

Information Credibility between Social Media Site and Review Site : Which One Do I Trust More?

DongBack Seo* · Jung Lee**

Abstract

This study aims to examine how the relationship with an information source affects people to perceive credibility of online information. We developed a conceptual framework that explained how people perceived information credibility when they were familiar with the information source and/or when the information source seemed credible. We then compared the models in two different contexts, namely, online review and social media sites, to examine differences. We surveyed 136 online social media users with their online shopping experiences. Among our eight hypotheses, three (H6: the personality similarity between an information provider and an information seeker enhances the perceived credibility of the former; H7: the credibility of an information provider produces a much stronger mediating effect in review sites than in social media sites; H8: the familiarity of an information seeker with an information provider produces a stronger mediating effect in social media sites than in review sites) are fully supported and four (H1: the credibility of an information provider has a positive influence on the perceived credibility of the online information; H2: the familiarity of an information seeker with an information provider has a positive influence on the perceived credibility of the online information; H3: the goal similarity between an information provider and an information seeker enhances the perceived familiarity of the latter with the former; H5: the personality similarity between an information provider and an information seeker enhances the perceived familiarity of the latter with the former) are partially supported. The hypothesis of H4: the goal similarity between an information provider and an information seeker enhances the perceived credibility of the former is rejected. The result confirms that credibility of information is strongly mediated by credibility of information source than familiarity with information source in online review sites and vice versa in social media sites.

Keywords : Information Credibility, Information Source, Goal Similarity, Personal Similarity, Social Media Site, Review Site

Received : 2014. 05. 20.

Final Acceptance : 2014. 09. 03.

※ The previous version of this article has been presented at the 16th International Conference on Human-Computer Interaction (HCI), Creta Maris, Heraklion, Crete, Greece, June 22-27, 2014 and included in HCI in Business Lecture Notes in Computer Science as a part of proceedings.

* Dept. of Management Information Systems, Chungbuk National University, e-mail : dongbackseo@gmail.com

** Corresponding Author, Bang College of Business, KIMEP University, e-mail : junglee@kimep.kz

1. Introduction

In 2012, Facebook announced that the number of Facebook subscribers had reached one billion, which was equivalent to one out of seven people in the world [Vance, 2012]. Moreover, the Social Media Report by Nielsen [2012] stated that the total amount of time spent on social media in the United States had increased to 121 billion minutes in July 2012 compared with 88 billion minutes in the previous year.

Many organizations has started to use social media as a marketing vehicle for their businesses. The social media not only allows businesses to interact with their customers but also provides a platform in which customers gather. Customers form a community and behave as a tribe with shared interests [Kane and Fichman, 2009]. With the founding of such strong, specified online communities, businesses can build a stronger brand power, collect additional ideas from their customers, and even support knowledge creation for organizations [Dutta, 2010].

One of the advantages of social media as a marketing tool is that social media deliver information with enhanced personal closeness [Mangold and Faulds, 2009]. It can be viewed as another form of electronic word of mouth (eWOM). Moreover, it is more advanced because it lessens the level of anonymity incorporated in online world. Although eWOM has benefitted customers with its extensive product information with less bias, its credibility is sometimes questioned because of its anonymity. However, users of social media can enjoy the power of eWOM by lessening anonymity

through their friend-networks on social media.

Considering the level of anonymity depending on websites (review versus social media websites), which information source (i.e., a renowned source vs. a person with whom the user has personal interaction, such as a social media friend) is more credible to the use of posted information is not clear. People usually perceive that information from the people they know is credible. However, numerous renowned bloggers and reviewers produce more influential information compared to the majority of users' friends. Thus, it is doubtful to say that information from a social media friend is more influential than one from a renowned source.

This study therefore aims to examine how the relationship with an information source affects the perceived credibility of online information. We develop a conceptual framework that explains how people perceive information credibility when they are familiar with information source and/or when information source seems credible. We then compare the models in two different contexts, namely, online review and social media sites, to examine differences. The result confirms that credibility of information is strongly mediated by credibility of information source than by familiarity with information source in online review sites and vice versa in social media sites.

2. Theoretical Development

2.1 How People Believe the Words of Others

One of the challenges on Internet shopping is that all transactions are conducted without face-

to-face interactions. Customers experience a level of ambiguity due to an impersonal online transaction. It means that customers are unable to see or touch products, but they should make a decision mostly based on information on websites [Lee and Lee, 2009]. Although rich product information is now widely available on a website, such as video simulations and consumer reviews, the credibility of information on the website is not always easily assured [Flavián et al., 2006].

To assist such customers with ambiguity and anxiety, leading online malls have devised various methods, especially to assure the credibility of an information source. For example, Amazon.com grants special labels to reviewers with high reputations, such as *Top 1000 Reviewer*, to verify the credibility of information sources. Another example is that customers can browse all the reviews written by one reviewer, to confirm the consistency in his/her information credibility.

These efforts to verify the credibility of information sources have effectively benefitted online consumers mainly based on the belief that people with experience and reputation would provide accurate and factual information [Lee, 2013]. Credibility refers to the accuracy, depth, and factuality of information as well as the intention and knowledge of those information providers [Radoilska, 2008]. Information that is provided by a knowledgeable person is often perceived as factual. Therefore, the following hypothesis is proposed:

H1: The credibility of an information provider has a positive influence on the perceived credibility of the online information.

