

MEASURING CONSUMER PERCEPTIONS OF CREDIBILITY,  
ENGAGEMENT, INTERACTIVITY AND BRAND METRICS OF SOCIAL  
NETWORK SITES

A Thesis

Submitted to the Graduate Faculty of the  
Louisiana State University and  
Agricultural and Mechanical College  
in partial fulfillment of the  
requirements for the degree of  
Master of Mass Communication

in

The Manship School of Mass Communication

by  
Jeffrey Evan Forbes  
B.A., Louisiana State University, 2003  
May 2010

## Acknowledgments

I wish to thank Dr. Lance Porter, my thesis advisor, for his guidance, understanding and above all, his patience. Without his help, this project would never have gotten off the ground. I owe a tremendous debt of gratitude to Dr. Peggy DeFleur for her constant support throughout this entire process, without her help I would not be where I am today.

My parents Tom and Jackie Forbes deserve immense gratitude for their unwavering support throughout this process. They provided me with encouragement, helpful advice and confidence, and I am truly blessed to have them in my life. I owe them a great deal and cannot express how much they mean to me.

I would like to thank the following friends, colleagues, and professors for their time, sense of humor, encouragement, support, and uncanny ability to put up with me. To Miranda, Amy L., Amy M., Amanda, Jennifer, Brigitte, Jeremy, Connor, Tristi, Misti, Nicole, Gennadi, Mike, Danny, Kaye, Emily, Greg, Jeff, Renee, Melissa, Patrick, Stephanie, Thomas, and Christine: I cannot say thank you enough for being with me throughout this whole experience.

## Table of Contents

ACKNOWLEDGMENTS.....	ii
ABSTRACT.....	v
CHAPTER 1 – INTRODUCTION.....	1
Purpose.....	2
CHAPTER 2 – LITERATURE REVIEW.....	3
Elaboration Likelihood Model.....	3
Credibility.....	7
Source Credibility.....	7
Corporate Credibility.....	9
Third-party Credibility.....	11
Media Credibility.....	13
Online Credibility .....	14
Social Network Sites.....	17
Engagement.....	20
Interactivity.....	23
CHAPTER 3 – METHODOLOGY.....	29
Procedure.....	30
Measures.....	31
Credibility Measures.....	32
Engagement Measures.....	32
Interactivity Measures.....	33
Attitude and Purchase Intention Measures.....	33
Demographics and Web Use Measures.....	34
CHAPTER 4 – RESULTS.....	35
Respondents Rated Corporate Site Most Credible.....	35
Participants Found the Corporate Site Most Engaging .....	36
Corporate Site Most Interactive.....	36
Attitudes More Positive, But Purchase Intentions Remained Neutral.....	36
Constructing the Measures.....	37
Tests of Hypotheses .....	38
Tests of Research Questions .....	39
CHAPTER 5 – DISCUSSION AND CONCLUSIONS.....	42
Users Found Facebook More Trustworthy than the Blog.....	42
Corporate Site Ranked Most Engaging, Followed by Facebook.....	43
Corporate Site Most Interactive.....	45
Users Found the Corporate Site Most Credible.....	46
Corporate Site and Attitudes and Purchase Intentions.....	46
ELM is a Useful Tool for Measuring Web Site Attitudes.....	47
Implications for Industry Professionals.....	48
Limitations.....	49

Future Research.....	49
WORKS CITED.....	51
APPENDIX A – WEB SITE SCREENSHOTS.....	56
APPENDIX B – INFORMED CONSENT.....	59
APPENDIX C – ONLINE SURVEY.....	60
VITA.....	65

## Abstract

For advertisers looking to include online media in their marketing strategies, consumer perceptions of Web sites become increasingly important. This study examined three types of endorsement in an online setting. To accommodate the many voices of a social network site, this study employed a new form of endorsement, a social-network endorsement, to account for the collective opinions and feedback of social network site members. Using an experimental design, this study tested the credibility, engagement, and interactivity of three types of endorsements: a corporate endorsement, a third-party endorsement and a social-network endorsement. Two hundred fifty-one participants examined one of three sites, a corporate site, a blog and a Facebook group page, to determine if Web site source affected credibility, engagement, interactivity, attitude toward the Web site, brand attitudes, and purchase intentions. Findings indicated consumers regard corporate Web sites with more credibility and find them more engaging and interactive. Credibility also increased positive attitudes towards the Web sites. Subjects also rated Facebook more trustworthy and engaging than the blog. However, none of the different endorsements influenced brand attitudes or purchase intentions.

## Chapter 1 – Introduction

According to Cooke and Buckley (2008), Web 2.0 technologies are changing the online media landscape. This platform encourages user participation in the content and form of online information, from blogs to YouTube, to social network sites like Facebook and MySpace. This changing media environment shifts who is in charge by letting users generate information displayed on the World Wide Web.

In their examination of user-generated content and advertising, Krishnamurthy and Dou (2008) suggest that consumers are on the same level as advertisers because Internet users are active participants in producing, designing, editing and publishing online content. The authors suggest advertisers have two options: produce professional ads alongside user-generated content, or ask users to help create ads for the brand.

Marketers are understandably hesitant to hand over their brand, but including users in the process of advertising may help form stronger relationships between advertisers, consumers and brands. This study compares levels of credibility, engagement and interactivity of blogs, social network sites and corporate sites to create a better understanding of the user-generated media environment. An examination of users' perceptions of blogs and social network sites can help advertisers decide how and where to place their ads. While advertisers need to appear credible, the context surrounding the ad is just as crucial for reaching consumers.

Traditional studies of credibility (Hovland & Weiss, 1951; Petty & Cacioppo, 1981; and Newhagan & Nass, 1989) have focused on print media. Other studies examining credibility and the Internet have used news sites or blogs to examine their credibility (Kioussis, 2000; Johnson and Kaye, 2002; and Johnson and Kaye, 2004). A new research area deals with social network sites and other Web 2.0 technology (boyd and Ellison, 2007; Ellison, Steinfield, & Lampe, 2007;

Gangadharbatla, 2008). This study investigates blogs, social network sites and corporate sites to provide a better understanding of the online social community and how advertising fits into this paradigm.

### Purpose

The purpose of this study is to examine the effects of Web site source on credibility, engagement, interactivity, and attitudes toward the brand, attitudes toward the site and purchase intentions. Specifically, this study will examine three different types of endorsement in an online setting: third-party, corporate and a new form called a social-network endorsement. A blog will represent the third-party endorsement because, in this case, one individual creates the main content, even though readers can leave comments. The second source is a combination of user-generated content and corporate-generated content in the form of a social network site, which I call a social-network endorsement. The final source is a corporate endorser, represented by a corporate Web site.

To account for multiple variables like source credibility, engagement, involvement and interactivity, a dual process model like the elaboration likelihood model is useful because the model accounts for multiple variables and predicts how those variables affect the effectiveness of a persuasive message (Booth-Butterfield & Welbourne, 2002). Persuasion and attitude change are the ultimate goal in any advertising situation. The elaboration likelihood model explains the route to persuasion by variables such as source credibility and involvement.

## Chapter 2 – Literature Review

### Elaboration Likelihood Model

The ELM is a dual route, multi-process theory of persuasion, containing central and peripheral routes to persuasion and the elaboration continuum (Petty, Cacioppo & Schumann, 1983; Petty & Cacioppo, 1984). The central route of persuasion is one that involves more effortful informational processing of the message. People carefully consider the quality and strength of the argument, and if the arguments are cogent and sound, they develop positive attitudes toward the message. Conversely, if a person scrutinizes the argument, and it is weak and unsound, they develop negative attitudes or counter-attitudes to the message (Petty & Cacioppo, 1984). The peripheral route involves less effort in processing the message. People following this peripheral route are not motivated to carefully scrutinize the message and therefore rely more on peripheral cues. Central route cues are more message-oriented, whereas peripheral cues like source attributes, source credibility, and distraction are separate from message scrutiny. Both routes lead to persuasion, but the central route results in more durable attitude change, provided the arguments are cogent and not specious (Petty & Cacioppo, 1984).

Another aspect of ELM is the elaboration continuum. The elaboration continuum contains different degrees of effortful processing concerning motivation and ability. Individuals with greater motivation and ability will pursue greater elaboration. Higher motivation increases the likelihood of attitude change along the central route to persuasion. Individuals with less motivation and ability to process the message have lower elaboration and typically follow the peripheral route. Petty and Wegener (1999) explained the route to persuasion:

As motivation and/or ability to process arguments is decreased, peripheral cues become relatively more important determinants of persuasion. Conversely, as argument scrutiny is increased, peripheral cues become less important determinants of persuasion (p. 18).

On the high end of the spectrum are high elaboration and the central route, and on the other are low elaboration and the peripheral route. Source factors and involvement are two common peripheral cues influencing the elaboration spectrum and therefore the specific route to persuasion (Petty, Cacioppo & Schumann, 1983; Petty & Cacioppo 1984).

In another examination of the ELM, Petty, Cacioppo, and Goldman (1981) tested changes in source credibility, argument quality and personal relevance and the resulting effect on persuasion. One hundred forty-five university students participated in the 2 x 2 x 2 factorial design. Participants listened to a radio recording concerning the institution of a comprehensive test required for seniors before graduation. The low credibility source was a high school class and the Carnegie Commission for Higher Education, chaired by a Princeton professor, represented the high credibility source. The low quality argument contained quotes and personal opinions whereas the high quality argument included statistics in support of the exam based on success rates at other universities. The researchers manipulated personal relevance by suggesting instituting the comprehensive exam the following year (high) or in the next ten years (low). Results indicated that under high relevance, argument quality influenced attitudes. Conversely, source credibility influenced attitudes in the low relevance design.

Similarly, Petty, Cacioppo and Schumann (1983) manipulated the role of involvement, argument quality, and source effects to determine their impact on the routes to persuasion. One hundred sixty students participated in a 2 x 2 x 2 factorial design. Participants looked at advertising print ads with high or low involvement design. The booklets contained advertisements for a razor and toothpaste. The high involvement design informed participants the product would be available soon in their area, and that the razor would be their gift upon completion of the booklet. The low involvement design offered participants the toothpaste as a gift and indicated the razors would not be available in their area in the near future. The

researchers manipulated argument quality by using strong and weak arguments and either used celebrity or non-celebrity endorsers for source effects. The authors found that argument quality influenced attitudes under high involvement, and celebrity endorsers influenced attitudes under low involvement conditions.

In a similar examination of ELM, Homer and Kahle (1990) used source expertise, time of source identification, and involvement to examine central and peripheral route processing of persuasive messages. Two hundred thirty-four participants made up the sample of this 2 x 2 x 2 factorial design. Participants examined a print ad for a skin-care product and responded to a questionnaire. The researchers manipulated source expertise by citing a dermatologist for the expert source and an accountant for the non-expert source. The time of source identification occurred at either the beginning or end of the stimulus material. For high involvement, the researchers informed the participants that the product would be available in their area, whereas the product would not be available for the low involvement condition. Findings suggested that the timing of source identification was highest when an expert source appeared at the end of the material when involvement was low. However, for high involvement the expert source led to better persuasion in the beginning of the advertisement. In addition, increased levels of involvement caused individuals to keep and recall the message content, following the experiment. Results also indicated source expertise may act as a central cue rather than a peripheral cue in some situations. In this case, the authors suggest source expertise is a central cue with regard to print media, which is particularly important because previous studies treat source credibility as a peripheral cue.

However, the Web seems to alter the effects of ELM. In a study examining banner ads in an online setting, Cho (1999) applied the ELM to Web sites and suggested a Modified Elaboration Likelihood Model. Traditional media presents a one-way flow of communication,

but on the World Wide Web, users are able to interact with the Web site creating a two-way communication flow. In his examination of banner ads, Cho determined the ELM needed modification to account for voluntary exposure, which he defined as the action of clicking through a banner ad. The author classified involuntary exposure as the existence of a banner ad on a Web site, but once users clicked through to see more detail, they exhibited voluntary exposure. Using an experimental design, the researcher tested levels of involvement, peripheral cues (banner ad size), and contextual relevance to determine the effectiveness of banner ads on persuasion. Results indicated subjects in the high-involvement group followed the central route processing and those in the low-involvement group relied more on peripheral cues. Findings supported the researcher's modified ELM, indicating future research can apply the ELM to Web site advertising.

Building on the research of Cho (1999), McMillan, Hwang and Lee (2003) applied the ELM to an entire Web site, instead of simply a banner ad. The researchers used involvement and perceived interactivity to examine engagement. Subjects visited four Web sites with varying levels of interactivity, limited features versus greater options, and informational versus creative content. Their findings indicated higher levels of involvement and perceived interactivity increased levels of engagement and attitudes toward the Web site. The authors concluded that the ELM was inadequate to predict responses to Web sites due to the high level of activity and engagement that occurs when people visit a Web site. The researchers suggest that advertisers must adjust to a new medium that involves and engages the consumer.

