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Master Thesis

-Social Communication-

The Impact of Online Customer Reviews on Purchase Intention

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Executive Summary

Consumer-generated product reviews have proliferated online. Driven by the notion that customers' decision to purchase a product is influenced by the information they obtain from online customer reviews, this thesis examines the impact of online customer reviews on purchase intention. To do so, the research integrates traditional communication theories, in particular social communication by Hovland (1948), with the Elaboration Likelihood Model (ELM) to build a theoretical model. Importantly, the model draws on Cheung and Thadani's (2010) literature review on individual-level eWOM research, concluding that there is no existing study simultaneously examining the impact of all the elements of social communication (communicator, stimuli and response) on purchase intention. This study outlines a research framework that can provide insight into this area.

The thesis provides a thorough review of the state of research in eWOM. Based on the review, five hypotheses where developed and tested using a 2(high involvement vs. low involvement x 2(high argument quality vs. low argument quality) x 2(disclosure of source vs. no disclosure of source) experimental design. The model is investigated quantitatively and the empirical testing was carried out by developing two scenarios, two hotel reviews, and one reviewer profile in order to manipulate argument quality, involvement and source credibility. A total of 253 respondents participated in the experiment. The main finding of the study is that the quality of online customer reviews has a positive effect on consumers' purchasing intention. The study was not able to reveal any significant main effect of source credibility, meaning that a reviewer's virtual credential is neither a significant nor a sufficient indicator that readers systematically or heuristically use to evaluate eWOM messages. Overall, this suggests that source credibility might have a different role in a CMC context and underlines the notion that people deliberate on the credibility of eWOM to a greater extent than traditional WOM when seeking online product recommendations. Moreover, the study failed to produce any significant interaction effects, as argument quality and source credibility did not interact with the subjects' degree of involvement. This stands in contrast with the multiple roles postulated by the ELM framework. These findings have implications for online sellers in terms of how to manage their online customer reviews

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Best Regards,

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Content

1.0 INTRODUCTION

The importance of word-of-mouth (WOM) communication is widely accepted in traditional marketing research. Many studies have shown that WOM communication affects consumer attitudes towards a wide range of products and services. With the rise of Web 2.0 over the past decade, consumers are able to collect opinions on products and services or offer their own consumption related advices using the web. This digital (web-based) communication is termed electronic WOM (eWOM), and is a relatively new field. While it has its roots in traditional WOM theory, the nature and influence of its use introduces several factors that are not common to WOM. As the advances of the Internet offers a fertile ground for communication, the WOM phenomenon has been transformed into various types of eWOM. Electronic feedback mechanisms and online reviews of products or services are modern manifests of an old concept of WOM (Dellarocas, 2003). Therefore, in this study, online reviews will be treated as eWOM communications.

Online reviews are customer-generated information presented from the perspective of consumers who have purchased and used the product or service. It includes their experiences, evaluations, and opinions (Park et al., 2007). As with traditional WOM, online reviews are important for guiding the actions of consumers, and they are increasing in popularity and importance (Chen & Xie, 2008; Hennig-Thurau et al., 2004). The number of online customer reviews reached 116 million in 2009 and is still rising (eMarketer, January 2009). Meanwhile, 83 percent of Internet shoppers reported that their purchasing decisions are based on online product evaluations and reviews (New Opinion Research Corporation, July 2008). The eWOM phenomenon has been changing people's behavior. People often make offline decisions based on online information; furthermore, they tend to rely on the opinions of other consumers when making decisions about matter such as which hotel to book or what travel agency to use (Lee et al., 2008). Accordingly, many firms are taking advantage of online reviews as a new marketing tool (Dellarocas, 2003). For example, Tripadvisor (www.tripadvisor.com), an online opinion platform, encourages users to write reviews about products and services. Other online sellers in many product categories are adopting the same strategy of providing a venue where customers can voice their opinions (Harmon, 2004). An underlying belief behind such

strategies is that online customer reviews are an important factor for product sales (Chen & Xie, 2005).

eWOM has undoubtedly been a powerful marketing force and the growing significance of eWOM has not gone unnoticed in academic circles. In fact, eWOM has been one of the most exciting research areas of inquiry. In recent years, we have witnessed an emerging literature focusing on the effectiveness of eWOM (Davis & Khazanchi, 2008; Chevalier & Mayzlin, 2006). However, the scope of published studies on the impact of eWOM is rather broad, and the studies appear relatively fragmented and inconclusive. A systematic literature review of eWOM research by Cheung and Thadani (2010) could not identify a single theory dominating the field of eWOM research. They discovered that researchers use diverse theoretical frameworks to study communication in an online context. Studies on the impact of eWOM can be classified into two levels: Market-level analysis and Individual-level analysis (Lee and Lee, 2009). The difference between these two lies in how the information is viewed. If seen as a market-level parameter, eWOM is considered in relation to other market parameters (e.g. price and sales) and measured as a number (e.g. average rating and dispersion of ratings). On the other hand, if eWOM is viewed as an individual- level parameter, researchers postulates eWOM as a process of personal influence, in which communication between a communicator and a receiver can change the receiver's attitude and purchasing decision. In this study, we focus on the individual-level eWOM research. We believe that Cheung and Thadani's (2010) systematic literature review stimulates future individual-level research on eWOM and the current research will contribute to their systemization by drawing on variables and linkages that need further investigation. Their current understanding of eWOM is largely based on traditional communication theories, social communication by Hovland (1948) in particular. Based on the idea that eWOM represents a new form of communication between a sender and a receiver, there are numerous open questions regarding the interrelationship between the four elements of social communication (communicator, stimuli, receiver and response). Little is known about the relative impact of the communicator, receiver and stimulus on the response of eWOM. From an economic, strategic, and marketing perspective, customer reviews are most important if they influence product sales. Several studies, attempt to identify the relationship between online customer reviews and

purchase intention. Most researchers have used an experimental design to investigate how different characteristics (the valence, volume and quality) of eWOM messages affects purchase intention. For example, Park and Lee (2008) examined how the direction of eWOM messages (positive Vs negative) and website's reputation contribute to the eWOM effect. Some researchers further induced the characteristics of both communicator and receivers in their investigation. Park and Kim (2008) found that the type of reviews on purchasing intention is stronger for experts than for novices while the effect of the number of reviews on purchasing intention are stronger for novices than for experts. So far, there is no existing study simultaneously examining the impact of all the elements of social communication on purchase intention. This study outlines a research framework that can provide insight into this area. Since the literature is so diverse concerning the impact of eWOM, this study contributes by testing eWOM effects when taking into account the different variables found to have an impact in various studies. Focusing on the individual-level analysis and using the four major elements of social communication as a foundation, the purpose of this study is to simultaneously examine the impact of specific characteristics related to communicator, stimuli and receiver on purchase intention. More specifically, whether the impact of eWOM, in form of online customer reviews, on purchase intention will vary across consumers when variations in communicator, stimuli and receiver characteristics are simultaneously taken into consideration. In line with Cheung and Thadani's (2010) identification and classification of relevant constructs, the following variables are chosen to examine the impact of eWOM on purchase intention: (1) the communicator's source credibility, (2) the stimuli's argument quality, (3) the individual's level of involvement. On this basis, we have developed the following research question:

1.1 Research Question

To what extent does the interrelationship between argument quality and source credibility, when considering the receiver's degree of involvement, affect the receiver's purchase intention.

1.2 Theoretical Contribution

This study can contribute to the eWOM research field in some respect. Considering the notion that the literature is so diverse concerning the impact of eWOM, we will provide a more comprehensive understanding of the impact of eWOM, as we simultaneously investigate the impacts of all the three elements (communicator, stimuli and receiver) on purchase intention. In addition, our elaboration on source credibility have as far as the authors know, not previously been done in the proposed context and in the proposed way. We believe that it will add new insight into the effect this component has in a computer mediated communication (CMC) context. Furthermore, as we applied the theoretical lens of Cheung and Thadani (2010) we put forward a not yet established understanding of the impact of eWOM and contribute to a highly needed systematization of literature by drawing on variables and linkages that needed further investigation. Overall, this could broaden the existing perspective on the impact of eWOM.

1.3 Structure of the paper

The remainder of the research is organized in the following manner. In chapter 2 the theoretical background underlying the investigated issue is reviewed. Here we define the main constructs, develop hypothesis and conceptualize the model for the research. Chapter 3 describes the empirical part of the research – the chosen method is justified, the derived sample is described, procedures and variables are presented. Chapter 4 describes the results of the model testing and discusses the findings. In Chapter 5, we present the results from our analysis. We also provide managerial implication of the findings. In the final part of the research, Chapter 6, we outline the limitations of the study and opportunities for future research.

2.0 THEORETICAL FRAMEWORK

In this section, we will provide an overview of the literature that will serve as a theoretical background for our hypotheses and research model.

2.1 Electronic Word-of-Mouth Communication

Traditional WOM is the act of consumers providing information to other consumers through oral person-to-person communication. The particularity of WOM and its influence is that neither party represents a company or product mentioned. It is built upon people's natural desire to share experiences with family, friends, colleagues etc. Interpersonal communication has received great attention in social psychology, been well recognized in the consumer literature (Arndt, 1967; King & Summer, 1970; Herr et al., 1991). The line of studies has consistently demonstrated how personal influence affects individuals to make a choice. One of the most widely accepted notions is that WOM plays an important role in shaping consumer's attitudes and behavior, and has a significant influence on consumers purchase decision (Katz & Lazarsfeld, 2009; Engel et al., 1969; Richins & Root-Shaffer, 1988).

The consumer influence through WOM communication is further accelerated with the advent of Web 2.0. With its arrival, research on WOM experienced a renaissance, but in a CMC context. Traditionally, WOM communication is considered as an oral form of interpersonal, non-commercial communication among acquaintances (Arndt, 1967). eWOM is considered an extension of traditional WOM and refers to "any positive or negative statement made by potential, actual or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet" (Hennig-Thurau et al., 2004, p.39).While eWOM has some characteristics in common with traditional WOM, it is different from traditional WOM on several dimensions. These dimensions attribute to the uniqueness of eWOM communication. While we base our current understanding of eWOM largely on the traditional WOM literature, it is important to understand that eWOM has some unique characteristics. First, because electronic dialogues are electronic by nature, communication between consumers does not only happen from mouth to ear. It happens from keyboard to keyboard as well, facilitating the information exchange

and enables communication with a multitude of other consumers (Mangold & Faulds, 2009). Unlike traditional WOM, eWOM communication possesses unprecedented scalability and speed of diffusion. In the context of traditional WOM, information is exchanged within small groups or between individuals in synchronous mode (Avery et al., 1999; Li & Hitt, 2008; Dellarocas, 2003; Steffes & Burgee, 2009). eWOM on the other hand also includes multi-way exchanges of information in an asynchronous mode (Hung & Li, 2007). Second, keyboard-to-keyboard communication is in its nature less personal than traditional WOM due to lack of face-to-face communication. Rather it entails passive reading or active writing of a message on a computer screen (Andreassen & Streukens, 2009). Third, while WOM is perishable, eWOM is stored for future reference (Andreassen & Streukens, 2009; Hennig-Thurau et al., 2004; Herr et al., 1991). Since traditional WOM information exchange happens in private conversations, direct observation is difficult. However, the presentation format and persistence of electronic communications make them observable (Lee et al., 2008; Park & Kim, 2008). In addition, eWOM information is far more voluminous in quantity (Chatterjee, 2001). Finally, there are source credibility issues. Traditional WOM emanates from a sender who is known to the receiver of the information. Information exchange online arises from a possibly unlimited number of unknown participants, and the presence of the numerous amount of unfiltered information makes the information validity uncertain. In most cases, it is not possible to determine source credibility due to e.g. anonymity or aliases; leaving users to rely on limited information about the source. Nevertheless, the aggregation power of online discussion forums provides heuristic cues that help users to evaluate the credibility of online recommendations compared to traditional word-of-mouth communication (Cheung et al., 2008; Cheung et al., 2009; Hu et al., 2008; Zhang & Watts, 2008; Andreassen & Streukens, 2009).

Clearly, the uniqueness of eWOM alters the principles by which information is transmitted and opinions and attitudes formed. In order to understand how eWOM is processed, and how the receivers respond to stimuli in a CMC context we apply traditional communication theories. Traditional communication theories, more specifically social communication, offer an appealing perspective on how eWOM is processed. According to traditional communication theories, there are four major elements in social communication.

2.2 Social Communication

In traditional communication theories, communication is the process by which an individual (the communicator) transmits stimuli (usually verbal symbols) to modify the behavior of other individuals (communicatees). This definition thus defines social communication as being comprised of four major elements: (1) the *communicator* who transmits the communication; (2) the *stimuli* transmitted by the communicator; (3) the *individual* who respond to the communication; (4) the *responses* made to the communication by the communcatee (Hovland, 1948). As the current understanding of eWOM is largely based on traditional WOM, it is imperative to further investigate how the four elements of social communication interact when put in a CMC context. In the following section, factors related to these four elements in the eWOM literature will be identified and classified. The choice of variables for the research model, with subsequent hypothesis, will also be explained. Lastly, the research model is introduced.

2.3 Response

The response is made to the communication by the communicatee (Hovland, 1948). Since the impact of eWOM can be defined in many ways, many different theoretical perspectives and theories have been deployed to examine eWOM closer. In the traditional WOM literature, WOM communication is considered as a type of social influence that affects consumers' beliefs, attitudes, and purchase intentions (Arndt, 1967). In the eWOM communication studies, factors related to a receivers' psychological state, such as purchase intention, attitude, information adoption and trust, are the most commonly investigated outcomes. Among all the outcome variables, purchase intention is the most frequently studied eWOM response (Cheung & Thadani, 2010).

2.3.1 Purchase Intention

Purchase intention has been described as "the probability that the consumer will purchase the product" (Sam & Tahir, 2009, p.20). According to Lee and Lee (2009), this probability is "determined by his or her estimated value of the product" (p.303). Furthermore, Park and Lee (2008) suggest it is possible to derive an estimated value of products and services by examining online customer

reviews. Moreover, customer reviews are now considered as a source of information that provides customers with the necessary information for product value estimation and purchase intention development (Chen & Xie, 2008; Lee et al., 2008). Although the ultimate variable of interest for practitioners is the actual buying behavior, it is impossible to evaluate it within the current study due to time constraints and limited resources. Purchase intention however is a good predictor of the actual purchasing behavior.

2.4 Stimuli

The stimulus refers to the message transmitted by the communicator (Hovland, 1948). As anyone can post information online, some of the information found online will be of limited quality. Persuasive messages commonly contain (implicit or explicit) arguments in favor of the advocated position. These arguments may vary in number, in content, in how they are ordered in the message, and so forth. A number of these dimensions of argument variations have received empirical attention as possible influencers on the success of persuasive messages. One particularly notable way in which message arguments may vary, is quality. That is, a given argument might be a normatively good argument (a high quality argument) or it might be a normatively poor argument (a low quality argument).

The reason for considering more closely the role that argument quality variations may play in persuasion is simply the manifested value of understanding the effects of certain variations in the contents of messages. Customer reviews are user-generated and measures product quality and valuation to form a user's perspective (Cheung et al., 2008). They are based on reviewers' own experience rather than underlying characteristics of the product. In addition, there is generally no standard information format for a consumer to post a review on a social networking site, and as a result, each online customer review is different from others (Park et al., 2007). In other words, not all reviews have the same influence on consumers. The persuasive outcome of customer reviews are certainly worth pursuing, and at least as deserving of attention as questions focused on what are, arguably, more superficial aspect of persuasive messages in a CMC context.

2.4.1 Argument Quality

Argument quality refers to the persuasive strength of arguments embedded in an informational message (Bhattacherjee & Sanford, 2006). Argument quality has long been discussed in the context of information systems and its importance has been highlighted and strongly validated in prior research on information seeking (Cheung et al., 2008; Lee et al., 2008; Sher & Lee, 2009; Zhang & Watts, 2008; Park et al., 2007).