The credibility of information is also influenced by the familiarity of an information seeker with an information provider. Familiarity refers to the acquaintance of an individual with a particular entity, which is formed via previous and direct interactions between both parties [Komiak and Benbasat, 2006]. Familiarity improves the understanding of a person toward particular information as well as a logic behind such knowledge, which reduces inaccuracies or misinterpretations. Additional knowledge or information is transferred between people who are familiar with each other than between people who are unfamiliar with each other [Gefen et al., 2008]. The familiarity of an information seeker with an information provider reduces uncertainty toward the provided knowledge and perceived risk in transactions between them [Gulati, 1995]. Therefore, the following hypothesis is proposed:

H2: The familiarity of an information seeker with an information provider has a positive influence on the perceived credibility of the online information.

2.2 Similarities between Information Providers and Seekers

Numerous studies have identified credibility and familiarity as important building blocks of interpersonal relationships [Gulati and Singh, 1998]. Credibility implies present belief about the other party, whereas familiarity implies previous behaviors and experiences [Gefen et al., 2008]. Given the existence of trust between familiar parties, these parties tend to choose each other

when they are presented with a wide selection of potential partners [Gulati and Singh, 1998]. Although certain studies have simultaneously discussed familiarity and credibility, these two concepts are distinguished from each other.

The similarity-attraction theory is proposed for drawing out the antecedents of these two factors. This theory suggests that people tend to engage in highly positive social interactions with others who are similar to them in various aspects [Byrne, 1971]. Such similarities, from demographics to self-esteem, have been extensively studied to investigate their effects on teamworks [Flynn, 2003; Zenger and Lawrence, 1989]. The similarity-attraction theory emphasizes a vital role of the perceived similarity in transferring knowledge [Fazio, 1989]. An increase in the similarity between two people increases the tendency for the intention and behavior of knowledge transfer between them [Martin and Stewart, 2001]. Similar people tend to often communicate and easily understand each other, which produces better outcomes [Schaubroeck and Lam, 2002].

The present study focuses on the similarity between two people in terms of their goals and personalities. On one hand, goal similarity highlights differences between the review and social media sites in terms of the information perceiving and processing objectives of information seekers. People who visit review sites aim to search for information on a specific product or service, whereas people who visit social media sites aim to search for information on other aspects, for instance, networking with people and getting to know personal experiences of their

friends on using a product or service. On the other hand, personality similarity highlights differences between the review and social media sites in terms of the relationship types between information provider and information seeker. No relationships are observed between information providers and information seekers on review sites, whereas these two parties regularly connect and communicate with each other on social media sites. Based on these concepts the following hypotheses are further developed.

2.2.1 Goal Similarity

Goal refers to an abstract benefit that is sought by people [Huffman and Houston, 1993], which determines the salient pieces of information that are readily accessible to the information seeker in a particular situation [Fazio, 1989]. People without definitive goals tend to utilize any information that they find without considering the importance of information [Martin and Stewart, 2001]. Goal similarity refers to the degree that two people commonly share the value of information. People who are highly similar in terms of their goals tend to seek for the same pieces of information.

The roles of an information provider (i.e., a reviewer) and an information seeker (i.e., a reader) in the online shopping context are clarified when they share a common goal [Chen et al., 2005], which improves their understanding of each other. For example, an information seeker perceives the comments of an information provider as very useful and agreeable when they share the same goals, hence developing an affinity between the two parties. Goal similarity develops

a mutual understanding between an information provider and seeker by facilitating an information exchange [Johnson et al., 1996]. Therefore, the following hypothesis is proposed:

H3: The goal similarity between an information provider and an information seeker enhances the perceived familiarity of the latter with the former.

Similar goals facilitate the transfer of information among people and strengthen the foundation of relationships [Si and Bruton, 2005]. Goal similarity results in an affinity and mutual understanding that can improve the quality of relationships [Johnson et al., 1996]. The customer obtains information that they seek by reading the comments of a reviewer who shares the same goal. Therefore, the information that is shared by the reviewer becomes highly credible. The following hypothesis is proposed:

H4: The goal similarity between an information provider and an information seeker enhances the perceived credibility of the former.

2.2.2 Personality Similarity

Personality similarity is an important factor in online transactions given its association with various business factors, such as leader-member exchange, organizational commitment, and job satisfaction [Bauer and Green, 1996; Meglino, Ravlin, and Adkins, 1989]. People with similar personalities easily and effectively communicate with each other [Meglino et al., 1991]. Such sim-

ilarity also increases the number of members in an organization [O'Reilly, Caldwell, and Barnett, 1989] and reduces conflict and ambiguity in the roles of individuals [Tsu and O'Reilly, 1989]. Therefore, personality similarity improves the relationships among people.

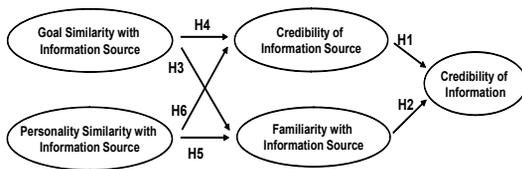
In the online shopping context, the personalities of an information provider and seeker are mostly reflected by their perspectives on a product that they have bought or are thinking of buying. Information providers and seekers with similar personalities can comfortably interact with each other by facilitating an open information exchange. Many studies have found that people with the same interests from the same generation can easily communicate with one another. Thus, the following hypothesis is proposed:

H5: The personality similarity between an information provider and an information seeker enhances the perceived familiarity of the latter with the former.