This study seeks to build on previous research and apply the ELM to online settings by including variables of engagement and interactivity to account for differences in examining Web sites versus more traditional media. More specifically, this study will examine site source and

credibility to determine the persuasiveness of different types of Web sites. The following section delves into credibility research across media.

### Credibility

The ELM accounts for many variables, but source credibility has been an important question for researchers dating back to the earliest studies by the Yale group (Hovland & Weiss, 1951), who examined source credibility and its impact on persuasion. Researchers have divided credibility into multiple dimensions, but this section addresses source and medium credibility.

For example, Thorson and Moore (1996) note the importance of analyzing credibility in terms of the source as well as the channel or medium. Kiouisis (2001) noted that one could separate credibility into medium, source and message paradigms, each of which affect attitude change as it relates to credibility. Austin and Dong (1994) studied the sender along with the message to determine if either would have an effect on the overall credibility of the information. They found that the respectability of the source had little impact on the perceived credibility of the information, and that the “innocuous” message was more believable than the sensational message. These findings led them to conclude that the perceived credibility of the information had more to do with the message itself than the sender, “this study has confirmed that an individual can believe that a highly reputable source can produce an unbelievable story” (p. 979). Therefore, credibility research should include source and medium dimensions to apply a representative analysis of credibility and the impact on persuasion.

### Source Credibility

Specific examinations of source credibility began with studies by the Yale group. In their examination of source credibility, Hovland and Weiss (1951) divided credibility into two subgroups: trustworthiness and expertise. Respondents found the highly credible source (Robert Oppenheimer on the subject of atomic submarines) more immediately believable. For example,

Oppenheimer's association with the atomic bomb made him an expert on the subject. Two hundred twenty-three participants read the articles and took a post-test questionnaire and the results showed a greater number of subjects changed their opinion to agree with the communicator when the source was highly credible. After four weeks, however, respondents took another test, which resulted in more believability in the low credibility source and less believability in the highly credible source. The researchers dubbed this the "sleeper effect" (p. 647). The experimenters also questioned whether the message itself was informative or if an opinion might have an effect on respondents' attitudes. This study provided groundwork for building credibility research, as trustworthiness and expertise are important dimensions of credibility research (Gaziano & McGrath, 1987; Ohanian, 1990; Newell & Goldsmith, 2001).

By adding aspects of source image to trustworthiness and expertise, Berlo, Lemert and Mertz (1969) extended credibility research by creating scales to measure credibility described as safety, qualification and dynamism. This study replaced trustworthiness with safety, and represented expertise with qualification, to extend the research of Hovland and Weiss (1951). Berlo et al. (1969) suggested the receiver could perceive the source in a broader manner, specifically that image of the source was an important aspect of source credibility. Using qualitative interviews, surveys and an experiment, the authors measured the perception of the source, and increased source qualities to include attractiveness. Participants fell into one of three different conditions using public figures. One condition had a public source with no context, a second condition used a public source with irrelevant context and the third condition used public source and relevant context. Their findings led to a broader way to measure credibility, but still utilized trust and expertise as essential components. The authors argued that source image should reflect message receivers' perceptions of the source, not objective source characteristics, and that source image, safety and dynamism are each essential dimensions of persuasion.

While the previous research focused on news and issues, Settle and Golden (1974) examined source credibility in an advertising context. Settle and Golden tested the relationship between claim consistency and consumer expectancy. The authors examined source credibility in advertising and attribution claim consistency. The results indicated disclaiming superiority instead of higher consistency across product traits could increase believability of product claims and source credibility. Source credibility increased when product claims admitted the superiority of another brand in some areas instead of claiming product superiority for all traits. A source is more trustworthy when divulging some negative information instead of appearing to advocate superiority. These findings suggest that if participants do not perceive the source as credible, then product claims will not be credible.

Message or argument quality is another aspect of source credibility (Petty et al., 1983; Homer & Kahle, 1990). In one study, Slater and Rouner (1996) examined source credibility by evaluating the quality of the message and the impact on belief change. In the experiment, 76 participants examined a booklet containing short articles on different social groups, written by biased or unbiased sources with high or low message quality. The results suggested when message quality was high the source appeared more credible. This finding was strong for expert sources, but not for biased sources, and message quality did not appear to influence the credibility of the biased source. The results also suggested that source credentials and attributes might not be as influential in persuasion as a high-quality message. Credibility of the source is important, but it is also vital to examine specific types of sources. The next section focuses on corporate credibility, third-party endorsement, and social-network endorsement.

### Corporate Credibility

Part of the corporate reputation is corporate credibility, which is influential in developing consumer's attitudes toward products and the advertisement. Advertisement credibility is the

extent to which claims made in the ad appear to be true or believable. Lafferty and Goldsmith (1999) suggested that along with endorser credibility, the corporate image is also essential for persuasion. Consumers must believe the corporation will fulfill its claims and that the company is truthful. The authors examined endorser credibility and corporate credibility's influence on attitude toward the ad, attitude toward the brand and purchase intentions. Participants looked at one of four magazine ads with high or low endorser credibility, or high or low corporate credibility. The findings suggested higher credibility for both endorser and corporate, positively influenced attitudes toward the brand, attitudes toward the ad and purchase intentions. Endorser credibility influenced attitudes toward the ad, but corporate credibility had a higher influence over attitude toward the brand and purchase intentions.

Similarly, Goldsmith, Lafferty and Newell (2000) compared the impact of endorser and corporate credibility on brand and advertisement attitudes and purchase intentions. Endorser credibility had a stronger effect on attitude toward the ad, whereas corporate credibility more heavily influenced attitude toward the brand. These findings were similar to Lafferty and Goldsmith (1999) who concluded that both endorser credibility and corporate credibility influence attitude toward the ad and attitude toward the brand, but corporate credibility, by itself, had a stronger impact on purchase intentions. This research led to the proposition of the Dual Credibility Model (DCM). The DCM stipulates, consistent with previous findings, endorser credibility influences attitude toward the ad, corporate credibility influenced both brand attitudes and purchase intentions. While corporate credibility influences all three metrics, endorser credibility only significantly influenced attitude toward the ad and attitude toward the brand. The DCM compares corporate and endorser credibility, but does not take into account different types of endorsers. The present study includes a third-party endorsement, but also introduces

new kind of endorsement, referred to as a social-network endorsement, to examine differences in perceived credibility. The next section examines third-party endorsement literature.

### Third-party Credibility

Source credibility research also focuses on third-party endorsement (Ohanian, 1990; Cameron, 1994). Dean and Biswas (2001) defined third-party endorsement as “product advertising that incorporates the name of a third-party organization and a positive evaluation of the advertised product that is attributed to the third-party organization” (p. 42). Here, third-party endorsement includes endorsements from individuals, and does not require the endorsement come from an organization.

Based on the advertiser credibility research of Settle and Golden (1974), Kamins, Brand, Hoewe, and Moe (1989) tested celebrity endorsers in two-sided versus one-sided claims, to determine their effect on advertising effectiveness and credibility. Celebrities are well known and generally perceived as likeable and attractive, but are not necessarily credible, and are therefore good examples of a third-party endorser. The two-sided message includes positive and negative claims, but positive claims, which focus on important product qualities, overshadow the negative claims. Using interviews and an experimental procedure with small business owners and CEOs, they examined celebrity endorsement using a two-sided and a one-sided message to see the impact on ad credibility and purchase intentions. Results indicated that two-sided message strategies increase celebrity and ad credibility more than one-sided message strategies, and two-sided messages had a more positive influence on purchase intentions than one-sided celebrity endorsed messages.

Continuing celebrity endorser research, Ohanian (1990) created a scale comprised of perceived expertise, trustworthiness and attractiveness to measure celebrity endorser credibility. The researcher selected these components of third-party credibility because a survey of the

relevant literature consistently operationalized source credibility using the same or similar terms. The researcher performed two exploratory tests and two confirmatory tests in the creation of this scale and its impact on purchase intentions and product quality. The result is a valid scale for measuring third-party credibility, which can evaluate the credibility of a celebrity endorser.

While Ohanian studied the celebrity as the source, Cameron (1994) examined message content. Cameron found participants rated a publicity message more credible than advertising content. The author defined publicity as third-party editorial content and described advertising content as a company-sponsored message. Thirty-six subjects examined either an editorial column or an advertisement containing the exact same copy. The participants then filled out a questionnaire and a two-week follow up questionnaire to test for recall. The findings indicated that third-party endorsement minimally positively affected trustworthiness, and immediate and delayed memory of the content. Admittedly, general attitudes toward advertising and publicity shaped the results as well as the controlled environment, but the results implied a subtle impact on credibility from a third-party source. The suggested implications are that a third-party endorsement will have a stronger effect on credibility than a corporate endorsement.

Similarly, Dean (1999) examined pre-purchase attitudes through third-party endorsements, brand popularity and event sponsorship, and found third-party endorsement positively affected consumer variables. The author used endorsements, popularity, and sponsorship to look at attitudes concerning product quality, perceived product uniqueness, manufacturer esteem, and perceived corporate citizenship. The results indicated third-party endorsements had a strong impact on product variables, quality, uniqueness and esteem, but did not affect citizenship. Results suggested that third-party endorsements might have more positive effects on consumer-related variables than sponsored endorsements.

In a related study, Dean and Biswas (2001) compared third-party organization endorsement and celebrity endorsement of products and the impact on attitudes toward product quality. The researchers created an experimental design for two products, a computer and automobile insurance. Tom Brokaw was the celebrity endorser for the computer print ads and Mario Andretti endorsed the automobile insurance ads. The third-party organization that endorsed the two products was the *Consumer Digest* magazine. The results indicated that a third-party organization endorsement significantly increased perceived product quality when compared to a celebrity endorsement. The authors noted respondents rated the third-party organization endorsement higher in perceived quality and information value of the ad than the celebrity endorsers. This finding indicated that expertise influenced purchase-related variables.

Building on previous research, Wang (2005) incorporated the Internet into third-party credibility research. In his study of third-party endorsement and the impact on online purchasing, Wang (2005) examined whether customer testimonials and online news clips influenced purchase intentions. The results indicated third-party endorsements, both consumer testimonials and online news clips, increased trust and influenced purchase intentions. The online news clips created greater credibility than the consumer testimonials, suggesting that different types of third-party endorsements have varying effects on credibility. Along with endorser credibility, it is vital to examine the effects of different media on persuasion. The next section examines media and online credibility research.

### Media Credibility

Another aspect of credibility is media credibility. McLuhan (1964) coined the phrase, “the medium is the message” (p. 7), explaining that the channel itself has an impact on the content of the message. The content for a print news story will differ from the same story written for a television broadcast. The channel, or medium, also has a strong influencing factor

on persuasion, because the environment can establish relevance and credibility (Thorson & Moore, 1996). In a study across media, Newhagan and Nass (1989) found people have different criteria for how they judge the credibility of each medium. In their study, findings suggested people judged television broadcasters as individuals, but attributed credibility of newspapers to the entire institution. Kiouisis (2001) continued research on credibility by looking at online news sites, television news, and newspapers. Differing from previous findings comparing newspaper and television credibility (Gaziano & McGrath, 1986; Lemert, 1970), Kiouisis (2001) found newspaper credibility ratings to be higher than television credibility ratings.

A number of studies have examined online credibility through newsgroups, chat rooms, online news sites, blogs, and other areas of interactive communication (Johnson & Kaye, 2002; Godes & Mayzlin, 2004; Johnson & Kaye, 2004). There is also new scholarship on social network sites (boyd & Ellison, 2008; Gangadharbatla, 2008). In addition, companies, corporations and advertisers are building sites, creating blogs and other interactive devices to reach stakeholders and consumers.

### Online Credibility

The past several years have seen a rise in user-generated content. User-generated content allows Internet users to influence and create content on Web sites. Since consumers' judge different media in different ways, a comparison and contrast of online media is important. This section first describes Web 2.0 capabilities and continues into the evaluation of blogs, online word-of-mouth, and social network sites. Despite the similarities between blogs and social network sites, the two are different enough to analyze separately from a credibility standpoint. Both blogs and social network sites would not be possible if not for the underlying technology.

Web 2.0 refers to the ability for users to generate content online. In an examination of the adoption of Web 2.0 tools and user behaviors, Reigner (2007) noted that the Internet will

always be a source of interpersonal communication. User-generated content allows people pursue community-related pursuits,

Facilitated by countless blogs, forums, chat rooms, and social networking sites, we now live in a 24-hour rolling, emotive, media world where we can satisfy our indelible need to feel a part of the events that unfold around us (p. 436).

This is a significant shift in user control of media, content and form of Web sites.

In their study of the future of online marketing, Cooke and Buckley (2008) evaluated the changes in use of the Internet through the Web 2.0 and social network platforms, “the key characteristic of Web 2.0 is that it lets people collaborate and share information online” (277). The authors identify four trends in the changing online media landscape. The first trend is the blurring of the line between professional and amateur content. The next trend is that consumers are embracing and actively participating in this new media, rather than waiting for someone to give it to them. Users decide what is important and what they want to see, rather than a professional publisher. The third point is that consumers can view as little or as much of the content as they desire. They are no longer required to sit through an entire program or broadcast. Consumers can choose whatever content they want at any time for any length of time. The final trend is the social interactions people develop over the Internet. This is a result of consumers ability to rate, comment, review and discuss content as well as creating their own, and this technology is at the heart of the success of Web 2.0 properties, like social network sites, YouTube, and other sites containing user-generated content. In an online environment where users drive Web site content, it is vital to examine the influence users have over one another.

