

## **SOURCE CREDIBILITY OF COMPANY-PRODUCED AND USER-GENERATED CONTENT ON THE INTERNET: AN EXPLORATORY STUDY ON THE FILIPINO YOUTH**

**James Ryan O. Jonas\***

*This study explores the Filipino youth's perception of source credibility of Company-Produced Content (CPC) and User-Generated Content (UGC) on the Internet. CPC advertisements have content that is controlled by the company, while UGC creations are owned and managed by users not related to the firm. Results from a paired samples t-test (n=120) suggest that the youth find UGC sources such as bloggers, video uploaders, and forum posters more credible than companies, despite being personally unknown or unrelated to the user. Implications and suggestions for future research are also discussed.*

*Keywords:* user-generated content, blogging, blogs, YouTube, banner ads, online marketing, internet advertising, opinion leadership

### **I. INTRODUCTION**

The Internet is now being viewed as an important advertising medium by both companies and customers (Pavlou & Stewart, 2000; Choi & Rifon, 2002; Organization for Economic Cooperation and Development [OECD], 2007; Cheong & Morrison, 2008). Recently, more and more advertising dollars are being channeled away from traditional media towards Internet advertising. In 2009, the value of US online advertising revenues was pegged at \$7.5 billion, and in 2010, this is expected to grow 10.5% more to \$8.3 billion (Schonfeld, 2010).

Advertisements on the Internet usually fall under two categories: Company-Produced Content (CPC) and User-Generated Content (UGC). Company-Produced Content is a type of online content that is created and managed directly by companies. Common CPC formats include banner advertisements, email marketing, and company blogs. User-Generated Content, on the other hand, is "content made publicly available over the

Internet that reflects a certain amount of creative effort and which is created outside of professional routines and practices" (OECD, 2007). UGC advertisements feature content that is initiated, managed and, most of the time, owned by users themselves. Common UGC formats today include third-party blogs, forums and wikis, and content sharing sites.

UGC is the electronic form of word-of-mouth (WOM) communication – "oral, person-to-person communication between a receiver and a communicator whom the person perceives as non-commercial" (Arndt, 1967). Kotler and Armstrong (2008) recognize that word of mouth, particularly from friends, family, and relatives, is trusted considerably by consumers. A Nielsen survey (2009) confirms this, with 90% of respondents saying they "completely" or "somewhat" trust recommendations from people they know.

However, the emergence of UGC produces a new group of people – the UGC

---

\* Assistant Professor of Marketing, College of Business Administration, University of the Philippines, Diliman, Quezon City. (Email: [jojonas@up.edu.ph](mailto:jojonas@up.edu.ph)).

creators – who are not personally known to consumers and yet may influence the latter’s perception of a company or brand. This research paper seeks to confirm if the perception of high credibility of oral WOM sources also extends to UGC, the online counterpart of WOM. If proven to be more trustworthy than CPC sources, UGC sources might be the new opinion leaders on the Internet, despite being personally unknown or unrelated to consumers. This ultimately

poses a big challenge to companies. How should they compete with UGC creators – who may also be their own customers – in the production and delivery of message to the target market? If UGC is indeed more credible, should companies eliminate, control, or influence it? Eliminating UGC might be impossible, controlling it would be difficult, but influencing it could be workable. This paper offers suggestions on how companies can work with UGC creators.

## II. CONSUMER CONTROL IN INTERNET ADVERTISING

A theoretical framework on how users perceive and process advertisements on the Internet is the Interactive Advertising Model (IAM), an integrative processing model of Internet advertising proposed by Rodgers and Thorson (2000). The IAM acknowledges that in online advertising, there are components that are “advertiser-controlled,” such as Company-Produced Content (CPC) and “consumer-controlled,” such as User-Generated Content (UGC).

### Company-Produced Content (CPC)

Advertisements whose content is initiated, owned, and managed by the company fall under the CPC type of Internet advertising. Commonly used CPC advertisement formats include email marketing, official blog sites, and banner advertisements.