Research on the quality of messages in marketing literature mostly focuses on the message contents. These studies show that strong messages, that is to say, messages that are understandable and objective, are more effective than weak ones, which are emotional and subjective (Petty & Cacioppo, 1984; Petty et al., 1983). According to Park, Lee and Han (2007) there are generally two types of reviews. Some reviews, such as "I loved this hotel, it feels like home" or "one of the best hotels I have stayed at for some time," are subjective, emotional, and do not make reasoned arguments. Other reviews, such as "This hotel delivers everything it promises on the web site, the customer service was excellent! All of the staff, from those at the front desk to housekeeping was extremely helpful, professional and cheerful," are specific, clear, and back up their claims with reasons. In the current study, argument quality is defined as the quality of a review's content from the perspective of information characteristics. Comprising three commonly used and significantly approved dimensions of argument quality: 1.Relevance (e.g. Park et al., 2007; DeLone & McLean, 2003; Cheung et al., 2008). 2. Understandability (e.g. McKinney et al., 2002; DeLone & McLean, 2003; Park et al., 2007; Petty & Cacioppo, 1984; Petty et al., 1983). 3. Objectivity (e.g. Park et al., 2007; Bailey & Pearson, 1983; Negash et al., 2003; Srinivasan, 1985; Petty & Cacioppo, 1984; Petty et al., 1983). Using this definition of argument quality, the last review example is a high quality review because it is more logical and persuasive and gives reasons based on specific facts about the product. In contrast, the earlier review examples are low quality reviews because they are emotional, subjective, and vacuous, offer no factual information, and simply makes a recommendation.

2.4.2 Main Effect of Argument Quality

A significant body of research focusing on information quality finds that the better and more extensive the information is, the greater the consumer satisfaction. In addition, as consumer satisfaction increases, so does consumers' purchasing intention. Therefore, information quality can have a positive effect on purchase intention (Bailey & Pearson, 1983; Negash et al., 2003; Srinivasan, 1985)

Since reviews are posted by people with actual usage experience, even low quality reviews can provide important and useful information when they are positive. However, we expect that, more favorable intentions towards purchasing will be formed when high quality online customer reviews are processed. If a review contains more understandable, relevant and objective comments with sufficient reasons of recommendation, it is relatively more persuasive than comments that express feelings and recommendations without specific reason. Other things being equal, reviews that are more relevant, objective and understandable, hence of higher quality, will have a greater positive effect on consumers' purchasing intention. Thus, the following hypothesis is proposed:

Hypothesis 1: The quality of online customer reviews positively affects consumers' purchase intention. More specifically, high argument quality embedded in an online customer review will generate more intention towards purchasing than low argument quality.

2.5 Communicator

The communicator refers to the person who transmits the communication (Hovland, 1948). Research on persuasion have quite naturally focused considerable research attention on the question of how various characteristics of the communicator influence the outcomes of the communicator's persuasive efforts. Theory and extensive empirical evidence in psychology and marketing suggest that source characteristics have a direct impact on product evaluation regardless of the content of the message transmitted by the source (Arndt, 1967; Herr et al., 1991; Hass, 1981; Chaiken & Maheshwaran, 1994; Chaiken, 1980; Petty et al., 1998; Menon & Blount, 2003; Pornpitakpan, 2004; Kang & Kerr, 2006).

As more people utilize product information from eWOM networks for making purchase decisions; the process by which people evaluate the credibility of these online customer recommendations has been particularly interesting for researchers (Cheung & Thandani, 2010). The underlying belief behind such research is that eWOM arises from a possibly unlimited number of unknown participants, and the vast amounts of unfiltered information makes the information validity uncertain. Yet, an increasing number of people are relying on eWOM to help with their product purchase decisions (Cheung et al., 2009). To understand how individuals are influenced by source characteristics in CMC, researchers have been interested in the source's attributes that are the most salient in this context. In CMC where textual messages are exchanged, some attributes of the source are difficult to assess, as the nature of eWOM does not permit the conveyance of traditional source characteristics, users are left to rely on limited information about the source. Thus, the role of source credibility, in the traditional sense, might have a different role in a CMC context.

2.5.1 Source Credibility

Source credibility is defined as the extent to which an information source is perceived to be believable, competent, and trustworthy by information receivers (Petty and Cacioppo, 1986). Communicator credibility is thus not an intrinsic property of a communicator; a message source may be perceived as highly credible by one receiver and not at all credible by another. But this general notion of credibility has been given somewhat more careful specification in investigation aimed at identifying the basic underlying dimensions of credibility. With some frequency, two major dimensions have commonly emerged in investigations of communicator credibility: (1) the message source perceived ability (expertise) and (2) motivation to provide accurate and truthful information (trustworthiness) (Hu et al., 2008; Sussman & Siegal, 2003; Cheung et al., 2009; Zhang & Watts, 2008; Cheung et al., 2008).

It is believed that people deliberate on the credibility of eWOM to a greater extent than traditional WOM when seeking online product recommendations, and will only take the online advice they perceived to be credible (Wathen & Burkell, 2002). Thus, receiver's judgment of the source's credibility is a key stage in the

information persuasion process. Due to the receiver's inability to evaluate the trusting beliefs about the person writing the recommendation, heuristic cues related to the source's credibility (also referred to as non-content elements) has received a growing attention in recent research. The reviews valence (positive, negative, or neutral), volume (the quantity of the information), review consistency (reviews claiming the same), and the eWOM rating have shown to be important heuristic cues (Cheung & Tadani, 2010). Thus, these heuristic cues are considered to represent the market performance of the product and give the receiver a platform to evaluate the credibility of the reviews (Chevalier & Mayzlin, 2006). While prior research on the credibility of eWOM has shown that lack of descriptive-information about the reviewer motivates online shoppers to assess these non-content elements for attitude formulation (e.g. Chaiken & Maheshwaran, 1994), little work have been done to consider the effect of information that reviewers disclose about themselves. Research on this has been somewhat neglected in the literature. Importantly, many online product reviews provide information about the reviewer as well as information about the product. In addition, social networking sites contains descriptive information about individuals (e.g. users profiles converge with their Facebook profiles). Overall, individuals are providing more identifying information along with their reviews. This gives information seekers the ability to examine source credibility more closely. Thus, consumers are not limited to the reviews alone and they are likely to pay attention to the reviewer as well.

It is critical to examine the effects of disclosing the reviewer's identity for both theoretical and practical reasons. On a theoretical level, the information processing literature has accumulated an extensive body of research suggesting that attributes of an information source have powerful effects on the way people respond to messages (Chaiken, 1980; Chaiken 1987; Hass, 1981**).** Indeed, the information processing literature has repeatedly demonstrated that attributes of a message source often exert direct effect on message receivers' attitudes and behaviors, independent of the message content (e.g., Chaiken & Maheswaran, 1994; Petty et al., 1998; Menon & Blount, 2003; Pornpitakpan, 2004; Kang & Herr, 2006). There are also practical reasons to expect that descriptive information about the source have influence in the CMC context in particular. On many sites, descriptive information about the reviewer is at least as prominent as product

information. For example, on sites such as Tripadvisor, Amazon and eBay information about reviewers is highly salient, and sometimes more detailed and voluminous than information on the products they review. Visitors to the site can see reviewers' badges (e.g., "real name" or "top reviewer") as well as personal information about the reviewers, ranging from where they live to the names of their pets, their nick names, hobbies, profession, interests, pictures, and other posted links. Given the extent and salience of social information on reviewers, it seems worthwhile to inquire whether such information (i.e. the reviewer's virtual credential) influences the online consumers who are responsible for product sales.

2.5.2 Main Effect of Source Credibility

Past studies indicate, that source credibility in the offline world will determine the effectiveness of a communication (Eagley et al., 1978), and that communicators with more positive attributes are more persuasive than those with less positive attributes (Eagley & Chaiken, 1993). In a CMC context, assessing source credibility can be challenging, as previous buyers are, in general, anonymous on the Internet. Because of this, people generally will not easily accept or believe a review posted on a web site if it does not provide enough specific information (Park et al., 2007). In the current study, we wish to investigate whether disclosure of relevant information related to the source (virtual credentials) will facilitate knowledge transfer and increase consumers' intention towards purchasing in a CMC context. Traditionally, people tend to believe information from a source with high credibility and accept this information more readily. Information provided by highly credible sources is perceived to be useful and reliable, and hence facilitate knowledge transfer (Ko et al., 2005; Cheung et al., 2009; Zhang & Watts, 2008). If the source has low credibility, receivers are less likely to accept the information (Grewal et al., 1994). Although source credibility in this study is only the virtual credential, it is believed to have similar effect as source credibility in the traditional sense. Thus, we expect a reviewer's virtual credential to have a positive effect on purchase intention if the reviewer is characterized as highly credible. Ba and Pavlou's (2002) study on the effect of virtual reputation systems has found that virtual credibility could have a strong influence on received information. Thus, the following hypothesis is formed:

Hypothesis 2: Disclosure of the reviewer's credibility (i.e. virtual credential) will have a positive effect on purchase intention when a highly credible reviewer writes the review.

2.6 Receiver

The receiver is the individual who responds to the communication (Hovland, 1948). For knowledge transfer to occur, learning must transpire in the mind of the receivers. When explicit information is transformed into internalized knowledge and meaning, the impact of the same content can provoke different responses among different receivers (Chaiken and Eagly, 1976; Nonaka, 1994). Researchers widely agree that consumer-related factors greatly influence WOM effects (Richins & Root-Shaffer, 1988). For example, received content may be taken to heart by one receiver and ignored by another, depending on e.g. the receivers' perception, experience and sources. This has led researchers on eWOM to gain interest in consumers' characteristics, such as consumer involvement and prior knowledge to explain and understand how people are influenced in adopting ideas, knowledge or information (e.g. Doh & Hwang, 2009). Researchers further investigated other factors related to personal characteristics, such as gender, consumer skepticism, perceived homophily, and cognitive personalization (Cheung & Thadani, 2010). To understand the process by which individuals will be influenced by the messages that they receive, we choose to focus on involvement. Since its introduction by Sherif and Cantril (1947), the involvement construct has been defined as a self-directed emotional state that determines the personal relevance of purchasing a specific product to a particular consumer (Rothschild, 1984, p.216). Involvement has been shown to exert considerable influence over consumers' purchase decision processes for products in general (Laurent & Kapferer, 1985a; Laurent & Kapferer, 1985b). Reviewing earlier empirical evidence, Dichter (1966) found that intense occupation with a product creates excess thoughts and emotions that can easily be recalled in WOM episodes in order to relieve the tension or relieve the experience. Moreover, Arndt (1967) confirmed the association between involvement and WOM transmission. Other researchers also supported the association (Bloemer, 1999). Thus, online customer reviews as eWOM are associated with consumer involvement. This association is more evident when applying ELM.

2.6.1 Involvement and Elaboration Likelihood (ELM)

Research in consumer behavior and social psychology has focused on the way in witch involvement moderates the amount and type of information processing elicited by persuasive communication (Petty et al., 1983). This view stems from the elaboration likelihood model (ELM). This theory can help to explain the consumers' reaction to online customer reviews by focusing on the information processing procedures that consumers follow in response to online customer reviews. ELM posits that a message can influence people's attitudes and behaviors in two ways: centrally and peripherally. The former refers to the nature of arguments in the message while the latter refers to issues or themes that are not directly related to the subject matter of the message (Petty and Cacioppo, 1986). The likelihood of elaboration is influenced by the individual's motivation and ability to process information (Petty et al., 1983). Motivation in this sense reflects a person's willingness and intention to process information (MacInnis et al., 1991). The term involvement is popularly used to refer to personal relevance or importance (Greenwald & Leavitt, 1985; Antil, 1984). Many authors have noted a strong relation between involvement and information processing (Celsi & Olson, 1988; Petty & Cacioppo, 1984; Petty et al., 1983). As involvement increases, individuals have greater motivation to comprehend the salient information, and tend to increasingly elaborate meanings during the comprehension stage of information processing. However, when involvement is low, individuals are more likely to processes the information via the peripheral route and rely on heuristic cues from a stimulus such as source credibility for a general idea and not on the specific information (Petty & Cacioppo, 1986).

According to Celsi and Olson (1988), involvement can be either situational or enduring; situational involvement is a temporary elevation of interest that fluctuates, usually within the period of a purchase decision, while enduring product involvement is a stable phenomenon that represents the consumer's personal interest in the product over a long period. The information-processing motivation is influenced by situational and enduring involvement (Celsi & Olson, 1988). Zaichkowsky's research stream relates to the concept of situational involvement or purchase decision involvement (McQuarrie & Munson, 1987; Zaichkowsky, 1994). Other conceptualizes involvement as enduring interest in the product class, and thus as enduring involvement or product class involvement

(Richins et al., 1992). It is recognized that involvement may vary between a specific decision and a product class. In addition, some products are inherently involving because of the nature of the purchase (Zhu & He, 2002). However, it is argued that products per se cannot be intrinsically involving. As referred to by Brennan and Mavondo (2000) and highlighted by Park, Lee and Han (2007, pp. 129-130) a shampoo may be both high involvement and low involvement depending on the circumstances surrounding the purchase decision. A high involvement shampoo purchase might be characterized by a first independent shampoo purchase, a consumer who is unfamiliar with the product, or one concerned about social issues that need to be considered. Thus, the characteristics assigned do not hold in all circumstances. Furthermore, some high involvement products are not necessarily purchased by high involved customers (Kassarjian, 1981). For example, a hotel booker may believe that the outcome (a place to stay) is important, but may have no interest in the purchase process. Consequently, no assumptions regarding high or low involvement can be assigned to the product or the product class, as involvement may vary with the various antecedents to involvement as they relate to the individual consumer. Thus, situational involvement is used in the present study. There were two reasons for using situational involvement instead of enduring involvement: First, individuals' involvement for the same product can be different deepening on the personal characteristics. Second, as Mittal (1995) suggests, the situational importance of a purchasing decision is likely to be most representative of the variance in the consumer's involvement, even more than product-class involvement.

2.6.2 Interaction between Involvement and Argument Quality

Previous studies have consistently found an interaction between involvement and the quality of an argument (Johnson & Eagly, 1989; Park et al., 2007). A person who is a high elaboration (central route) processor tends to think about more or all of the given information. Furthermore, when involvement is high rather than low, people are more motivated to devote the cognitive effort required to evaluate the true merits of an issue or product (Petty et al., 1983). Thus, people with high involvement will seek as much useful information as they can from online customer reviews. They are more likely to process persuasion attempts via the central route, meaning review content is important. However, for people with low

involvement, the review quality will be less important, as they are more likely to rely on other content than the message content itself, such as characteristics of the information source. Thus, the message content is less likely to be thoroughly scrutinized; moreover, a change in attitude can result from fewer resource-demanding processes in which object-relevant information can be evaluated with a minimum of effort (peripheral route). Thus,

Hypothesis 3: There will be an interaction effect between involvement and argument quality on purchase intention, such that high involvement subjects will have stronger purchase intentions in response to high quality than low quality arguments; no such sensitivity is expected for the low involvement subjects.