This similarity allows both parties to evaluate each other positively [Antonioni and Park, 2001] by enabling an individual to predict the behavior of the other person. Hence people who share the similar personalities can interpret various behaviors and environmental events in a highly predictive manner among them [Engle and Lord, 1997]. Such predictability reduces conflict and ambiguity between the involved parties [Tsu and O'Reilly, 1989], which eventually promotes trust. In the online shopping context, an information provider and seeker share the same perception toward a product when their person-

alities are similar, which greatly improves the perceived credibility of the information provider. The following hypothesis is proposed:

H6: The personality similarity between an information provider and an information seeker enhances the perceived credibility of the former.



〈Figure 1〉 Research Model

2.3 Comparison between Review and Social Media Sites

Review and social media sites mainly differ in terms of the objectives of their users. People visit review sites to search for relevant information on a specific product or service before making a purchase. On the other hand, people visit social media sites to share information (such as their educational background, family, work, and origins) with their friends [Kaplan and Haenlein, 2010].

Such differences in the objectives of using review and social media sites generate differences in the attitudes of information providers and seekers. In review sites, information providers are responsible for publishing quality reviews of a particular product or service [Forman et al., 2008]. These information providers are often treated as professionals by their readers who find their reviews useful. These information providers rely on the quality and credibility of their reviews

to maintain and enhance their reputations. Information seekers in review sites place more emphasis on the credibility of information providers. To verify if the credibility of an information provider is more pronounced in review sites rather than in social media sites, the following hypothesis is proposed:

H7: The credibility of an information provider produces a much stronger mediating effect in review sites than in social media sites.

The reviews in social media sites are often written in conversational or casual tones. However, readers continue to take these reviews seriously. In addition, their purchasing decisions are influenced by their familiarity with information providers rather than by the quality of the reviews that they are reading. People tend to believe information that comes from someone whom they are closely affiliated with [Gulati, 1995]. Given that social media sites connect people who are personally affiliated, the reviews that are published in these sites, whether positive or negative, are perceived as friendly conversations. The following hypothesis is therefore proposed:

H8: The familiarity of an information seeker with an information provider produces a stronger mediating effect in social media sites than in review sites.

3. Data Collection

3.1 Item Development

Studies on information accuracy and objectivity

are reviewed to collect data on information credibility. These studies explain the key concepts that are used in this study [Radoilska, 2007; Underwood and Ozanne, 1998]. Studies on business trust are reviewed to collect data on information provider credibility given that such credibility reflects the sincerity of an information provider in helping an information seeker [Flavián et al., 2006; McKnight et al., 2002]. Studies that measure the depth and frequency of information seeker-provider interactions are reviewed to collect data on the familiarity of information seekers with the information providers [Gefen et al., 2008; Komiak and Benbasat, 2006]. Major business studies are reviewed to collect data on goal and personality similarities. Most of these studies describe the similarities between supervisors and their subordinates or the similarities among peers within a firm. Such measurements are modified to fit

in the electronic commerce context [Ensher and Murphy, 1997; Martin and Stewart, 2001; Schaubroeck and Lam, 2002; Si and Bruton, 2005]. Operational definitions of the constructs and measurements are summarized in <Table 1>.

3.2 Data Collection Process

The data was electronically collected from the students studying at one of the leading universities in Netherlands. The online questionnaire was built and 400 potential subjects were invited through emails, social networking sites, and review sites. The questionnaire described what review sites and social media sites were with examples (Tweakers.net and Facebook.com, respectively) to provide a clear idea of two different types of websites. The questionnaire clearly asked subjects to consider the reviews of reviewers on the review sites

<Table 1> Operational Definition and Measurements

Constructs	Operational Definition	Measurements
Goal similarity	Degree of goal congruence between information seeker and information provider	In terms of shopping, GS1: we share common goals GS2: we have similar objectives GS3: we pursue similar goals
Personality similarity	Degree of personality similarity in terms of openness and extraversion to products	We are similar in terms of PS1: openness to a new product PS2: curiosity to a new product PS3: the tendency to seek stimulation
Information source credibility	How honestly an information provider describes about products.	He, as an information source, is CS1: credible CS2: trustworthy CS3: As an information source, I trust him
Information source familiarity	The amount of knowledge that an information seeker possesses about an information provider	FS1: I know him well FS2: I'm familiar with him FS3: I have an experience with him FS4: I know what kind of person he is
Information credibility	How closely information describes objective facts about a product.	CI1: This information is credible CI2: This information is accurate CI3: This information is factual CI4: This information is trustable

and the comments of their friends on social media websites they often visit.

A mobile phone was selected as an experimental product for a subject to collect and evaluate information to purchase one. A mobile phone is considered a personal product that most people need and use, at least, in developing and developed countries. Although there are different kinds of mobile phones, people tend to personalize and use them for a couple of years, especially for smart phones. For these reasons, people are likely to seek information about potential mobile phones they will purchase.

4. Data Analysis

The sample comprised 136 subjects, in which 51% were male and 49% were female. 92% of the respondents were aged between 12 and 25 years, 97.8% were from the Netherlands, and 100% actively managed social media accounts, such as Facebook, Myspace, and Twitter (see <Table 2>).

