cheung et al, 2009):

H13. The higher degree of perceived information usefulness, the higher degree of information adoption will be.

3. Methodology

Data collection of this research was conducted by questionnaire. The target group of people was customers who have prior experience of going shopping online. Taobao.com was the main research source as it has a complete and mature e-WOM processing platform.

Taobao.com

Taobao.com (www.taobao.com) is a Chinese online shopping website founded in 2003. The major business models are customer-to-customer (C2C) and business-to-customer (B2C). It provides a platform for businesses and individuals to open a virtual shopping store. Figure 3 displays the homepage of the Taobao website. Once you open the homepage, you can search any product you want to buy and any shopping store you want to buy from. After you decide which virtual store to enter and you click it, you can see all the products within this store and all the comments under each particular product. Figure 4 demonstrates an example of the online review list under a specific product.



Figure 3 Homepage of Taobao.com



Figure 4 comment list for a particular product

3.1 Subject

To test the factors affecting e-WOM adoption from the Taobao.com, both offline questionnaire and online questionnaire were distributed. Three versions of questionnaires, English, Traditional Chinese, and Simplified Chinese, were prepared. Internet was our main channel to distribute and collect questionnaires. We posted the questionnaire link to the public on some social networking websites, such as Facebook, Weibo, Renren. While for the offline questionnaires, we distributed at the campus of Hong Kong Baptist University. A total of 294 questionnaires were received.

The target respondents of this research were people who went shopping on Taobao.com and had some experience on the online review platform. 83 of the questionnaires were uncompleted, which were abandoned from the data analysis. So totally we get 201 usable questionnaires, in which 20 of them were from offline.

Refers to Table 1 (See Appendix B), it summarizes the demographic characteristic of the respondents. As Table 1 shown, total 201 respondents have different occupations; 35% are employed, 7% are self-employed, 54% are students, and 4% are others (retired, housewife, and unemployed). Among these 201 respondents, 60% are females. And most participants of our research are young people (132 out of the 201 participants are in age of 19-25). Through analyzing the research results, we can see that the education level of most Taobao users is undergraduate (around 88%), and 84% respondents' salary is below HK\$ 4,000, furthermore half of them even don't have any income. 71.5% of the respondents regard Taobao as the first choice of their online shopping website, and 32% of respondents reported that they had more than 3 years of experience in using Taobao.com. Although Taobao is someone's first choice of online shopping, most of the respondents (43.3%) search for Taobao even not more than 10 times per year.

3.2 Measures

We adopted the measures from previous researches, and then made a little modification of words to let all the measures fit into our research topic and contexts (Taobao.com) Seven-point Likert scales (from strongly disagree (1) to strongly agree (7)) were used to measure most of the variables except product nature. Under Appendix A, Three versions of the questionnaire are attached. In addition, Table 2 (See Appendix C) summarizes all the items as well as their sources. We discuss the every detailed item, which is used to measure each of the variables, as follows:

3.2.1 Sufficiency

We developed three questions for measuring sufficiency of the argument based on Wixom & Todd (2005) and adopted to the use of Taobao.com. Three statements, "The comment sufficiently completed your needs, the comment included all necessary product characteristics that you need, and the comment provided comprehensive information", were used.

3.2.2 Relevance

The relevance of the argument was measured by three items, which were adapted from Cheung, Lee & Rabjohn (2008). Three items, such as “the comment was relevant/ appropriate/ applicable” were used.

3.2.3 Accuracy

We also developed three questions for measuring accuracy of the argument based on Cheung, Lee & Rabjohn (2008) and adopted to the use of Taobao.com. Three statements, such as “The comment was accurate/ reliable/ correct”, were used.

3.2.4 Timeliness

The measurement scale developed for timeliness was based on Wixom & Todd (2005). Two questions were asked, and the scale.

3.2.5 Validity

We developed our own scale to measure Validity of the argument based on Areni (2003). Areni (2003) used three items to demonstrate this construct, such as valid, logical, and sound. We decided to follow Areni’s suggestions by using a three-item scale.

3.2.6 Argument Quality

We adopted three items from Cheung et al. (2009) and one from Wixom & Todd (2005) to measure the argument quality, which is related to the comment that respondents reviewed in Taobao.com.

3.2.7 Product Nature

We have developed a new item according to Lee, Lee & Shin (2011) to measure the product nature. Product nature is divided into two groups: Subjective Products and Objective Products. Respondents were asked to indicate their perception of one product that they previously bought in Taobao.com. According to a passage of introducing product nature, which we put into the questionnaire before Q6, respondents decided which type of product nature their product leans to

be. A five scale ranging from purely objective product (1) to purely subjective product (5) was used.

3.2.8 Sender's Expertise

In terms of sender's expertise, we will see whether it will influence the source credibility or not. Two items were adapted from Cheung, Lee & Rabjohn (2008) to measure the sender's expertise.

3.2.9 Tie Strength

Tie strength was measured using an adapted items from Bansal & Voyer(2000). Three statements, "the relationship with the reviewer is strong, you interacted frequently with the reviewer, and there is likelihood of sharing a personal confidence with the reviewer", were used.

3.2.10 Prior Experience

We developed our own scale to measure prior experience, because our definition of prior experience is significantly different from a lot of previous research papers. In others' researches, prior experience means prior beliefs, knowledge or expectations about the reviewed product or service. Thus when the consumers receive the similar information with their prior belief, knowledge or expectations, they will treat the received information more credible and adopt the information to make subsequent purchase decisions. This definition of prior experience is more about the content of the comment. However in our research, prior experience is more about the one who writes the comment. To measure the prior experience, we developed three items. The first question was asking about whether you have read and used the reviewer's prior comments to help you make purchase decision ,with an answer either yes or no. The remaining two questions were asking about whether the reviewer's prior comments were useful/good or not if you have used the reviewer's comments before.

3.2.11 Source Credibility

Respondents were asked their opinion about the reviewer of the comment that read in Taobao.com, whether the reviewer was reputable/good/ trustworthy/ highly rated by other site participants or not. Four items were used to measure and they were all adapted from Cheung et al. (2009).

3.2.12 Consistency

Consistency is important to the user's perception of the review. If one particular review is consistent or similar with other reviewers, the reader is likely to perceive the credibility of this review to be higher. Two measuring items from Cheung et al. (2009) were adopted to measure the consistency.

3.2.13 Information Usefulness

Information usefulness was measured using three items adapted from Cheung, Lee & Rabjhon (2008). The questions, "the comment was valuable/informative/helpful" were used.

3.2.14 Information Adoption

Information adoption is the final result of the e-WOM. Four questions were used for measuring the information adoption of the respondents. The first question, adapted from Cheung, Lee & Rabjhon (2008), was asking whether the respondents agreed with the opinion suggested from the comment. And the remaining questions, adapted from Cheung et al. (2009), were about whether the comment had some influence or not.

3.3 Data analysis

To analyze the data, our study uses the statistical package for social science (SPSS) 20.0. We use factor analysis to test the discriminant validity of the measurement scales. The measuring items should load higher on its associated variable than on any other variables. The Cronbach alpha is used to assess the internal consistency and reliability of the scale. Besides, multiple regression analysis was also used to test the proposed model.

4. Finding and Results

This section demonstrates the statistic results of our research model and the hypotheses. We firstly assess the discriminant validity and reliability of our measurement scales. Secondly, we do the multiple regression analysis. Finally, we will show our summary of the research results.

4.1 Construct validity and reliability of instrument

To make sure that we use a set of valid and reliable measurement scales, we demonstrate the factor analysis and reliability analysis before the multiple regression analysis. We used factor analysis to analyze the interrelationship among the variables and to refine the scales items. The 39 items which measures the 14 constructs belongs to principal component factor analysis. Because our items were adopted from the previous researches, both Eigenvalues and fixed number of factors were used to refine scales items for further analysis. Finally we got 28 refined items to measure 14 constructs (refer to table 3 of the Appendix C). A promax rotation was also used to enhance our analysis. The factor analysis results are demonstrated in Table 4 of Appendix D with all factor loadings less than 0.3 suppressed. Factor loadings were all higher than 0.5 on the expected factors. Thus, each item loaded higher on its associated construct than on any other construct. According to Hair et al. (1998), if a factor loading is higher than 0.4, it will be considered statistically significant at an alpha level of 0.05 for a sample size of 200. Therefore, applied to our factor analysis results, all the refined items loaded significantly on their own factors.