2.6.3 Interaction between Involvement and Source Credibility

Early laboratory experiments on the role of credibility in informational influence found significantly more opinion change in the direction advocated by the communicator when the material was attributed to a highly credible source than when it was attributed to a low-credibility source (Hovland, 1951). These results were thought to be due to the associations between highly credible sources and favorable outcomes. More recently, ELM researchers have taken a cognitive response approach to source credibility. In this view, higher levels of source credibility can interact with other variables to produce patterns quite different from the simple enhancement effect produced by Hovland (1951) (Heesacker et al., 1983). For example, when people are highly involved in a message topic, source credibility has little impact on attitude change since individuals will scrutinize the argument rather than assess this peripheral cue. In contrast, when individuals are not involved in a topic, source credibility has been found to be an important predictor of attitude change in general (Petty et al, 1981). When an individual is either unable or unwilling to process the arguments presented in a message, source credibility will play a more critical role in the influence process. Leading to the following hypothesis:

Hypothesis 4: There will be an interaction effect between involvement and source credibility on purchase intention, such that low involvement subjects will have stronger purchase intentions in response to disclosure of reviewer's credibility

than no source disclosure; no such sensitivity is expected for the high involvement subjects.

2.6.4 Interaction between Involvement, Argument Quality and Source Credibility

The multiple roles postulated claims that variables can take various roles at different positions along the elaboration continuum (Petty & cacioppo, 1986; Petty & Wegner, 1999). Thus, it is assumed that different persuasion processes occur under high versus low involvement. Moreover, involvement might affect purchase intention differently depending on source credibility and quality embedded in the review. As discussed in the previous section, prior studied found that high involvement makes people elaborate more on the message than low involvement (Petty & Cacioppo, 1984). Following the logic from hypothesis 3 and 4, there are reasons to believe that the importance of source credibility and argument quality will differ depending on the receiver's degree of involvement. When lacking the ability and motivation to carefully process a message (i.e. low involvement), the receiver will be more inclined to accept a simple recommendation, regardless of argument quality, when coming from a highly credible source. On the other hand, a highly involved receiver will carefully assess the arguments embedded in the message and only accept the recommendation when arguments are relevant, understandable and objective, regardless of the source's credibility. Thus, it is believed that the importance of argument quality and source credibility will depend on the consumers' level of involvement:

Hypothesis 5: There will be a tree-way interaction between argument quality, source credibility and involvement on purchase intention. More specifically, the greater the receiver's involvement, the more argument quality and the less source credibility affect purchase intention. Whereas, the lesser the receiver's involvement, the more source credibility and the less argument quality affect purchase intention.

2.7 Research Model and Summary of Hypotheses

The discussions in the preceding sections lead us to the following research model:
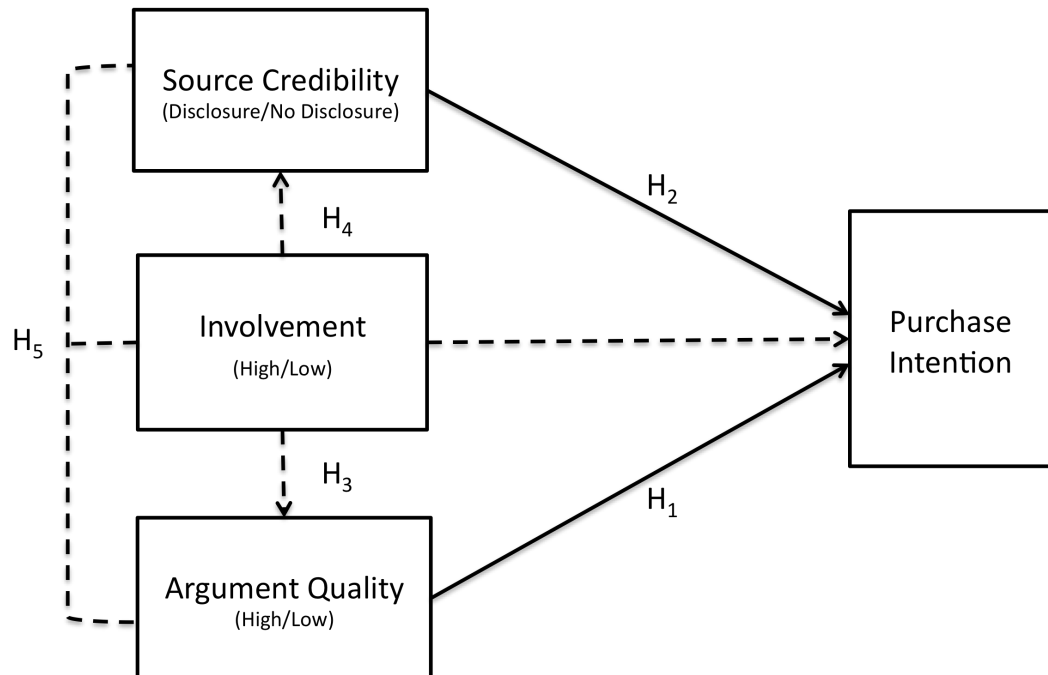
Figure 1: Impact of online customer reviews on purchase Intention

The consequent relationships as depicted in Figure 1 are summarized in the following hypotheses:

- Main effect of Argument Quality on Purchase intention (H_1).
- Main effect of Source credibility on Purchase intention (H_2).
- Involvement x Argument Quality interaction on purchase intention (H_3).
- Involvement x Source Credibility interaction on purchase intention (H_4).
- Involvement x Argument Quality x Source Credibility interaction on purchase intention (H_5).

3.0 METHODOLOGY

3.1 Design, Participants and Experimental Product

To reiterate, the goal of this study is, by including all the four elements of social communication, to investigate whether the impact of online customer reviews on purchase intention will vary between groups. The research purpose is thus of causal character, meaning that there is a cause (argument quality, involvement and source credibility) and effect (purchase intention). Experimental design is know as a type of research that tests hypotheses of whether stimuli cause a certain effect (Mitchell & Jolley, 2007). An experimental design that consists of one or more independent variables is called a factorial design. This type of design is the most appropriate for this study because it enables the manipulation of the independent variables, and makes it possible to identify the effect of each at various levels. Additionally, it allows for a systematic assessment of how the independent variables interact (Malholtra, 2010). Thus, the study employs a 2 x 2 x 2 between-subjects factorial design. The three independent variables are argument quality (high vs. low), involvement (high vs. low), and source credibility (disclosure of source vs. no disclosure of source). This resulted in eight different treatment groups, as conceptualized in table 1.

Table 1: Design

Experiment Groups	High Involvement		Low Involvement		Marginal Means
	High AQ	Low AQ	High AQ	Low AQ	
Disclosure of SC	1 μ Consumer Response	2 μ Consumer Response	3 μ Consumer Response	4 μ Consumer Response	A: μ1,μ2-μ3,μ4
No SC	5 μ Consumer Response	6 μ Consumer Response	7 μ Consumer Response	8 μ Consumer Response	B :μ5,μ6-μ7,μ8
Marginal Means	C: μ1-μ5	D: μ2-μ6	E: μ3-μ7	F: μ4-μ8	

*μ=Mean in the Group

This design required participants for eight (8) different treatment groups. We needed approximately 30 participants per treatment group, requiring 240 participants in total.

A Web-based online survey service called Qualtrics (www.qualtrics.com) was used to develop the questionnaire. Qualtrics allowed us to publish the questionnaire on Facebook, and enabled respondents to complete the

questionnaire at their own leisure. The targeted respondents of this study are individuals who visit particular opinion platforms and engage in communication within social networking sites. In general, people aged 18-34 make up the majority of visitors to social networks and blogs. Among this group Facebook has become synonymous not only with social media, but with Web use more generally (Nielsen, 2011). Facebook remains especially popular among college student population, and Web-surveys in general provide a time- and cost-saving option for data collection (Clayton & Werking, 1998; Schmidt, 1997). Using Facebook for data collection proved to be quite appealing to the respondents, as they were easily accessible and mostly willing to participate.

Hotel booking was chosen for our target product. With the growth of social media and customer reviews, hotel review sites (e.g. Tripadvisor) have grown rapidly. These sites have made a strong impact on the tourism and hotel industry and play a central role in the travel planning process. Two reasons guided our choice of target product. First, hotels are frequently booked and purchased online. Second, consumers tend to rely on the comments from previous users because the quality of hotels can only be evaluated after trying or inspecting it. Key attributes are subjective and difficult to compare, and there is a need to use one's senses to evaluate the quality.

3.2 Experimental procedure

At the start of the experiment, the subjects were told that they were to carefully read the instructions provided in the survey and then complete the experiment independently. The subjects were randomly assigned to one of the eight experimental conditions, and only exposed to one booklet, thus having no awareness of there being different variations (Appendix 12). The subjects were instructed to read and fill out the booklet, and informed that it would take about 7-10 minutes. On average the subjects used (5 minutes) to complete the questionnaire. The layout and the questions were kept constant for all booklets; only the manipulations were varied. This was done in order to keep the message constant across experimental conditions.

On the front page of the booklet, there was a short introduction to the experiment. The second page consisted of a scenario manipulating involvement with five 7-point semantic differential scales where 1 was "important/involving/unnecessary/beneficial/relevant" and 7 was not "unimportant/not involving/necessary/not beneficial/irrelevant". This functioned as a manipulation check for the subjects' degree of involvement.

The third page of the booklet included a reviewer profile in the four "disclosure of source" conditions, and a hotel review (high/low argument quality). In addition, the subjects were asked to assess the source's expertise and trustworthiness. Both were measure using four 7-point semantic differential scales, where 1 was expert/knowledgeable/reliable/trustworthy and 7 was not expert/not knowledgeable/not reliable/not trustworthy. Argument quality was measured on three 7-point Likert scales regarding the reviews' objectivity, understandability and relevance. At the end of the page the subjects were asked to indicate, on two 6-point Likert scales, their purchase intention and how likely they were to recommend the hotel to their friends. Each page of the booklet included instructions on how to fill out the questionnaire. On the last page of the booklet, the subjects were asked to state their gender, age and highest finished degree.

3.2.1 Control Variables

This experiment could be affected by the characteristics of the subjects (e.g. prior knowledge) and the stimuli (e.g., prices or brand names of products) (Hong et al., 2004). Multiple methods were used to control for the effects of possible confounding variables in order to improve the study's internal validity. Individual differences, including personality, cognitive style, and personal Web experiences, were controlled for by randomly assigning subjects to the experimental conditions.

The perception that each review of the product was positive needed to be controlled as the study was only considering positive reviews. The reviews' information valence was measured using two items in the pretests (Appendix 1).

In an experiment of this kind, it is also necessary to control other variables that might change the effects of online customer reviews, such as brand effects, attitude toward the review, prior knowledge of the product etc. In the present experiment, the hotel booking process did not include any brand so that product familiarity and prior knowledge was easily controlled. Brand effect was also controlled for by not giving any information about the brand (e.g. brand name etc.).

3.3 Manipulation of the Independent Variables

All items included in this study are based on previous research, with minor adjustment to fit the study.

3.3.1 Argument Quality

Two reviews were created based on real reviews from Tripadvisor. Relevance, understandability, and objectiveness were chosen as the criteria for argument quality. High quality reviews are product-relevant, understandable, and persuasive, with sufficient reasoning based on facts about the product. Low quality reviews are emotional, subjective, vacuous, with no information except expressions of subjective feelings or simple interjections (e.g., "Wow!"). The reviews were classified as either high or low quality (Review examples in Appendix 12). The length of the reviews was controlled because it can affect information quality (Chevalier & Mayzlin, 2006). Length of each review was set at five lines with a font size of 12-point type. Before the main experiment, a pre-test was conducted to check whether these reviews were perceived as intended.

Measurement of Argument Quality

Measurement of argument quality was carried out by a 7-point Likert scale, ranging from agree (1) to disagree (7). We asked respondents to indicate the extent to which they either agreed or disagreed to a series of belief statements about a single customer review (Appendix 13). These scales were adapted from the literature defining the quality of a review's content from the perspective of information characteristics (e.g. Park et al., 2007). Likert scales are feasible for online surveys to collect data, but a Likert scale will only capture the cognitive

components of a person's attitude and are therefore only partial measures. They do not capture the different possible intensity level of expressed affective or behavioral components of a person's attitudes. It identifies only the extent to which the respondent thinks the statement represents his or her own belief (Shiu et al., 2009).

3.3.2 Involvement

The study employed situational involvement for involvement manipulation by embedding role-playing (Maheswaran & Sternthal, 1990; Meyers-Levy & Perracchio, 1995). Involvement was dichotomized into high and low involvement. The two involvement situations differed in the amount of goal directedness. The high involvement respondents were asked to imagine a scenario where they were to book a hotel for their friends since they had the most experience with hotel booking. These instructions created a high level of goal directedness, with respondents focusing their attention on hotel booking issues. However, the role-playing instructions in the low involvement situation completely lacked goal directedness. Low involvement subjects were simply asked to imagine that they found a Web site with the information. Thanks to this manipulation, the high involvement subjects read and processed the product information more carefully than the low involvement subjects (Appendix 6).

Measurement of Involvement

Involvement was measured using Zaichkowsky's (1994) Revised Personal Involvement Inventory (RPII). The RPII is a context-free measure applicable to involvement with products, with advertisements, and with purchase situations. In this study, we measure situational involvement. Originally the RPII consists of 10 items, in our study we used 4 original items (important, necessary, involving and relevant) applicable to our study's context, and included an additional item (beneficial). Involvement was measured by five 7-point semantic differential scales (Appendix 13). By using this bipolar scale format, we wanted to capture a person's thoughts or feelings about a given objective. Using bipolar adjectives as the endpoint of a symmetrical continuum, using seven scale descriptors that express each scale's point descriptor (Shiu et al., 2009).

3.3.3 Source Credibility

Tripadvisor has a procedure by which reviewers can disclose personal information about themselves. We focus our analysis on the categories of information most commonly provided by reviewers: the reviewer's nickname, profession, personal information (e.g. hobbies) and reasons for traveling. Members may optionally decide to post such information. We use this data to assess the effect of disclosing the source's credibility. This information was available right above the review, usually appearing on a separate profile page. Consistent with the notion that community members may not click past the first page containing the reviews, we decided to dichotomize source credibility into disclosure and no disclosure of source credibility (Appendix 13).

Two reviewer profiles were created based on real reviewers from Tripadvisor. Expertise and trustworthiness were chosen as the criteria for source credibility. Based on this, we created two reviews classified as being of either high or low source credibility. As only the high credible reviewer profile will be used in the analysis, a pre-test was conducted to check whether these reviewers were perceived as intended.

Measurement of source credibility

The next independent variable is source credibility. Source expertise (2) and source trustworthiness (2) as the items of source credibility were adapted from Wu and Shaffer (1987) and carried out by a semantic differential scale (Appendix 12). Respondents were asked to select the point on the continuum that best expresses their opinion about the given objective. As far as we know, the end poles are truly bipolar. However, the survey was handed out in Norwegian, meaning that the bipolar adjectives were translated from its origin. Consequently, this might create bias in the questionnaire, because bipolar adjectives have not been validated in this language.

3.4 Measurement of the Dependent Variable

Purchase intention was measured on two 6-point numeric scales (Appendix 13). The scale items were taken from previous studies published in the information technology and marketing literature. These measurements ranged from 1,

representing extremely unlikely, to 6, extremely likely. The corresponding questions were: "How likely is it that you will book this hotel?" and "How likely is it that you will recommend this hotel to your friends?"(Cronin & Taylor, 1994).

4.0 RESULTS

This chapter will first report the results from our pre-testing. It will then discuss the assumptions of ANOVA, before reporting construct reliability and manipulation checks, and lastly presenting the results for each hypothesis.

4.1 Pre-Testing

Overall, we conducted 5 pre-tests (Appendix 1, 2 and 3). All of the pre-tests were conducted at BI Norwegian school of management.

4.1.1 Pre-Test Argument Quality

Argument quality was measured by the review's relevance, understandability, and objectiveness. Two reviews were developed, one representing a low quality review and one representing a high quality review. Both reviews' information valence was positive and close to identical in length. Manipulation checks were performed to assess whether the review was perceived to convey positive information valence, and whether the review recommended the hotel. The pre-test was handed out at BI, Norwegian School of Management, randomly to 20 respondents, 10 copies for each review. The pre-test took about 3-4 minutes.