In their evaluation of online credibility, Johnson and Kaye (1998) investigated media use, demographics and reliance on traditional media counterparts to test online media credibility. The researchers launched an online survey comparing online newspapers, newsmagazines, candidate literature, and issue-oriented sources to their traditional media counterparts. Respondents rated

online media more credible than their traditional versions. Specifically, respondents rated online newspapers, candidate literature, and issue-oriented sources as more credible, but there was no difference in judgment for online and offline newsmagazines. Despite these findings, respondents judged both online and traditional media as only somewhat credible. This means users with high traditional media reliance rated online information as more credible than their traditional counterparts. Reliance on the Web did not predict credibility, indicating that familiarity with the medium did not influence online credibility.

Continuing their research into online media credibility, Johnson and Kaye (2002) surveyed politically minded Internet users to determine if reliance on the Web, reliance on traditional sources, convenience of using the Web, or political demographics were strong predictors of online media credibility. Findings suggested that reliance on traditional sources, political trust, then convenience were the best predictors of online media credibility, whereas web use had no significant effect on credibility. Similar to the previous study (Johnson & Kaye, 1998), findings indicated reliance on traditional media best predicted online credibility.

In a white paper concerning the utility of blogs, Edelman and Intelliseek (2005) provided more information about the blogosphere for marketers and company stakeholders. A 2005 Edelman survey revealed that public trust has shifted from figures of authority to the average person. The blogosphere allows peer-to-peer communication and permits people to interact with one another through posts, links and comment threads. Blogs also create an opportunity to study word-of-mouth communication by examining comment strings. Blogs provide market research and insight because of their quick syndication. The Internet is a venue that provides strong, rich media, combining, text, audio and video in an arena controlled by the consumer, and blogs represent communities sharing ideas and opinions.

Extending their work in online credibility to blogs, Johnson and Kaye (2004) conducted a survey of blog readers to analyze blog reliance and credibility. Findings indicated blog users rated blogs as more credible than traditional news sources. However, respondents rated traditional sources as moderately credible. They measured credibility by fairness, believability, accuracy, and depth of information. Blogs scored highest on depth of information, but lower on fairness. Another finding was reliance on traditional and online media were weak predictors of blog credibility. These three studies suggest that, in terms of political information, online media credibility is higher than traditional media credibility.

In a study of word-of-mouth communication in online venues, Godes and Mayzlin (2004) measured word-of-mouth in the context of Usenet, a collection of online newsgroups covering diverse topics. The focus of the study was to examine these online conversations as valuable units to measure word-of-mouth communication. The researchers measured word-of-mouth through volume and dispersion. The authors found conversations were taking place across heterogeneous communities, instead of just within them. Findings also indicated that these conversations make strong units of measurement for word-of-mouth. Results suggested that online information influences decision-making and online conversations might be a valid substitute for offline word-of-mouth. While online word-of-mouth is important, the nature of how people communicate online has grown due to the newer capabilities of the Internet. The advent of Web 2.0 technologies created a media environment where consumers have much more control over the content they see and how they interact with that content. The following section examines social network sites and their impact on advertising research.

### Social Network Sites

Web 2.0 technologies are, at the time of this study, a newer development in the online landscape. Since social network sites are a more recent phenomenon, there is a scarcity in

empirical research on the subject. However, there are a few studies that examine how consumers use social network sites.

One of the earlier studies examining social network sites provided a comprehensive definition and a historical timeline of social network sites. boyd and Ellison (2008) present the following definition of social network sites:

Web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system (p. 211).

Social network sites generally consist of “friends” and allow users to navigate through friends and friends-of-friends. The researchers noted that while it is possible to meet strangers through social network sites, most users treat social network sites as an extension of their offline social circles. A primary difference between social network sites and issue-centered sites is the use of personal profiles. In a site devoted to issue discussion the focus is on the discussion topic; what draws people to a site of this nature is they all share an interest in the topic. Social network sites are predominantly profile-driven instead of issue-driven. Users examine friends’ profiles to build online connections. These online connections with peers are a basic aspect of most of the social network sites, but the sites may vary greatly in other features. Some social network sites offer photo and video sharing, built-in blogging (MySpace and Facebook), instant messaging and limited mobile support (Facebook). The authors conclude that the lack of understanding of social networking sites from a research perspective is due to lack of experimental methodology and longitudinal studies because these sites are a generally new phenomenon. This study addresses this concern by testing a social network site in an experimental methodology and seeks to build on existing social network Web site research.

In a study focused on social network site use and social capital, Ellison, Steinfield and Lampe (2007) evaluated students’ use of Facebook and the creation and preservation of social

capital. They refer to Coleman (1988) for the definition of social capital. Social capital is the resources acquired through relationships among people. The authors explain that social capital is a way for people to draw on the resources of other members of the network. The authors found that bridging social capital, the formation of loose ties with other members of the community, was the strongest relationship with Facebook use. This finding indicates that greater use of a social network site increases community interaction and influence over members. While Facebook does appear to play a role in how students create and preserve social capital, it is unclear which is the cause and which is the effect. While the researchers provide important findings on social network site usage, they do not delve into what the impacts are for advertisers and marketers. The present study examines the implications and opportunities for advertisers on social network sites.

In an exploratory study focused on social network site membership, Gangadharbatla (2008) investigated social network sites through collective self-esteem, need to belong, and Internet self-efficacy, to determine attitudes toward social network sites. The author used Facebook as the social network site for the study. Facebook has certain features specific to the site, beyond personal profiles, which set it apart from other social network sites. Some features include a news feed feature that informs the user what his or her friends are updating on the site, recent changes they made to their profiles, groups they joined and products, issues or candidates they support. Members of Facebook can also post photos, videos, notes, send messages to each other, and leave short messages on users' personalized profiles. A sample of 237 students participated in a survey about attitudes toward social network sites and membership. Gangadharbatla found Internet self-efficacy, need to belong and collective self-esteem positively affected attitudes toward social network sites. Based on an initial examination of membership and usage, the author concluded that social network sites could serve as a venue for advertisers

to specifically target certain demographics, and use online word-of-mouth to change attitudes and even purchase intentions.

Since social network sites are a newer phenomenon, there is a lack of research on the subject. Further investigation into perceived credibility of social network sites can help advertisers determine the benefits and consequences of advertising online. I examined the perceived credibility of corporate sites, blogs and social network sites to build on the existing research in online marketing. Both blogs and social network sites give users much more control over content, which forces advertisers to develop new ways to hold consumers' attention. One such way professionals can target audiences and create lasting impressions is through engagement, which I will review in the following section.

### Engagement

In March 2006, Chief Research Officer Joe Plummer of the Advertising Research Foundation (ARF), announced the official definition of engagement as “turning on a prospect to a brand idea enhanced by surrounding context” ([as cited in] Wang, 2006, p. 355). Engagement occurs inside the consumer. Therefore, relevance is a factor. The change the ARF made was to create a relationship between the brand and the consumer, instead of simply a transaction. Wang (2006) suggested that involvement and relevance are key components of engagement. In describing engagement, a brief overview of involvement is necessary to explain the connection between relevance, involvement and engagement.

Researchers contend that relevance is a driver of involvement. Celsi and Olson (1988) defined involvement as the consumer's personal feelings or personal relevance for an object or event. Researchers typically define involvement in terms of high or low involvement. Krugman (1965) explained high involvement as having strong personal references and connections to the persuasive message. Similarly, Petty and Cacioppo (1983) have found that high involvement

messages have greater personal relevance and elude connections that are more personal than low involvement messages.

In an effort to establish a framework for involvement, Greenwald and Leavitt (1984) divided involvement into four levels: preattention, focal attention, comprehension and elaboration. These levels are in order from low to high, and the higher levels of involvement should result in cognitive and attitudinal effects that are more durable. Capacity of the audience determines the level of involvement. Consequently, preattention requires little capacity, and focal attention needs moderate capacity. Comprehension requires more attentional capacity, and elaboration requires the most capacity because it relies on the consumer's preexisting knowledge. These levels resemble the involvement and ability components of the ELM, and involvement and relevance are strong indicators of consumer engagement. The current study goes further to examine whether involvement and engagement are predictors of attitude change.

Wang (2006) examined whether higher engagement based on contextual relevance increased advertising recall, message involvement, attitude toward the message and attitude toward the ad. Using contextual relevance to initiate engagement, the researcher tested if higher engagement would heighten message recall, message involvement and attitudes toward the ad. To heighten engagement, the author used an online game juxtaposed to an advertisement for Playstation3, one with an interactive game and the other with only text and visuals. The results indicated higher engagement is an influential driver of message involvement. Higher engagement, through contextual relevance, enhanced message recall, message involvement, message believability, attitude toward the message, and attitude toward the ad. The findings in this study reinforced the connection between involvement and engagement.

In their examination of emotional engagement and contextual relevance, Cunningham, Hall and Young (2006) used the MTV Video Music Awards to study the impact of flow of

attention and flow of emotion on levels of engagement. The researchers divided engagement into several dimensions: cognitive, emotional, social and multi-platforming. The cognitive dimension referred to participants' attention and the emotional dimension referred to participants' level of involvement with the storyline. The experiment included a social aspect where participants watched the stimuli either alone or with other participants. Multi-platforming referred to participants' ability to engage with the material over several platforms. Subjects could simultaneously watch the program on television and interact online and through cell phones. Embedded advertising (commercials that aired during the show were assumed to be relevant to the audience) created the contextual relevance for the respondents. Data from the survey suggested a strong connection between emotional engagement with programming and embedded advertising. Emotional engagement influenced affective emotions, such as likeability, motivation and perceptions of the brand. The authors stressed the importance of creativity as a mechanism for improving engagement, because contextual relevance alone may not be enough to promote consistent engagement. These results also suggest that emotion and relevance are key factors of engagement.

In a hypothetical model of engagement, Plummer (2006) proposed that engagement contained three drivers: surprise, utility and emotion. Surprise, or discovery, refers to an unexpected outcome or presentation, which catches the consumer's attention. Utility or relevance, speaks to the targeting of the advertisement. A well-targeted ad produces a more engaged audience; this is a media control (context), but also a creative control (poignancy). Emotional bonding is primarily a creative control; there is some aspect of the ad that creates an emotional bond between the viewer and the ad. This framework contains behavioral targeting and contextual targeting. Behavioral targeting scrutinizes consumer behavior and targets them accordingly, whereas contextual targeting is the equivalent of including automotive ads in a car

magazine. Both of these are suggested drivers of engagement, because through behavioral targeting and understanding the audience, designers can produce surprising and unexpected material. Contextual targeting gives a concentrated reach to target audiences and establishes higher relevancy, thereby increasing engagement in the consumer.

Extending engagement research across media, Kilger and Romer (2007) investigated engagement of television, magazines and the Internet, and the impact on purchase likelihood. The researchers operationalized engagement into six dimensions: inspirational, trustworthy, life enhancing, social involvement, personal timeout, and advertising receptivity. Through telephone interviews of involved users of television, magazines and the Internet, the researchers found a connection between engagement and purchase likelihood. The results suggested that dimensions of engagement positively influenced purchase likelihood across all three media. Building on the research online engagement research, the present study will test engagement across three different types of Web sites to determine whether site source and engagement influence attitude change and purchase intentions. As Web 2.0 technology grows, the results will continue to affect how customers interact on the Internet with increased control over Web site content. The following section reviews interactivity research as it applies to various Web sites.

### Interactivity

User-generated content (UGC) increases control over content and increases the interactivity of Web sites with Web 2.0 capabilities (Reigner, 2007). Steuer (1992) used speed, range and mapping to create the broadly used definition of interactivity as the “degree to which users of the medium can influence the form or content of the mediated environment” and machine interactivity, which is the capability for users to changed for and content in real time (p. 80). According to this definition, Web sites that permit UGC increase interactivity when compared to those without UGC.

Macias (2003) provided a comprehensive analysis of the changing definition of interactivity. She began with Rafaeli's (1988) definition of interactivity stating that it was repetitive conversation exchange, where old and new conversations could refer to each other and roles are interchangeable. Heeter (1989) defined interactivity through six components: complexity of choice, the amount of effort to access information, the extent of responsiveness of the user, the potential for monitoring information use, the ease for the user to add information, and the potential for interpersonal communication.

Hoffmann and Novak (1996) combined Rafaeli's definition with Steuer's concept of interactivity to define it as the ability to interact through the medium as well as maintain personal interaction between people. Macias (2003) explains that interactivity requires two things: a person can give or get information online through surfing or researching, but they are also able to connect with other people via emails, chat rooms, and online chat features, such as MSN Messenger or AOL Instant Messenger as well as chat features on social networking sites like Facebook. Macias (2003) conducted an experiment where participants viewed one of four interactive advertisements followed by an online survey. The two products used in the experiment were New Balance tennis shoes and a Nikon point-and-shoot camera. Subjects saw either a highly interactive ad or an ad with lower interactivity. The results indicated that higher levels of interactivity have a positive effect on users' perceptions of brands and advertising.