In terms of the reliability test, we used Cronbach's alpha to analyze the internal consistency of the measurement scales. As can be seen in Table 4 of Appendix D, the Cronbach's alpha were from 0.791 to 0.968, which was greater than 0.7. In other words, the scales used in our research are both valid and reliable.

4.2 Multiple Regression Analysis

We use multiple regression analysis to test the relationship between several independent or predictor variables and the dependent variable. If p-value is less than 0.05, the independent variables will affect the dependent variable (significant level). If not, the relationship does not exist.

4.2.1 Explaining Argument Quality

For the following regression, Argument Quality is the dependent variable and Sufficiency, Relevance, Accuracy, Timeliness, and Validity are the independent variables. This multiple regression is to test Hypothesis 1, 2, 3, 4 and 5:

$$\text{Argument Quality [AQ]} = a + \beta_1 * \text{Sufficiency [S]} + \beta_2 * \text{Relevance [R]} + \beta_3 * \text{Accuracy [A]} + \beta_4 * \text{Timeliness [T]} + \beta_5 * \text{Validity [V]}.$$

The results, shown in Table 5, present support for Hypotheses 1, 3 and 5 as Sufficiency, Accuracy, and Validity are significant predictors of Argument Quality. However, Relevance and Timeliness is insignificant because p-value is over 0.05. Therefore, hypothesis 2 and 4 are not supported. Additionally, the results of R-square ($R^2=0.462$) indicated that 46.2% of the variance in Argument Quality could be explained by Sufficiency, Accuracy, and Validity.

Table 5 Regression Result of Argument Quality

Coefficients^a

Model	Beta	t	Sig.
(Constant)		2.373	.010
Sufficiency	.159	2.208	.014
Relevance	.081	1.039	.150
Accuracy	.162	1.897	.030
Timeliness	.057	.775	.220
Validity	.360	4.452	.000

a. Dependent Variable: Argument Quality

4.2.2 Explaining Source Credibility

In the following regression, Source Credibility is the dependent variable and Tie Strength, Prior Experience, and Sender's Expertise are the independent variables. This regression is to test Hypothesis 6, 7, and 8:

$$\text{Source Credibility [SC]} = a + \beta_1 * \text{Tie Strength [TS]} + \beta_2 * \text{Prior Experience [PE]} + \beta_3 * \text{Sender's Expertise [SE]}.$$

The results, shown in Table 6, present support for all the three Hypotheses 6, 7, and 8 as Tie Strength, Prior Experience, and Sender's Expertise are significant factors of Source Credibility. Moreover, the R-square ($R^2=0.484$) indicated that 48.4% of the variance in Source Credibility could be explained by Tie Strength, Prior Experience, and Sender's Expertise

Table 6 Regression Result of Source Credibility

Coefficients^a

Model	Beta	t	Sig.
(Constant)		3.075	.001
Tie Strength	.286	3.828	.000
Prior Experience	.201	3.268	.001
Sender's Expertise	.338	4.555	.000

a. Dependent Variable: Source credibility

4.2.3 Explaining Information Usefulness

In the third regression, because of the moderating effect of the Product Nature and Consistency that we proposed in our hypothesis part before, Argument Quality, Source Credibility, Argument Quality*Product Nature, and Source Credibility*Consistency are the independent variables. And the dependent variable is the Information Usefulness. This regression is to test Hypothesis 9, 10, 11 and 12:

$$\text{Information Usefulness [IU]} = a + \beta_1 * \text{Argument Quality [AQ]} + \beta_2 * \text{Source Credibility [SC]} + \beta_3 * \text{Argument Quality [AQ]} * \text{Product Nature [PN]} + \beta_4 * \text{Source Credibility [SC]} * \text{Consistency [C]}.$$

The results, shown in Table 7, support for Hypotheses 9, 11 and 12 as Argument Quality, Source Credibility, and Source Credibility*Consistency emerged as significant predictors of Information Usefulness. However, Argument Quality*Product Nature is insignificant because p-value of regression coefficient is larger than 0.05. Therefore, hypothesis 10 is not supported. Additionally, the significant change in R-square ($R^2=0.461$) indicated that 46.1% of the variance in Information Usefulness could be explained by Argument Quality, Source Credibility, and Source Credibility*Consistency.

Table 7 Regression Result of Information Usefulness

Coefficients^a

Model	Beta	t	Sig.
(Constant)		6.678	.000
Argument Quality	.334	4.496	.000
Source credibility	.235	2.265	.013
Argument Quality * Product Nature	.041	.674	.251
Source Credibility * Consistency	.198	1.813	.036

a. Dependent Variable: Information Usefulness

4.2.4 Explaining Information Adoption

In the fourth regression, Information Adoption is the dependent variable and Information Usefulness is the independent variables. This regression is to test Hypothesis 13:

$$\text{Information Adoption [IA]} = a + \beta_1 * \text{Information Usefulness [IU]}.$$

The statistical results, shown in Table 8, support for Hypotheses 13 as Information Usefulness is significant predictors of Information Adoption because its p-value of regression coefficient is smaller than 0.05. Further, the R-square ($R^2=0.561$) indicated that 56.1% of the variance in Information Adoption could be explained by the Information Usefulness.

Table 8 Regression Result of Information Adoption

Coefficients^a

Model	Beta	t	Sig.
(Constant)		4.111	.000
Information Usefulness	.751	15.627	.000

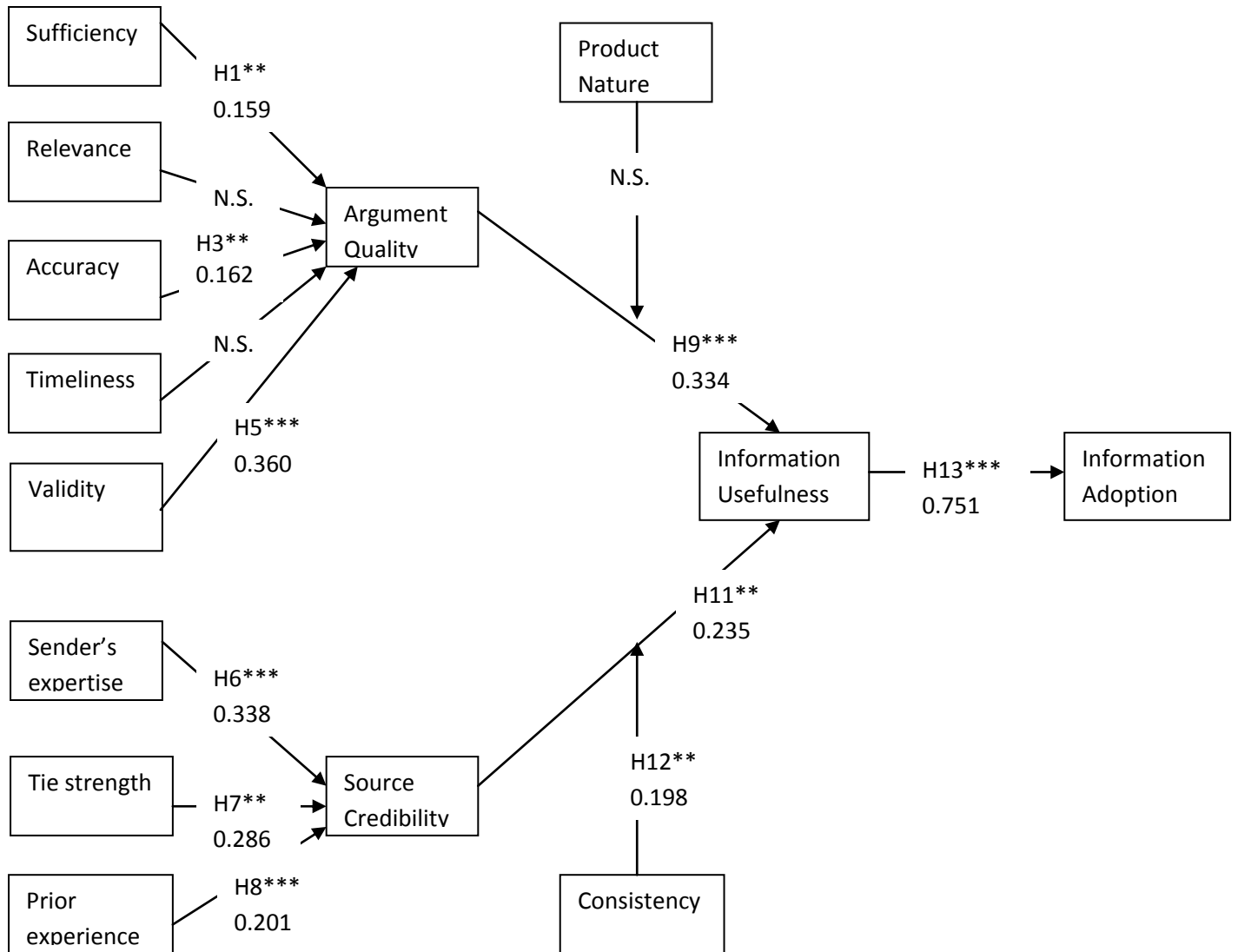
a. Dependent Variable: Information Adoption