**Email marketing.** Email marketing is the use of email as a means of communicating commercial messages to an audience. It can be used by companies to send targeted messages to a captured market. However, it is sometimes prone to abuse, especially when companies send unsolicited email or spam or when no opt-out or unsubscribe options are offered.

**Official blog sites.** A blog is a website consisting of text, images, audio, video, or a combination of these, date-stamped and usually posted in reverse chronological order whose primary purpose is to deliver and share information (OECD, 2007). Companies usually set up official blogs to update customers on news about the company and its products. As opposed to blogs owned by external users, in an official blog, the company has absolute control over the information posted on it.

**Banner advertisements.** When clicked, the banner image redirects the user to another website featuring the company or product being advertised. In the past, banner advertisements are the most common and widely-used form of Web advertising (Choi & Rifon, 2002). However, they are becoming less effective as an advertising medium as Internet users become more experienced (Dahlen, 2001).

### User-Generated Content (UGC)

Advertisements whose content originates from users not related to the company are called User-Generated Content (UGC). In UGC, users own and control information, as opposed to CPC where they exercise little or

no power at all. Common UGC advertisement formats include third-party blogs, forums and wikis, and content sharing sites.

**Third-party blogs.** The proliferation of free blogging platforms enabled users to easily create and manage their own blogs. If positive reviews are posted, the blogger ultimately acts as an informal (and unpaid) endorser of the firm. At the same time, they act as critics when they post negative opinions. In the case of the latter, companies find it difficult to police content since blog authors are independent and, sometimes, even anonymous.

**Forums and wikis.** A forum is an online discussion site while a wiki is a site that allows users to add, remove, and edit content. Both rely on collaborative effort from a multitude of users who may not personally know each other. As collaborative platforms with no intervention from companies, forums and wikis become avenues where users can exchange positive and even negative comments about products and services.

**Content sharing sites.** Content sharing sites allow users to share media content. Examples are Flickr.com (for photos), DeviantArt.com (for artworks and drawings), and YouTube.com (for videos and film). Creators retain copyright over their contributions which poses a problem to companies who might have to deal with content offensive to the brand.

According to the OECD (2007), the rise of UGC is brought about by several factors. Technologically, increasing Internet penetration rate and rising broadband usage made it possible for more people to upload and share created content. The declining cost

of Internet connection and gadgets for media creation is an economic factor that helped spur the growth of UGC. The need for self-expression and social interaction is a social factor driving users to open up on the Internet. Legal factors also contributed to the growth because of existence of laws protecting privacy and intellectual property.

The concept of “consumer control” significantly altered the way advertisements are delivered on the Internet. A user can now “respond to a web-based advertisement, decide to buy the item, and then buy it within minutes, [allowing] for a significant shortening of the decision process” (Chandon, Chtourou & Fortin, 2003). Pavlou and Stewart (2000) further claim that a critical factor on the Internet is the consumer who does something to or with the advertisement, not the other way around. A study conducted more than a decade ago, when people were just starting to use the Internet, found that customer persuasion and purchase intention declined when users are given control over the advertisement (Bezjian-Avery, Calder, & Iacobucci, 1998). In the advent of UGC, however, companies can no longer confine to themselves authority and control.

Traditional media historically dictate what the public should see or hear. With UGC, this wall of power has started to crumble. Its rise implies a “shift away from simple passive consumption of broadcasting... to more active choosing, interacting, and creating content” (OECD, 2007). Users can now generate and disseminate information, with the ability to influence other users in the process. Companies, therefore, end up competing with the very same customers they are targeting, with regard to creating and delivering message and content.

### III. A REVIEW OF STUDIES ON SOURCE CREDIBILITY

Source credibility is defined as “a communicator’s positive characteristics that affect the receiver’s acceptance of a message” (Ohanian, 1990). The source credibility model asserts that the credibility of a message is a function of the recipient’s perception of trustworthiness of the message source (Hovland & Weiss, 1951; Erdogan, 1999; Chu & Kamal, 2008). Simply stated, a recipient will most likely find a message credible and effective if he perceives the sender to be trustworthy. This most probably explains why customers find WOM recommendations from people they trust, such as friends and family, more credible.