4.1 Measurement Model

Exploratory factor analysis was conducted on the data set, and the SPSS 17.0 software was

<Table 2> Respondents Demographics

Gender	Freq. (%)	Age	Freq. (%)	Nationality	Freq. (%)
Male	70(51.5%)	12~19	61(44.9%)	Netherlands	133(97.8%)
Female	66(48.5%)	20~25	64(47.1%)	Belgium	1(0.8%)
Total	136(100%)	26~35	5(3.7%)	Germany	1(0.8%)
		36 and older	6(4.4%)	USA	1(0.8%)
		Total	136(100%)	Total	136(100%)

<Table 3> Exploratory Factor Analysis

Items	Review Site					Social Media Site				
	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5
GS1	.132	.044	.872	-.003	-.130	.149	-.071	.883	.070	.022
GS2	-.082	.000	.904	.052	-.049	.179	.086	.846	.179	-.139
GS3	.128	.101	.839	.051	.159	.150	.180	.824	.106	.115
PS1	.040	.088	.125	.783	.253	-.195	.783	-.022	.066	.142
PS2	.019	.098	.046	.860	.235	-.001	.825	.101	.109	.185
PS3	.057	.107	-.057	.895	-.119	-.089	.783	.095	.056	.128
CS1	.380	.011	-.081	.183	.606	-.045	.369	.007	.084	.753
CS2	.218	.040	.014	.123	.774	.178	.219	.062	.000	.700
CS3	.032	.229	-.016	.075	.801	-.038	.012	-.067	.003	.801
FS1	.000	.662	.009	.149	.073	.072	-.280	.179	.548	.329
FS2	.029	.898	.063	-.052	.026	.181	.110	.156	.735	.183
FS3	.023	.864	-.067	.025	.100	.065	.266	.188	.798	-.014
FS4	.170	.604	.167	.173	.075	.127	.046	-.047	.802	-.201
CI1	.897	.128	.079	-.011	.067	.834	-.176	.163	.150	-.017
CI2	.889	.101	-.015	.044	.037	.748	-.227	.159	.110	-.036
CI3	.625	.041	.177	-.029	.412	.816	-.086	.176	.038	.180
CI4	.842	-.046	.040	.106	.252	.842	.131	.042	.138	-.009
Cronbach's Alpha	0.87	0.70	0.85	0.83	0.72	0.85	0.80	0.85	0.72	0.71

used to test the convergent and discriminant validities of the items. The items within a set are divided into five major components (see <Table 3>) with factor loading values ranging from 0.6 to 0.9. The convergent and discriminant validities of the items are justified given that they satisfy the baseline factor loading value [Hair et al., 1998]. A Cronbach's alpha test was conducted to verify the internal consistency of the items. The

Cronbach's alpha values of all items range from 0.70 to 0.87 (see <Table 3>), which satisfies the minimum prescribed value for social science studies (i.e., 0.7) [Nunnally and Bernstein, 1994].

Lastly, we tested the internal consistency and convergent validity of the constructs by examining the items, including construct loading, composite reliability, and average variance extracted (AVE) as in <Table 4>. The values of composite

<Table 4> Correlations among Constructs

	Construct	Indicator	Standardized Loading	Measurement Error	Composite Reliability	AVE (Average Variance Extracted)
Review Site	Goal Similarity	GS1	0.86	0.26	0.85	0.66
		GS2	0.82	0.33		
		GS3	0.76	0.42		
	Personality Similarity	PS1	0.68	0.54	0.83	0.63
		PS2	0.93	0.13		
		PS3	0.74	0.45		
	Information Source Credibility	CS1	0.75	0.44	0.73	0.48
		CS2	0.71	0.49		
		CS3	0.60	0.63		
	Information Source Familiarity	FS1	0.50	0.75	0.79	0.51
		FS2	0.90	0.19		
		FS3	0.84	0.30		
		FS4	0.51	0.74		
	Information Credibility	CI1	0.88	0.23	0.88	0.64
		CI2	0.83	0.31		
		CI3	0.66	0.57		
CI4		0.82	0.33			
Social Media Site	Goal Similarity	GS1	0.84	0.30	0.85	0.66
		GS2	0.84	0.29		
		GS3	0.76	0.42		
	Personality Similarity	PS1	0.74	0.45	0.80	0.57
		PS2	0.79	0.38		
		PS3	0.74	0.45		
	Information Source Credibility	CS1	0.87	0.24	0.74	0.50
		CS2	0.60	0.64		
		CS3	0.60	0.64		
	Information Source Familiarity	FS1	0.50	0.72	0.77	0.47
		FS2	0.69	0.52		
		FS3	0.84	0.29		
		FS4	0.64	0.59		
	Information Credibility	CI1	0.88	0.22	0.86	0.60
		CI2	0.76	0.42		
		CI3	0.74	0.45		
CI4		0.71	0.50			