4.3 Summary of Results

After the factor analysis and regression analysis, a summary of results is presented in Figure 5.

The model indicates that Information Usefulness ($\beta=0.751$) was a strong determinant of

Information Adoption. Besides, Argument Quality ($\beta=0.334$) is the most significant determinant for Information Usefulness, followed by Source Credibility ($\beta=0.235$) and Source Credibility*Consistency ($\beta=0.198$). Moreover, Validity ($\beta=0.360$) is the most significant antecedent for Argument Quality, followed by Accuracy ($\beta=0.162$) and Sufficiency ($\beta=0.159$). Finally, Sender's Expertise ($\beta=0.338$) is the most significant antecedent for Source Credibility, followed by Tie Strength ($\beta=0.286$) and Prior Experience ($\beta=0.201$). The test results for the whole model are presented in Table 9 (See Appendix E).



Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.001$, N.S. not significant
(Figure 5)

5. Discussion

This research applied a modified Information Acceptance Model to find out factors determining e-WOM adoption in Taobao.com. The statistical results revealed that argument quality and the source credibility affect the information usefulness, and finally affect information adoption, which is in line with the original model. However, some of the detailed determinants and moderators are found to be insignificant. We will discuss each relationship in the following.

From the research results, it shows that sufficiency, accuracy and validity are all significant antecedents to affect the argument quality. If the reviewer could provide more sufficient information to support his or her argument, the perceived argument quality will be higher. The reason is that if buyers could get plenty of information from one piece of e-WOM, the argument will be a well-founded argument to the message receiver. This result is consistent with the research by Xu & Koronios (2004/2005). Secondly, only by applying accurate e-WOM can the reviewer create a high quality argument to the receiver. If some of the information in the argument is false, the receiver will take it as a low quality argument even though the argument conclusion is right. This result is different from the research result of Cheung, Lee & Rabjohn (2008), which showed that accuracy is an insignificant antecedent to determine argument quality. As to the validity of the argument, higher validity generates higher argument quality. A valid argument is sound and logical. As we mentioned before, validity highlights the difference between information quality and argument quality. However few prior studies listed validity as one of the factors to determine argument quality, but in our research this antecedent is found to be the most significant factor compared to sufficiency and accuracy (refers to the coefficients of Figure 5). We could imagine that if the argument is confusing and misunderstood, the quality will be low even though if it contains sufficient and accurate information.

According to the result, sender's expertise, tie strength, prior experience are all significant to determine source credibility. And the strength of significance for the three antecedents is all found to be very high. If the reviewer is perceived by the message receiver to be knowledgeable about the reviewed product, the receiver will trust the information more. Because of the expertise of the sender, the receiver will perceive the e-WOM to be more credible and reliable. However, sender's expertise is found to be insignificant to determine source credibility in research by Cheung, Lee & Rabjohn (2008). It may due to the difference of research context for these two

researches. Secondly, if the relationship of the sender and receiver is close, namely, the tie strength between them is strong, high source credibility will be gained. Just like the case of face to face relationship, in the virtual community, once the relationship is set up, people tend to seek information from strong social ties. And they will trust the information more from strong tie relationships than weak tie relationship. This result of our study confirms the research by Bansal & Voyer (2000). In this study, we also find that the better prior experience with the reviewer, the more credible the message receiver will perceive the source to be. If the buyer has used the review of message sender before and find it matches with what the reviewer said, and then he or she will put more trust on the sender the next time. It is worthy of mentioning that few previous studies have identified this kind of prior experience as a factor to determine the source credibility. For all the three important antecedents of source credibility in our research, sender's expertise plays the dominant role in the relationship (with the coefficient of 0.338), followed by tie strength and prior experience with the coefficients of 0.286 and 0.201 respectively.

Additionally, the moderating effect of recommendation consistency exists. When a piece of e-WOM is more consistent with other e-WOM, the same source credibility will generate more perceived information usefulness. Namely, the relationship between source credibility for one particular message and information usefulness will be stronger if that piece of review shows a consistency with other online reviews. It is also found by Zhang & Watts (2003) that the effect of source credibility for one particular message on information usefulness will be higher if the online review is consistent with other reviews.

According to the findings, the relevancy is found to be a statistically insignificant antecedent to the argument quality. However, this result is different from the research results by Cheung, Lee & Rabjohn (2008). The result in this study may due to that the intention of the buyers themselves is not clear when they are seeing the online reviews. Instead of searching reviews for one particular product, they may just reading lots of reviews and then integrate all the information adopted and finally make a purchase decision about what and which product they are going to buy. So when they meet with a review, they may take the relevancy not that important.

Timeliness is also an insignificant antecedent determining the argument quality in our study, which is consistent with the research result by Cheung, Lee & Rabjohn (2008). When people are

browsing the online reviews, they may neglect timeliness of the message. We think because of the lack of information of receivers, they could not distinguish which is exactly updated information and which is not. As time goes on, they are accustomed to read the information without paying attention to the timeliness of one particular message. In addition, the most content in e-WOM is just some permanent viewpoints of the message senders' about the evaluated product. That means as long as the evaluated product remains unchanged, no matter how much time passed, the comment always stands for the sender's opinion. And receivers do not care whether the comment is same with ones a few years ago. For instance, a review said "the material of this T-shirt was bad and uncomfortable, especially after washing it after the first time". This review does not give additionally information about the timeliness to the buyer, but the buyer may still think this argument to be a good quality argument.

The moderating effect of product nature is also insignificant. Namely, there is not much difference between objective products and subjective products in terms of the effect on the relationship between argument quality and information usefulness. That means, no matter the product leans to objective product or subjective product, people think the information to be more useful as long as the argument quality is higher. The reason of this result may be that not only objective products could be described by every standard, such as the capacity of a hard disk and the length of battery power, but also subjective product could have another method to describe. The unified standard of objective product could make it easier for receiver to evaluate a product depending on the information the sender provides. While evaluating subjective product, the sender could use storytelling, self-experience to make the receiver think that the comment is easy to understand and useful. Another reason may be there is an unclear line between objective goods and subjective goods, as a result, people do not consider too much about the nature of the product when they are reading the reviews.

6. Implication

This study has both theoretical and practical implications. Those implications could be applied to conceptual and empirical areas under the contexts of online product reviews.