The results form the first pre-test indicated that both reviews were perceived to convey positive information valence (M_{High}=1.00; M_{Low}=1.00), and to recommend the hotel (M_{High}=1.50; M_{Low}=1.33). However, the results indicated that the perceived argument quality of the high quality review did not differ significantly from the low quality review (M_{High}=2.61; M_{Low}=3.33), t (12) = 1.179, $p = .261$, leaving us to revise the two reviews (Appendix 1).

As some respondents reported problems as to what the questions referred to, we decided to slightly modify the reviews and specify the questions. The second

pretest was handed out at BI, Norwegian School of Management, randomly to 20 respondents, 10 copies for each scenario.

The results from the second pre-test indicated that both reviews were perceived to convey positive information valence (M_{High}=2.30; M_{Low}=1.50), and to recommend the hotel (M_{High}=1.90; M_{Low}=2.40). The results also indicated that the perceived argument quality of the high quality review differed significantly from the low quality review (M_{High}=3.70; M_{Low}=5.40;) t (18) = 2.953, p = .009 (Appendix 1).

4.1.2 Pre-Test Involvement

Two scenarios were developed, aiming at manipulating the respondents' degree of involvement through participation (goal-directedness) and responsibility. We decided to keep the RPII, but the adjectives were reduced and modified to better fit the booking-situation. We decided to keep the dimensions "fascinating – not fascinating", "relevant – irrelevant", "necessary – not necessary" and "involving – not involving". In addition, we added "active – passive." The RPII items were measured using a semantic differential scale. Manipulation checks were performed to assess whether the scenario was perceived as realistic and if subjects could imagine themselves in the situation described. Subjects were also told to indicate their perceived degree of responsibility and participation. All manipulation checks were measured on a 7-point Likert scale. The pre-test was handed out at BI, Norwegian School of Management, randomly to 10 respondents, 5 copies for each scenario. The pre-test took approximately 3-4 minutes.

The results from the first pre-test indicated that subjects in both the high – and low involvement condition, to some extent, differed in whether they perceived the situation as realistic (M_{high}=2.20; M_{Low}=3.80), and if they were able to imagine themselves being in the situation (M_{high}=1.80; M_{Low}=3.80). Subjects differed significantly on perceived responsibility (M_{High}=2.60; M_{Low}=5.80), t (8) = 2.530, p = .035, but not for perceived degree of participation (M_{High}=2.20; M_{Low}=2.60), t (8) = - .400, p = .700. The results also indicated that the degree of involvement did not differ significantly between the two groups (M_{high}=3.44; M_{Low}=3.76), t (8) = .717, p = .494 (Appendix 2).

The results from the first pre-test indicated that the two scenarios were similarly involving. In addition, some respondents reported difficulties understanding whether the questions referred to the specific situation portrayed in the scenario or if the questions were referring to a general situation. To decrease the confusion surrounding the questions, we decided to design the questions to the specific situation, and better clarify the subjects' task in the different scenarios. We also decided to remove the dimension "active – passive", as this was captured through our manipulation check, and add "beneficial – not beneficial". "Fascinating – not fascinating" was replaced with "important – not important". The second pre-test was handed out at BI, Norwegian School of Management, randomly to about 20 respondents, 10 copies for each scenario.

The results from the second pre-test indicated that subjects in both the high – and low involvement condition perceived the situation as realistic (M_{High}=1.45; M_{Low}=2.09), and had no problem imagining themselves being in the situation (M_{High}=1.45; M_{Low}=1.91). Subjects differed significantly in perceived responsibility (M_{High}=1.73; M_{Low}=6.45), t (20) = 12.057, $p = .000$, and degree of participation (M_{High}=1.73; M_{Low}=6.18), t (20) = 10.002, $p = .000$. The results also indicated that the degree of involvement differed significantly between the two groups (M_{High}=2.49; M_{Low}=4.82), t (20) = 13.345, $p = .000$ (Appendix 2). Based on these results we can conclude that we successfully managed to manipulate the subjects' degree of involvement for both high – and low involvement.

4.1.3 Pre-Test Source Credibility

In order to measure source expertise and source trustworthiness we adopted Wu and Shaffer's (1987) scale. We selected two different sources: a travel leader and a farmer. In order to be close to reality, we adopted the way of presenting the reviewer information from Tripadvisor. The respondents were presented with some personal information about the source (profession, reason for travelling and personal information) as well as a screen name. The respondents were asked to mark their opinions concerning the source's trustworthiness, credibility, expertise and knowledge. The pre-test was handed out at BI, Norwegian Business School, randomly to 22 respondents, 11 copies for each source.

The results indicated a significant difference between the two sources (M_{Farmer}=2.00; $M_{TravelLeader}$=4.25), t (20) = - 6.282, *p* = .000 (Appendix 3). Based on the result we can characterize the two sources as low-credibility and high-credibility sources, respectively.

4.2 Assumptions for ANOVA

For the univariate test procedures of ANOVA to be valid, there are several assumptions that must be met (Hair et al., 2010). The univariate test procedures of ANOVA are valid (in a statistical sense) if it is assumed that the groups are independent in their responses on the dependent variable, the dependent variable is normally distributed, and variances are equal for all treatment groups (Hair et al., 2010). Some evidence, however, indicates that F tests in ANOVA are robust concerning these assumptions except in extreme cases.

4.2.1 Independent Observations

Observations must be independent (Hair et al., 2010, p. 458). Violations of the independency assumptions means that the responses in each group are not made independently of the responses in another group. Violating the independence assumption can seriously compromise the accuracy of the ANOVA test. This assumption should be satisfied by a proper study design and randomization (Yockey, 2008).

The experiment booklets, used to gather information in the present study, were handed out on the social networking site Facebook. The interactive nature of Web surveys prevents participants from talking and copying each other's answers. In addition, randomization of the eight conditions was also ensured. Further, to prevent them from talking and copying each other's answers, the introduction specifically instructed subjects to mark their own opinion, and not consults others. Since the survey can be completed at the respondent's leisure, it is impossible to guarantee that the sample achieved in this way does not cause a subset of individuals to have answers that are somewhat correlated. However, there is no reason to suspect dependence. In addition, the sample was collected in a relatively

short period so there is no reason to suspect time-ordered effects (serial correlations).

4.2.2 Normally Distribution

This assumption means that the dependent variable should be normally distributed in the population for each of the eight cells in the study. The ANOVA method is relatively robust to violations of this assumption, provided the violations are not too severe (Yockey, 2008).

Having a larger sample makes the experiment more robust if some of the other assumptions are violated. Increased sample size generally reduces sampling error and increases the power of the test (Hair et al., 2010). Based on the central limit theorem, the sample mean is approximately normally distributed when sample size is moderately large (at least 15) (Moore & McCabe, 2006). The eight experimental groups in this survey range from 30-34 respondents in each, so this should be an adequate sample size (Appendix 10). Still, we decided to examine the normality of the data before proceeding to the tests (Yockey, 2008; Hair et al., 2010).

A wide variety of tests can be performed to test if the data follows a normal distribution. To test for univariate normality, the Kolmogorov-Smirnov and the Shapiro-Wilk statistics will be used. These test are significant ($p < .05$) for all of the variables, suggesting violation of the normality assumption (Appendix 4). However, this is quite common in larger samples (Pallant, 2005:57)

4.2.3. Equal Variance

This assumption means that the variances in each of the cells should be equal in the population. Violating the equal variance assumption can compromise the accuracy of the ANOVA test, particularly when the group sample sizes are unequal (Yockey, 2008). Interpreting the results of Levene's test in SPSS addresses this assumption by providing a test of whether the variance is equal for the eight cells in our study. The Levene's test is significant (F $(2, 245) = 2.505$, $p = .017$), suggesting that the variance of our dependent variable is not equal across

groups (Appendix 4). When violating this assumption, it is recommended to set a more conservative alpha level (e.g. .025 or .01) (Pallant, 2005, p. 259).

4.2.4 Outliers

ANOVA is especially sensitive to outliers and their affect on the Type 1 error (Hair et al., 2010). Outliers can be checked by comparing the 5% Trimmed Mean, where SPSS removes the top and bottom 5% of the cases and recalculates a new mean value, with the original mean (Pallant, 2005). The results shows a small differences between the 5% trimmed mean and the mean, indicating no problems with outliers (Appendix 4).

4.2.5 Remarks to the Assumptions

One of the key concepts in hypothesis testing is that of significance level (or, equivalently the alpha level). Because we are violating the assumption of normality and equality of variance the current study will apply a more conservative alpha level, thus, $p = .025$. By having a stricter willingness to accept p-value as significant the chance of making a Type 1 error reduces (Pallant, 2005, p. 259; Hair et al., 2010).

4.3 Construct Reliability and Manipulation Checks

After being presented with the scenario, the review and the reviewer profile, subjects were asked to indicate their agreement to a bulk of statements designed to assess the extent to which the manipulations were successful.

4.3.1 Manipulation Check: Argument Quality

To assess argument quality, the subjects were asked to indicate to which extent they perceived the review to be relevant, objective and understandable on a 7-point Likert scale ranging from 1 "completely agree" to 7 "completely disagree". The three items had good internal consistency ($\alpha = 0.90$), and a factor analysis with maximum likelihood rotation and varimax extraction of the three items produced a one-factor solution explaining 83.9% of the variance. Hence, the three

items were averaged to create an argument quality item (i.e. adding the items together and divide by three) (Hair et al., 2010).

In order to deem the argument quality manipulation as successful, subjects in the high argument quality condition should perceive the review to be of higher quality than subjects in the low argument quality condition. A 2(argument quality) x 2(involvement) x 2(source credibility) ANOVA was performed to test the main-effect of argument quality. A significant main-effect of argument quality was observed ($F(2, 243) = 326,036$, $p = .000$). Subjects in the high argument quality condition rated the review significantly higher ($M_{High Argument Quality} = 2.831$) than subjects in the low argument quality condition ($M_{Low Argument Quality} = 5.863$) (Appendix 5).

4.3.2 Manipulation Check: Involvement

To assess the degree of involvement, subjects were asked to evaluate the scenario on five 7-point semantic differential items (i.e. relevant-irrelevant, involving-not involving, necessary-unnecessary, beneficial-not beneficial and important-not important). These items had a good internal consistency ($\alpha = 0,94$), and a factor analysis with maximum likelihood rotation and varimax extraction produced a one-factor solution explaining 81.7% of the variance. Hence, the five items were averaged to create an involvement item (Hair et al., 2010).

In order to deem the involvement manipulation as successful, subjects in the low involvement condition should perceive the scenario to be less involving than subjects in the high involvement condition. A 2(involvement) x 2(argument quality) x 2(source credibility) ANOVA was performed to test the main-effect of involvement. A significant main-effect of involvement was observed ($F(2, 242) = 245,380$, $p = .000$). Subjects in the high involvement condition rated the scenario significantly more involving ($M_{High-Involvement} = 2,843$) than subjects in the low involvement condition ($M_{Low-Involvement} = 4,692$) (Appendix 6).

4.3.3 Manipulation Check: Source Credibility

To assess source credibility, the subjects were asked to indicate to which extent they perceived the reviewer to be knowledgeable, credible, expert and trustworthy on four 7-point semantic differential scale. The four items had good internal consistency ($\alpha = 0.89$), and a factor analysis with maximum likelihood rotation and varimax extraction of the three items produced a one-factor solution explaining 81.1% of the variance. Hence, the four items were averaged to create a source credibility index (Hair et al., 2010).

In order to deem the source credibility manipulation as successful, subjects in the source disclosure condition should perceive the source to be more credible than subjects in the no source disclosure condition. A 2(source credibility) x 2(involvement) x 2(argument quality) ANOVA, with the source credibility index as dependent variable was performed to test the main-effect of source credibility. A significant main-effect of source credibility was observed (F(2, 243) = 63,757, *p* = .000). Subjects in the source disclosure condition rated the source significantly more credible (M$_{\text{Disclosure of Source}}$= 3,144) than participants in the no source disclosure condition (M$_{\text{Disclosure of Source}}$= 4,616) (Appendix 7).

4.3.4 Construct reliability: Purchase intention

To assess purchase intention, the subjects were asked to indicate how likely they were to recommend the hotel to others, and how likeley they were to book the hotel on two 6-point Likert scales. The two items had good internal consistency (α= .94), and a factor analysis with maximum likelihood rotation and varimax extraction of the two items produced a one-factor soultion explaining 94.6 % of the variance. Hence, the two items were averaged to create a purchase intention index (Hair et al., 2010) (Appendix 8).

Table 2: Summary of Construct Reliability

Construct Items	No. of Items	Cronbach's Alpha	Composite Reliability
Involvement	5	0.94	81.7%
Argument Quality	3	0.90	83.9%
Source Credibility	4	0.89	81.1%
Purchase Intention	2	0.94	94.6%

4.4 Hypothesis Testing

The study presented the following hypotheses:

- Main effect of Argument Quality on Purchase Intention (H1).
- Main effect of Source Credibility on Purchase Intention (H2).
- Involvement x Argument Quality interaction on Purchase Intention (H3).
- Involvement x Source Credibility interaction on Purchase Intention (H4).
- Involvement x Argument Quality x Source Credibility interaction on Purchase Intention (H5).

4.4.1 Main Effect and Interaction Effects on Purchase Intention.

A 2 (involvement) x 2 (argument quality) x 2 (source credibility) between-subjects ANOVA was conducted to test our hypothesis. Participants were presented with a booklet with a scenario (high/low involvement) and a hotel review (high/low argument quality). In addition, half of the respondents were presented with a profile of the reviewer (disclosure of source/no disclosure of source) (Appendix 13).

The ANOVA results for purchase intention are presented in table 5 below. The table shows the cell means of the purchase intention index with standard deviation in parentheses and the number of participants (Appendix 10).

Table 3: ANOVA Results

Experiment Groups		High Involvement		Low Involvement		Marginal Means
		High AQ (n = 63)	Low AQ (n = 67)	High AQ (n = 60)	Low AQ (n = 63)	
Disclosure of SC	(n = 127)	2.45 (1.11) n = 31	4.24 (1.01) n = 33	2.17 (1.21) n = 30	4.12 (1.41) n = 33	3.28[b]
No SC	(n = 126)	2.39 (.87) n = 32	4.44 (1.32) n = 34	3.05 (1.37) n = 30	4.30 (1.40) n = 30	3.56[b]
Marginal means (SC)		2.42	4.34	2.61	4.21	
Marginal means (Involvement)		3.41[c]		3.43[c]		
		AQ = High		AQ = Low		
Marginal means (AQ)		2.52[a]		4.28[a]		

[a] : Significant main-effect of argument quality, $p < .000$
[b] : Insignificant main-effect of source credibility $p > .052$
[c] : Insignificant main-effect of involvement, $p > .856$
Standard deviation in parentheses

The booklets were handed out to around 600 acquaintances on the social networking site Facebook, out of the 600 booklets handed out, 385 were collected and 253 were completed and used in the analysis. Of the 253 respondents, 130 were male, and 123 were female, with average age being 26. Regarding highest finished degree the majority reported (n=207) having a university education (Appendix 9).

4.4.2 Main Effect of Argument Quality

As table 3 shows, our study revealed a significant main-effect of argument quality on purchase intention ($M_{\text{High Argument Quality}}$ = 2.515, $M_{\text{Low Argument Quality}}$ = 4.276) (F (2, 245) = 131.208, p = .000). Hence, hypothesis 1 is supported; meaning that high argument quality leads to higher degrees of purchase intention (Appendix 10).