In another survey of interactivity definitions, McMillan and Hwang (2002) divided the definitions into three categories: a focus on the process, a focus on the features, and the focus on user perceptions. The authors developed three components to measure perceived interactivity. The first is the direction of communication, specifying two-way communication and the ability to create interpersonal interactivity, then user control and time. After an experiment of 60 students examining either a highly interactive Web site or a site with low interactivity,

participants responded to a survey. Based on the results, the authors created a scale with three overlapping dimensions (direction of communication, user control and time) to measure perceived interactivity. The measurement of perceived interactivity allows researchers to analyze relationships of interactivity with variables like attitude toward the Web site. Advertisers may also use this scale to measure perceived interactivity and determine how to design a banner ad and which site is the most appropriate for the ad. The authors suggest that advertisers need to incorporate real-time conversations, loading speed and ability to engage the consumer into their ads (p. 39).

Similar to previous interactivity research, Wu (1999) found that perceived interactivity positively influenced attitudes toward the Web site. The researcher divided interactivity into a two-component construct made up of navigation and responsiveness. One hundred-four students participated in the experiment, one group surfing a site with high interactivity levels and another with low interactivity levels. Results indicated users' attitudes toward the Web site increased, when perception of interactivity of the Web site increased. Findings also indicated that as perceived interactivity increased attitudes toward the Web site were more positive.

Building on Wu's study, Jee and Lee (2002) extended interactivity research to determine the effect on purchase intentions. The authors examined perceived interactivity and its impact on attitude toward the site and purchase decisions. The researchers considered personal factors like need for cognition, product involvement, product expertise, and Internet factors including skills, challenges and online shopping experience as antecedents of perceived interactivity, including the consequences of Web site attitudes and purchase intentions. Results concerning the consequences of perceived interactivity indicate a significant impact of high interactivity on positive attitudes toward the site, and a direct positive effect on attitude toward the Web site and

purchase intentions. Findings also suggested that perceived interactivity and purchase intentions indirectly affect Web site attitudes.

Previous research suggests corporate credibility and endorser credibility have an impact on brand attitudes, advertisement attitudes, but that corporate credibility had a stronger influence on purchase intentions (Lafferty & Goldsmith, 1999; Newell & Goldsmith, 2001; Lafferty, Goldsmith, & Newell, 2002; Lafferty & Goldsmith, 2004).

Similarly, Goldsmith et al. (2000) found that corporate credibility remained positive when the endorser was a highly credible source. They define corporate credibility as the reputation of the company for honesty and expertise. Based on the two constructs of trustworthiness and expertise and the findings of Hovland and Weiss (1951) and Ohanian (1990) and the corporate reputation research by Goldsmith et al. (2000) it would appear that corporations are the experts about their product or service. Therefore, the corporate Web site may have a greater impact on perceived credibility than the blog.

H1: The corporate endorser will have a more positive effect on perceived credibility than third-party endorser.

This study includes social-network endorsement as another type of third-party endorsement. This endorsement differs from a single endorser celebrity or otherwise, because members of the social network site create and change content on a corporate created Web page. Social network members may therefore influence other members' attitudes toward the brand. However, the social-network endorsement is primarily a third-party endorsement and Goldsmith et al. (2000) found corporate credibility higher than endorser credibility in print media. Similarly, this study proposes that subjects will perceive the corporate site more credible than the social network site. In addition to higher credibility, research suggests corporate endorsement affects brand attitudes, but does not influence purchase intentions (Lafferty & Goldsmith, 1999;

Goldsmith et al., 2000; Newell & Goldsmith, 2001; Lafferty, et al., 2002; Lafferty & Goldsmith, 2004).

H2: Corporate endorsement will have a more positive impact on perceived credibility than the social-network endorsement.

Goldsmith et al. (2000) found that corporate credibility had a greater impact on attitude toward the brand than a third-party endorsement. The third-party endorser, however, had the strongest impact on attitude toward the ad. Findings suggested that corporate credibility directly and positively affected attitude toward the ad, attitude toward the brand and purchase intentions. The following hypotheses incorporate the findings of Goldsmith et al. (2000) from a print context into an online context. By perusing a corporate Web site, you visit the company's advertisement for itself, so a Web site is both the advertisement for the company and the source of the message.

H3: Corporate endorsement will have a more positive impact on attitude toward the brand than a third-party endorsement.

H4: Corporate endorsement is positively and directly related to purchase intentions

This study examines credibility in the World Wide Web, as well as including engagement and interactivity, which also influence Web attitudes. The first research question inquires if there will be any difference between perceived credibility of the blog compared with the Facebook site. Previous research (Johnson & Kaye, 1998, and Johnson & Kaye, 2004), focused on blog credibility, and other research (boyd & Ellison, 2008, Gangadharbartla, 2008), examined social network sites, but there has not been a comparison between the two. The following research questions attempt to determine a link between engagement and interactivity and their effects on online credibility.

RQ1: What are the differences in perceived credibility between the social network site and the blog?

This study also poses a question concerning site source and the possible effects on Web site credibility comparing the social network site and the blog.

RQ2: What are the differing impacts of a corporate site, a blog and a social network site on attitude toward the Web site?

Source credibility is a strong influencer of attitudes, especially in print media (Petty & Cacioppo 1984; Goldsmith, Lafferty & Newell, 2000). However, based on the Web 2.0, online credibility literature (Johnson & Kaye, 1998; Johnson & Kaye 2002; Johnson & Kaye, 2004) and interactivity literature (Kioussis, 2002; McMillan & Hwang 2002; Jee & Lee, 2002; Wu, 2005) the nature of online credibility may be shifting away from standard credibility measures.

Therefore, the researcher presents the following research questions:

RQ3: What are the differing effects of site source on engagement?

RQ4: What are the differing impacts of site source on perceived interactivity?

RQ5: What are the differing impacts of site source on brand attitudes?

RQ6: What are the differing impacts of site source on purchase intentions?

### Chapter 3 – Methodology

The variables of credibility and involvement influence the routes to persuasion of the Elaboration Likelihood Model. However, researchers generally test these variables in print advertisements. This study incorporated ELM research into an online setting by manipulating Web site sources to test for credibility, engagement and interactivity and the effects on Web site attitudes, brand attitudes and purchase intentions. According to Kilger and Romer (2007) higher levels of engagement may lead to higher purchase likelihood, suggesting that engagement is a driver of purchase intentions. Interactivity also plays a vital role in the online experience. Therefore, it is important to include interactivity as a measure of Web site attitudes, brand attitudes and purchase intentions. Web site credibility, engagement and interactivity may affect consumers' attitudes, especially those who consult the Internet for product research and purchasing.

I used Jeep for the brand in the experiment. Jeep was a good fit because of its familiarity and recent campaigns to promote the Jeep lifestyle accentuated a community feel and an attempt to create a relationship with the consumer. The tagline from the 1980's "only in a Jeep," and the current section on the corporate Web site "The Jeep Life 'live it,'" suggest Jeep is associated with going places you can only get to in a Jeep, and catering to a free-spirited, outdoor lifestyle to that likeminded consumers would want to subscribe. At the time of the experiment, Jeep was one of only a few sponsored groups on Facebook.

This study investigated three different Web site sources and the resulting impact on credibility, engagement, interactivity, brand attitudes, Web site attitudes and purchase intentions. I employed an experimental design methodology to measure the effect of Web site source on these variables. Previous credibility research enlisted experimental design methodology to investigate the causal relationship of variables (Hovland & Weiss, 1951; Settle & Golden 1974,

Petty & Cacioppo, 1984, Newell & Goldsmith, 2001; Lafferty & Goldsmith, 2004). In addition, much of the literature on ELM used experimental methodology to examine routes of persuasion (Petty, Cacioppo & Schumann, 1983; Puckett, Petty, Cacioppo & Fisher, 1983; Petty & Cacioppo, 1984; Homer & Kahle, 1990; Haugtvedt, Petty & Cacioppo, 1992). In examining source attributes, source expertise and trustworthiness have been strong influencing factors in experimental settings (Hovland & Weiss, 1951; Petty & Cacioppo, 1981; Gaziano & McGrath, 1986; Meyer, 1988; Homer & Kahle, 1990; Lafferty & Goldsmith, 1999; Newell & Goldsmith, 2001; Lafferty & Goldsmith, 2004).

### Procedure

A convenience sample of 251 Louisiana State University undergraduates enrolled in mass communication courses made up the participants in the study. The age ranged from 18-23 with a few exceptions. Researchers consider young adults in this demographic to be an aggressive consumer group, which is highly influenced by advertising (Fleming, Thorson & Atkin, 2004). I visited students enrolled in lab courses so they would already have access to a computer terminal and the Internet. The computer classrooms in the Journalism Building have a maximum capacity of 20 students, so I attended 15 different classes over a period of two weeks during the spring semester to achieve an adequate sample size. As the experiment lasted only 15 minutes, I did not offer participants extra credit or any other incentives. I divided the experiment into three groups. The first group contained links to the blog, the second group linked to the Facebook page, and the third group visited the corporate site. To randomly assign subjects, I made the first class group one, the second group two, and the third group three, and then continued this rotation throughout the rest of the classes. I asked students if they previously participated in the experiment, and I did not include those individuals who had already participated. Subjects visited one of three different Web sites and then completed an online post-test questionnaire. I

presented consent forms and a PDF with links to a specific URL to navigate through the Web site and a second link to take them to the proper online survey ([www.surveymonkey.com](http://www.surveymonkey.com)). I informed participants the experiment was confidential, voluntary, and that they would not encounter anything today that they would not see in everyday life. I then instructed students to click on the respective URL for their section, the blog URL: <http://ajeepfansite.blogspot.com/>; the Facebook URL: <http://www.facebook.com/jeep?ref=ts>; or the Jeep Web site: <http://www.jeep.com/en/>. Students in the Facebook group who did not have a membership moved to one of the other conditions. The subjects navigated the Web site assigned to them for five to ten minutes, then followed the link to the online survey.

### Measures

The corporate Jeep Web site and the Facebook site already existed. Using a BlogSpot template, I created a blog consisting of a sample of the same content in the Facebook page (see Appendix A for screenshots). The blog included several sections from the discussion feed, an extensive photo gallery, a section of Jeep-produced videos and the 2008 Jeep models. The blog also included an interactive game featured on both the Facebook page and the corporate site. Throughout the course of the experiment, I updated the blog to reflect any changes on the Facebook page to replicate the content on the homepage of the Facebook page. The only difference between the blog and the Facebook page was the source manipulation. The blog contained an “about me” section, which featured a photo and fabricated biography of a male Jeep enthusiast. The Facebook page, sponsored by the Chrysler Company, contained the discussion threads, photo sharing, interactive games, videos and new Jeep vehicles. The corporate site contained much of the same information as well as photo sharing, videos, interactive games, vehicle information, but also included a section for creating your own Jeep, which was not on either the Facebook page or the blog. The scope of the corporate Web site was much larger than

the blog and Facebook page as the latter two were more fan-focused, and did not include many of the features associated with a commercial business Web site.

### Credibility Measures

I adapted the credibility portion of the survey from Ohanian's (1990) credibility fifteen-item seven point Likert scale, which broke credibility down into three sections: trustworthiness, expertise and attractiveness. I did not include the attractiveness construct because the variable of attractiveness refers to celebrities. I determined Web site attitudes, engagement and interactivity better defined the attractiveness of the Web site for site source credibility.

The five items for the trust construct asked respondents if the Web site appeared dependable, honest, reliable, sincere and trustworthy (Cronbach's alpha= .90). The expertise construct asked participants to agree with the following statement: "The content in this Web site is produced by individuals who are" experts, experienced, knowledgeable, qualified and skilled (Cronbach's alpha= .89). Following the credibility section there was qualitative question encouraging participants to comment on what in particular made the content of the Web site credible.

### Engagement Measures

I adapted the engagement portion from Wang's (2006) engagement scale, originally from Lacznia, Kempf and Muehling (1999). The questions concerning engagement were "how much attention did you pay to the Web site," "how engaging was the Web site," "how involving was the Web site" and "how much attention did you pay to process the Web site" (Cronbach's alpha= .94). Following each question was a seven-point Likert scale ranging from not-at-all to a great deal. I dropped the fourth question from the seven-point due to redundancy. The involvement portion of the survey included Zaichowsky's (1994) 10-item seven-point semantic differential bipolar scale. The items included were "important-unimportant," "boring-interesting," "relevant-

irrelevant,” “exciting-unexciting,” “means nothing-means a lot to me,” “appealing-unappealing,” “fascinating-mundane,” “worthless-valuable,” “involving-uninvolving” and “needed-not needed” (Cronbach’s alpha= .91). I adapted the personal involvement inventory scale to read, “I find the Jeep brand...” followed by the ten bipolar items. This section also ended with a qualitative question concerning the content subjects found engaging about the site.