6.1 Theoretical implication

This research can provide more understanding of the existing e-WOM research in many ways. This research is based on a modified IAM by Sussman & Siegal (2003). This model demonstrates the factors affecting people to adopt information. Current researches applied IAM to study online behaviors. Our research identifies five determinants of argument quality, namely, sufficiency, relevance, accuracy, timeliness and validity. The relevance and timeliness is not statistically supported for this research under the context of e-WOM in Taobao.com. However, one model may have different results under different context. Therefore, future researches could examine effect of relevance and timeliness on argument quality again. Additionally, future research could also explore other different factors that influences argument quality, such as comprehensiveness (Cheung, Lee & Rabjohn, 2008), understandability (Srinivasan, 1985) etc. In terms of the antecedents influencing source credibility including sender's expertise, tie strength, prior experience, they are supported in our research. However, in addition to the sender's expertise, it could be inferred that the receiver's expertise is also a possible antecedent to influence the source credibility. As to the moderator effect of product nature, it is not statistically supported. But it should be explored whether the product nature have other effect on the information usefulness under different conditions.

6.2 Practical implication

The findings of this research can give some suggestion to administrators of various online discussion forums in order to help them better manage the information in order to present useful information, as well as inspirations to the online stores to attract more customers, increasing their product sales and creating a reputable e-WOM. If the information contained in the online reviews could be sufficient, accurate, and valid, the information will be found to be more useful, which may have high possibility of adoption. When the administrators design their systems, they could have a feedback mechanism to let buyers evaluate the e-WOM after reading it. By this way, the reviews with high degree of sufficiency, accuracy and validity will have a highly rated score,

and the buyers will feel more convenient and time-saving when browsing the reviews. Moreover, if the tie strength with the reviewer is strong, the expertise of the reviewer is high, and the prior experience is perceived to be good, the e-WOM will be regarded to be more credible. So online shopping websites could add more social networking features in their discussion forum to help forum participants to set up closer relationships with each other. Additionally, the results reveal that the recommendation consistency with other reviews could also make one piece of e-WOM more credible. From the view of online stores, if the stores find that many of the reviews have a consistent opinion towards one particular product, they had better pay attention to the opinion. For example, if the opinion is talking about the delay of logistic, then the store will look into the logistic part and try to make improvements. From another point of view, it could also provide an implication for buyers. When they are reading the reviews, they could compare the consistency between different review sources to make more efficient purchase decisions. All this together, give implications to the administrator to better manage the review, help the online stores to create a good online reputation and also help buyers to get useful information for efficiently.

7. Limitation

For this study, we should also consider several limitations. At first, even though the sample size is not too small (N=201), the sample is not representative. The reason is that the sample of this research is not randomly selected. The respondents who were younger, from Mainland China and university students were overrepresented in our sample. A better sampling technique should be used to obtain more representative data. Secondly, except the discussed antecedents, some antecedents affecting the e-WOM adoption were not included and measured in our research, for example, a factor which would influence the source credibility, the receiver's expertise. If the receiver has much higher expertise, he or she will know more about the products in terms of the prices, product features, and other suppliers. So, for one piece of same e-WOM, a knowledgeable receiver would show less trust to the message than a normal receiver who does not know much about the product. A more extensive model could be developed to extend this study. Thirdly, the respondents are all users of Taobao.com website. Therefore, this research only represents one type of online consumer communities. Attentions should be paid if applying the findings to other online communities.

8. Conclusion

Under the context of e-WOM in Taobao.com, the result of our research reveals that, e-WOM adoption mainly depends on the argument quality message senders can provide, as well as the source credibility receivers perceived. In this research, the argument quality is closely related with sufficiency, accuracy, and validity, while the source credibility is determined by sender's expertise, tie strength, and prior experiences. And there is also moderating effect of recommendation consistency on the relationship between source credibility and information usefulness.

Reference

- Areni, C. S. (2003). The Effects of Structural and Grammatical Variables on Persuasion: An Elaboration Likelihood Model Perspective. *Psychology & Marketing*, 20(4), 349–375.
- Bansal, H.S., & Voyer, P.A. (2000). Word-of-mouth processes within a service purchase decision context. *Journal of Service Research*, 3(2), 166-177.
- Bhattacharjee, A., & Sanford, C. (2006). Influence processes for information technology acceptance: an elaboration likelihood model. *MIS Quarterly*, 30 (4), 805-25.
- Brackstone, G. (1999). Managing Data Quality in a Statistical Agency. *Survey Methodology*, 25, 139-149.
- Bristol, Julia M. (1990). Enhanced Explanations of Word of Mouth Communications: The Power of Relationships. *Research in Consumer Research*, 14, 350-362.
- Brown, J.J. ,& Reingen, P.H. (1987). Social Ties and Word-of Mouth Referral Behavior. *Journal of consumer Research*, 14, 350-362.
- Cheung, M.K., Lee, M.K.O., & Rabjohn, N. (2008). The Impact of Electronic Word of Mouth: The Adoption of Online Opinions in Online Consumer Communities. *Internet Research*, 18(3), 229-247.
- Cheung, M., Luo, C., Sia, C., & Chen, H. (2009). Credibility of electronic Word-of-Mouth: Informational and normative determinants of on-line consumer recommendations. *International Journal of Electronic Commerce*, 13(4), 9-38.
- Citrin, A.V. (2001), “Information quality perceptions: the role of communication media characteristics”, *Information and Learning*, 17, 1-143.
- Davis, F.D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
- DeLone, W.H., & McLean, E.R. (2003). The DeLone and McLean model of information systems success: a ten-year update. *Journal of Management Information Systems*, 19(4), 9-30.

- Duhan, D.F., Johnson, S.D., Wilcos, J.B., & Harrell, G.D.(1997). Influences on Consumer Use of Word-of-Mouth Recommendation Sources. *Journal of the Academy of Marketing of Marketing Science*, 25(4), 283-295.
- Dunk, A.S. (2004), Product life cycle cost analysis: the impact of customer profiling, competitive advantage, and quality of IS information. *Management Accounting Research*, 15(4), 401-414.
- Frenzen, J.K., & Davis, H.L.(1990). Purchasing behavior in embedded markets. *Journal of Consumer Research*, 17, 1-12.
- Fulkerson, R. (1996). Teaching the argument in writing. Urbana, IL: National Council of Teachers of English.
- Goldsmith, R.E. (2006). Electronic word-of-mouth. in M. Khosrow-Pour (Ed.), *Encyclopedia of E-Commerce, E-Government and Mobile Commerce* (pp. 408-12). Hershey, PA: Idea Group Publishing.
- Goldsmith, R.E. ,& Horowitz, D. (2006). Measuring motivations for online opinion seeking. *Journal of Interactive Advertising*, 6(2), 1-16.
- iResearch Consulting Group (2006), China Internet Community User Development Report 2006, available at www.iresearch.com.cn/html/online_community/detail_free_id_36782.html
- Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C. (1998) *Multivariate Data Analysis with Readings*. Prentice-Hall, New Jersey.
- Lee,J., Lee, J.-N., & Shin,H.(2011). The long tail or the short tail: The category-specific impact of eWOM on sales distribution. *Decision Support Systems*, 51 ,466–479.
- Loshin, D. (2006). Master data and master Data Management: An Introduction. Retrieved from: <http://www.dataflux.com/Resources/>
- Madu, C.N., & Madu, A.A. (2002). Dimensions of e-quality. *International Journal of Quality and Reliability Management*, 19(3), 246-58.