<Table 5> Correlations among Constructs

	Review Site					Social Media Site				
	GS	PS	CS	FS	CI	GS	PS	CS	FS	CI
GS	0.81					0.81				
PS	.091	0.79				.124	0.75			
CS	.021	.293**	0.69			.056	.371**	0.70		
FS	.129	.244**	.239**	0.71		.314**	.152	.147	0.68	
CI	.151	.131	.436**	.171*	0.80	.338**	-.178*	.032	.297**	0.78
Mean (SD)	4.05 (0.98)	3.23 (1.23)	4.06 (1.43)	1.88 (1.29)	4.49 (1.61)	4.05 (0.98)	4.80 (1.46)	4.28 (1.19)	4.05 (1.51)	2.41 (1.45)

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

reliabilities are sufficiently higher than 0.7 [Nunnally and Bernstein, 1994], and the values of AVE are above 0.5 [Fornell and Larcker, 1981] except for information source familiarity in social media site (0.47). Discriminant validity was examined by comparing the square root of the AVE and off-diagonal construct correlations. All square roots of the AVE are greater than the off-diagonal construct correlations in the corresponding rows and columns [Fornell and Larcker, 1981], thus indicating convergent consistency. The correlations among most constructs in <Table 5> are

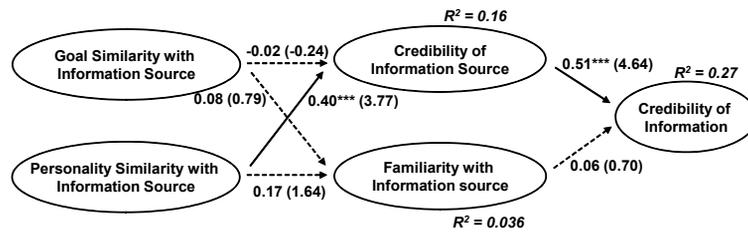
below 0.7, which indicates that multicollinearity is not a potentially serious problem in the model [Bagozzi and Phillips, 1991].

4.2 Structural Model

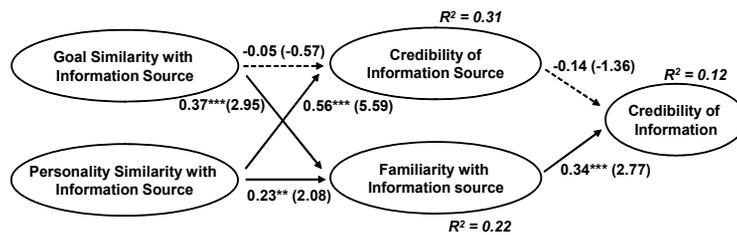
LISREL 8.71 was used to test the structural model fit. Most statistics in the model indicate a marginally adequate fit (<Table 6>). Some indexes such as AGFIs and RMRs are slightly lower and higher than the recommended levels, respectively. Such gap is deemed acceptable for

<Table 6> Structural Model Fit

Fit Index	Recommended Level	Structural Model	
		Review Site	Social Media
Absolute Fit Measures			
Chi-square test statistic (χ^2); <i>df</i>		307.35; 112	245.18; 112
<i>p</i> -value	< 0.01	0.000	0.000
Goodness-of-fit index (GFI)	> 0.80	0.79	0.82
Root mean square error of app. (RMSEA)	< 0.08	0.09	0.078
Root mean squared residual (RMR)	< 0.05	0.091	0.10
Incremental Fit Measures			
Goodness-of-fit index (GFI)	> 0.80	0.79	0.82
Adjusted goodness-of-fit index (AGFI)	> 0.80	0.71	0.76
Normed fit index (NFI)	> 0.80	0.78	0.79
Parsimonious Fit Measure			
Normed chi-square	1.00~3.00	2.74	2.19



<Figure 2> Professional Review Site



<Figure 3> Social Media Site

the analysis given the small sample size of the study. The other indices, such as GFI and RMSEA, all show an acceptable fit.

The results of the hypotheses testing are presented in <Figure 2> and <Figure 3> as well as in <Table 7>. The credibility of an information provider has a significant effect on the credibility of information in review sites ($b = 0.51, t = 4.64, p < 0.001$) but shows an insignificant effect on the credibility of information in social media sites ($b = -0.14, t = -1.36, p > 0.10$), which partially supports H1.

The familiarity of the information seeker with the information provider has a significant effect on the credibility of information in social media sites ($b = 0.34, t = 2.77, p < 0.01$) but shows an insignificant effect on the credibility of information in review sites ($b = 0.06, t = 0.70, p > 0.10$), which partially supports H2.

Goal similarity shows a significant effect on the familiarity of the information seeker with the

information provider in social media sites ($b = 0.37, t = 2.95, p < 0.01$) but shows an insignificant effect on such familiarity in review sites ($b = 0.08, t = 0.79, p > 0.10$), which partially supports H3. Goal similarity shows an insignificant effect on the credibility of the information provider in both review ($b = -0.02, t = -0.24, p > 0.10$) and social media sites ($b = -0.05, t = -0.57, p > 0.10$), which does not support H4.

Personality similarity shows a significant effect on the familiarity of the information seeker with the information provider in social media sites ($b = 0.23, t = 2.08, p < 0.05$) but shows a marginally insignificant effect on such familiarity in review sites ($b = 0.17, t = 1.64, p > 0.10$), which partially supports H5. Personality similarity shows a significant effect on the credibility of the information provider in both review ($b = 0.40, t = 3.77, p < 0.001$) and social media sites ($b = 0.56, t = 5.59, p < 0.001$), which supports H6.