### Interactivity Measures

The interactivity section came from Macias (2003), who used a six-item seven point semantic differential scale to measure perceived interactivity. The items on the scale were “inviting-uninviting,” “not enticing-enticing,” “interactive-not interactive,” “not playful-playful,” “interesting-not interesting,” “engaging-not engaging” (Cronbach’s alpha= .88). This section also ended with a qualitative question urging participants to list specific details about the interactivity of the Web site.

### Attitude and Purchase Intention Measures

In examining Web site attitudes, I employed an attitude toward the Web site scale from Chen and Wells (1999), but also used in Jee and Lee (2002). The scale was a five-point Likert scale asking questions “this Web site makes it easy for me to build a relationship with the company – I would like to visit this site again in the future – I am satisfied with the service provided by this Web site – I feel comfortable surfing this Web site.” The scale ended with an additional question “compared to other sites: I would rate this as (ranging on a five-point Likert scale) one of the best – one of the worst.”

The final section included questions about attitudes toward the site, brand attitudes and purchase intentions, which came from Lafferty and Goldsmith (1999). Attitude toward the site contained three items on a seven-point semantic differential scale “good-bad,” “pleasant-unpleasant” and “favorable-unfavorable” (Cronbach’s alpha= .93). Similarly, attitude toward the

brand contained three items on a seven-point semantic differential scale “good-bad,” “favorable-unfavorable” and “pleasant-unpleasant” (Cronbach’s alpha= .96). The scale for purchase intentions comes from the same study (Lafferty & Goldsmith, 1999), and contains the same seven-point semantic differential scale “good-bad,” “favorable-unfavorable” and “pleasant-unpleasant” (Cronbach’s alpha= .96). For this study the phrase “If money were not an issue, how likely would it be for you to purchase a Jeep the next time you were in the market for a vehicle?” A vehicle is a highly involved product, simply because of its value and expense, so the researcher modified the question to try to rule out involvement issues concerning finances. The survey ended with several demographic questions including two on Internet use.

#### Demographics and Web Use Measures

For the demographics section of the survey, subjects responded to questions about their age and gender. The Web use questions were adaptations of Pew Internet use questions, <http://pewinternet.org/>. The first Web use question asked subjects “how often do you use the Internet,” with choices ranging from “several times a day, about once a day, three to five days a week, one to two days a week, every few weeks, less often, never.” The second Web use question focused on activities. “What do you typically use the Internet for?” The list of activities included email, news, information and research, entertainment, social networking, and “I don’t typically use the Internet.” A copy of the online survey is included in Appendix C.

## Chapter 4 – Results

The sample for this experiment contained 251 participants, spreading out over the three conditions as follows: blog category (N = 83), Facebook (N = 81) and corporate (N = 87). Sixty-six (26.6%) participants were male, and the other 182 (73.4%) were female, with three participants skipping the question. Of the 246 participants who reported age, 25 (9.7%) were 18, 76 (29.5%) were 19, 79 (30.6%) were 20, 41 (15.9%) were 21, 16 (6.2%) were 22, and 9 (3.6%) reported 23 and up. The age of the sample ranged from 18 to 30. Concerning the Internet use questions, those who responded used the Internet for email 246 (95.3%), for news 183 (70.9%), for information and research 190 (73.6%), for entertainment 192 (74.4%), for social networking 226 (89.6%), and one person (.4%) reported no typical use of the Internet.

### Respondents Rated Corporate Site Most Credible

For the two constructs of credibility, trustworthiness and expertise, the corporate page rated highest. In determining the corporate Web site to be trustworthy 16 (18.8%) of respondents somewhat agreed, 22 (25.9%) agreed, and 21 (4.7%) strongly agreed. When asked if experts created the content of the corporate site 11 participants (15.3%) somewhat agreed, 19 (26.4%) agreed, and 24 (33.3%) strongly agreed.

When asked if they found Facebook trustworthy, 11 respondents (13.8%) somewhat disagreed, 16 (20.0%) were neutral, 17 (21.3%) somewhat agreed, eight (10.0%) agreed and 11 respondents (13.8%) strongly agreed. Concerning the expertise of the content of Facebook, 16 respondents (21.6%) disagreed, 17 (23.0%) were neutral, 13 (17.6%) somewhat agreed, six (8.1%) agreed and only two (2.7%) strongly agreed that experts created the content.

In rating the trustworthiness of the blog, 20 respondents (24.1%) were neutral, 14 (16.9%) somewhat agreed, 25 (30.1%) agreed and seven (8.4%) strongly agreed. Seventeen respondents (21.3%) disagreed that experts created the content of the blog, 19 (23.8%) somewhat

disagreed, 21 (26.3%) were neutral, eight (10.0%) somewhat agreed, three (3.8%) agreed, and three (3.8%) strongly agreed.

#### Participants Found the Corporate Site Most Engaging

The corporate site ranked highest in engagement. Eighteen respondents (20.7%) found the corporate page somewhat engaging, 34 (39.1%) found it engaging and 26 (29.9%) found the site very engaging. In determining engagement levels of Facebook, 13 (16.3%) were neutral, 22 (27.5%) found it somewhat engaging, 13 (16.3%) found it engaging, and six respondents (7.5%) found the site very engaging. For engagement levels of the blog, 15 (18.3%) were neutral, 28 (34.1%) were somewhat engaged, 19 (23.2%) were engaged, and four respondents (4.9%) were very engaged with the blog.

#### Corporate Site Most Interactive

When asked how interactive they found the corporate site 51 respondents (59.3%) found it very interactive and 23 (26.7%) found it interactive. For interactivity levels of Facebook 18 (22.8%) found it very interactive, 15 (19.0%) found it interactive, 20 (25.3%) found it somewhat interactive, and 12 (15.2%) were neutral. Concerning interactivity levels for the blog, 22 (27.2%) found it very interactive, 25 (30.9%) found it interactive, and 18 (22.2%) found the blog somewhat interactive.

#### Attitudes More Positive, But Purchase Intentions Remained Neutral

Respondents had the most positive attitude toward the corporate site. Thirty-two respondents (37.2%) had very favorable attitudes toward the site, 28 (32.6) had favorable attitude and 10 (11.6%) had somewhat favorable attitudes to the corporate site. Respondents expressed their attitudes toward Facebook, 14 participants (17.9%) found the site very favorable, 17 (21.8%) found it favorable and 21 (26.9%) found Facebook somewhat favorable. In examining

respondents' attitudes toward the blog, 10 (12.3%) had very favorable attitudes, 28 (34.6%) had favorable attitudes and 27 (33.3%) had somewhat favorable attitudes to the blog.

After viewing the corporate Web site, viewers rated their attitudes to the brand. Twenty-seven respondents (31.4%) found the brand very favorable, 24 (27.9%) found it favorable, and 13 (15.1%) found it somewhat favorable. After viewing the Facebook page, 21 respondents (26.9%) found the brand very favorable, 21 (26.9%) found it favorable and 15 (19.2%) found the brand somewhat favorable. Of the respondents who visited the blog 16 (19.8%) found the brand very favorable, 23 (28.4%) found it favorable, 24 (29.6%) found it somewhat favorable and 12 (14.8%) were neutral.

When asked "if money were not an issue, how likely would you purchase a Jeep the next time you were in the market for a vehicle," 16 respondents (18.4%) were very likely, 15 (17.2%) were likely, and 10 (11.5%) were somewhat likely to purchase a Jeep. After visiting Facebook respondents reported their purchase intentions 18 (23.1%) were very likely, 13 (16.7%) were likely, and 12 (15.4%) were somewhat likely to buy a Jeep. Of the respondents who visited the blog, eight (9.9%) were very likely to buy a Jeep, eight (9.9%) were likely to purchase and 18 (22.2%) were somewhat likely to buy a Jeep.

### Constructing the Measures

The credibility section of the survey included Ohanian's scale for measuring celebrity endorser's credibility. The trust factor for credibility of the Web site contained five questions concerning perceived trustworthiness of the Web site (Cronbach's alpha = .95). The expert factor referred to the knowledge and expertise of the Web site creator (Cronbach's alpha = .94).

The next two sections of the survey focused on engagement, involvement and interactivity. The engagement factor included three questions determining levels of attention, engagement and involvement of the Web site (Cronbach's alpha = .87). The involvement portion of the survey

consisted of ten bipolar adjectives rating subjects' involvement with the Jeep brand (Cronbach's  $\alpha = .82$ ). In the next section of the survey, six pairs of bipolar adjectives measured users' perceived interactivity of the Web site (Cronbach's  $\alpha = .85$ ).

The final section consisted of Web site attitudes, attitude toward the site, attitude toward the brand, and purchase intentions. A three-item, bipolar adjective scale measured users' attitude to the site (Cronbach's  $\alpha = .97$ ). The same three-item, bipolar scale measured users' attitude toward the brand (Cronbach's  $\alpha = .97$ ). Finally, three items, likelihood, possibility and probability measured users' purchase intentions (Cronbach's  $\alpha = .92$ ).

### Tests of Hypotheses

H1: Corporate endorsement will have a more positive affect on perceived credibility than the blog (third-party endorser).

A one-way analysis of variance (ANOVA) found significant differences in trustworthiness of the Web sites. Subjects found the corporate site significantly more credible ( $M = .27$ ,  $SD = 1.03$ ) than the blog ( $M = -.34$ ,  $SD = 1.04$ ,  $F(2, 246) = 8.26$ ,  $p < .05$ ).

A one-way analysis of variance revealed that subjects found the corporate site significantly more credible ( $M = .67$ ,  $SD = 1.01$ ) than the blog ( $M = -.36$ ,  $SD = .92$ ,  $F(2, 226)$ ,  $p < .001$ ). The results support the first hypothesis, confirming the corporate site ranked higher in credibility than the third-party site.

H2: The corporate endorsement will have a more positive affect on perceived credibility than the social network endorsement.

A one-way analysis of variance revealed that respondents found the corporate site significantly more trustworthy ( $M = .27$ ,  $SD = 1.03$ ) than the social network site ( $M = .05$ ,  $SD = .84$ ,  $F(2, 246) = 8.26$ ,  $p < .001$ ). Furthermore, a one-way analysis of variance for expertise indicated subjects found the corporate site significantly more credible ( $M = .67$ ,  $SD = 1.01$ ) than

social network site ( $M = -.36, SD = .84, F(2, 226) = 30.01, p < .001$ ). The results support the second hypothesis confirming participants perceived the corporate site more credible than the Facebook page.

**Table 1:**  
Analysis of Variance for Credibility

Source	Corporate Mean	Facebook Mean	Blog Mean	df	F	p
Trustworthiness	.27	.05	-.34	2, 246	8.256**	.00
Expertise	.67	-.36	-.36	2, 226	30.006**	.00

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

H3: Corporate endorsement will have a more positive impact on attitude toward the brand than third-party endorsement.

Results of a one-way analysis of variance found no significant differences in attitude toward the brand between corporate and third-party endorsement. Therefore, the hypothesis was not supported.

H4: Corporate endorsement is positively and directly related to purchase intentions.

The results of the analysis of variance revealed no significant mean differences in purchase intent between corporate and third-party endorsement, indicating the corporate source did not influence purchase intentions. Therefore, results did not support the fourth hypothesis.

#### Tests of Research Questions

RQ1: What are the differences in perceived credibility between the social network site and the blog?

A one-way analysis of variance showed subjects found the Facebook page significantly more credible ( $M = .05, SD = .84$ ) than the blog ( $M = -.34, SD = 1.04, F(2, 246) = .826, p < .001$ ) (See table 1).

RQ2: What are the differing impacts of site source on attitude toward the Web site?

A one-way analysis of variance revealed that the corporate site had a significantly more positive effect on attitude toward the Web site ( $M = .40, SD = 1.02$ ), than the blog ( $M = -.30, SD = .97$ ) and the social network site ( $M = -.13, SD = .89, F(2,247) = 11.98, p < .001$ ) (See Table 2). There were no significant differences between the blog and the social network site.

**Table 2:**  
Analysis of Variance for Web Site Attitudes

Source	Corporate	Facebook	Blog	df	F	p
Web site Attitudes	.40	-.13	-.30	2, 247	11.976**	.001

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

RQ3: What are the differing effects of site source on engagement?

A one-way analysis of variance showed the corporate site had significantly higher levels of engagement ( $M = .47, SD = .88$ ) than the social network site ( $M = -.09, SD = .74$ ) and the blog ( $M = -.43, SD = 1.05, F(2, 249) = 20.1, p < .001$ ). Results also indicated users perceived the social network site significantly more engaging ( $M = -.09, SD = .74$ ) than the blog ( $M = -.43, SD = 1.05, F(2, 249) = 20.1, p < .052$ ).

RQ4 What are the differing impacts of site source on perceived interactivity of a Web site?