4.4.3 Main effect of Source Credibility

As table 3 shows, our study failed to reveal a significant main-effect of source disclosure ($M_{\text{Disclosure of Source}}$ = 3.284, $M_{\text{No Disclosure of Source}}$ = 3.556) (F (2, 245) = 3.805, p = .052). Hence, hypothesis 2 is not supported; meaning we are not able to say that disclosure of relevant information related to the source will affect purchase intention (Appendix 10)

4.4.4 Interaction Effects

Our study did not reveal any significant interaction effects (Appendix 9): Involvement × argument quality (F (2, 245) = 1.072, p = .302), involvement × source credibility (F (2, 245) = 2.258, p = .134), and involvement × argument quality × source credibility (F (2, 245) = 2.458, p = .118). Hence, we find no support for hypothesis 3, 4 and 5 (Appendix 10).

An independent sample t-test was performed to further investigate involvement × source credibility. Our results reveal that there were no significant differences in means between the subjects in the low involvement condition with disclosure of source credibility ($M_{\text{Low Involement, Disclosure}}$ = 3.172) and subjects in the low involvement with no disclosure of source credibility ($M_{\text{Low Involvement, No Disclosure}}$ = 3.675), t (122) = -1.781, p = .039 (one-tailed). As hypothesized we find no

significant differences in means between the subjects in the high involvement condition with disclosure of source credibility ($M_{\text{High-Involvement, Disclosure}}$ = 3.375) and the subjects in the high involvement condition with no disclosure of source credibility ($M_{\text{High-Involvement, No Disclosure}}$ = 3.469) t (127) = -.369, p = .357 (one-tailed) (Appendix 11).

An independent sample t-test was performed to further investigate involvement × argument quality. Our results reveal that there were a significant difference in means between the subjects in the low involvement condition with low argument quality ($M_{\text{Low Involement, Low Argument Quality}}$ = 4.206) and subjects in the low involvement with high argument quality ($M_{\text{Low Involvement, High Argument Quality}}$ = 2.598), t (122) = -6.531, p = .000. We also find a significant difference in means between the subjects in the high involvement condition with low argument quality ($M_{\text{High-Involvement, Low Argument Quality}}$ = 4.343) and the subjects in the high involvement condition with high argument quality ($M_{\text{High-Involvement, High Argument Quality}}$ = 2.427) t (127) = -10.019, p = .000 (Appendix 11).

Table 4: Presentation of predictions, results and conclusions

	Predictions	Empirical results	Conclusion
H$_1$	Main effect of argument quality on purchase intention.	F (2, 245) = 131.208, p = .000	Supported
H$_2$	Main effect of source credibility on purchase intention.	F (2, 245) = 3.805, p = .052	Not Supported
H$_3$	Involvement x argument quality interaction on purchase intention. In the high involvement condition, argument quality will influence purchase intention more than it will in the low involvement condition.	F (2, 245) = 1.072, p = .302 *Under high involvement:* t (127) = -10.019, p = .000 *Under low involvement:* t (122) = -6.531, p = .000	Not Supported
H$_4$	Involvement x source credibility interaction on purchase intention. In the low involvement condition, disclosure of source credibility will influence purchase intention more than it will in the high involvement condition.	F (2, 245) = 2.258, p = .134 *Under high involvement:* t (127) = - .369, p = .357 *Under low involvement:* t (122) = -1.781, p = .039	Not Supported
H$_5$	Involvement x argument quality x source credibility interaction on purchase intention.	F (2, 245) = 2.458, p = .118	Not Supported

5.0 DISCUSSIONS & CONCLUSION

In this chapter, the findings of our study are discussed in relation to the purpose and research question of this study. At the end, managerial implications are presented and discussed.

5.1 Predictions and findings

It was predicted that there would be a main effect of argument quality on purchase intention, since previous studies have found a positive relationship between argument quality and purchase intention (Bailey & Pearson, 1983; Negash et al., 2003; Park et al., 2007; Srinivasan, 1985). This study replicated previous studies by obtaining the same effect. Consistent with these studies, we find that the quality of online customer reviews has a positive effect on consumer purchasing intention. Moreover, high argument quality embedded in an online customer review generates stronger intentions towards purchasing than low argument quality; reviews that are relevant, objective and understandable with sufficient reasons based on specific facts about the product, have a stronger effect on purchasing intention than reviews that are emotional, subjective and offers no factual information about the product. In general, this implies that consumers are more persuaded by high argument quality than low argument quality, which underlines the variation in influence of argument quality in messages. These findings can be interpreted as the effects of the quality of online word-of-mouth messages.

The current study provides no evidence of a significant relationship between disclosure of source credibility and purchase intention; subjects exposed to a credible source did not show a significant higher degree of purchase intention, than subjects not exposed to the source. Our results are inconsistent with the information processing literature suggesting that attributes of an information source have powerful effects on the way people respond to messages (Chaiken, 1980; Chaiken, 1987, Hass, 1981). Indeed, the information processing literature has repeatedly demonstrated that attributes of a message source often exert direct effects on message receivers' attitudes and behaviors, independent of the message content (e.g., Chaiken & Maheswaran, 1994; Petty et al., 1998; Menon & Blount, 2003; Pornpitakpan, 2004; Kang & Herr, 2006). Although the source credibility in

this study is only "the virtual credential" of the eWOM source, it was believed to have similar effect. Our study suggests that the traditional role of source credibility do not have the same role in a CMC context. In the current study, a reviewer's virtual credential is neither a significant nor a sufficient indicator that readers systematically or heuristically use to evaluate eWOM messages. It can appear that an extension of the source credibility construct is needed in order to understand what constitutes "virtual source credibility." However, it might be that the nature of CMC is less personal than face-to-face communication such that the effect of source credibility cannot have a similar effect. Our results leads us to believe that the importance may not lie with whether the source is credible, per se, but whether consumers are able to verify the credibility of the messages. Overall, this underlines the notion that people deliberate on the credibility of eWOM to a greater extent than traditional WOM when seeking online product recommendations (Whaten & Burkell, 2002).

To understand the process by which individuals will be influenced by the messages that they receive, we draw on the Elaboration Likelihood Model (ELM) of information influence (Petty & Cacioppo, 1986). Following the ELM framework, the level of consumer involvement can affect whether a message will be processed centrally or peripherally. Accordingly, when people are highly involved in a message topic, source credibility should have little impact on attitude change since individuals will scrutinize the argument rather than assess this peripheral cue. In contrast, when individuals are not involved in a topic, source credibility has been found to be important predictors of attitude change in general (Petty et al, 1981). The analysis in the current study showed that all of the interaction failed to produce statistical significance. As our study did not revel any interaction effects, the findings are not in line with the multiple roles postulated of the ELM. Hence, hypothesis 3 (involvement x argument quality), hypothesis 4 (involvement x source credibility) and hypothesis 5 (involvement x argument quality x source credibility) were not supported.

Further analysis of the involvement x argument quality interaction effect, shows that both high and low involved customers want high quality reviews. This results, which is not the same as the predicted from ELM, is explained by the fact that low involvement customers does not simply accept what other consumers recommend,

as review content is important to them. On the other hand, high involvement customers are as expected affected by high- rather than low- argument quality. It might be that the involvement conditions provided in this study did not appropriately manage purchase intention to result from fewer resource-demanding processes among the participants. Such that both the high- and low involvement condition unintentionally facilitated careful and systematic processing of message content. However, the manipulation check showed that subjects differed significantly in degree of involvement. A more adequate explanation relies within the information scarcity provided in this study, it might simply be that not enough reviews were presented (quantity), meaning that the participants' level of involvement became less relevant to their evaluation. This might also explain why the involvement x source credibility interaction on purchase intention was insignificant. In particular, source credibility was not found to be an important predictor for participants in the low involvement condition. By not presenting enough reviews, the participants may not have been able to speculate as to the source of the message, making it less relevant to their evaluation. However, this study deliberately presented only one review, enabling us to investigate the effects of source credibility, which in traditional communication suggests that message source characteristics have a powerful impact on the way people respond to messages. Overall, exposure to a single message and a single source facilitated careful and systematic processing of message content. Even though the current study highlights the importance of argument quality, and leads us to believe that readers do not follow recommendations blindly. Rather, they tend to believe in opinions that are supported by valid and strong arguments. The results should be carefully interpreted. Unlike traditional WOM, eWOM is often characterized by information overload than information scarcity. Information overload increases the likelihood of information being processed heuristically; using heuristic cues as a convenient and efficient device to assess the credibility of the source on which to base their product purchase decision (Hansen & Haas, 2001). Normative influences (valence, volume, and rating) can affect how people determine credibility of online recommendations (Forman et al., 2008). In the current study, disclosure of source credibility is not significantly associated with purchase intention when review volume is low. However, the aggregation power of online discussion forum allows users to use these normative cues to evaluate eWOM messages, and verify the credibility of the message. Members evaluating a single

product are likely to see numerous reviews from numerous sources. If similar experiences are repeatedly reported by different reviewers, readers are more likely to assign each individual review higher credibility (Cheung et al., 2009). Besides, the aggregated rating of past readers can allow users to know how other readers judged that piece of online recommendation. This could help to increase their confidence in the review and reviewer. Thus, normative influences should be taken into consideration when understanding the impact of eWOM.

5.2 Managerial implications

From our study, we found that argument quality is the most vital element for influencing purchase intention within eWOM. Our study shows that the differential effect of online reviews is due to argument variations. When information seekers sense high quality reviews, they give it greater influence over their purchase intention. The key role of argument quality may have interesting practical implications for review writers and Web-site managers. Consumers who actively post reviews may enjoy giving information and advices to other consumers. For these consumers, finding that other perceives their reviews as high quality or influential may represent a reward for writing reviews. As our research shows, reviewers can enhance quality and influence by writing reviews that contains more understandable, relevant and objective comments with sufficient reasons of recommendation. They should also try to avoid expressing feelings, simple interjections and recommendations without specific reason. In addition, even though peers and customers typically write reviews, it is the manufacturers or the retailers that publish these reviews. Accordingly, they are in position to influence which reviews that should be posted and how the reviews should be written. Thus, we believe the findings of this study can provide some advice of the organization of online communities in order to help them better manage their web site for the purpose of sales. For example, an online retailer could post selected customer reviews. Our research offers insight into what kind of customer reviews that are more influential for a specific service (hotel booking). Furthermore, retailers that post all customer reviews could offer guidelines or hints about how to write a review (e.g. offer a standard form), which would enable reviews that are more influential. In this way, online retailers may be able to increase sales on their web site by encouraging and nurturing high quality

reviews. Given space constraints, it may also be important to consider whether the text of reviews or the identity of reviewers is featured prominently. On many web sites, descriptive information about the reviewer is at least as prominent as product information. For example, on sites such as Tripadvisor information about reviewer's is highly salient, and sometimes more detailed and voluminous than information on the products they review. Our study suggests that this approach is not the most beneficial. Thus, the operators of an online consumer forum could focus on how to improve the source credibility reputation in their eWOM forums. To improve source credibility reputation, the forum administrators could initiate reward schemes to recognize reputable contributors who consistently post high quality reviews. A different approach, than prioritizing (self-proclaimed) personal information

6.0 LIMITATIONS & FUTURE RESEARCH

The current study has several limitations. First, this study only presented subjects with one review (one single review from a single source). This was done in order to isolate the effect of source credibility (i.e. reviewer's virtual credentials). However, by doing this it appears we remove important elements (i.e. heuristic cues) needed to assess the source's credibility. Because a reviewer's virtual credentials are self-proclaimed, a consumer might need more cues to make source credibility judgments. Second, instead of presenting subjects with one high- and one low-credible source, we decided to dichotomize the two levels of source credibility as (1) disclosure of source identity, and (2) no disclosure of source identity. This might lead subjects to determine the source's credibility based on the quality of the review, when the identity of the source was not disclosed. Despite this, reviewer's virtual credentials are in most cases found on a separate page from the review, and thus in real life, readers have the option to disclose or not disclose the source's identity when reading a review. Third, by only including positive reviews, we neglect the effect that negative and neutral reviews might have on purchase intention. This was done in order to create a simple research design. In addition, the inclusion of negative and neutral reviews can create confounding issues (e.g. two-sided effects, review (in)consistency, source credibility).

Fourth, due to resource and time constraint, this study used a convenience sample. Convenient sampling has many potential sources of biases, including respondent self-selection. In addition, convenience samples are not representative of any definable population. Thus, the sample used in this study might be an under-representation or over-representation of particular groups. Hence, it is not theoretically meaningful to generalize our results to any population (Malhotra, 2010). Care must be taken when extrapolating the findings. The current sample is bias towards student populations, which represents a low-income group. A more diverse sample of potential users in different age categories and professions should be examined in future research. Further, as this study only uses one single questionnaire to measure all constructs included, common method bias may be presented in the measurement,

The scales used in this study are adopted from previous studies and the Marketing Scales Handbook, and therefore originally in English. All scales were translated into Norwegian, meaning some of the words' denotation might have been altered in the translation process.

Our results violated the assumptions of normality and equality of variance, increasing the likelihood of us committing a type 1 error. As a result, we decided to apply a more conservative alpha level when interpreting the results.

Despite these limitations, the research summarized in this paper presented the effect of online customer reviews along with implications. Many other interesting questions remain unanswered, however, and require further investigation. First, this investigation focused on positive online customer reviews. Online customer reviews may have a different effect on purchasing intention when there are some negative reviews. Second, the study can be extended by considering other variables (Cheung and Thadani, 2010).

7.0 REFERENCES

Andreassen, T. W. and Streukens, S. (2009), "Service innovation and electronic word-of- mouth: is it worth listening to?" *Managing Service Quality*, Vol. 19 No. 3, 249-65.

Antil, J. H. (1984), "Conceputalization and operationalization of involvement." In: T. Kinnear (Ed.), Advances in Consumer Research, Series 11, Association for Consumer Research, Provo, UT, pp. 203-209.

Arndt, J. (1967), "Role of Product-Related Conversations in the Diffusion of a New Product. " *Journal of Marketing Research*, pp. 291-95.

Avery, C., Resnick, P. and Zeckhauser, R. (1999), "The market for evaluations." *American Economic Review*, Vol. 89 No 3, pp. 564-84.

Ba, S. and Pavlou, P.A. (2002), "Evidence of the Effect of Trust Building Technology in Electronic Markets: Price Premiums and Buyer Behavior." *MIS Quarterly*, Vol. 26 No. 3, pp. 243-68.

Bailey, J. E. and Pearson, S. W. (1983), "Development of a tool for measuring and analyzing computer user satisfaction." *Management Science*, Vol. 29, No. 5, pp.530-45.

Bhattacherjee, A. and Sanford, C. (2006), "Influence processes for information technology acceptance: an elaboration likelihood model." *MIS Quarterly*, Vol. 30 No. 4, pp. 805-25.

Bloemer, J., Ruyter, K. and Wetzels, M (1999), "Linking perceived service quality and service loyalty: A multidimensional perspective." *European Journal of Marketing*, Vol. 33. No. 11, pp.1082- 1106.

Celsi, R. L. and Olson, J C. (1988), "The role of involvement in attention and comprehension processes." *Journal of Consumer Research*, Vol. 15 No. 2, pp. 210-24.

Chaiken, S. (1980), "Heuristic versus systematic information processing and the use of source versus message cues in persuasion." *Journal of Personality and Social Psychology*, Vol. 39 No. 5, pp. 752-66.

Chaiken, S. (1987), "The Heuristic model of persuasion." In Zanna, M. P., Olson, J. M., and Herman, C. P. (Eds.) *Social influence: The Ontario Symposium*. Vol. 5, pp. 3-39, Hillsdale, NJ: Erlbaum

Chaiken, S. and Eagly, A. H. (1976), "Communication modality as a determinant of message persuasiveness and message comprehensibility," *Journal of Personality and Social Psychology*, Vol. 34 No. 4, pp. 605-14.