- McKnight, D.H., & Kacmar, C.J. (2007). *Factors and Effects of Information Credibility: Proceedings of the Ninth International Conference on Electronic Commerce*. Minneapolis, MN, USA, ACM.
- Mitchell, A.A., & Dacin, P.A. (1996). The assessment of alternative measures of consumer expertise. *Journal of Consumer Research*, 23, 219-239.
- Moers, F.(2005). Discretion and bias in performance evaluation: the impact of diversity and subjectivity. *Accounting . Organizations and Society*,30(1),67-80.
- Money, R. B., Mary, C.G., & John, L.G. (1998). Explorations of National Culture and Word-of-Mouth Referral Behavior in the Purchase of Industrial Services in the United and Japan. *Journal of Marketing*, 62, 76-87.
- Nah, F.F.-H, & Davis, S. (2002). HCI research issues in e-commerce. *Journal of Electronic Commerce Research*, 3 (3), 98-113.
- Petty, R.E., & Cacioppo, J.T. (1986). *Communication and Persuasion: Central and Peripheral Routes to Attitude Change*. New York, NY: Springer-Verlag.
- Pénard, T., & Poussing, N. (2010). Internet Use and Social Capital: The Strength of Virtual Ties. *Journal of Economic Issues*, 44(3), 569-595.
- Srinivasan, A. (1985), Alternative measures of systems effectiveness: associations and implications, *MIS Quarterly*, 9(3), 243-253.
- Steffes, E.M., & Burgee. (2009). Social ties and online word of mouth. *Internet Search*, 19(1), 42-59.
- Sussman, S.W., & Siegal, W.S. (2003). Informational influence in organizations: an integrated approach to knowledge adoption. *Information Systems Research*, 14(1), 47-65.
- Vandenbosch, B., & Higgins, C. (1996). Information Acquisition and Mental Models: An Investigation into the Relationship between Behavior and Learning. *Information Systems Research*, 7(2), 198-214.

Westbrook, R. A. (1987). Product/Consumption-Based Affective Responses and Postpurchase Processes. *Journal of Marketing Research*, 24, 258-270.

Xu, H., & Koronios, A .(2004/2005). Understanding Information Quality In E-Business. *The Journal of Computer Information Systems*, 45(2),73-82.

Zhang, W., & Watts, S. (2003). Knowledge Adoption in Online Communities of Practice. *International Conference on Information Systems*, 24, 96–109.

Appendix A

Hello! We are two final year students studying Information Systems & e-Business Management in Hong Kong Baptist University. We are now conducting a survey about product comments in Taobao.com. Please kindly spend about 5 minutes to answer the following questions. The information you provided will be used for academic purpose only.

If you have any enquiry, please feel free to contact Miss. Susan Wang via email: 09050221@hkbu.edu.hk or Miss. Wendy Chen via email: 09050515@hkbu.edu.hk . Thank you for your cooperation.

Part A. The Usage and Experience of Taobao.com

Please provide your information by ticking the appropriate box.

1. Have you ever used Taobao.com before?

Yes No (If you choose No, it is the end of the questionnaire, Thank you!)

2. Taobao.com is your first choice of shopping online.

Yes No

3. How long have you used Taobao.com to go shopping online?

Less than 1 year 1 year 2 years 3 years More than 3 years

4. How many times do you search on Taobao.com every year?

1-10 11-20 21-30 31-40 41-50 More than 50

Part B. Product Nature

Please recall the last time you planned to buy a product from Taobao.com and answer Q5 & Q6.

5. What was the product? _____

According to the product you write down above, please read the following information and then answer question below.

When evaluating a product, customers may perceive its attributes using two types of evaluation standards: objective versus subjective standards.

Objective Product: There is an accepted ranking-based standard for evaluating this kind of product.

Normally some attributes like capacity, warranty, power and size are treated as objective standards. E.g. with other attributes such as price being the same, a 2 G MP3 player is better than a 1 G MP3 player.

Subjective Product: Customers focus on their personal preference when evaluating a product. Attributes like color, design and style are treated subjective standards.

6. Would you consider the product that you put down in the Q 5 lean to be an objective product or a subjective product (please circle your choice)?

Purely objective product	1	2	3	4	5	Purely subjective product
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Part C. Quality of The Argument

Please recall one piece of comment you have read in Taobao.com when you plan to buy the product in Q5 and answer the following question by circling the appropriate number.

	Strongly disagree					Strongly agree	
7. The comment sufficiently completed your needs.	1	2	3	4	5	6	7
8. The comment included all necessary product characteristics that you need.	1	2	3	4	5	6	7
9. The comment provided comprehensive information.	1	2	3	4	5	6	7
10. The comment was relevant.	1	2	3	4	5	6	7
11. The comment was appropriate.	1	2	3	4	5	6	7
12. The comment was applicable.	1	2	3	4	5	6	7
13. The comment was accurate.	1	2	3	4	5	6	7
14. The comment was reliable.	1	2	3	4	5	6	7
15. The comment was correct.	1	2	3	4	5	6	7

16. The comment provided the most current information.	1	2	3	4	5	6	7
17. The comment provided the most recent information.	1	2	3	4	5	6	7
18. The argument in the comment was valid.	1	2	3	4	5	6	7
19. The argument in the comment was logical.	1	2	3	4	5	6	7
20. The argument in the comment was sound.	1	2	3	4	5	6	7
21. The argument in the comment was convincing.	1	2	3	4	5	6	7
22. The argument in the comment was strong.	1	2	3	4	5	6	7
23. The argument in the comment was persuasive.	1	2	3	4	5	6	7
24. In general, the argument in the comment provided me with high-quality information.	1	2	3	4	5	6	7
25. The comment was consistent with other reviews.	1	2	3	4	5	6	7
26. The comment was similar to other reviews.	1	2	3	4	5	6	7

Part D. Information Usefulness and Adoption

Please answer the following question by circling the appropriate number.

	Strongly disagree						Strongly agree
27. The comment was valuable.	1	2	3	4	5	6	7
28. The comment was informative.	1	2	3	4	5	6	7
29. The comment was helpful.	1	2	3	4	5	6	7
30. You agreed with the opinion suggested	1	2	3	4	5	6	7

from the comment.								
31. Information from the comment contributed to your knowledge of discussed product/service.	1	2	3	4	5	6	7	
32. The comment made it easier for you to make purchase decision.	1	2	3	4	5	6	7	
33. The comment enhanced your effectiveness in making purchase decision.	1	2	3	4	5	6	7	

Part E. Source Credibility

For the following questions, they are about the reviewer of the piece of the comment you have recalled for Part C & Part D. Please answer the following question by circling the appropriate number or ticking the appropriate box.

	Strongly disagree							Strongly agree
34. The reviewer was knowledgeable in evaluating products.	1	2	3	4	5	6	7	
35. The reviewer was expert in evaluating products.	1	2	3	4	5	6	7	
36. The relationship with the reviewer is strong.	1	2	3	4	5	6	7	
37. You interacted frequently with the reviewer.	1	2	3	4	5	6	7	
38. There is likelihood of sharing a personal confidence with the reviewer.	1	2	3	4	5	6	7	
39. You believe the reviewer was reputable.	1	2	3	4	5	6	7	
40. You believe reviewer was highly rated by other site participants.	1	2	3	4	5	6	7	
41. You believe reviewer was good.	1	2	3	4	5	6	7	
42. You believe reviewer was trustworthy.	1	2	3	4	5	6	7	

43. You have read and used the reviewer's prior comments to help you make purchase decision (please tick your choice).							
<input type="checkbox"/> Yes <input type="checkbox"/> No							
	Strongly disagree						Strongly agree
44. If yes, the reviewer's prior comments were useful.	1	2	3	4	5	6	7
45. If yes, the reviewer's prior comments were good.	1	2	3	4	5	6	7

Part F. Personal Information

Please provide your information by ticking the appropriate box.

46. Please tick your gender.			
<input type="checkbox"/> Male <input type="checkbox"/> Female			
47. Please tick your age.			
<input type="checkbox"/> 18 or below	<input type="checkbox"/> 19-25	<input type="checkbox"/> 26-35	<input type="checkbox"/> 36 or above
48. Please tick your education level.			
<input type="checkbox"/> Below secondary school	<input type="checkbox"/> Secondary school	<input type="checkbox"/> Undergraduate	<input type="checkbox"/> Postgraduate <input type="checkbox"/> Above
49. Please tick your occupation.			
<input type="checkbox"/> Employed	<input type="checkbox"/> Self-employed	<input type="checkbox"/> Student	<input type="checkbox"/> Others (retired, housewife, unemployed)
50. Please tick your monthly income.			
<input type="checkbox"/> No income	<input type="checkbox"/> Below HK\$4,000	<input type="checkbox"/> HK\$4,000 - HK\$7,499	<input type="checkbox"/> HK \$7,500 - HK\$14,999
<input type="checkbox"/> HK\$10,000 - HK\$14,999	<input type="checkbox"/> HK\$15,000 - HK\$19,999	<input type="checkbox"/> Over HK\$19,999	

This is the end of the questionnaire.