On the Internet, however, the emergence of UGC adds another dimension to source credibility. Rieh (2002) argues that “consumer judgments of website information credibility are more a function of the website provider’s credibility (viewed as the source of information), than by the perceptions of actual author or creator of the content.”

What this implies is that any UGC, regardless of the person who created it, would generally be perceived as an independent third-party. On the other hand, a CPC, however credible and objective the content author may be, would still be perceived as coming from a biased source with a veiled corporate agenda.

The perception that UGC creators are not driven by corporate or monetary interest may be the reason why they are regarded as independent and objective. Studies have shown that money is not the primary reason why bloggers maintain a blog (Burns, 2005; Bughin, 2007). An analysis of motivational reasons for creating UGC shows that users create UGC “to connect with other people and to feel important” (Daugherty, Eastin, & Bright, 2008).

Preliminary studies on source credibility on the Internet claim that certain forms of UGC are more credible than CPC. Johnson

and Kaye (2004) surveyed blog readers and found that readers judge blogs much more credible than traditional media. A problem with this study, however, is the use of blog readers as respondents that could have biased the results. Cheong and Morrison (2008) interviewed 17 students and determined that users find information on third-party blogs more credible than that on official company press releases, write-ups, or announcements. A sample size of 17, however, may be too small.

The author’s present study improves on the foregoing research by surveying a sizable sample that includes not just creators, but also non-users, of UGC. At the same time, what is being measured is the credibility of content not just on blogs, but also on a variety of UGC platforms. This exploratory study focuses on the youth market in the Philippines, because the youth are the primary users of the Internet, with nearly one-third of Internet users around the world belonging to this age group (Pew Internet, 2009).

Although the WOM medium from oral to electronic may be different, a growing number of researchers in the United States (Johnson & Kaye, 2004; Cheong & Morrison, 2008; Chu & Kamal, 2008) argue that information on the Internet created by third-party sources (such as UGC) is more credible than those produced by companies (CPC). This study seeks to confirm if the same difference in credibility perception exists among young Internet users in the Philippines:

*Hypothesis 1:* A difference in perceived credibility exists between sources of company-produced content (CPC) and sources of user-generated content (UGC).

The author also theorizes that the level of Internet usage may be a factor affecting source credibility perceptions. A study by Dutta-Bergman (2002) used an attitude interest-opinion (AIO) inventory to determine the relationship between Internet usage and various psychographic factors – opinion leadership, among one of them. It found that opinion leaders are less likely to use the Internet, suggesting a “negative correlation of opinion leadership and Internet use.” A more recent study by Assael (2005), however, showed that heavy Internet users (i.e., those using the Internet for at least 20 hours per week) have more favorable

attitudes towards the Internet and are more likely to rely on the Internet for information. This present study tests if the two groups of Internet users (light and heavy users) differ in perception of source credibility. Thus,

*Hypothesis 2:* Heavy Internet users (those using the Internet for at least 20 hours per week) are significantly different from light Internet users (those using the Internet for less than 20 hours per week) in terms of perception of credibility of CPC and UGC.

#### IV. METHODOLOGY

Target respondents were selected through a convenience sampling method, with those aged between 18 and 34 living in Metro Manila, Philippines being chosen to answer the survey. Due to cost constraints, only respondents from select schools, offices, and shopping malls in Quezon City, Makati, Taguig, and Manila were recruited. Questionnaires were personally administered by the author.

The questionnaire used a Likert-type 5-point numerical scale ranging from 1 (“Not at all”) to 5 (“Very”). Respondents rated six online channels in terms of credibility in providing information they need to know about the product being advertised. These are: (i) Banner advertisement; (ii) Email newsletter; (iii) Official blog of the company; (iv) Blog owned by a third party; (v) Forums and wikis; and (vi) Videos uploaded by third

parties to content-sharing sites. These six channels were chosen because they are the most common Internet advertising formats today.