Chaiken, S. and Maheswaran D. (1994), "Heuristic processing can bias systematic processing: Effects of source credibility, argument ambiguity, and task importance on attitude judgement."*Journal of Personality Social Psychology*, Vol. 66 No. 3, pp. 460-73.

Chatterjee, P. (2001), "Online Reviews: Do Consumers Use Them?" *Advances in Consumer Research* 2001, pp. 129-34.

Chen, Y., and Xie, J. (2005), "Third-party product review and firm marketing strategy." *Marketing Science*, Vol. 24, No. 2, pp. 218-40.

Chen, Y., and Xie, J. (2008), " Online Consumer Review: Word-of-Mouth as a New Element of Marketing Communication Mix." *Management Science,* Vol. 54, No. 3, pp. 477-91.

Cheung, C. M. K., Lee, M. K. O. and Rabjohn, N. (2008), "The impact of electronic word- of-mouth." *Internet Research*, Vol. 18 No. 3, 229-47.

Cheung, M. Y., Luo, C., Sia, C. L. and Chen, H. (2009), "Credibility of Electronic Word-of- Mouth: Informational and Normative Determinants of On-line Consumer Recommendations." *International Journal of Electronic Commerce*, Vol. 13 No. 4, pp. 9-38.

Cheung, C. M. K., and Thadani, D. R. (2010), "The Effectiveness of Electronic Word-of-Mouth Communication: A Literature Analysis." *2010 Proceedings*, pp. 329-45.

Chevalier, J. A. and Mayzlin, D. (2006), "The Effect of Word of Mouth on Sales: Online Book Reviews." *Journal of Marketing Research*, Vol. 43 No 3,pp. 345-54

Clayton, R. L., and Werking, G. S. (1998), "Business surveys of the future: The World Wide Web as a data collection method." In Couper, M. P., Baker, R. P., Bethlehem, J., Clark, Z. F., Martin, J., Nicholls II, W. L., and O'Reilly, J. ;. (eds), *Computer Assited Survey Information Collection*, John Wiley & Sons, New York, pp.543-62.

Cronin, J. J. and Taylor, S. A. (1994), "SERVPERF versus SERVQUAL: Reconciling performance-based and perception-minus-expectations measurment of service quality." *Journal of Marketing*, Vol 58 No 1, pp.125-31.

Davis, A. and Khazanchi, D. (2008), "An Empirical Study of Online Word of Mouth as a Predictor for Multi-product Category e-Commerce Sales." *Electronic Markets,* Vol.18 No. 2, pp. 130-41.

Dellarocas, C. (2003), "The Digitization of Word of Mouth: Promise and Challenges of Online Feedback Mechanisms." *Management Science*, Vol. 49 No. 10, pp. 1407-24.

DeLone, W. H. and McLean, E. R. (2003), "The DeLone and McLean model of Information systems success: a ten-year update." *Journal of Management Information Systems*, Vol. 19 No. 4, pp.9-30.

Dichter, E. (1966), "How word-of-mouth advertising works." *Harvard Business Review*, Vol. 44 No. 6, pp. 147-66.

Doh, S. J. & Hwang, J. S. (2009), "How Consumers Evaluate eWOM (Electronic Word-of-Mouth) Messages. " *Cyberpsychology & Behaviour*, Vol 12 No. 2, pp. 193-97.

Eagly, A. H. and Chaiken, S. (1993), "The Psychology of Attitudes." *Harcourt Brace Jovanovich,* Fort Worth, TX.

Eagley, A. H., Wood, W. and Chaiken, S. (1978) "Causal inferences about communicators and their effect on opinion change." *Journal of Personality and Social Psychology*, Vol. 36 No. 4, pp.424-443.

eMarketer (January, 2009), "Can Use-Generated Content Change Your World?" Retrieved March 21, 2012. Available on URL: http://www.emarketer.com/Article.aspx?R=1006888

Engel, J.F., Blackwell, R.D. and. Kegerreis, R.J. (1969), "How Information is used to adopt an innovation", *Journal of Advertising Research*, Vol. 9 No. 4, pp. 3-8.

Forman, C., Ghose, A. and Wesenfeld, B. (2008), "Examining the Relationship Between Reviews and Sales: The Role of Reviewer Identity Disclosure in Electronic Markets."*Information Systems Research*, Vol. 19. No. 3, pp. 291-313.

Greenwald, A. and Leavitt, C. (1985), "Cognitive theory and audience involvement." In: L. Erlbaum (Ed.), Psychological Processes and Advertising Effects, Erlbaum, NJ, pp.221-40.

Grewal, D., Gotlieb. J. and Marmorstein, H. (1994), "The Moderating Effects of Message Framing and Source Credibility on the Price-perceived Risk Relationship." *Journal of Consumer Research*, Vol 21 No. 6, pp. 145-53.

Haas, M. R., and Hansen, M. T. (2001), "Competing for Attention in Knowledge Markets: Electronic Documents Dissemination in a Management Consulting Company." *Administratice Science Quarterly*, Vol. 46, pp. 1-

28.

Hair Jr., J.F., Black, W.C., Babin, B.J., and Anderson, R.E., (2010) *"Multivariate Data Analysis: A Global Perspective"*, Seventh Edition. *Upper Saddle River, New Jersey: Pearson Education, Inc.*

Harmon, A. (February, 2004), "Amazon glitch unmasks war of reviewers." Retrieved March 21, 2012. Available on URL: www.nytimes.com/2004/02/14/technology/14AMAZ.html?ei=5007&en=1 83dc1dl16a0c7b4c&ex=1392094800&Parner=USERLAND&pagewanted =all&position=

Hass, R. G. (1981), "Effects of source characteristics on cognitive responses and persuasion." In Petty, R. E., Ostrom, T. M. and Brock, T. C. (Eds.), "Cognitive responses in persuasion" (pp. 44-72). Lawrence Erlbaum, Hillsdale, NJ, pp. 141-72.

Heesacker, M., R. E. Petty. and J. T. Cacioppo. (1983), "Field dependence and attitude change: Source credibility can alter persuasion by affecting message relevant thinking." *Journal of Personality*. Vol. 51 No. 4, pp. 653-66.

Hennig-Thurau, T., Gwinner, K. P., Walsh, G. and Gremler, D. D. (2004), "Electronic Word-of-Mouth Via Consumer-Opinion Platforms: What Motivates Consumers to Articulate Themselves on the Internet?" *Journal of Interactive Marketing*, Vol. pp. 18, 38- 52.

Herr, P. M., Kardes, F. R. and Kim, J. (1991), "The effects of word-of-mouth and product- attribute information on persuasion: An accessibility-diagnosticity perspective." *Journal of Consumer Research*, Vol. 17 No. 4, pp. 454-62.

Hong, W., Thong, J. Y. L., and Tam, K. Y. (2004), "The effects of information format and shopping task on consumers' online shopping behavior: A cognitive fit perspective." *Journal of Management Information Systems*, Vol 21, No 3, pp. 149-84.

Hovland, C. I. (1948), "Social Communication." *Proceedings of the American philosophical society,* Vol. 92 No. 5, pp. 371-75

Hovland, C. I. (1951), "Changes in attitude through communication." *Journal of Abnormal and Social Psychology* Vol. 46 No. 3, pp.424-37.

Hu, N., Liu, L. and Zhang, J. (2008). "Do online reviews affect product sales? The role of reviewer characteristics and temporal effects." *Information*

Technology and Management, Vol. 9 No. 3, pp. 201-14.

Hung, K. H. and Li, S. Y. (2007), "The Influence of eWOM on Virtual Consumer Communities: Social Capital, Consumer Learning, and Behavioral Outcomes." *Journal of Advertising Research*, Vol. 47 No. 4, pp. 485-95.

Johnson, B. T., and Eagly, A. H. (1989), "The effects of involvement on persuasion: A meta-analysis." *Psychological Bulletin*. Vol. 106. No. 2, pp. 290-314.

Kang, Y. S. and Herr, P. M. (2006), "Beauty and the beholder: Toward an integrative model of communication source effects." *Journal of Consumer Research*, Vol. 33 No. 1, pp. 123-30.

Kassarjian, H. H. (1981), "Low involvement-A second look." In: K.B. Monroe (Ed.) *Advances in Consumer Research*, Vol. 8 Ann Arbor: Association for Consumer Research, pp.31-34.

Katz, E. and Lazarsfeld, P.F. (2009), "Personal influence: The part played by people in the flow of mass communications", *Transaction Publisher, New Brunswick, New Jersey. Originally published in 1955 by The Free Press*

King, C. W. and Summers, J. O. (1970), "Overlap of Opinion Leadership across consumer product categories." *Journal of Marketing Research*, Vol. 7, pp. 43-50.

Ko, D.G., Kirsch, L.J. and King, W.R. (2005), "Antecedents of knowledge transfer from consultants to clients in enterprise system implementations", *MIS Quarterly*, Vol. 29 No. 1, pp. 59-85

Laurent, G. and Kapferer, J. N. (1985a),"Measuring consumer involvement profiles." *Journal of Marketing Research*, Vol.22, No. 11, pp. 41-53.

Laurent, G. and Kapferer, J. N. (1985b), "Consumer involvement profiles: A new practical approach to consumer involvement." *Journal of Advertising Research*, Vol. 25, No. 6, pp. 48-57

Lee, J. and Lee, J. N. (2009), "Understanding the product information inference process in electronic word-of-mouth: An objectivity-subjectivity dichotomy perspective." *Information & Management,* Vol. 46 No. 3, pp.302-11.

Lee, J., Park, D. H. and Han, I. (2008), "The effect of negative online consumer reviews on product attitude: An information processing view." *Electronic Commerce Research and Applications*, Vol. 7 No. 3, pp. 341-52.

Li, X. and Hitt, L. (2008), "Self-Selection and Information Role of Online Product

Reviews." *Information Systems Research*, Vol. 19 No. 4, pp. 456-74.

MacInnis, D. J., Moorman, C. and Jaworski, B. J. (1991), "Enhancing and measuring consumers' motivation, opportunity, and ability to process brand information from ads." *Journal of Marketing*, Vol. 55, pp. 32-53.

Malhotra, K. Naresh. (2010), "Marketing Research: An Applied Orientation", Sixth Edition. Upper Saddle River, New Jersey: Person Education, Inc.

Mangold, W.G. and Faulds, D.J. (2009), "Social media: The new hybrid element of the promotion mix."*Business Horizons,* Vol. 52 No. 4, pp. 357-65.

Maheswaran, D., and Sternthal, B. (1990), "The effects of knowledge, motivation, and type of message on ad processing and product judgements." *Journal of Consumer Research*, Vol 17, pp. 66-73.

McKinney, V., K. Yoon, F. Zahedi (2002), "The Measurement of Web-Customer Satisfaction: An Expectation and Disconfirmation." *Information Systems Research*, Vol. 13, No. 3, pp. 296-315.

McQuarrie, E. F. And Munson, J. M. (1987), "The Zaichkowsky Personal Involvement Inventory: Modification and extension." *Advances in Consumer Research*, Vol 14, pp. 36-40.

Menon, T. and Blount, S. (2003), "The messenger bias: A relational model of knowledge valuation." *Research in Organizational Behavior,* Vol. 25, No. 3, pp. 137-86.

Meyers-Levy, J. and Peracchio, L. A. (1995),"Moderators of the impact of self-reference on persuasion." *Journal of Consumer Research*, Vol. 22, No 4, pp. 408-23.

Mitchell, M. L. and Jolley M. J. (2007)." Research Design Explained." *Belmont, CA: Wadsworth.*

Mittal, B. A (1995), "A comparative analysis of four scales of consumer involvement." *Psychology & Marketing*, Vol.12 No. 7, pp. 663-82.

Moore D. S. and McCabe, G. P. (2006), "Introduction to the Practice of Statistics." Fifth edition. Freeman, New York: 191–250.

Sam. M. F. M. and Tahir, M. N. H. (2009), "Website Quality And Consumer Online Purchase Intention of Air Ticket." *International Journal of Basic & Applied Science*, Vol. 9, No. 10, pp. 20-25.

Negash, S., Ryan, T., and Igbaria, M. (2003), "Quality and effectiveness in web-based customer support systems." *Information & Management*, Vol. 40 No. 8, pp. 757-68.

New Opinion Research Corporation (2010), "Online Consumer Reviews
        Significantly Impact Consumer Purchasing Decisions." Retrieved March
        21, 2012. Available on URL:
        http://www.opinionresearch.com/fileSave%5COnline_Feedback_PR_Final
        _62020 08.pdf

Nielsen (Q3, 2011), "State of the media: The social media report." Retrieved
        March 21, 2012. Available on URL: cm.nielsen.com/documents/Nielsen-
        Socail-Media-Report_FINAL_090911.pdf

Nonaka, I. (1994), "A dynamic theory of knowledge creation," *Organization
        Science*, Vol. 5 No. 1, pp. 14-37.

Park, D. H. and Kim, S. (2008). "The effects of consumer knowledge on message
        processing of electronic word-of-mouth via online consumer reviews."
        Electronic Commerce Research and Applications, Vol. 7 No. 4, pp. 399-
        410.

Park D. H. and Lee, J. (2008), "eWOM overload and its effect on consumer
        behavioural intention depending on consumer involvement." *Electronic
        Commerce Research and Applications,* Vol. 7 No. 2, pp. 386-98.

Park, D. H., Lee, J. and Han, I. (2007), "The Effect of On-Line Consumer
        Reviews on Consumer Purchasing Intention: The Moderating Role of
        Involvement." *International Journal of Electronic Commerce*, Vol. 11 No.
        4, pp. 125-48.

Pallant, J. (2005) "SPSS Survival Manual." *Chicago: Open University Press*

Petty, R. E. and Cacioppo, J. T. (1984), "The effects of involvement on response
        to argument quantity and quality: Central and peripheral routes to
        persuasion." *Journal of Personality and Social Psychology*, Vol. 46 No. 1,
        pp. 69-81.

Petty, R. E. and Cacioppo, J. T. (1986), "Communication and Persuasion: Central
        and Peripheral Routes to Attitude Change." *Springer-Verlag*, New York,
        NY.

Petty, R. E., Cacioppo, J. T. and Goldman, R. (1981), "Personal involvement as a
        determinant of argument –based persuasion." *Journal of Personality and
        Social Psychology* Vol. 41 No. 5, pp. 847-55.

Petty, R. E., Cacioppo, J. T. and Schumann, D. C. (1983), "Central and peripheral
        routes to advertising effectiveness: The moderating role of involvement."
        Journal of Consumer Research, Vol. 10 No. 2, pp. 135-46.

Petty, R. E., Wegener, D. T. and White, P. H. (1998), "Flexible correction
       processes in social judgment: Implications for persuasion." *Social
       Cognition*, Vol. 16 No. 1, pp. 93-113.
       Petty, R. E. and Wegener, D. T. (1999)," The Elaboration Likelihood
       Model: Current Status and Controversies." In Chaiken, S., and Trope, Y.
       (Eds.). *Dual-process Theories in Social Pschology* (pp.41-72.) New York:
       Guilford Press.

Pornpitakpan, C. (2004), "The persuasiveness of source credibility: A critical
       review of five decades' evidence." *Journal of Applied Social Psychology,*
       Vol. 34 No. 2, pp. 243-81.

Richins, M. L. and Root-Shaffer, T. (1988), "The role of involvement and opinion
       leadership in consumer word-of-mouth: An implicit model made explicit,"
       Advances in Consumer Research, Vol. 15, 32–6.

Richins, M. L., Bloch, P. H. And McQuarrie. (1992), "How enduring and
       situational involvement combine to create involvement responses."
       Journal of Consumer Psychology, Vol. 1, No 2, pp. 143-53.

Rotschild, M. (1984), "Perspectives on Involvement: Current Problems and Future
       Direction." *Advances in Consumer Research*, Vol. 11, pp. 216-17.