Thank you !

您好！我們是來自香港浸會大學資訊系統及電子商務管理專業的兩位學生。我們正在就淘寶網的線上評論做一個問卷調查。請您用大概5分鐘時間完成以下問題。您所提供的一切信息都只將作為學術用途。

如果您有任何疑問或者查詢，請隨時聯繫王小姐（09050221@hkbu.edu.hk）或陳小姐（09050515@hkbu.edu.hk）。感謝您的合作！

第一部份: 淘寶網的使用及相關經驗

請勾選您認為適當的答案。

1. 您是否使用過淘寶網？

是 否 (如果您選擇否，本問卷結束，謝謝您！)

2. 淘寶網是您網上購物的首選。

是 否

3. 您使用淘寶網購物多長時間了？

少於一年 一年 兩年 三年 多於三年

4. 您一年之內會使用淘寶多少次？

1-10 11-20 21-30 31-40 41-50 多於 50

第二部份: 產品屬性

請回憶您上一次計畫在淘寶網中購物的經歷，並回答第五題及第六題。

5. 您想購買的產品是？ _____

請根據您在上題中寫下的產品，閱讀下列信息並回答第 6 題。

當顧客在評估一個產品時，他/她會把產品的特徵大體分成兩類：客觀產品和主觀產品。

客觀產品：通常這類產品的屬性像容量、保修期、電力和尺寸屬於客觀的評價標準。因為對於這類產品的屬性一般會有一個普遍認同的評價標準。例如，在所有其他特徵（價錢等）相同的情況下，一個 2G 的 MP3 播放機比一個 1G 的 MP3 播放機要好。

主觀產品：對於這類產品的特徵，顧客通常都比較注重個人的喜好。像顏色、設計和風格這些特性都屬於主觀特徵。

6.您認為您在第 5 題寫的產品偏向於客觀產品還是主觀產品（請您圈出您認為合適的數字）？

純客觀產品	1	2	3	4	5	純主觀產品
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第三部分：論證的品質

請回憶您在淘寶購買第 5 題中提到的產品時看到的一條評論，並圈出您認為合適的數字。

	非常不同意					非常同意	
7. 這條評論提供了足夠的信息以滿足您的需要。	1	2	3	4	5	6	7
8. 這條評論包含了所有您想知道的產品特徵。	1	2	3	4	5	6	7
9. 這條評論對您所想購買的產品給予了一個綜合的評價。	1	2	3	4	5	6	7
10. 這條評論和產品信息是切題的。	1	2	3	4	5	6	7
11. 這條評論提供的信息是合適的。	1	2	3	4	5	6	7
12. 這條評論對您這次的購買行動是適用的。	1	2	3	4	5	6	7
13. 這條評論提供的信息是準確的。	1	2	3	4	5	6	7
14. 這條評論裡的信息是可靠的。	1	2	3	4	5	6	7
15. 這條評論的信息是正確的。	1	2	3	4	5	6	7
16. 這條評論提供了最新的信息。	1	2	3	4	5	6	7
17. 這條評論提供了最近的信息。	1	2	3	4	5	6	7
18. 這條評論裡的論證是有根據的。	1	2	3	4	5	6	7

19. 這條評論裡的論證是合邏輯的。	1	2	3	4	5	6	7
20. 這條評論裡的論證是合理的。	1	2	3	4	5	6	7
21. 這條評論裡的論證是有說服力的。	1	2	3	4	5	6	7
22. 這條評論裡論證的說服力很強。	1	2	3	4	5	6	7
23. 這條評論裡的論證是令人信服的。	1	2	3	4	5	6	7
24. 整體上，這條評論裡的論證給您提供了高品質的信息。	1	2	3	4	5	6	7
25. 這條評論與其他評論是一致的。	1	2	3	4	5	6	7
26. 這條評論與其他評論相似。	1	2	3	4	5	6	7

第四部分：信息有用性及其採納

請圈出您認為合適的數字。

	非常不同意							非常同意
27. 這條評論是有價值的。	1	2	3	4	5	6	7	
28. 這條評論給您提供了很多有用的信息。	1	2	3	4	5	6	7	
29. 這條評論是有幫助的。	1	2	3	4	5	6	7	
30. 您同意這條評論中的見解。	1	2	3	4	5	6	7	
31. 這條評論中的信息對您關於所討論的產品/服務的認識有貢獻。	1	2	3	4	5	6	7	
32. 這條評論讓您做購買決定變得更加容易。	1	2	3	4	5	6	7	
33. 這條評論增強了您做購買決定的有效性。	1	2	3	4	5	6	7	

第五部分：來源可靠性

以下的問題是關於您在第三部分和第四部分所看到的“這條評論”的作者。請圈出您認為合適的數字或者勾選您認為合適的答案。

	非常不 同意						非常 同意
34. 這位評論者在評價產品方面有一定知識。	1	2	3	4	5	6	7
35. 這位評論者在評價產品方面是一個專家。	1	2	3	4	5	6	7
36. 您與這位評論者的關係很緊密。	1	2	3	4	5	6	7
37. 您經常與這位評論者溝通交流。	1	2	3	4	5	6	7
38. 您有可能會與這位評論者分享一些私人的事情。	1	2	3	4	5	6	7
39. 您認為這位評論者有知名度。	1	2	3	4	5	6	7
40. 您認為網站其他參與者給予這位評論者很高的評價。	1	2	3	4	5	6	7
41. 您認為這位評論者是好的。	1	2	3	4	5	6	7
42. 您認為這位評論者值得信賴。	1	2	3	4	5	6	7
43. 您有看過並且採用過這位評論者以前的評論來幫助你做購買決定（請勾選您的答案）。							
<input type="checkbox"/> 有 <input type="checkbox"/> 沒有 (請跳到 46 題)							
	非常不 同意						非常 同意
44. 如果您 43 題的答案為“有”，這位評論者以前的評論是有用的。	1	2	3	4	5	6	7
45. 如果您 43 題的答案為“有”，這位評論者之前的評論是好的。	1	2	3	4	5	6	7

第六部分：個人信息

請勾選您認為合適的答案。

46. 請勾選您的性別。

男 女

47. 請勾選您的年齡。

18 或以下 19-25 26-35 36 或以上

48. 請勾選您的教育程度。

高中以下 高中 本科 研究生 研究生以上

49. 請勾選您的職業。

雇員 自主創業 學生 其它 (退休, 家庭主婦, 無業)

50. 請勾選您的月收入。

無收入 HK\$4,000 以下 HK\$4,000 - HK\$7,499 HK\$7,500 - HK\$11,999
 HK\$10,000 - HK\$14,999 HK\$15,000 - HK\$19,999 HK\$ 19,999 以上

問卷結束。

感謝您的參與!