〈Table 7〉 Hypotheses Test Summary

Hypotheses		Review Site	Social Media
H1	Info. Source Credibility → Info. Credibility	S	NS
H2	Info. Source Familiarity → Info. Credibility	NS	S
H3	Goal Similarity → Info. Source Familiarity	NS	S
H4	Goal Similarity → Info. Source Credibility	NS	NS
H5	Personality Similarity → Info. Source Familiarity	NS	S
H6	Personality Similarity → Info. Source Credibility	S	S
H7	Mediating effect of Info. Source Credibility is stronger in review site than in social media site.	S	
H8	Mediating effect of Info. Source Familiarity is stronger in social media site than in review site.	S	

S: supported; NS: not supported.

H7 was tested by comparing the mediating effects of information provider credibility in review and social media sites. Given that the path from information source credibility to information credibility is insignificant, the former does not produce a mediating effect on the latter in social media sites. The opposite is observed in review sites, in which the information source credibility produces a mediating effect from personality similarity to information credibility. Therefore, H7 is supported.

The mediating effects of the familiarity of the information seeker with the information provider in review and social media sites are also compared. No mediating effect is observed in review sites given that all paths to and from the variable are insignificant. However, information source familiarity produces a mediating effect from goal and personality similarity to information credibility in social media sites. Therefore, H8 is supported.

Lastly, we compute mediating effects of three paths using Sobel's test. For the path from personality similarity to information credibility through

information source credibility in review site, 2.86 is computed for the Sobel test statistics. Since it is higher than 2.56, we conclude that the mediating effect is significant at 0.01 level. In social media site, the path from goal similarity to information credibility through information source familiarity exhibits significant mediating effect at 0.05 with the Sobel test statistics of 2.01. The path from personality similarity to information credibility through information source familiarity shows the Sobel test statistics of 1.68. This results confirms that the mediating effect is significant at 0.1 level. All three cases of mediating effects in two different contexts of review site and social media site are confirmed to be statistically significant.

5. Discussion

5.1 Academic Contribution and Practical Implication

The result indicates that the credibility of in-

formation between review sites and social media sites are mediated by different constructs that are also affected by different antecedents. The credibility of information on review sites is mediated by the credibility of information source, while the credibility of information on social media sites is mediated by the familiarity with information source.

All these results consistently imply that people tend to rationally evaluate information by whether or not they can trust information source on review sites. Meanwhile, people also tend to rely on their relational familiarity with information source to evaluate information on social media sites. The result of the study confirms the idea of dual processes by Petty and Cacioppo [1981]. In persuasion literature, there are two distinct routes - one is *central route* based of the rational consideration of arguments central to an issue and the other is *peripheral route* based on peripheral cues. For example, when information is posted about a certain product, in some cases, people analyze information directly relevant to central issues of the product. However, in other cases, peripheral cues such as who posted and when read (whether a close friend posted or whether a reader just have nice food or is hungry) are triggered to reach a decision of being or not being persuaded [Ray and Seo, 2013].

These results and presentations clearly show that there is a stimulus to trigger one route against the other. Coinciding with the idea of these dual processes, the results confirm that people tend to use the central route to evaluate information when they read information posted by anonymous

reviewers on review sites. Meanwhile, they use the peripheral route to evaluate information on social media sites.

Another interesting and meaningful implication of the study is that goal similarity and personality similarity with information source positively influence on familiarity with information source at social media websites. Although familiarity with information source is related to peripheral route, goal similarity ($b = 0.37$) plays more significant role on building Familiarity with Information Source than Personality Similarity ($b = 0.23$). It implies that posters can increase the familiarity of readers by posting important and relevant information to the readers.

However, for review sites, only personality similarity with information source positively influences on the credibility of information source, which is rather counter-intuitive. It suggests for the researchers and practitioners that the posters can increase the credibility of information source by revealing the online media users' personal lives. One possible explanation of this unexpected result can be derived from the modest sample size ($n = 136$) and the composition of the respondents within the sample. The sample size can be considered small and the composition of the sample implies a need for caution in interpreting the results, because more than 90 percent of respondents is from the age group between 12 and 25. However, it is clear that this study opens different perspectives and factors influencing on the credibility of information between online review and social media sites.

Lastly, this study would like to highlight the difference between social media site and pro-

fessional review site in terms of information credibility establishment process: in social media, the familiarity with the information source is the key mediator, while in the review site, the credibility of the information source is the key mediator. This would be a finding with a significant implication because it confirms our belief that in social media, the reputation of the information source (i.e., credibility) is less important than the personal subjective closeness with the information source (i.e., familiarity). It further brings an answer to the idea why businesses nowadays focus on the social media marketing because it attaches to potential customers through an emotional aspect more than an cognitive aspect.

5.2 Limitation and Future Study

This study has several limitations that should be considered in future research. First, one of the limitations this study bears is that it tests hypotheses for only one type of product, a smartphone, which is widely sold online. We look forward to testing the hypotheses for other types of products in future. Also, the modest sample size could be one concern; it may have caused instability in the parameter estimates, such as low t-values in some of hypotheses tests. Lastly, future research should identify more factors that show routes to the information credibility such as brand and price. Considering these factors together with the impact of reviews will bring further in-depth understandings of researchers and practitioners in the online review context.