Schmidt, W. C. (1997), "World Wide Web survey research: Benefits, potential
       problems, and solutions." *Behavior Research Methods Instruments
       Computer*. Vol 29, pp. 274-79.

Sher, P. and Lee, S. (2009), "Consumer Skepticism and Online Reviews: An
       Elaboration Likelihood Model Perspective." *Social Behavior and
       Personality*, Vol. 37 No. 1, pp. 137-43.

Sherif, M. and Cantril, H. (1947), "The psychology of ego involvement." *Wiley*,
       New York.

Shiu, E., Hair, J. Jr., Bush, R. and Ortinau, D. (2009), "Marketing Research,"
       McGraw Hill Higher Education

Srinivasan, A. (1985), "Alternative measures of systems effectiveness:
       Associations and implications." *MIS Quarterly*, Vol. 9 No 3, pp.243-53.

Steffes, E. M. and Burgee, L. E. (2009), "Social ties and online word of mouth."
       Internet Research, Vol. 19 No. 1, pp. 42-59.

Sussman, S. W. and Siegal, W. S. (2003). "Informational influence in
       organizations: an integrated approach to knowledge adoption."
       Information Systems Research, Vol. 14 No. 1,pp. 47-65.

Wathen, C. N. and Burkell, J. (2002), " Believe it or not: Factors influencing credibility on the Web*." JASIST*, Vol. 53. No. 2, pp. 134-44.

Wu, C. and Shaffer, D. (1987), "Susceptibility to persuasive appeals as a function of source credibility and prior experience with the attitude object." *Journal of Applied Psychology,* Vol. 52, pp. 677-88.

Yockey, R. D. (2008), " SPSS Demystified: A Step-by-Step Guide to Sucesscul Data Analysis." *Upper Saddle River, New Jersey: Pearson Education, Inc.*

Zaichkowsky, J. L. (1994),"The personal involvement inventory: Reduction, revision and application to advertising." *Journal of Advertising*, Vol. 23. No. 4, pp.59-70.

Zhang, W. and Watts, S. A. (2008)," Capitalizing on Content: Information Adoption in Two Online communities." *Journal of the Association for Information Systems*, Vol. 9 No. 2, pp. 73-94.

Zhu, J. H., and He, Z. (2002), "Perceived characteristics, perceived needs, and perceived popularity." *Communication Research*, Vol. 29, No. 4, pp, 466-95.

8.0 APPENDICES

Appendix 1: Pre-Test Argument Quality

Pre-Test 1:

Group Statistics

	Scenario	N	Mean	Std. Deviation	Std. Error Mean
ArgQual	Low Arg Qual	8	3.3333	1.38013	.48795
	High Arg Qual	6	2.6111	.64693	.26411

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference		Lower	Upper
ArgQual	Equal variances assumed	1.736	.212	1.179	12	.261	.72222	.61232		−.61191	2.05635
	Equal variances not assumed			1.302	10.44	.221	.72222	.55484		−.50691	1.95135

Information Valence and Recommendation:

Group Statistics

	Scenario	N	Mean	Std. Deviation	Std. Error Mean
Positive	Low Arg Qual	8	1.0000	.00000[a]	.00000
	High Arg Qual	6	1.0000	.00000[a]	.00000

Group Statistics

	Scenario	N	Mean	Std. Deviation	Std. Error Mean
Recommend	Low Arg Qual	8	1.5000	.53452	.18898
	High Arg Qual	6	1.3333	.51640	.21082

Pre-Test 2:

Group Statistics

	Scenario	N	Mean	Std. Deviation	Std. Error Mean
ArgQual	Low AQ	10	5.4000	1.20493	.38103
	High AQ	10	3.7000	1.36490	.43162

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
ArgQual	Equal variances assumed	.135	.718	2.95	18	.009	1.70000	.57574	.49041	2.90959
	Equal variances not assumed			2.95	17.7	.009	1.70000	.57574	.48907	2.91093

Information Valence and Recommendation:

Group Statistics

	Scenario	N	Mean	Std. Deviation	Std. Error Mean
Positivt	Low AQ	10	1.5000	1.26930	.40139
	High AQ	10	2.3000	1.88856	.59722

Group Statistics

	Scenario	N	Mean	Std. Deviation	Std. Error Mean
Recommend	Low AQ	10	2.4000	2.17051	.68638
	High AQ	10	1.9000	1.85293	.58595

Appendix 2: Pre-Test Involvement

Pre-Test 1:

Group Statistics

	Scenario	N	Mean	Std. Deviation	Std. Error Mean
MeanRPII	Low Involvement	5	3.7600	.74027	.33106
	High Involvement	5	3.4400	.66933	.29933

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Involvement	Equal variances assumed	.054	.822	.717	8	.494	.32000	.44632	-.70921	1.34921
	Equal variances not assumed			.717	7.92	.494	.32000	.44632	-.71102	1.35102

Scenario Realistic:

Group Statistics

	Scenario	N	Mean	Std. Deviation	Std. Error Mean
Realistic	Low Involvement	5	3.8000	2.58844	1.15758
	High Involvement	5	2.2000	1.64317	.73485

Ability to imagine being in the scenario:

Group Statistics

	Scenario	N	Mean	Std. Deviation	Std. Error Mean
Imagine	Low Involvement	5	3.8000	2.77489	1.24097
	High Involvement	5	1.8000	1.78885	.80000

Subjects' degree of participation:

Group Statistics

	Scenario	N	Mean	Std. Deviation	Std. Error Mean
Participation	Low Involvement	5	2.2000	.83666	.37417
	High Involvement	5	2.6000	2.07364	.92736

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Participation	Equal variances assumed	2.420	.158	-.400	8	.700	-.40000	1.00000	-2.7060	1.90600
	Equal variances not assumed			-.400	5.26	.705	-.40000	1.00000	-2.9316	2.13165

Subjects' degree of perceived responsibility:

Group Statistics

	Scenario	N	Mean	Std. Deviation	Std. Error Mean
Responsibility	Low Involvement	5	5.8000	1.30384	.58310
	High Involvement	5	2.6000	2.50998	1.12250

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Responsibility	Equal variances assumed	.934	.362	2.530	8	.035	3.20000	1.26491	.28311	6.1168
	Equal variances not assumed			2.530	6.01	.045	3.20000	1.26491	.10640	6.2936

Pre-Test 2:

Group Statistics

	Involvement	N	Mean	Std. Deviation	Std. Error Mean
MeanRPII	Low Involvement	11	4.8182	.50955	.15363
	High Involvement	11	2.4909	.27370	.08252

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
MeanRPII	Equal variances assumed	2.298	.145	13.34	20	.000	2.32727	.17439	1.96349	2.69105
	Equal variances not assumed			13.34	15.3	.000	2.32727	.17439	1.95625	2.69830

Scenario Realistic:

Group Statistics

	Involvement	N	Mean	Std. Deviation	Std. Error Mean
Realistisk	Low Involvement	11	2.09	1.514	.456
	High Involvement	11	1.45	.522	.157

Ability to imagine being in the scenario:

Group Statistics

	Involvement	N	Mean	Std. Deviation	Std. Error Mean
Imagine	Low Involvement	11	1.91	1.514	.456
	High Involvement	11	1.45	.522	.157

Subjects' degree of participation:

Group Statistics

	Involvement	N	Mean	Std. Deviation	Std. Error Mean
Participation	Low Involvement	11	6.18	1.079	.325
	High Involvement	11	1.73	1.009	.304

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Participation	Equal variances assumed	.176	.679	10.002	20	.000	4.455	.445	3.526	5.384
	Equal variances not assumed			10.002	19.91	.000	4.455	.445	3.525	5.384

Subjects' degree of responsibility:

Group Statistics

	Involvement	N	Mean	Std. Deviation	Std. Error Mean
Responsibility	Low Involvement	11	6.45	.820	.247
	High Involvement	11	1.73	1.009	.304

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Responsibility	Equal variances assumed	.231	.636	12.057	20	.000	4.727	.392	3.909	5.545
	Equal variances not assumed			12.057	19.1	.000	4.727	.392	3.907	5.547

Appendix 3: Pre-Test Source Credibility

Farmer (Low Credibility Source) – Travel Leader (High Credibility Source)

Group Statistics

	Expertise	N	Mean	Std. Deviation	Std. Error Mean
Source Credibility	Farmer	11	2.0000	.61968	.18684
	Travel Leader	11	4.2545	1.01623	.30641

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Source Credibility	Equal variances assumed	2.977	.100	−6.282	20	.000	−2.25455	.35888	−3.0031	−1.5059
	Equal variances not assumed			−6.282	16.53	.000	−2.25455	.35888	−3.0133	−1.4957

Appendix 4: ANOVA Assumptions

Tests of Normality

	Kolmogorov–Smirnov[a]			Shapiro–Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Purchase_Intention	.130	253	.000	.939	253	.000

Levene's Test of Equality of Error Variances[a]

Dependent Variable:Purchase_Intention

F	df1	df2	Sig.
2.505	7	245	.017

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

Outliers:

Descriptives

			Statistic	Std. Error
Purchase_Intention	Mean		3.4190	.09514
	95% Confidence Interval for Mean	Lower Bound	3.2316	
		Upper Bound	3.6063	
	5% Trimmed Mean		3.4100	
	Median		3.0000	
	Variance		2.290	
	Std. Deviation		1.51329	
	Minimum		1.00	
	Maximum		6.00	
	Range		5.00	
	Interquartile Range		3.00	
	Skewness		.155	.153
	Kurtosis		-1.107	.305

Appendix 5: Construct Reliability & Manipulation Check Argument Quality

Construct Reliability (Argument Quality):

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.516	83.870	83.870	2.326	77.522	77.522
2	.395	13.169	97.040			
3	.089	2.960	100.000			

Extraction Method: Maximum Likelihood.

Factor Matrix[a]

	Factor
	1
AQ Relevance	.957
AQ Informativeness	.952
AQ Objectivity	.709

Extraction Method: Maximum Likelihood.

Reliability Statistics

Cronbach's Alpha	N of Items
.904	3

Manipulation Check:

Dependent Variable:Arg.Qual

AQ	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Low Argument Quality	5.863	.117	5.634	6.093
High Argument Quality	2.831	.121	2.593	3.069

Tests of Between-Subjects Effects

Dependent Variable:Arg.Qual

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	587.423[a]	7	83.918	47.558	.000	.578
Intercept	4729.177	1	4729.177	2680.149	.000	.917
INV	.003	1	.003	.002	.967	.000
AQ	575.298	1	575.298	326.036	.000	.573
SC	8.875	1	8.875	5.030	.026	.020
INV * AQ	.727	1	.727	.412	.522	.002
INV * SC	.658	1	.658	.373	.542	.002
AQ * SC	4.094	1	4.094	2.320	.129	.009
INV * AQ * SC	.358	1	.358	.203	.653	.001
Error	428.778	243	1.765			
Total	5883.778	251				
Corrected Total	1016.201	250				

Appendix 6: Construct Reliability & Manipulation Check Involvement

Construct Reliability (Involvement):

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.085	81.702	81.702	3.873	77.459	77.459
2	.378	7.565	89.267			
3	.274	5.478	94.745			
4	.156	3.126	97.871			
5	.106	2.129	100.000			

Extraction Method: Maximum Likelihood.

Factor Matrix[a]

	Factor
	1
Important – Unimportant	.928
Involving – Not Involving	.867
Not Necessary – Necessary	-.799
Beneficial – Not Beneficial	.869
Relevant – Irrelevant	.931

Extraction Method: Maximum Likelihood.

Reliability Statistics

Cronbach's Alpha	N of Items
.942	5

Manipulation Check:

INV

Dependent Variable:Involvement

INV	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Low Involvement	4.692	.085	4.526	4.859
High Involvement	2.843	.083	2.680	3.005

Tests of Between–Subjects Effects

Dependent Variable:Involvement

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	217.117[a]	7	31.017	35.688	.000	.508
Intercept	3538.064	1	3538.064	4070.860	.000	.944
INV	213.265	1	213.265	245.380	.000	.503
AQ	.270	1	.270	.311	.578	.001
SC	.226	1	.226	.260	.610	.001
INV * AQ	.278	1	.278	.320	.572	.001
INV * SC	.020	1	.020	.023	.879	.000
AQ * SC	.509	1	.509	.586	.445	.002
INV * AQ * SC	.569	1	.569	.654	.419	.003
Error	210.327	242	.869			
Total	3939.320	250				
Corrected Total	427.444	249				

Appendix 7: Construct Reliability & Manipulation Check Source Credibility

Construct Reliability (Source Credibility):

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.243	81.076	81.076	2.961	74.033	74.033
2	.462	11.539	92.615			
3	.172	4.311	96.926			
4	.123	3.074	100.000			

Extraction Method: Maximum Likelihood.

Factor Matrix[a]

	Factor
	1
Not Knowledgeable – Knowledgeable	.822
Not Expert – Expert	.769
Not Trustworthy – Trustworthy	.919
Not Credible – Credible	.922

Extraction Method: Maximum Likelihood.

Reliability Statistics

Cronbach's Alpha	N of Items
.894	3

Manipulation Check:

SC

Dependent Variable:SourceCredibility

SC	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
No Disclosure of Source	4.616	.130	4.360	4.872
Disclosure of Source	3.144	.131	2.886	3.401

Tests of Between-Subjects Effects

Dependent Variable:SourceCredibility

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	311.592[a]	7	44.513	20.921	.000	.376
Intercept	3766.994	1	3766.994	1770.504	.000	.879
SC	135.651	1	135.651	63.757	.000	.208
INV	.541	1	.541	.254	.614	.001
AQ	178.307	1	178.307	83.805	.000	.256
SC * INV	.071	1	.071	.033	.856	.000
SC * AQ	1.700	1	1.700	.799	.372	.003
INV * AQ	.218	1	.218	.102	.749	.000
SC * INV * AQ	.001	1	.001	.000	.984	.000
Error	517.016	243	2.128			
Total	4666.625	251				
Corrected Total	828.608	250				

Appendix 8: Construct Reliability Purchase Intention

Total Variance Explained

Factor	Total	% of Variance	Cumulative %
		Initial Eigenvalues	
1	1.891	94.550	94.550
2	.109	5.450	100.000

Extraction Method: Maximum Likelihood.