A one-way analysis of variance revealed that respondents found the corporate site significantly more interactive ( $M = .87, SD = .17$ ) than the social network site ( $M = .58, SD = .16$ ) and the blog ( $M = .86, SD = .16, F(2, 189) = 14.9, p < .001$ ). A one-way analysis of variance found no significant difference in perceived interactivity between the social network

site and the blog.

RQ5: What are the impacts of site source on brand attitudes?

A one-way analysis of variance showed site source had no significant impact on attitude toward the brand.

RQ6: What are the impacts of site source on purchase intentions?

A one-way analysis of variance found site source had no significant impact on purchase intent.

## Chapter 5 – Discussion and Conclusions

Web 2.0 technologies allow users to have greater control over the content of Web sites and this study compared different types of Web sites to determine the differences in credibility, engagement, interactivity and attitudes toward the brand, attitudes toward the Web site and purchase intentions. This section discusses the relationships between blogs, social network sites, and corporate sites, and what the findings mean for researchers as well as advertisers and other industry professionals.

### Users Found Facebook More Trustworthy than the Blog

The differences between the Facebook page and the blog can help explain why consumers found the social network site more trustworthy than the blog. While the blog contains comments from other viewers, only one person creates and modifies the main content of the blog. Conversely, with Facebook, members can post opinions, pictures, and videos, create discussion threads and interact with other members by sending them private messages. Members have greater control over the content in their online community.

Another possible factor for trusting the social network site is the voice of many versus the voice of one. As an online community, Facebook allows members from all over the world to join in discussions, share information, stories, and personal opinions. For the Jeep page of Facebook, Jeep owners posted many of the comments, pictures, questions, advice, and stories, which serve as a form of product or brand review for the group and any member who comes across the page. All subjects who visited the Facebook site were members of Facebook, which means they spend time in the online community, checking in on friends and their online social network. These members have seen Facebook countless times and are familiar and comfortable with the format, which may cause them to trust the overall site more than the subjects who examined a blog they never saw before.

This finding suggests consumers may favor a social network endorsement over a third-party endorsement on the Web. Perhaps the voices of friends and other members of the online social network create a sense of comfort, which may help users feel as if they are interacting with peers. This finding builds on previous research into online word-of-mouth by Godes and Mayzlin (2004), who found that word-of-mouth conversations in online newsgroups influenced offline decision-making and might be a viable substitute for offline conversations. Social network sites provide similar opportunities for online conversations as newsgroups and a social network endorsement may also be strong units of online word-of-mouth measurement. This finding indicates that creating a sponsored page on a social network site may be more credible and better for the overall image of the company than creating a corporate blog.

Another factor in why participants perceived the social network site more trustworthy than the blog was the third-party endorsement was not a celebrity. Previous research in third-party endorsement includes using celebrities to endorse a product (Settle & Golden, 1974; Kamins, Brand, Hoek & Moe, 1989; Ohanian, 1990). Using an anonymous blog host as the third-party endorser may have also reduced how much users trusted the content of the blog.

#### Corporate Site Ranked Most Engaging, Followed by Facebook

The corporate page had the highest levels of engagement and the social network site nearly reached a significant difference in engagement over the blog, suggesting site source may affect levels of engagement. Perhaps subjects perceived the corporate site more engaging due to the plethora of extra content than either the social network site or the blog. The corporate Web site contained detailed vehicle information, several online games, links to YouTube, a section allowing Jeep owners to post pictures and videos, and a build-your-own Jeep feature. Neither Facebook nor the blog could match the sheer scope of the corporate site, which contained additional games and a build-your-own Jeep section, indicating these features can increase

engagement among younger consumers. This finding is consistent with previous engagement research, suggesting that the greater scope of the corporate site created a more engaging Web site (Wang, 2006; Kilger & Romer, 2007).

Similarly, users rated the social network site more engaging than the blog. Many features of Facebook allow greater user control of content than the blog, which might be a factor in why respondents found Facebook more engaging. As a member of Facebook, users can create and respond to discussion threads, and give and receive advice about subjects they find interesting. Another possible reason users found Facebook more engaging might be a community connection. boyd and Ellison's (2007) conclusion that social network sites are a place for offline friends to connect online could explain why people found Facebook engaging. Facebook provides a personal connection to friends in an online setting, and a Web site created around connecting with friends would be more engaging than a blog written by a stranger. Membership may play a role in engagement as well. Facebook members are already engaged in the social network site, whether or not they are interested in Jeep, may be less relevant than their pre-existing attitudes toward the social network site. Similarly to the corporate site, Facebook contained more engaging elements than the blog, which may have led to respondents perceiving it as more engaging.

Advertisers and Web site designers can increase engagement by incorporating user-generated content into their ads and Web site designs. Each of these findings suggests social network sites may create a more engaging environment for consumers over blogs because social network sites permit more user control over the actual content of the Web site, not just a comment section for feedback and conversations.

### Corporate Site Most Interactive

Participants rated the corporate site more interactive than both Facebook and the blog. The Jeep Web site contained many more activities than either Facebook or the blog. The Jeep site included features like; building your own Jeep, a virtual tour of Jeep vehicles, more games, and more pages devoted to Jeep vehicles and products. Once more, the size of the corporate site allowed for many more interactive features like the build-your-own Jeep, several different online games, and the Jeep Experience page, than both the Facebook page and the blog. These results suggest the greater the options for interaction; users could perceive the Web site as more interactive, which supports current interactivity research (Wu, 1999; McMillan & Hwang, 2002; Jee & Lee, 2002; Macias, 2003). In the quest for creating a more interactive site, advertisers may find that providing more options creates a more interactive experience for consumers.

Surprisingly, participants did not find Facebook more interactive than the blog. Despite the differences in user control of content, more familiarity with the Web site, and more activities than the blog, users did not perceive Facebook higher in interactivity. This finding suggests that social network sites may not appear more interactive than a blog. Both the Facebook page and the blog contained the roughly the same number of online games, and interactive features like, posting responses, following discussion threads, and photos and videos. Therefore, due to the similarity of content, there were no significant differences in perceived interactivity between the Facebook page and the blog. Contrary to previous research (Gangadharbatla, 2008; boyd & Ellison, 2008) this result indicates that membership to a social network site does not necessarily increase the perceived interactivity of the Web site.

Furthermore, the greater levels of interactivity in the Facebook site (photo sharing, video and discussion posting, instant messaging) did not increase the overall perceived interactivity of

the site. This finding suggests that the interactive differences between a social network site and a blog are not great enough to result in a strong difference in perceived interactivity.

#### Users Found the Corporate Site Most Credible

The corporate site ranked the highest in trust and expertise followed by the social network site and then the blog. Users found the corporate Web site significantly more credible than the blog indicating a corporate endorsement is more credible than a third-party endorsement in an online environment. This finding is consistent with previous corporate credibility research (Lafferty & Goldsmith, 1999; Newell & Goldsmith, 2001; Lafferty & Goldsmith, 2004). Extending this research to compare corporate and social network endorsements, the present study suggests consumers may find a corporate endorsement more credible than the social-network endorsement.

Consumers may trust a corporate site over both a social network site and a blog because corporate sites are the official online representation of the company; the corporate site is the most likely place to find credible information about the company and their products. Perhaps consumers browsing for information about Jeep vehicles and products must presume the official Web site will contain current, detailed information about their products. Once more, these findings suggest corporate endorsements and corporate credibility are important in an online setting and highlight the importance of corporate Web site maintenance.

#### Corporate Site and Attitudes and Purchase Intentions

The corporate site ranked higher than the social network site and the blog for Web site attitudes, indicating credibility, engagement and interactivity impact Web site attitudes. The corporate site contained many more activities, features, and users might perceive it as more credible than either Facebook or the blog. These results suggest when users find the Web site

credible, the content engaging, and can interact with the site in a variety of ways they may develop positive attitudes toward the Web site.

In examining the different impacts of site source on brand attitudes and purchase intentions, the results indicated that the different Web site endorsements did not affect brand attitudes or purchase intentions. These results contradict previous corporate credibility research, which suggested that higher corporate credibility positively influences attitude toward the brand and purchase intentions (Lafferty & Goldsmith, 1999; Goldsmith, Lafferty & Newell, 2000).

While attitude change and increasing purchase intent are the goal of any advertising campaign, they are often difficult to achieve. This study suggested that site source does not influence brand attitudes and purchase intentions. One possible cause for this result was the product used in the experimental design. Purchasing a brand new vehicle is a complicated and difficult decision, which consumers would research heavily and not necessarily rush. Consumers would not likely reach a decision of this magnitude by perusing a Web site for fifteen minutes, which is a possible cause for the lack of attitude change.

#### ELM is a Useful Tool for Measuring Web Site Attitudes

The ELM uses source manipulation as one of several variables to test for central and peripheral route processing, and ultimately whether it leads to attitude change. This study extended ELM research (Petty, Cacioppo & Goldman, 1981; Petty & Cacioppo, 1984; Cho, 1999; McMillan, Hwang & Lee, 2003), by applying the ELM in an online venue. The findings further the analysis of Cho (1999) who utilized a modified ELM for online measurement. Building on ELM online research, this preliminary study suggests the ELM may be an adequate predictor of Web site attitudes when the model includes variables like engagement and perceived interactivity.

### Implications for Industry Professionals

These findings also have implications for advertising practitioners as well. The corporate page for Jeep had several features based on the Web 2.0 platform, similar to both the blog and Facebook. This is a highly engaging and interactive site and can lead to strong positive attitudes, but did not translate into higher purchase intention. The Jeep Web site and Facebook social network site are good examples of including user-generated content. Certain design features can increase credibility, engagement, and interactivity and possibly persuade visitors. Several of the more successful features that incorporate these elements were; the create your own Jeep section, a virtual tour of Jeep vehicles and products, online games, public forums, posting photos, videos and sharing stories. These changes in Web site and ad design may help industry professionals incorporate the Web 2.0 trend into their advertising strategies.

However, jumping straight into an online community should not be a hasty decision. Jeep clearly fits the social network site appeal because of their brand, but automatically assuming social network sites will be a virtual gold mine may have severe consequences. Companies should respect the community and understand what people want to get out of it before committing to a social network site advertising strategy, as well as if their brand fits in that environment. This study suggests that there are several components, including rich media, pictures, user comments, and games, may increase the participation on the part of the user and lead to positive attitudes to the Web site, and eventually to the brand with possible influence on purchase decisions. While each of these seemingly fun interactions do increase attitudes, the professionalism of the Web site also factored into perceptions of credibility, so it is important to maintain a high level of professionalism. These findings highlight the importance of strong Web site maintenance whether the site is the corporate Web site, a social network page or a corporate blog. Managing content and permitting users to edit that content may help build strong

relationships in an online setting and companies could benefit from embracing Web 2.0 capabilities.

### Limitations

This study employed the use of college undergraduates from Louisiana State University. The sample was predominantly female (73%), and between the ages of 18-23 (with a few exceptions). There did not appear to be a gender effect. Many of the participants noted the games, pictures, videos, and online creative features (like the build-your-own Jeep), positively influenced their attitudes toward the site. Users of different age groups may navigate and interact with a Web site in a different fashion and develop different attitudes to the same content.

The content of the blog was a sampling of the Facebook page, but the Jeep Web site contained much more content than the other two Web sites. The corporate site contained many more pages and therefore, significantly more content, than both the Facebook page and the blog. Participants examining the corporate site could navigate much further into Jeep products and vehicles, play more games, and interact with more features than either Facebook or the blog. The differences between content in the corporate site versus Facebook and the blog may be the reason the subjects overwhelmingly found the corporate site more credible, engaging and interactive.

Another limitation, previously mentioned in the discussion, was the use of a new Jeep as the product. New vehicles are a highly involving product, due to their price, longevity, and the relationship consumers' form with their automobiles. The use of an automobile certainly may affect whether a Web site would persuade a viewer's purchase intentions.

### Future Research

Petty, Cacioppo and Schumann (1983), Petty, and Cacioppo (1984) include involvement in their analysis (mainly of print media) of source cues and routes to persuasion). The ELM

notes that there are many intervening variables affecting persuasion and tries to account for them with the dual routes to persuasion. This study furthered the research of Cho (1999) and McMillan, Hwang and Lee (2003), by extending ELM testing to examine different types of Web sites. The results suggest that the ELM is an effective model for measuring online behavior. The World Wide Web is constantly changing and future research employing the ELM across different Web sites could result in a greater understanding of consumer's online behavior and how different Web site content can drive persuasion. Future studies should also focus specifically on applying the ELM to social network sites.

Future studies should expand their audience to a larger, more diverse sample, and even use different social network sites, along with examining Web use and online credibility. Researchers should include high and low involvement products, as well as familiar and unfamiliar brands to determine if there are different effects on purchase decisions. Finally, the online credibility research would benefit from an empirical testing of engagement, interactivity and Web site credibility along with attitudes and purchase intentions. Advertisers and researchers alike would benefit from an inclusive measure for examining advertising credibility of Web site.

The World Wide Web changed the way consumers interact and engage with brands. Web 2.0 technologies allow Web users to participate and edit the content of Web sites changing them from viewers and users into creators. While the source of the Web site may not influence attitude change or increase purchase intentions, this study highlights the importance of establishing a strong, credible presence online. Whether this presence is in the form of a corporate site, a social network, a corporate blog or any combination in between, advertisers and marketers will benefit from creating professional, engaging and interactive content online.