The author intended a sample size of 200 to achieve a desired precision of +/- 0.2 and a 95% confidence interval (Churchill & Brown, 2007, p. 382). Eighteen (18) questionnaires were initially rejected either because the respondents did not finish the survey or the respondent’s age was outside the target range. Sixty-two (62) additional questionnaires were eliminated because the required CPC and UGC items in the survey were not answered. A complete CPC and UGC pair was needed because the paired samples *t*-test will be used to test the hypothesis. Total valid responses, therefore, is 120, a 60% response rate.

#### V. RESULTS

Previous studies focused on bloggers and blog readers and their opinion of credibility of blogs (Johnson & Kaye, 2004; Chu & Kamal, 2008). However, to fully

understand the general population’s perception of source credibility, non-bloggers and non-users of UGC must also be surveyed. To check whether this group of

users is represented in the survey's sample, the profile and online behavior of respondents will be discussed first. This will be followed by the results of evaluation of source credibility and the difference between light and heavy Internet users.

### Profile and Online Behavior of Respondents

Fifty-eight percent (58%) of the respondents are females, while 42% are males. The average age is 22.7 years old. Almost half (47.8%) of the respondents are employed and a similar percentage (47.3%) are students. The rest are either running their own business or are not working. Ninety percent (90%) consider themselves "active

Internet users," defined as people who access the Internet everyday or every other day (Universal McCann, 2009). On the average, the surveyed youth are online more than 28 hours per week.

Although majority are active Internet users, around thirty-eight percent (38%) say they do not own a blog (Table 1). A similar percentage admit they have never participated in wikis or forums ("Never participated in wikis/forums" = 39.6%). In addition, around one-fourth of respondents (25.6%) say they have not submitted any video contributions to video sharing sites. These figures prove that non-users and non-creators of UGC are represented in the survey sample.

**Table 1**  
**UGC Activities of Young Internet Users (n=120)**

*\*Survey Question: When online, how often do you do the following activities?*

UGC Activity	Always	Sometimes	Rarely	Never
Manage / update my blog	6.0%	26.9%	29.1%	37.9%
Read blogs	17.0%	39.6%	34.6%	8.8%
Participate in wikis, forums (e.g., Wikipedia, Yahoo! Answers)	5.5%	18.1%	36.8%	39.6%
Upload videos to content sharing sites (e.g., YouTube)	5.6%	28.8%	40.0%	25.6%
Watch videos on content sharing sites (e.g., YouTube)	36.5%	51.4%	9.9%	2.2%

### Hypothesis 1: Source Credibility of CPC vs. UGC

The paired samples *t*-test is used to evaluate the respondents' perception of source credibility. This test is appropriate when determining whether there is a significant difference between the average values of the same measurement made under two different conditions. The paired *t* test, in effect, pools the response differences within each pair, from pair to pair (Larsen & Marx, 2001).

The pairs considered in this study are the CPC and UGC means. In the questionnaire, items (i) Banner advertisement; (ii) Email newsletter; and (iii) Official blog of the company refer to *Company-Produced Content (CPC)*, and their scores were combined to become the CPC Mean. Items (iv) Blog owned by a third party; (v) Forums and wikis; and (vi) Videos uploaded by third parties refer to *User-Generated Content (UGC)*, and their scores were combined to become the UGC Mean (Table 2).

**Table 2**  
**Credibility Rating of UGC and CPC Sources (n=120)**

	Item	$\bar{x}$	$\sigma$	Category $x$
CPC	i. Banner advertisement	3.319	0.74893	3.2111
	ii. Email newsletter	3.121	0.83216	
	iii. Official company blog	3.322	0.96794	
UGC	iv. Third-party blog	3.747	0.81550	3.6500
	v. Forums and wikis	3.663	0.88958	
	vi. Third-party videos on content sharing sites	3.396	0.83274	

An assumption of the paired samples *t*-test is that the data must be normally distributed. To check for normal distribution, the one-sample Kolmogorov-

Smirnov (K-S) non-parametric test is employed. Results of the K-S test prove that the data follow a normal distribution.

**Table 3**  
**One-Sample Kolmogorov-Smirnov Test**

		UGC	CPC
Normal Parameters <sup>a,b</sup>	Mean	3.6500	3.211
	Std. Deviation	.65800	.65669
Most Extreme Differences	Absolute	.127	.148
	Positive	.127	.123
	Negative	-.118	-.148
Kolmogorov-Smirnov Z		1.388	1.990
Asymp. Sig. (2-tailed)		.043	.001

a. Test distribution is normal.

b. Calculated from data.