References

- [1] Antonioni, D. and Park, H., "The Effects of Personality Similarity on Peer Ratings of Contextual Work Behaviors", *Personnel Psychology*, Vol. 54, No. 2, 2001, pp. 331-360.
- [2] Bagozzi, R. P., Yi, Y., and Phillips, L. W., "Assessing Construct Validity in Organizational Research", *Administrative Science Quarterly*, Vol. 36, No. 3, 1991, pp. 421-458.
- [3] Bauer, T. N. and Green, S. G., "Development of Leader-member Exchange: A Longitudinal Test", *Academy of Management Journal*, Vol. 39, 1996, pp. 1538-1567.
- [4] Byrne, D., *The Attraction Paradigm*, New York: Academic Press, 1971.
- [5] Chen, Z. X., Aryee, S., Lee, C., and Hui, C., "Processes Linking Perceived Leader-subordinate Goal Similarity to Subordinate Performance", *Academy of Manage Best Paper*, 2005.
- [6] Dutta, S., "What's Your Personal Social Media Strategy?", *Harvard Business Review*, Vol. 88, No. 11, 2010, pp. 127-130.
- [7] Engle, E. M. and Lord, R. G., "Implicit Theories, Self-schemas, and Leader-member Exchange", *Academy of Management Journal*, Vol. 40, 1997, pp. 988-1010.
- [8] Ensher, E. A. and Murphy, S. E., "Effects of Race, Gender, Perceived Similarity, and Contact on Mentor Relationships", *Journal of Vocational Behavior*, Vol. 50, 1997, pp. 460-481.
- [9] Fazio, R., "On the Power and Functionality of Attitudes: The Role of Attitude Accessibility", In: Pratkanis, A. (eds.), *Attitude*

- Structure and Function*, pp. 153–80. Mahwah NJ: Lawrence Erlbaum Associates, 1989.
- [10] Flavián, C., Guinalú, M., and Gurrea, R., “The Role Played by Perceived Usability, Satisfaction and Consumer Trust on Website Loyalty”, *Information and Management*, Vol. 43, No. 1, 2006, pp. 1–14.
- [11] Flynn, F., “How Much Should I Give and How Often? The Effects of Generosity and Frequency or Favor Exchange on Social Status and Productivity”, *Academy of Management Journal*, Vol. 46, 2003, pp. 539–553.
- [12] Forman, C., Ghose, A., and Wiesenfeld, B., “Examining the Relationship between Reviews and Sales: The Role of Reviewer Identity Disclosure in Electronic Markets”, *Information Systems Research*, Vol. 19, No. 3, 2008, pp. 291–313.
- [13] Fornell, C. and Larcker, D. F., “Evaluating Structural Equation Models with Unobservable Variables and Measurement Error”, *Journal of Marketing Research*, Vol. 18, No. 1, 1981, pp. 39–50.
- [14] Gefen, D., Wyss, S., and Lichtenstein, Y., “Business Familiarity as Risk Mitigation in Software Development Outsourcing Contracts”, *MIS Quarterly*, Vol. 32, No. 3, 2008, pp. 531–551.
- [15] Gulati, R., “Does Familiarity Breed Trust? The Implications of Repeated Ties for Contractual Choice in Alliances”, *Academy of Management Journal*, Vol. 38, No. 1, 1995, pp. 85–112.
- [16] Gulati, R. and Singh, H., “The Architecture of Cooperation: Managing Coordination Costs and Appropriation Concerns in Strategic Alliances”, *Administrative Science Quarterly*, Vol. 43, No. 4, 1998, pp. 781–814.
- [17] Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., and Tatham, R. L., *Multivariate Data Analysis*, Englewood Cliffs, NJ: Prentice-Hall, 2006.
- [18] Huffman, C. and Houston M. J., “Goal-Oriented Experiences and the Development of Knowledge”, *Journal of Consumer Research*, Vol. 20, No. 2, 1993, pp. 190–207.
- [19] Johnson, J., Cullen J., and Takenouchi, M., “Setting the Stage for Trust and Strategic Integration in Japanese-US Cooperative Alliances”, *Journal of International Business Studies*, Vol. 27, 1996, pp. 981–1004.
- [20] Kane, G. C. and Fichman, R. G., “Community Relations 2.0”, *Harvard Business Review*, Vol. 87, 2009, pp. 45–50.
- [21] Kaplan, A. M. and Haenlein, M., “Users of the World, Unite! The Challenges and Opportunities of Social Media”, *Business Horizons*, Vol. 53, No. 1, 2010, pp. 59–68.
- [22] Komiak, S. Y. X. and Benbasat, I., “The Effects of Personalization and Familiarity on Trust and Adoption of Recommendation Agents”, *MIS Quarterly*, Vol. 30, No. 4, 2006, pp. 941–960.
- [23] Lee, J., “What Makes People Read An Online Review? The Relative Effects of Early Posting and Helpfulness on Review Readership”, *Cyberpsychology, Behavior, and Social Networking*, Vol. 16, No. 7, 2013, pp. 529–535.
- [24] Lee, J. and Lee, J.-N., “Understanding Product Information Inference Process in Elect-