## Works Cited

- Austin, E.W. & Dong, Q. (1994). Source v. content effects on judgment of new believability. *Journalism Quarterly*, 71(4), 973-983.
- Berlo, D.K., Lemert, J.B., & Mertz, R.J. (1969). Dimensions for evaluating the acceptability of message sources. *Public Opinion Quarterly*, 33(4), 563-576.
- Booth-Butterfield, S. & Welbourne, J. (2002). The elaboration likelihood model: Its impact on persuasion theory and research. In J. P. Dillard & M. Pfau (Eds.), *The persuasion handbook: Developments in theory and practice* (pp. 155-174). Thousand Oaks, CA: Sage Publications, Inc.
- boyd, d. m. & Ellison, N.B. (2008). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210-230.
- Cameron, G.T. (1994). Does publicity outperform advertising? An experimental test of third-party endorsement. *Journal of Public Relations Research*, 6(3), 185-207.
- Celsi, R.L. & Olson, J.C. (1988). The role of involvement in attention and comprehension processes. *Journal of Consumer Research*, 15(3), 210-224.
- Chen, Q. & Wells, W.D. (1999). Attitude toward the site. *Journal of Advertising Research*, 39(5), 27-37.
- Cho, C.H. (1999). How advertising works on the WWW: Modified elaboration likelihood model. *Journal of Current Issues & Research in Advertising*, 21(1), 51-62.
- Cooke, M. & Buckley, N. (2008). Web 2.0, social networks, and the future of market research. *International Journal of Market Research*, 50(2), 267-292.
- Cunningham, T., Hall, A.S., & Young, C. (2006). The advertising magnifier effect: An MTV study. *Journal of Advertising Research*, 46(4), 369-380.
- Dean, D.H. (1999). Brand endorsement, popularity, and event sponsorship as advertising cues affecting consumer pre-purchase attitudes. *Journal of Advertising*, 28(3), 1-12.
- Dean, D.H. & Biswas, A. (2001). Third-party organization endorsement of products: An advertising cue affecting consumer pre-purchase evaluation of goods and services. *Journal of Advertising*, 30(4), 41-59.
- Edelman & Intelliseek (2005). Trust media: How real people are finally being heard. The 1.0 Guide to the blogosphere for marketers & company stakeholders. First in a Series on New Communications & Word-of-Mouth Marketing. *Edelman and Intelliseek*, Retrieved from <http://www.edelman.com/>.

- Ellison, N.B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook “friends:” Social capital and college students’ use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), 1143-1168.
- Fleming, K., Thorson, E. & Atkins, C. K. (2004), Alcohol advertising exposure and perceptions: Links with alcohol expectancies and intentions to drink or drinking in underage youth and young adults, *Journal of Health Communication*, 9(1), 3-29.
- Gangadharbatla, H. (2008). Facebook me: Collective self-esteem, need to belong, and internet self-efficacy as predictors for the iGeneration’s attitude toward social networking sites. *Journal of Interactive Advertising*, 8(2), Retrieved from <http://jiad.org/vol8/no2/gangadharbatla/index.htm>.
- Gaziano, C. & McGrath, K. (1986). Measuring the concept of credibility. *Journalism Quarterly*, 63(3), 451-462.
- Gaziano, C. & McGrath, K. (1987). Newspaper credibility and relationships of newspaper journalists to communities. *Journalism Quarterly*, 71(2), 317-328, 345.
- Godes, D. & Mayzlin, D. (2004). Using online conversations to study word-of-mouth communication. *Marketing Science*, 23(4), 545-560.
- Goldsmith, R.E., Lafferty, B.A., & Newell, S.J. (2000). The impact of corporate credibility and celebrity credibility on consumer reaction to advertisements and brands. *Journal of Advertising*, 29(3), 43-54.
- Greenwald, A.G. & Leavitt, C. (1984). Audience involvement in advertising: Four levels. *Journal of Consumer Research*, 11(2), 581-592.
- Haugtvedt, C.P., Petty, R.E., & Cacioppo, J.T. (1992). Need for cognition and advertising: Understanding the role of personality variables in consumer behavior. *Journal of Consumer Psychology*, 1(3), 239-260.
- Heeter, C. (1989). Implications of new interactive technologies for conceptualizing communication. *Media Use in the Information Age: Emerging Patterns of Adoption and Consumer Use*, Jerry Savaggio and Jennings Bryant, eds., Hillsdale, NJ: Lawrence Erlbaum Associates, 53-75.
- Hoffman, D. & Novak, T. P. (1996). Marketing in hypermedia computer-mediated environments: Conceptual foundations. *Journal of Marketing*, 60(3), 50-68.
- Homer, P.M. & Kahle, L.R. (1990). Source expertise, time of source identification, and involvement in persuasion: An elaborative processing perspective. *Journal of Advertising*, 19(1), 30-39.
- Hovland, C.I. & Weiss, W. (1951). The influence of source credibility on communication effectiveness. *Public Opinion Quarterly*, 15(4), 635-650.

- Jee, J. and Lee, W.N. (2002). Antecedents and consequences of perceived interactivity: An exploratory study. *Journal of Interactive Advertising*, 3(1), Retrieved from <http://jiad.org/vol3/no1/jee/index.htm>.
- Johnson, T. & Kaye, B. (1998). Cruising is believing?: Comparing internet and traditional news sources on media credibility measures. *Journalism and Mass Communication Quarterly*, 75(2), 325-340.
- Johnson, T. & Kaye, B. (2002). Webbelievability: A path model examining how convenience and reliance predict online credibility. *Journalism and Mass Communication Quarterly*, 79(3), 619-642.
- Johnson, T. & Kaye, B. (2004). Wag the blog: How reliance on traditional media and the Internet influence credibility perceptions of weblogs among blog users *Journalism and Mass Communication Quarterly*, 81(3), 622-642.
- Kamins, M.A., Brand, M.J., Hoeks, S.A., & Moe, J.C. (1989). Two-sided versus one-sided celebrity endorsements: The impact on advertising effectiveness and credibility. *Journal of Advertising*, 18(2), 4-10.
- Kilger, M. & Romer, E. (2007). Do measures of media engagement correlate with purchase likelihood? *Journal of Advertising Research*, 47(3), 313-325.
- Kiousis, S. (2001). Public trust or mistrust? Perceptions of media credibility in the information age. *Mass Communication and Society*, 4(4), 381-403.
- Kiousis, S. (2002). Interactivity: A concept explication. *New Media & Society*, 4(3), 355-383.
- Krugman, H. E. (1965), The impact of television advertising: Learning without involvement. *Public Opinion Quarterly*, 29(3), 349-356.
- Laczniak, R.N., Kempf, D.S. & Muehling, D.D. (1999). Advertising message involvement: The role of enduring and situational factors. *Journal of Current Issues and Research in Advertising*, 21(1), 51-61.
- Lafferty, B.A. & Goldsmith, R.E. (1999). Corporate credibility's role in consumers' attitudes and purchase intentions when a high versus a low credibility endorser is used in the ad. *Journal of Business Research*, 44(2), 109-116.
- Lafferty, B.A., Goldsmith, R.E., & Newell, S.J. (2002). The dual credibility model: The influence of corporate and endorser credibility on attitudes and purchase intentions. *Journal of Marketing: Theory and Practice*, 10(3), 1-12.
- Lafferty, B.A. & Goldsmith, R.E. (2004). How influential are corporate credibility and endorser attractiveness when innovators react to advertisements for a new high-technology product? *Corporate Reputation Review*, 7(1), 24-36.
- Lemert, J. B. (1970). News media competition under conditions favorable to newspapers.

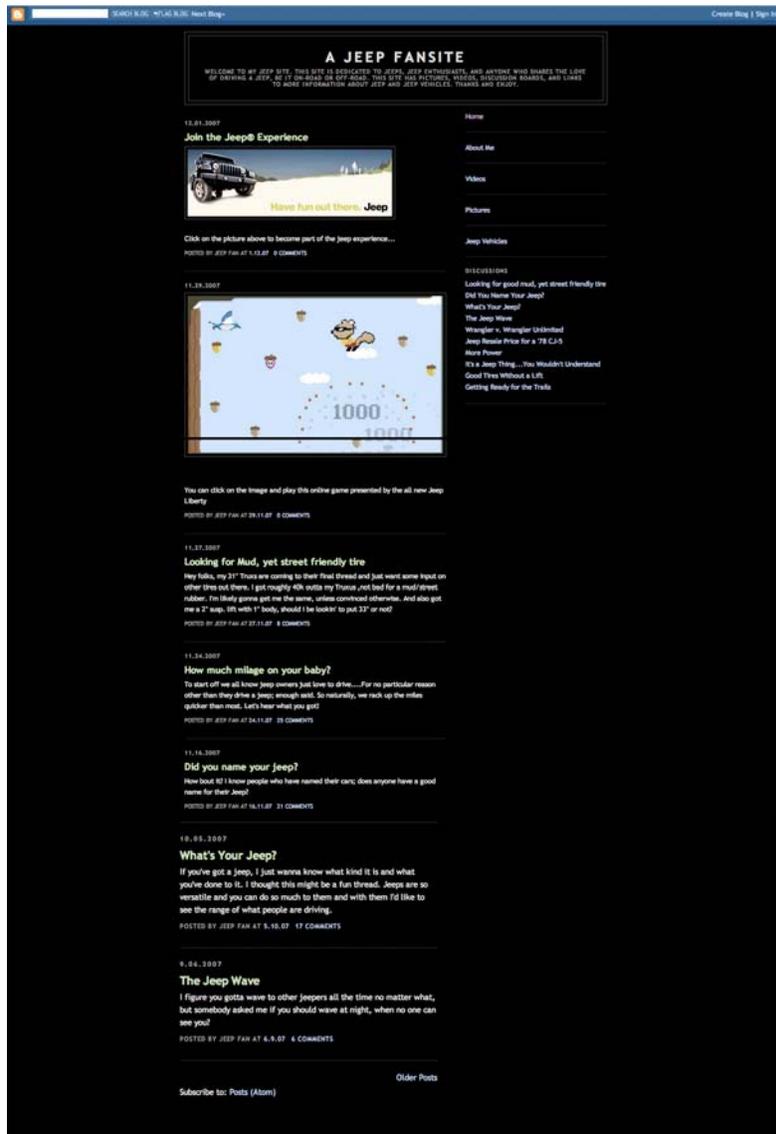
- Journalism Quarterly*, 47(3), 272–280.
- Macias, W. (2003). A preliminary structural equation model of comprehension and persuasion of interactive advertising brand websites. *Journal of Interactive Advertising*, 3(2), Retrieved from <http://jiad.org/vol3/no2/macias/index.htm>
- McLuhan, M. (1964). *Understanding media: The extensions of man*. New York. Signet.
- McMillan, S.J. & Hwang, J.S. (2002). Measures of perceived interactivity: Exploration of the role of the direction of communication, and time in shaping perceptions of interactivity. *Journal of Advertising*. 31(3), 29-44.
- McMillan, S.J., Hwang, J.S. & Lee, G. (2003). Effects of structural and perceptual factors on attitudes toward the website. *Journal of Advertising Research*, 43(4), 400-409.
- Meyer, P. (1988). Defining and measuring credibility of newspapers: Developing an index. *Journalism Quarterly*, 65(3), 567-572.
- Newell, S.J. & Goldsmith, R.E. (2001) The development of a scale to measure perceived corporate credibility. *Journal of Business Research*, 52(3), 235-247.
- 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.
- Petty, R. & Cacioppo, J.T. (1981). *Attitudes and persuasion: Classic and contemporary approaches*. Dubuque, IA: Wm. C. Brown.
- Petty, R.E. & Cacioppo, J.T. (1984). The effects of involvement on responses to argument quantity and quality: Central and peripheral routes to persuasion. *Journal of Personality and Social Psychology*, 46(1), 69-81.
- Petty, R. & Cacioppo, J. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. New York: Springer-Verlag.
- Petty, R. E., Cacioppo, J.T. & Goldman, R. (1981). Personal involvement as a determinant of argument-based persuasion. *Journal of Personality and Social Psychology*, 41(5) 847-855.
- Petty, R.E., Cacioppo, J.T., & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement, *Journal of Consumer Research*, 10(2) 135-146.
- Petty, R. & Wegener, D. (1999). The elaboration likelihood model: Current status and controversies. In S. Chaiken & Y. Trope (Eds.), *Dual process theories in social psychology*, (pp 41-72) New York: Guilford Press.