The results of the *t*-test conducted on the CPC Mean – UGC Mean pair are shown on Table 4. The low value of paired samples correlation score ( $r=0.285$ ,  $p<0.002$ ) between UGC and CPC shows that the respondents correctly perceived both types of content differently. The test also reveals

that a significant difference exists between the two means. The directional strength towards UGC (UGC Mean=3.65 > CPC Mean=3.211) proves that the youth perceived UGC sources more credible than CPC sources.

**Table 4**  
**Paired Samples *t*-Test Result**

<i>Paired Samples Statistics</i>							
	Mean	N	Std. Deviation	Std. Error Mean			
UGC	3.6500	120	.65800	.06007			
CPC	3.2111	120	.65669	.05995			

  

<i>Paired Samples Correlations</i>			
	N	Correlation	Sig.
UGC – CPC Pair	120	.285	.002

  

<i>Paired Samples Test</i>								
Paired Differences								
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
UGC – CPC Pair	.43889	.78618	.07177	.29678	.58100	6.115	119	.000

### Hypothesis 2: Heavy vs. Light Internet Users

In assessing the demographic and psychographic profile of heavy Internet users, Assael (2005) defined heavy Internet users as those using the Internet for more than 20 hours per week. Using this definition, heavy Internet users will already comprise 65% of this study's survey sample. The author decided to subdivide this group

further into two, resulting to three groups as per Internet usage: (1) "Light Internet Users" – those who access the Internet less than 20 hours per week; (2) "Medium Internet Users" – access the Internet 20-40 hours per week; and (3) "Heavy Internet Users" – access the Internet at least 40 hours per week. A comparative analysis of these groups of Internet users can be found in Tables 5 and 6.

**Table 5**  
**Light vs. Medium vs. Heavy Internet Users**

Group	Light Users	Medium Users	Heavy Users	Total
n	42	36	42	120
Average Internet usage per week (hours)	7.14	25.44	52.64	28.56
CPC $\bar{x}$	3.4444	3.2222	2.9683	3.2111
UGC $\bar{x}$	3.5238	3.5000	3.9048	3.6500



**Table 6**  
**Post-Hoc Test of the 3 Groups of Internet Users**

Mean Difference (UGC – CPC)	<i>n</i>	<i>Subset for alpha = .05</i>	
		<i>1</i>	<i>2</i>
Light Internet Users	42	.0794	
Medium Internet Users	36	.2778	
Heavy Internet Users	42		.9365
Sig.		.207	1.000

A post-hoc test of the three groups (light, medium, and heavy Internet users) shows that heavy Internet users are significantly different from the two other groups. This proves that they are indeed a distinct group of Internet users.

Interestingly, the test shows that there is no significant difference between light and

medium Internet users. This could either mean that the definition used by Assael (2005) of heavy Internet users (i.e., those using the Internet for at least 20 hours per week) may already be outdated or that, in the case of the Philippines, heavy Internet users are those who use the Internet for at least 40 hours, not 20 hours, per week.

## VI. DISCUSSION

An analysis of source credibility is essential because past studies have shown that high credibility perceptions ultimately lead to message effectiveness and favorable attitudes toward the brand (Friedman & Friedman, 1979; Ohanian, 1990; Erdogan, 1999). Thus, companies must struggle with building credibility on the Internet in the face of competition with other providers of information. With the widespread popularity of UGC, this competition now includes the company's own target customers.

The results of this study provide a number of theoretical insights. First, this research adds to the conclusion of a growing number of researches that claims that product information created by other consumers are more trustworthy than company-produced information (Cheong & Morrison, 2008) and that blog readers find blogs highly credible compared with traditional media (Johnson & Kaye, 2004). Second, it provides a

foundation for future research on the roles UGC creators play in persuasive communication and the factors influencing consumer attitude and behavior.