您好！我们是来自香港浸会大学资讯系统及电子商务管理专业的两位学生。我们正在就淘宝网的在线评论做一个问卷调查。请您用大概 5 分钟时间完成以下问题。您所提供的一切信息都只将作为学术用途。

如果您有任何疑问或者查询，请随时联系王小姐（09050221@hkbu.edu.hk）或陈小姐（09050515@hkbu.edu.hk）。感谢您的合作！

第一部份：淘宝网的使用及相关经验

请勾选您认为适当的答案。

1. 您是否使用过淘宝网？

是 否（如果您选择否，本问卷结束，谢谢您！）

2. 淘宝网是您网上购物的首选。

是 否

3. 您使用淘宝网购物多长时间了？

少于一年 一年 两年 三年 多于三年

4. 您一年之内会使用淘宝多少次？

1-10 11-20 21-30 31-40 41-50 多于 50

第二部份：产品属性

请回忆您上一次计划在淘宝网中购物的经历，并回答第五题及第六题。

5. 您想购买的产品是？ _____

请根据您在上题中写下的产品，阅读下列信息并回答第 6 题。

当顾客在评估一个产品时，他/她会把产品的特征大体分成两类：客观产品和主观产品。

客观产品：通常这类产品的属性像容量、保修期、电力和尺寸属于客观的评价标准。因为对于这类产品的属性一般会有一个普遍认同的评价标准。例如，在所有其他特征（价钱等）相同的情况下，一个 2G 的 MP3 播放器比一个 1G 的 MP3 播放器要好。

主观产品：对于这类产品的特征，顾客通常都比较注重个人的喜好。像颜色、设计和风格这些特性都属于主观特征。

6. 您认为您在第 5 题写的产品偏向于客观产品还是主观产品（请您圈出您认为合适的数字）？

纯客观产品	1	2	3	4	5	纯主观产品
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第三部分：论证的质量

请回忆您在淘宝购买第 5 题中提到的产品时看到的一条评论，并圈出您认为合适的数字。

	非常不同意					非常同意	
7. 这条评论提供了足够的信息以满足您的需要。	1	2	3	4	5	6	7
8. 这条评论包含了所有您想知道的产品特征。	1	2	3	4	5	6	7
9. 这条评论对您所想购买的产品给予了一个综合的评价。	1	2	3	4	5	6	7
10. 这条评论和产品信息是切题的。	1	2	3	4	5	6	7
11. 这条评论提供的信息是合适的。	1	2	3	4	5	6	7
12. 这条评论对您这次的购买行动是适用的。	1	2	3	4	5	6	7
13. 这条评论提供的信息是准确的。	1	2	3	4	5	6	7
14. 这条评论里的信息是可靠的。	1	2	3	4	5	6	7
15. 这条评论的信息是正确的。	1	2	3	4	5	6	7
16. 这条评论提供了最新的信息。	1	2	3	4	5	6	7
17. 这条评论提供了最近的信息。	1	2	3	4	5	6	7
18. 这条评论里的论证是有根据的。	1	2	3	4	5	6	7

19. 这条评论里的论证是合逻辑的。	1	2	3	4	5	6	7
20. 这条评论里的论证是合理的。	1	2	3	4	5	6	7
21. 这条评论里的论证是有说服力的。	1	2	3	4	5	6	7
22. 这条评论里论证的说服力很强。	1	2	3	4	5	6	7
23. 这条评论里的论证是令人信服的。	1	2	3	4	5	6	7
24. 整体上，这条评论里的论证给您提供了高品质的信息。	1	2	3	4	5	6	7
25. 这条评论与其他评论是一致的。	1	2	3	4	5	6	7
26. 这条评论与其他评论相似。	1	2	3	4	5	6	7

第四部分：信息有用性及其采纳

请圈出您认为合适的数字。

	非常不同意						非常同意
27. 这条评论是有价值的。	1	2	3	4	5	6	7
28. 这条评论给您提供了很多有用的信息。	1	2	3	4	5	6	7
29. 这条评论是有帮助的。	1	2	3	4	5	6	7
30. 您同意这条评论中的见解。	1	2	3	4	5	6	7
31. 这条评论中的信息对您关于所讨论的产品/服务的认识有贡献。	1	2	3	4	5	6	7
32. 这条评论让您做购买决定变得更加容易。	1	2	3	4	5	6	7
33. 这条评论增强了您做购买决定的有效性。	1	2	3	4	5	6	7

第五部分：来源可靠性

以下的问题是关于您在第三部分和第四部分所看到的“这条评论”的作者。请圈出您认为合适的数字或者勾选您认为合适的答案。

	非常不同意							非常同意
34. 这位评论者在评价产品方面有一定知识。	1	2	3	4	5	6	7	
35. 这位评论者在评价产品方面是一个专家。	1	2	3	4	5	6	7	
36. 您与这位评论者的关系很紧密。	1	2	3	4	5	6	7	
37. 您经常与这位评论者沟通交流。	1	2	3	4	5	6	7	
38. 您有可能会与这位评论者分享一些私人的事情。	1	2	3	4	5	6	7	
39. 您认为这位评论者有知名度。	1	2	3	4	5	6	7	
40. 您认为网站其他参与者给予这位评论者很高的评价。	1	2	3	4	5	6	7	
41. 您认为这位评论者是好的。	1	2	3	4	5	6	7	
42. 您认为这位评论者值得信赖。	1	2	3	4	5	6	7	
43. 您有看过并且采用过这位评论者以前的评论来帮助你做购买决定（请勾选您的答案）。								
<input type="checkbox"/> 有	<input type="checkbox"/> 没有（请跳到 46 题）							
	非常不同意							非常同意
44. 如果您 43 题的答案为“有”的话，这位评论者以前的评论是有用的。	1	2	3	4	5	6	7	
45. 如果您 43 题的答案为“有”的话，这位评论者之前的评论是好的。	1	2	3	4	5	6	7	

第六部分：个人信息

请勾选您认为合适的答案。

46. 请勾选您的性别。

男 女

47. 请勾选您的年龄。

18 岁以下 19-25 26-35 36 或以上

48. 请勾选您的教育程度。

高中以下 高中 本科 研究生 研究生以上

49. 请勾选您的职业。

雇员 自主创业 学生 其它（退休，家庭主妇，无业）

50. 请勾选您的月收入。

无收入 RMB 4,000 以下 RMB4,000 - RMB7,499

- RMB9,999

RMB10,000 - RMB14,999 RMB15,000 - RMB19,999

19,999 以上

问卷结束。

感谢您的参与！

Appendix B

Table 1 Demographic Statistics of Respondents

Measures (Sample size=201)	Value	Frequency	Percentage
Gender	Female	120	60.3
	Male	79	39.7
Age	Below 19	0	0
	19-25	132	66.0
	26-35	39	19.5
	36 or above	29	14.5
Education level	Below secondary school	1	0.5
	Secondary school	9	4.5
	Undergraduate	175	88.4
	Postgraduate or above	13	6.6
Occupation	employed	70	35.2
	Self-employed	14	7.0
	student	108	54.3
	Others(retired, housewife, unemployed)	7	3.5
Monthly income	No income	83	41.3
	Below HK\$4,000	86	42.8
	HK\$4,000-HK\$7,499	20	10.0
	HK\$7,500-HK\$9,999	4	2.0

	HK\$10,000-HK\$14,999	6	3.0
	HK\$15,000-HK\$19,999	1	0.5
	Over HK\$19,999	1	0.5
Taobao.com is your first choice of shopping online	Yes	143	71.5
	No	57	28.5
How long have you used Taobao.com to go shopping online?	Less than 1 year	33	16.6
	1 year	31	15.6
	2 years	47	23.6
	3 years	24	12.1
	More than 3 years	64	32.2
Measures (Sample size=201)	Value	Frequency	Percentage
How many times do you search on Taobao.com every year?	1-10	87	43.3
	11-20	34	16.9
	21-30	25	12.4
	31-40	11	5.5
	41-50	7	3.5
	More than 50	37	18.4