- Pew Internet & American Life Project. Explore Survey Questions. Retrieved December 3, 2007, from <http://www.pewinternet.org/Data-Tools/Explore-Survey-Questions/>
- Plummer (2006). Statement by Joseph Plummer on behalf of the Advertising Research Foundation, New York.
- Puckett, J.M., Petty, R.E., Cacioppo, J.T., & Fisher, D.L. (1983). The relative impact of age and attractiveness stereotypes on persuasion. *Journal of Gerontology*, 38(3), 340-343.
- Rafaeli, S. (1988). Interactivity: From new media to communication. In J.M. Wireman, and S. Pingree, (Eds.), *Advanced communication science: Merging mass and interpersonal processes*, (pp. 110-111). R.P. Hawkins, Newbury Park, CA: Sage.
- Reigner, C. (2007). Word of mouth on the Web: The impact of Web 2.0 on consumer purchase decisions. *Journal of Advertising Research*. 47(4), 436-447
- Settle, R.B. & Golden, L.L. (1974). Attribution theory and advertiser credibility. *Journal of Marketing Research*, 9(2), 181-185.
- Slater, M.D. & Rouner, D. (1996). How message evaluation and source attributes may influence credibility assessment and belief change. *Journalism and Mass Communication Quarterly*, 73(4), 974-991.
- Steuer, J. (1992). Defining virtual reality: Dimensions determining telepresence, *Journal of Communication*, 42 (4), 73-93.
- Thorson, E., & Moore, J. (1996). The circle of synergy: Theoretical perspectives and an evolving IMC agenda. In E. Thorson & J. Moore (Eds.), *Integrated communication: Synergy of persuasive voices*, (pp. 333-354). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Wang, A. (2005). Integrating and comparing other's opinions: The effect of third-party endorsements on online purchasing. *Journal of Website Promotion* 1(1), 105-129.
- Wang, A. (2006). Advertising engagement: A driver of message involvement on message effects. *Journal of Advertising Research*, 46(4), 355-368.
- Wu, G. (1999). Perceived interactivity and attitude toward the website. Paper presented at American Academy of Advertising Conference, Albuquerque, New Mexico.
- Wu, G. (2005). The mediating role of perceived interactivity in the effect of actual interactivity on attitude toward the website. *Journal of Interactive Advertising*, 5(2), Retrieved from <http://jiad.org/vol5/no2/wu/index.htm>
- Zaichkowsky, J.L. (1994). The personal involvement inventory: Reduction, revision, and application to advertising. *Journal of Advertising*, 23(4), 59-70.

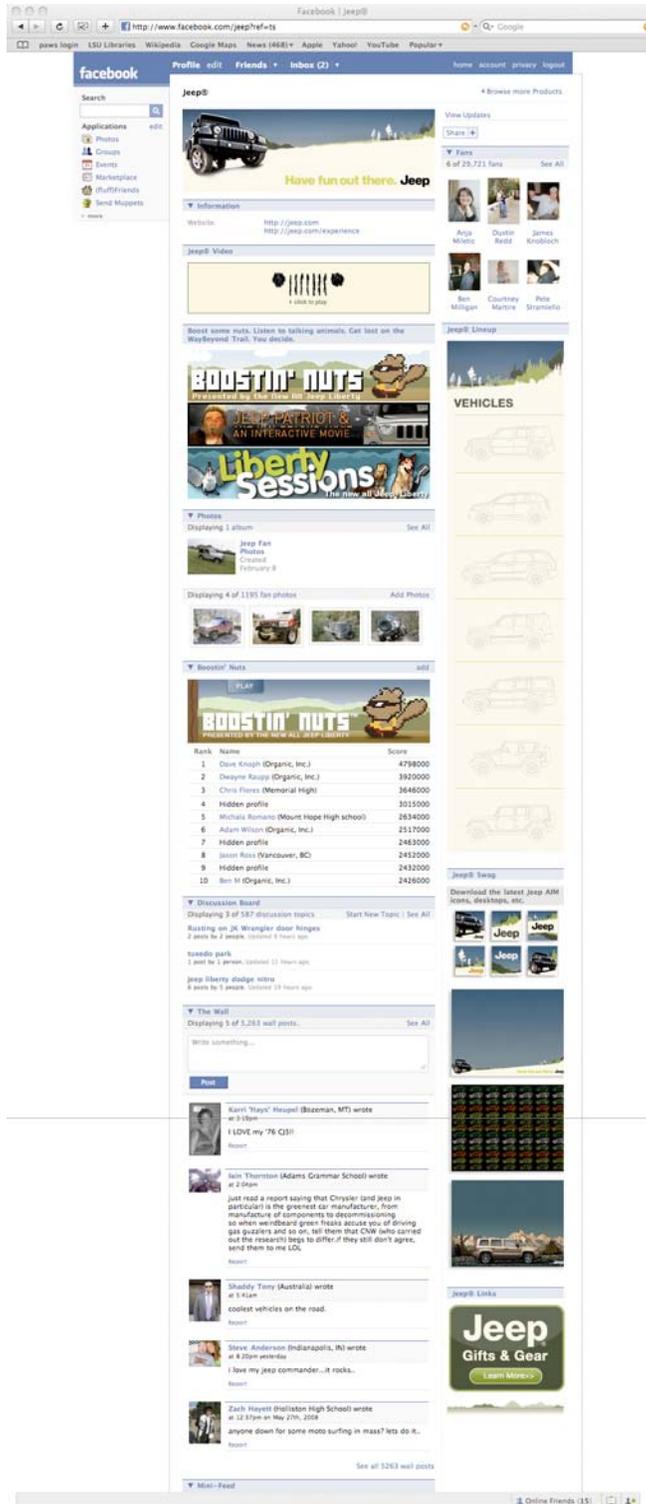
# Appendix A

## Web Site Screenshots

Screenshot of third-party endorsement (blog) - <http://ajeepfansite.blogspot.com/>



Screenshot of the social network site (Facebook) - <http://www.facebook.com/jeep?ref=ts>



Screenshot of the corporate site (Jeep.com) - <http://www.jeep.com/en/>



Appendix B

Consent Form

**INFORMED CONSENT**

**Project Title & Purpose:** Credibility in Online Media: A test of measuring credibility through corporate and third-party sources and its impact on engagement and brand metrics. The purpose is to determine the effect of source credibility in online social profiles on engagement and brand metrics.

**Performance Site:** Mass Communication courses at Louisiana State University

**Voluntary:** Participants must be at least 18 years of age. Participation is entirely voluntary. You may refuse to answer any question or withdraw from participation at any penalty or loss of benefits to which you are otherwise entitled.

**Study Procedure:** You will be asked to visit one of six urls, read and observe the information presented on the pages. A brief post-test questionnaire will follow the experiment.

**Risks:** This project does not involve any risks greater than those encountered in everyday life.

**Confidentiality:** Every effort will be made to maintain the confidentiality of study records. All questionnaires will be unsigned so that there is no way to tie any individual questionnaire to any individual subject. Results of the study may be published but the data will only be reported in aggregate form. Participant identity will remain confidential unless the law requires disclosure.

**Signature:** The study has been discussed with me and all my questions have been answered. I may direct additional questions regarding study specifics to Jeff Forbes. If I have questions about participants' rights or other concerns, I can contact Robert C. Mathews, Institutional Review Board, (225) 578-8692.

I agree to participate in the study described above and acknowledge the investigator's obligation to provide me with a signed copy of this consent form.

Signature of Participant

Date

\_\_\_\_\_

\_\_\_\_\_

# Appendix C

## Online Survey

1. Online Credibility							
Please rate your agreement with the following statements on a scale of 1-7.							
<b>1. I find this website</b>							
	1 - Strongly disagree	2	3	4	5	6	7 - Strongly agree
Dependable	<input type="radio"/>	<input type="radio"/>					
Honest	<input type="radio"/>	<input type="radio"/>					
Reliable	<input type="radio"/>	<input type="radio"/>					
Sincere	<input type="radio"/>	<input type="radio"/>					
Trustworthy	<input type="radio"/>	<input type="radio"/>					
2. Online Credibility continued							
Please rate your agreement with the following statements on a scale of 1-7.							
<b>2. The content in this website is produced by individuals who are</b>							
	1 - Strongly Disagree	2	3	4	5	6	7 - Strongly Agree
Experts	<input type="radio"/>	<input type="radio"/>					
Experienced	<input type="radio"/>	<input type="radio"/>					
Knowledgeable	<input type="radio"/>	<input type="radio"/>					
Qualified	<input type="radio"/>	<input type="radio"/>					
Skilled	<input type="radio"/>	<input type="radio"/>					
<b>3. What in particular did you find credible about the content of this website?</b>							
<input type="text"/>							
3. Engagement							
Please rate your agreement with the following statements on a scale from 1-7.							
<b>4. How much attention did you pay to the website?</b>							
<input type="radio"/> 1 - None at all	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7 - A great deal	
<b>5. How engaging was the website?</b>							
<input type="radio"/> 1 - Not at all	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7 - A great deal	
<b>6. How involving was the website?</b>							
<input type="radio"/> 1 - Not at all	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7 - A great deal	
4. Involvement							

Please rate your agreement with the following word pairs

**7. I find the Jeep Brand**

Important	2	3	4	5	6	Unimportant
1						7
<input type="radio"/>						

**8.**

Boring						Interesting
1						7
<input type="radio"/>						

**9.**

Relevant						Irrelevant
1						7
<input type="radio"/>						

**10.**

Exciting						Unexciting
1						7
<input type="radio"/>						

**11.**

Means nothing						Means a lot to me
1						7
<input type="radio"/>						

**12.**

Appealing						Unappealing
1						7
<input type="radio"/>						

**13.**

Worthless						Valuable
1						7
<input type="radio"/>						

**14.**

Fascinating						Mundane
1						7
<input type="radio"/>						

**15.**

Involving						Uninvolving
1						7
<input type="radio"/>						

**16.**

Not needed						Needed
1						7
<input type="radio"/>						

**17. What specifically did you find engaging or involving about this website.**

**5. Interactivity**

Please rate your agreement to the following statements on a scale from 1-5.

**18. Rate your agreement with the following statements**

	Definitely disagree 1	2	3	4	Definitely agree 5
This website makes it easy to build a relationship with Jeep	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would visit this website in the future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with the service provided by this website	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel comfortable surfing this website	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel surfing this website is a good way to spend my time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**19. Compared to other websites: I would rate this**

1 - One of the best  
  2  
  3  
  4  
  5 - One of the worst

**6. Interactivity continued**

Please use the following word pairs to rate your opinion of the website

**20. I found the website to be**

Inviting 1	2	3	4	5	6	Uninviting 7
<input type="radio"/>						

**21.**

Not enticing 1	2	3	4	5	6	Enticing 7
<input type="radio"/>						

**22.**

Interactive 1	2	3	4	5	6	Not interactive 7
<input type="radio"/>						

**23.**

Not playful 1	2	3	4	5	6	Playful 7
<input type="radio"/>						

**24.**

Interesting 1	2	3	4	5	6	Uninteresting 7
<input type="radio"/>						

25.

Engaging 1 2 3 4 5 6 7 Not engaging

26. What did you find interactive about this website?

## 7. Brand Attitudes and Purchase Intentions

Please rate your opinion based on the following word pairs.

27. My attitude toward the Jeep brand is

Good 1 2 3 4 5 6 7 Bad

28.

Favorable 1 2 3 4 5 6 7 Unfavorable

29.

Pleasant 1 2 3 4 5 6 7 Unpleasant

30. I would rate my attitude toward this Jeep website as

Good 1 2 3 4 5 6 7 Bad

31.

Favorable 1 2 3 4 5 6 7 Unfavorable

32.

Pleasant 1 2 3 4 5 6 7 Unpleasant

33. If money weren't an issue, how likely would you purchase a Jeep the next time you were in the market for a vehicle.

Very likely 1 2 3 4 5 6 7 Very unlikely

34.

Probable 1 2 3 4 5 6 7 Improbable

35.

Possible

Impossible

1

7

## 8. Demographics

**36. What is your age?**

**37. What is your gender?**

**38. How often do you use the internet?**

- Several times a day
- About once a day
- 3-5 days a week
- 1-2 days a week
- Every few weeks
- Less often
- Never

**39. What do you typically use the internet for? (click all that apply)**

- Email
- News
- Information/Research
- Entertainment
- Social Networking (facebook, myspace, friendster, etc...)
- I don't typically use the internet

Other (please specify)

**40. Do you own, or have you ever owned a Jeep?**

- Yes
- No

## Vita

Jeff was born in New Orleans, Louisiana on April 28, 1981. He earned his Bachelor of Arts in creative writing along with a minor in French, from Louisiana State University in 2003.

While earning his master's degree, Jeff worked as a writer for *La Vie Magazine* in Baton Rouge, and was a teaching assistant for the visual communication courses in mass communication. The assistantship helped him develop an interest in photography, layout, design, and teaching. Jeff also participated in a public relations internship in California, specifically working in publicity for a digital arts and technology festival in San Jose in the summer of 2006. In the fall of 2007, Jeff interned with the United States Tennis Association as a press aide for the Baton Rouge Pro Tennis Classic.

Jeff's research interests include credibility of new media, interactive media, and market research. He worked for the Disney Cruise Line as an internal communication intern, and is currently working in Travel Industry Marketing with Disney Destinations. His future career interests are copywriting, advertising design, web design and eventually working as creative director.