The finding that the youth perceive UGC creators such as bloggers, video uploaders, and forum posters more credible than companies brings about several managerial implications. For instance, companies must not fear the use of UGC despite notions that user-created content is usually of low quality and has unfounded bias against companies. In fact, the OECD (2007) has noted that a large share of user-generated content not posted anonymously can be "of very high quality as creators care about their reputation, and have high incentives for accuracy."

Instead of rejecting UGC and its creators, companies must learn how to work with this potential new group of opinion leaders. Companies must find ways to leverage them, not compete with them. Possible initiatives

the company can take toward this direction include blog sponsorships, product reviews, UGC creation contests, and customer feedback through UGC. Blog sponsorships would include direct advertisements on blogs and inviting UGC makers to press events. Bloggers can be tapped to post an objective review of company products while video makers can be invited to join a contest where they submit video creations about the brand. UGC platforms such as blogs, forums, wikis and content sharing sites can be used as sources of comments and feedback which the

company can use to improve product offerings.

Recognizing who the heavy Internet users are can provide great benefits to companies. Understanding the attitudes and behavior of this distinct group of Internet users can ultimately lead to identifying a potential future Internet trend. A study on heavy Internet users claims that this group resembles the early Internet adopter group (Assael, 2005). Companies can thus tap and utilize this group to better target the bigger mainstream market.

## VII. LIMITATIONS AND FUTURE RESEARCH

The employment of six Internet advertising items in this research biases the results in favor of these advertisement formats only. Although the six are generally accepted to be the most common types of online advertisements today, the study ignores other possible formats that play various functions (such as the company website) or are just emerging (such as social networking sites). Further studies can explore how these platforms affect the perception of source credibility on the Internet.

The use of convenience sampling limits the generalizability of the study's results. At best, the conclusions of the study only apply to the youth sample in Metro Manila, Philippines. Future studies may utilize probabilistic sampling methods to address this limitation.

The definition of credibility can also be refined in future research. This study focused on perceived trustworthiness of the source, but other factors may be considered such as expertise of the source, justifiability of information presented, and attitudinal disposition of the recipient (Hovland & Weiss, 1951; Chu & Kamal, 2008; Flanagin

& Metzger, 2008).

The relationship of source credibility with purchase intention or contribution to a positive image or perception of the company or brand was not measured by this study. Further research in this direction may be undertaken in the future.

A more detailed analysis of the groups of Internet users, particularly heavy Internet users, might also yield interesting insights. Understanding their demographic and psychographic profiles can help companies craft a more effective marketing message. In addition, further testing of the correlation of opinion leadership and level of Internet usage may be done, in order to determine if opinion leaders on the Internet are also heavy Internet users.

In conclusion, an understanding of the youth's attitudes and behavior on the Internet and of their online relationship with companies – and also among themselves – becomes particularly important as the Internet becomes an integral part of the lives of the youth.