Appendix C

Table 2 Measurement Items

Factor	Items	Source
Sufficiency [S]	[S1] The comment sufficiently completed your needs.	Wixom and Todd (2005)
	[S2] The comment included all necessary product characteristics that you need.	
	[S3] The comment provided comprehensive information.	
Relevance [R]	[R1] The comment was relevant.	Cheung, Lee and Rabjhon (2008)
	[R2] The comment was appropriate.	
	[R3] The comment was applicable.	
Accuracy [A]	[A1] The comment was accurate.	Cheung, Lee and Rabjhon (2008)
	[A2] The comment was reliable.	
	[A3] The comment was correct.	
Timeliness [T]	[T1] The comment provided the most current information.	Wixom and Todd (2005)
	[T2] The comment provided the most recent information.	
Validity [V]	[V1] The argument in the comment was valid.	Areni (2003)
	[V2] The argument in the comment was logical.	
	[V3] The argument in the comment was sound.	
Argument Quality [AQ]	[AQ1] The argument in the comment was convincing.	Cheung et al. (2009)
	[AQ2] The argument in the comment was strong.	
	[AQ3] The argument in the comment was	

	persuasive.	
	[AQ4] In general, the argument in the comment provided me with high-quality information.	Wixom and Todd (2005)
Product Nature [PN]	[PN] Would you consider the product that you put down in the Q 5(refer to questionnaire) lean to be an objective product or a subjective product?	Self-developed
Sender's Expertise [SE]	[SE1] The reviewer was knowledgeable in evaluating products.	Cheung, Lee and Rabjhon (2008)
	[SE2] The reviewer was expert in evaluating products.	
Tie Strength [TS]	[TS1] The relationship with the reviewer is strong.	Bansal & Voyer(2000)
	[TS2] You interacted frequently with the reviewer.	
	[TS3] There is likelihood of sharing a personal confidence with the reviewer.	
Prior Experience [PE]	[PE1] You have read and used the reviewer's prior comments to help you make purchase decision.	Self-developed
	[PE2] The reviewer's prior comments were useful.	
	[PE3] The reviewer's prior comments were good.	
Source Credibility [SC]	[SC1] You believe the reviewer was reputable.	Cheung et al. (2009)
	[SC2] You believe reviewer was highly rated by other site participants.	
	[SC3] You believe reviewer was good.	
	[SC4] You believe reviewer was trustworthy.	
Consistency [C]	[C1]. The comment was consistent with other reviews.	Cheung et al. (2009)
	[C2] The comment was similar to other reviews.	

Information Usefulness [IU]	[IU1] The comment was valuable. [IU2]. The comment was informative. [IU3] The comment was helpful.	Cheung, Lee and Rabjhon (2008)
Information Adoption [IA]	[IA1] You agreed with the opinion suggested from the comment. [IA2] Information from the comment contributed to your knowledge of discussed product/service. [IA3] The comment made it easier for you to make purchase decision. [IA4] The comment enhanced your effectiveness in making purchase decision.	Cheung, Lee and Rabjhon (2008) Cheung et al. (2009)

Table 3 Refined Measurement Items

Factor	Items	Source
Sufficiency [S]	[S1] The comment sufficiently completed your needs.	Wixom and Todd (2005)
	[S2] The comment included all necessary product characteristics that you need.	
Relevance [R]	[R3] The comment was applicable.	Cheung, Lee and Rabjhon (2008)
Accuracy [A]	[A1] The comment was accurate.	Cheung, Lee and Rabjhon (2008)
	[A2] The comment was reliable.	
	[A3] The comment was correct.	
Timeliness [T]	[T1] The comment provided the most current information.	Wixom and Todd (2005)
	[T2] The comment provided the most recent information.	

Validity [V]	[V1] The argument in the comment was valid.	Areni (2003)
	[V2] The argument in the comment was logical.	
	[V3] The argument in the comment was sound.	
Argument Quality [AQ]	[AQ4] In general, the argument in the comment provided me with high-quality information.	Wixom and Todd (2005)
Product Nature [PN]	[PN] Would you consider the product that you put down in the Q 5(refer to questionnaire) lean to be an objective product or a subjective product?	Self-developed
Sender's Expertise [SE]	[SE1] The reviewer was knowledgeable in evaluating products.	Cheung, Lee and Rabjhon (2008)
	[SE2] The reviewer was expert in evaluating products.	
Tie Strength [TS]	[TS1] The relationship with the reviewer is strong.	Bansal & Voyer(2000)
	[TS2] You interacted frequently with the reviewer.	
	[TS3] There is likelihood of sharing a personal confidence with the reviewer.	
Prior Experience [PE]	[PE2] The reviewer's prior comments were useful.	Self-developed
	[PE3] The reviewer's prior comments were good.	
Source Credibility [SC]	[SC3] You believe reviewer was good.	Cheung et al. (2009)
	[SC4] You believe reviewer was trustworthy.	
Consistency [C]	[C1]. The comment was consistent with other reviews.	Cheung et al. (2009)
	[C2] The comment was similar to other reviews.	
Information	[IU2]. The comment was informative.	Cheung, Lee and

Usefulness [IU]	[IU3] The comment was helpful.	Rabjhon (2008)
Information Adoption [IA]	[IA3] The comment made it easier for you to make purchase decision.	Cheung et al. (2009)
	[IA4] The comment enhanced your effectiveness in making purchase decision.	

Appendix D

Table 4 Result of Factor Analysis (with factor loading less than 0.3 suppressed)

Pattern Matrix^a

Factors	Measures	Component														alpha		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14			
Tie Strength [TS]	[TS3] There is likelihood of sharing a personal confidence with the reviewer.	.961																.968
	[TS1] The relationship with the reviewer is strong.	.947																
	[TS2] You interacted frequently with the reviewer.	.922																
Accuracy [A]	[A3] The comment was correct.		.983															.931
	[A2] The comment was reliable.		.897															
	[A1] The comment was accurate.		.785															
Information Adoption [IA]	[IA4] The comment enhanced your effectiveness in making purchase decision.			.928														.943
	[IA3] The comment made it easier for you to make purchase decision.			.903														
Validity [V]	[V2] The argument in the comment was logical.				.971													.909
	[V1] The argument in the comment was valid.				.913													
	[V3] The argument in the comment was sound.				.718													
Consistency [C]	[C2] The comment was similar to other reviews.					.996												.791
	[C1] The comment was consistent with other reviews.					.771												
Timeliness [T]	[T2] The comment provided the most recent information.						.966											.818
	[T1] The comment provided the most current information.						.818											
Prior Experience [PE]	[PE3] The reviewer's prior comments were good.							.919										.837
	[PE2] Y The reviewer's prior comments were useful.							.902										
Source Credibility [SC]	[SC3] You believe reviewer was good.								.942									.926
	[SC4] You believe reviewer was trustworthy.								.895									
Sufficiency [S]	[S1] The comment sufficiently completed your needs.									.899								.815
	[S2] The comment included all necessary product characteristics that you need.									.816								
Sender's Expertise [SE]	[SE1] The reviewer was knowledgeable in evaluating products.										.826							.894
	[SE2] The reviewer was expert in evaluating products.	.323									.737							
Product Nature [PN]	[PN] Would you consider the product that you put down in the Q 5 lean to be an objective product or a subjective product.												.998					
Argument Quality [AQ]	[AQ4] In general, the argument in the comment provided me with high-quality information.													.888				
Relevance [R]	[R3] The comment was applicable.														.765			
Information Usefulness [IU]	[IU2] The comment was informative.															.629		.858
	[IU3] The comment was helpful.			.423												.540		

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

Appendix E

Table 9 Summary result of hypotheses

Hypotheses	Result
H1: the higher degree of the perceived sufficiency of an argument, the higher the argument quality will be	Accepted
H2: the higher degree of the perceived relevance of an argument, the stronger the argument will be	Rejected
H3: the higher degree of the perceived accuracy of an argument, the higher the argument quality will be.	Accepted
H4: the higher degree of the perceived timeliness of an argument, the stronger the argument will be	Rejected
H5: the higher degree of the perceived validity of an argument, the stronger the argument will be.	Accepted
H6: the higher degree of the perceived sender's expertise, the higher degree of perceived source credibility will be.	Accepted
H7: the stronger the tie strength, the higher degree of perceived source credibility will be.	Accepted
H8: the better prior experience with the sender, the higher degree of perceived source credibility will be.	Accepted
H9: The stronger of an argument is, the higher degree of the perceived usefulness of the information will be.	Accepted

H10: The argument quality will affect the perceived information usefulness more while e-WOM recipient is reviewing information about an objective product instead of a subjective product.	Rejected
H11: the higher degree of perceived source credibility, the more useful the information will be.	Accepted
H12: the higher consistency of the received information with other received information, the more perceived source credibility affects perceived information usefulness.	Accepted
H13: the higher degree of perceived information usefulness, the higher degree of information adoption will be.	Accepted