- ronic Word-of-Mouth: an Objectivity-Subjectivity Dichotomy Perspective”, *Information and Management*, Vol. 46, No. 5, 2009, pp. 302-311.
- [25] Mangold, W. G. and Faulds, D. J., “Social Media: The New Hybrid Element of the Promotion Mix”, *Business Horizons*, Vol. 52, No. 4, 2009, pp. 357-365.
- [26] Martin, I. M. and Stewart, D. W., “The Differential Impact of Goal Congruency on Attitudes, Intentions, and the Transfer of Brand Equity”, *Journal of Marketing Research*, Vol. 38, No. 4, 2001, pp. 471-484.
- [27] McKnight, D. H., Choudhury, V., and Kacmar, C., “Developing and Validating Trust Measures for e-Commerce: An Integrative Typology”, *Information Systems Research*, Vol. 13, No. 3, 2002, pp. 334-359.
- [28] Meglino, B. M., Ravlin, E. C., and Adkins, C. L., “A Work Values Approach to Corporate Culture: A Field Test of the Value Congruence Process and its Relationship to Individual Outcomes”, *Journal of Applied Psychology*, Vol. 74, 1989, pp. 424-432.
- [29] Meglino, B. M., Ravlin, E. C., and Adkins, C. L., “Value Congruence and Satisfaction with a Leader: An Examination of the Role of Interaction”, *Human Relations*, Vol. 44, 1991, pp. 481-495.
- [30] Nunnally, J. C. and Bernstein, I. H., *Psychometric theory* (3rd Ed), New York: McGraw-Hill, 1994.
- [31] O'Reilly, C. A., Caldwell, D. F., and Barnett, W. P., “Work Group Demography, Social Integration, and Turnover”, *Administrative Science Quarterly*, Vol. 34, 1989, pp. 21-27.
- [32] Petty, R. E. and Cacioppo, J. T., “Personal Involvement as a Determinant of Argument-Based Persuasion”, *Journal of Personality and Social Psychology*, Vol. 41, No. 5, 1981, pp. 847-855.
- [33] Ray, S. and Seo, D., “The Interplay of Conscious and Automatic Mechanisms in the Context of Routine Use: An Integrative and Comparative Study of Contrasting Mechanisms”, *Information and Management*, Vol. 50, 2013, pp. 523-539.
- [34] Radoilska, L., “Truthfulness and Business”, *Journal of Business Ethics*, Vol. 79, No. 1, 2008, pp. 21-28.
- [35] Schaubroeck, J. and Lam, S. K., “How Similarity to Peers and Supervisor Influences Organizational Advancement in Different Cultures”, *Academy of Management Journal*, Vol. 45, No. 6, 2002, pp. 1120-1136.
- [36] Si, S. X. and Bruton, G. D., “Knowledge Acquisition, Cost Savings, and Strategic Positioning: Effects on Sino-American IJV Performance”, *Journal of Business Research*, Vol. 58, No. 11, 2005, pp. 1465-1473.
- [37] Tsui, A. S. and O'Reilly, C. A., “Beyond Simple Demographic Effects: The Importance of Relational Demography in Supervisor-Subordinate Dyads”, *Academy of Management Journal*, Vol. 32, 1989, pp. 402-423.
- [38] Underwood, R. L. and Ozanne, J., “Is Your Package an Effective Communicator? A Normative Framework for Increasing the Communicative Competence of Packaging”, *Journal of Marketing Communications*, Vol. 4, No. 4, 1998, pp. 207-220.

- [39] Zenger, T. R. and Lawrence, B. S., "Organizational Demography: The Differential Effects of Age and Tenure Distributions on Technical Communication", *Academy of Management Journal*, Vol. 32, 1989, pp. 353-376.
- [40] Nielsen report, <http://www.nielsen.com/us/en/reports/2012/state-of-the-media-the-social-media-report-2012.html>, 2012.
- [41] Vance, "Facebook: The Making of 1 Billion Users", <http://www.businessweek.com/articles/2012-10-04/facebook-the-making-of-1-billion-users>, 2012.

■ Author Profile



DongBack Seo

DongBack Seo earned her Doctor of Philosophy and Masters of Science in Management Information Systems from the University of Illinois at Chicago.

Prior to pursuing the Ph.D. program, she worked as a software engineer in a wireless communications firm and as a small business owner. Her publications include three books, recently published *Evolution and Standardization of Mobile Communications Technology*, as well as a class manual and several chapters. Her papers have been published in many journals (e.g., *Communications of the ACM*, *European Journal of Information Systems*, *Telecommunications Policy*, etc.) and conference proceedings (e.g., *International Conference on Information Systems*, *European Conference on Information Systems*, etc.). Her research interests include the areas of adoption of IT/IS-enabled services from the perspectives of individuals and organizations, organizational standards strategy, business convergence, mobile commerce, and analysis of competitive dynamics in rapidly changing industries.



Jung Lee

Jung Lee is an Assistant Professor in the Bang College of Business at KIMEP University. She was a post-doctoral research fellow in the Department

of Information Systems at the National University of Singapore. She received Ph.D. degree in MIS from Korea University Business School, M.S. degree in Information Systems from the Graduate School of Information of Yonsei University, and B.S. degree in Biology from Korea Advanced Institute of Science and Technology (KAIST). Her research interests include electronic word-of-mouth, trust/distrust and social media. She has published papers in journals including *Decision Support Systems*, *Information & Management*, *Information Systems Frontiers*, *International Journal of Electronic Commerce*, and presented papers at conferences including ICIS, AMCIS, and PACIS.