## REFERENCES

- Arndt, J. (1967). Word-of-mouth advertising and informal communication. In D. Cox (Ed.), *Risk taking and Information handling in consumer behaviour* (pp. 188-239). Boston, MA: Harvard University.
- Assael, H. (2005). A demographic and psychographic profile of heavy internet users and users by type of internet usage. *Journal of Advertising Research*, 45(March), 93-123.
- Bezjian-Avery, A., Calder, B. & Iacobucci, D. (1998). New media interactive advertising vs. traditional advertising. *Journal of Advertising Research*, (July/August), 23-32.
- Bughin, J. R (2007). How companies can make the most of user-generated content. *McKinsey Quarterly*, (August).
- Burns, E. (2005). Blogging for the soul, not the bottom line. *ClickZ*, (September). Retrieved from <http://www.clickz.com/3549576>
- Chandon, J. L., Chtourou, M. S. & Fortin, D. R. (2003). Effects of configuration and exposure levels on responses to web advertisements. *Journal of Advertising Research*, 43(June), 217-229.
- Cheong, H. J. & Morrison, M. A. (2008). Consumers' reliance on product information and recommendations found in UGC. *Journal of Interactive Advertising*, 8(2), 38-49.
- Choi, S. M. & Rifon, N. J. (2002). Antecedents and consequences of web advertising credibility: A study of consumer response to banner advertisements. *Journal of Interactive Advertising*, 3(1), 12-24.
- Chu, S. C. & Kamal, S. (2008). The effect of perceived blogger credibility and argument quality on message elaboration and brand attitudes: An exploratory study. *Journal of Interactive Advertising*, 8(2), 26-37.
- Churchill, G. Jr. & Brown, T. J. (2007). *Basic marketing research* (6th ed.). Mason, Ohio: Thomson South-Western.
- Dahlen, M. (2001). Banner advertisements through a new lens. *Journal of Advertising Research*, 41(4), 23-30.
- Daugherty, T., Eastin, M. S. & Bright, L. (2008). Exploring consumer motivations for creating user-generated content. *Journal of Interactive Advertising*, 8(2), 16-25.
- Dutta-Bergman, M. J. (2002). Beyond demographic variables: Using psychographic research to narrate the story of internet users. *Studies in Media and Information Literacy Education*, 2(3), 1-11.
- Erdogan, Z. B. (1999). Celebrity endorsement: a literature review. *Journal of Marketing Management*, 15(3), 291-314.
- Flanagin, A., & Metzger, M. (2008). Digital media and youth: Unparalleled opportunity and unprecedented responsibility. In A. Flanagin & M. Metzger (Eds.), *Digital media, youth, and credibility* (pp. 5-28). Cambridge, MA: The MIT Press.
- Friedman, H.H. & Friedman, L. (1979). Endorser effectiveness by product type. *Journal of Advertising Research*, 19(October), 63-71.

- Hovland, C. I. & Weiss, W. (1951). The influence of source credibility on communication effectiveness. *Public Opinion Quarterly*, 15, 635-650.
- Johnson, T. J. & Kaye, B. K. (2004). Wag the blog: How reliance on traditional media and the internet influence credibility perceptions of weblogs among blog users. *Journalism & Mass Communication Quarterly*, 81(3), 622-642.
- Kotler, P. & Armstrong, G. (2008). *Principles of marketing* (12th ed.). Upper Saddle River, NJ: Pearson Hall.
- Larsen, R. J. & Marx, M. L. (2001). *Introduction to mathematical statistics and its applications* (3rd ed.). Upper Saddle River, NJ: Pearson Hall.
- Nielsenwire (2009). *Global advertising: consumers trust real friends and virtual strangers the most*. Retrieved from <http://blog.nielsen.com/nielsenwire/consumer/global-advertising-consumers-trust-real-friends-and-virtual-strangers-the-most/>
- Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising*, 19(3), 39-52.
- Organization for Economic Cooperation and Development (2007). *Participative web and user-created content*. Retrieved from [http://www.oecd.org/document/40/0,3343,en\\_2649\\_34223\\_39428648\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/40/0,3343,en_2649_34223_39428648_1_1_1_1,00.html)
- Pavlou, P. A. & Stewart, D. W. (2000). Measuring the effects and effectiveness of interactive advertising: A research agenda. *Journal of Interactive Advertising*, 1(1), 62-78.
- Pew Internet & American Life Project (2009). *Generational differences in online activities*. Retrieved from <http://www.pewInternet.org/Reports/2009/Generations-Online-in-2009/Generational-Differences-in-Online-Activities/Generations-Explained.aspx?r=1>
- Rieh, S. Y. (2002). Judgment of information quality and cognitive authority in the web. *Journal of the American Science for Information Science and Technology*, 53(2), 145-161.
- Rodgers, S. & Thorson, E. (2000). The interactive advertising model: How users perceive and process online advertisements. *Journal of Interactive Advertising*, 1(1), 42-61.
- Schonfeld, E. (2010). *JPMorgan forecasts a 10.5 percent rebound in U.S. display advertising in 2010*. Retrieved from <http://techcrunch.com/2010/01/04/jpmorgan-advertising-2010/>
- Universal McCann (2009). *Power to the people – Social media tracker wave 4*. Retrieved from <http://universalmccann.bitecp.com/wave4/Wave4.pdf>