Reliability Statistics

Cronbach's Alpha	N of Items
.942	2

Appendix 9: Descriptive Statistic of the Sample

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Age	253	20	58	25.73	5.742
Valid N (listwise)	253				

Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Middle School	2	.8	.8	.8
	High School	44	17.4	17.4	18.2
	College/university	207	81.8	81.8	100.0
	Total	253	100.0	100.0	

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	123	48.6	48.6	48.6
	Male	130	51.4	51.4	100.0
	Total	253	100.0	100.0	

Appendix 10: Hypotheses testing

AQ	SC	INV	Mean	Std. Deviation	N
Low Argument Quality	No Disclosure of Source	Low Involvement	4.3000	1.39951	30
		High Involvement	4.4412	1.31866	34
		Total	4.3750	1.34813	64
	Disclosure of Source	Low Involvement	4.1212	1.40885	33
		High Involvement	4.2424	1.00872	33
		Total	4.1818	1.21730	66
	Total	Low Involvement	4.2063	1.39595	63
		High Involvement	4.3433	1.17166	67
		Total	4.2769	1.28205	130
High Argument Quality	No Disclosure of Source	Low Involvement	3.0500	1.36679	30
		High Involvement	2.3906	.86821	32
		Total	2.7097	1.17539	62
	Disclosure of Source	Low Involvement	2.1667	1.20583	30
		High Involvement	2.4516	1.09053	31
		Total	2.3115	1.14806	61
	Total	Low Involvement	2.6083	1.35325	60
		High Involvement	2.4206	.97636	63
		Total	2.5122	1.17429	123
Total	No Disclosure of Source	Low Involvement	3.6750	1.50936	60
		High Involvement	3.4470	1.51944	66
		Total	3.5556	1.51291	126
	Disclosure of Source	Low Involvement	3.1905	1.63487	63
		High Involvement	3.3750	1.37725	64
		Total	3.2835	1.50738	127
	Total	Low Involvement	3.4268	1.58720	123
		High Involvement	3.4115	1.44601	130
		Total	3.4190	1.51329	253

Tests of Between-Subjects Effects

Dependent Variable:Purchase_Intention

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	211.445[a]	7	30.206	20.240	.000	.366
Intercept	2910.423	1	2910.423	1950.129	.000	.888
AQ	195.818	1	195.818	131.208	.000	.349
SC	5.679	1	5.679	3.805	.052	.015
INV	.050	1	.050	.033	.856	.000
AQ * SC	.780	1	.780	.523	.470	.002
AQ * INV	1.600	1	1.600	1.072	.302	.004
SC * INV	3.370	1	3.370	2.258	.134	.009
AQ * SC * INV	3.668	1	3.668	2.458	.118	.010
Error	365.644	245	1.492			
Total	3534.500	253				
Corrected Total	577.089	252				

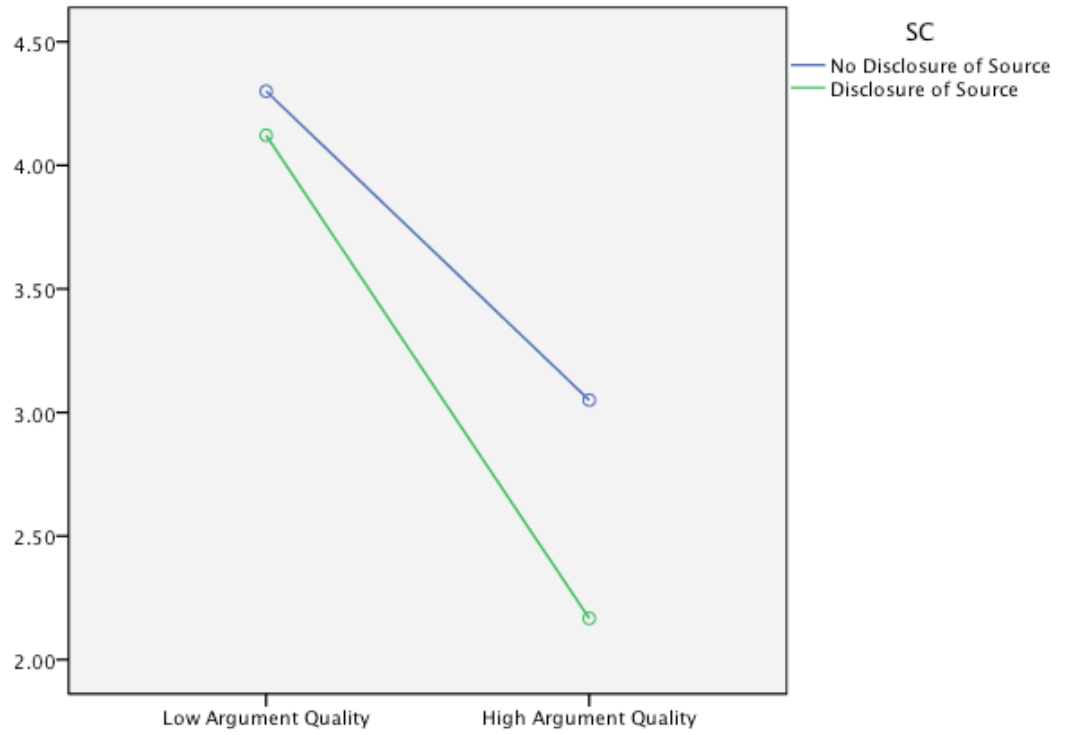**Profile Plots: Argument Quality x Involvement**
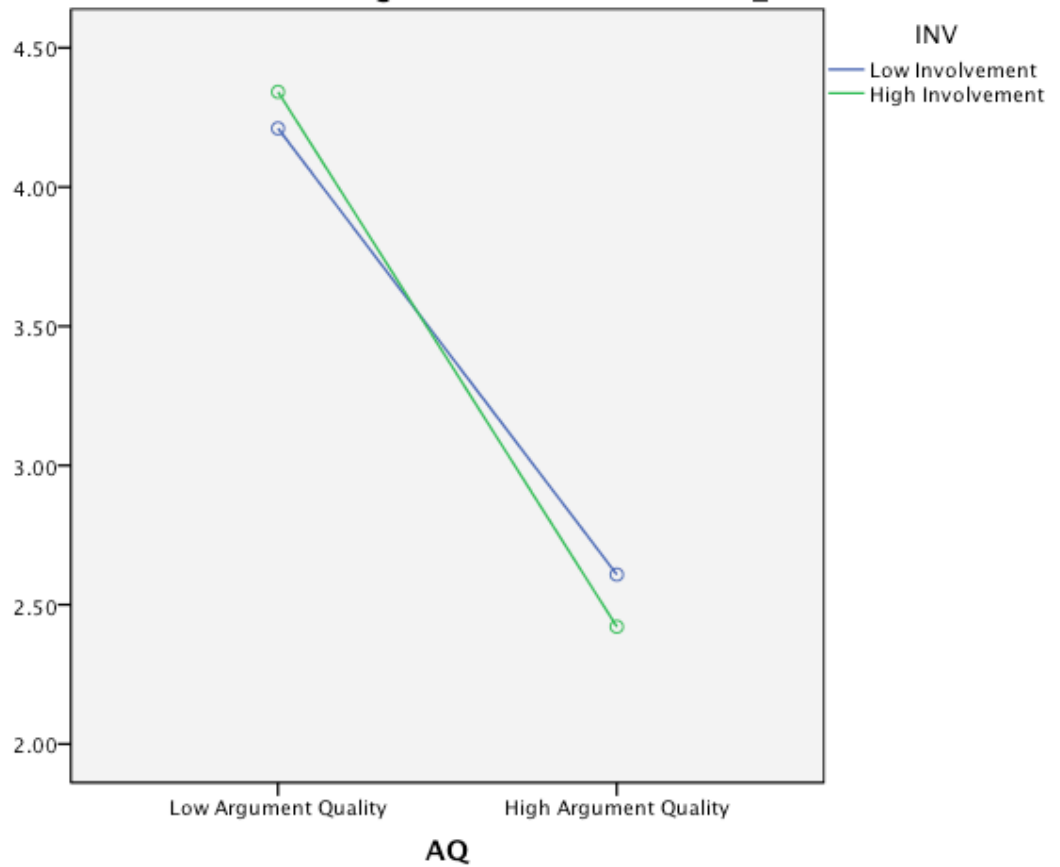
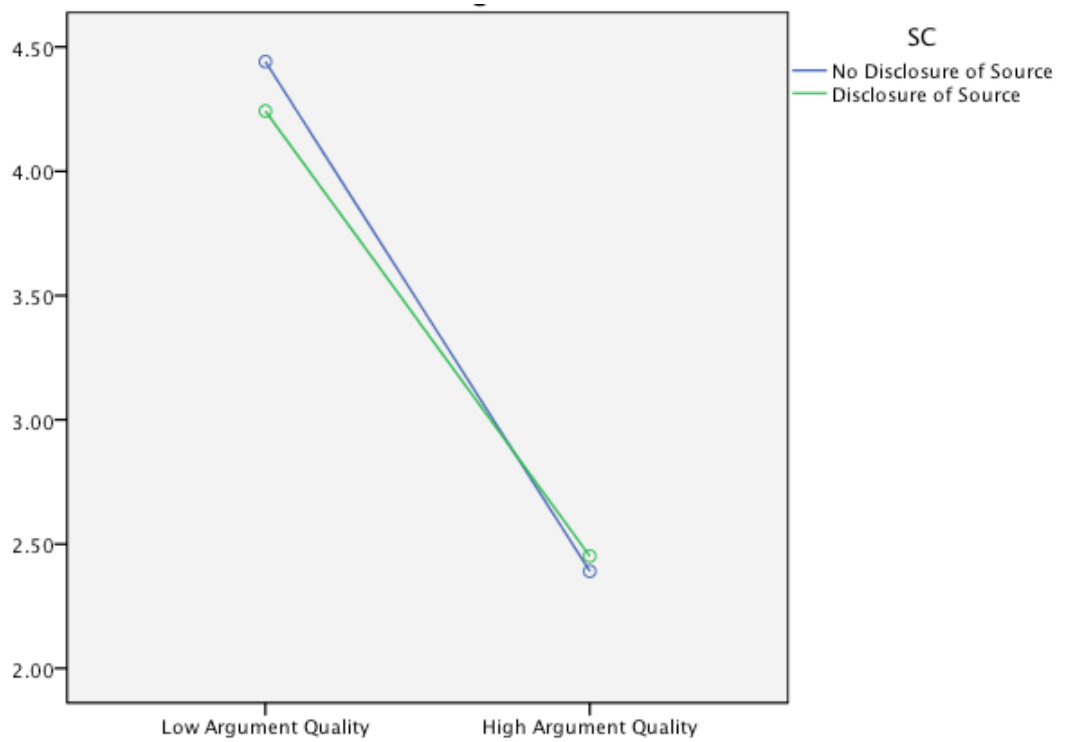**Profile Plots: Source Credibility x Involvement**
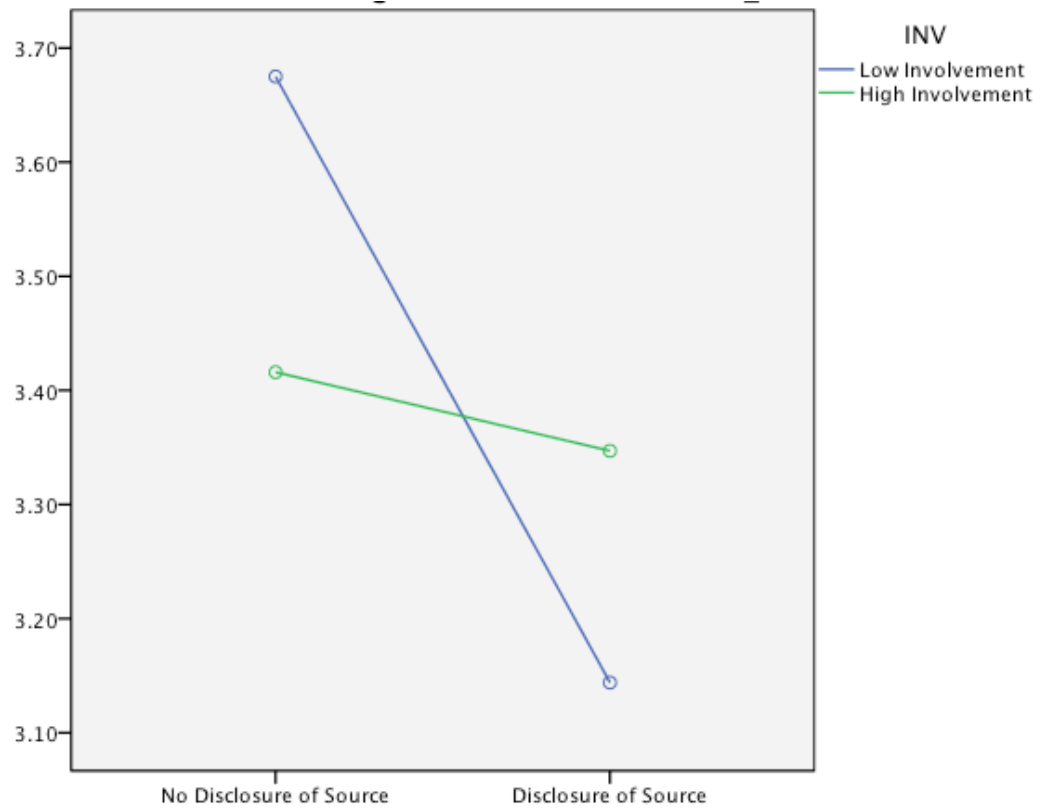
Profile Plots: Involvement x Argument Quality x Source Credibility

Low Involvement:

High Involvement:

Appendix 11: T-tests Interaction effects

Disclosure of Source Credibility and Involvement Interaction

Group Statistics

	Hypothesis2	N	Mean	Std. Deviation	Std. Error Mean
Purchase_Intention	High Involvement Disclosure of Source	64	3.3750	1.37725	.17216
	High Involvement No Disclosure of Source	65	3.4692	1.52037	.18858

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Purchase_Intention	Equal variances assumed	1.009	.317	−.369	127	.713	−.09423	.25554	−.59990	.41144
	Equal variances not assumed			−.369	126.13	.713	−.09423	.25534	−.59954	.41108

Group Statistics

	Hypothesis2	N	Mean	Std. Deviation	Std. Error Mean
Purchase_Intention	Low Involvement Disclosure of Source	64	3.1719	1.62866	.20358
	Low Involvement No Disclosure of Source	60	3.6750	1.50936	.19486

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Purchase_Intention	Equal variances assumed	.955	.330	−1.781	122	.077	−.50312	.28250	−1.06237	.05612
	Equal variances not assumed			−1.785	121.9	.077	−.50312	.28181	−1.06099	.05474

Argument Quality and Involvement Interaction

Group Statistics

	Hypothesis3	N	Mean	Std. Deviation	Std. Error Mean
Purchase_Intention	High Involvement High AQ	62	2.4274	.98283	.12482
	High Involvement Low AQ	67	4.3433	1.17166	.14314

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Purchase_Intention	Equal variances assumed	4.687	.032	−10.019	127	.000	−1.91586	.19121	−2.2942	−1.53749
	Equal variances not assumed			−10.088	125.8	.000	−1.91586	.18992	−2.2917	−1.54001

Group Statistics

	Hypothesis3	N	Mean	Std. Deviation	Std. Error Mean
Purchase_Intention	Low Involvement High AQ	61	2.5984	1.34418	.17211
	Low Involvement Low AQ	63	4.2063	1.39595	.17587

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Purchase_Intention	Equal variances assumed	.305	.582	−6.531	122	.000	−1.60799	.24622	−2.09541	−1.12057
	Equal variances not assumed			−6.535	121.9	.000	−1.60799	.24607	−2.09511	−1.12086

Appendix 12: Review examples

High-quality review

"A great hotel that delivers what it promises. I was very impressed with customer service and facilities. The staff was attentive, friendly and very helpful. The rooms were large and clean, as was the bathroom. Although the hotel was at the heart of the city right there was little or no noise. All in all, a hotel of very high standard".

Low-Quality review

"Wow! What a fantastic hotel. After spending hours searching for a good hotel, I decided to book this hotel and I have no regrets what so ever. I had a great vacation. The weather was amazing, no rain, could not be happier or more satisfied. This is by far one of my better holidays. I am guaranteed to go back"

Appendix 13: Questionnaire in English, with all manipulation

This questionnaire contains all manipulations in one. Respondents though, were only subjected to one of each manipulation.

(Introduction)

Hi!

Related to our master thesis we want your opinions about different aspects of hotel booking. As we are looking for your personal opinions there are of course no right or wrong answers, and we want you to answer this survey by yourself. The survey is anonym and the results will only be used in our research.

The survey will take approximately 7-10 minutes

Thank you for taking the time to answer this survey. Your answer is of great help for us.

Kind regards

Kai Vegard Johansen and Filip Lundberg Hovland

(PAGE BREAK)

We now want you to read a short story, and then answer some questions related to the story. It is important that you carefully read the story and image that this is happening in your life.

(High Involvement)

You and four friends are going on summer vacation together. You have used a long time to agree upon a destination that fits you all and have decided to stay 7 nights at a hotel. You have all looked forward for the trip and to enjoy some quite days after finishing your exams.

The next thing that needs to be done is to find and book a hotel. You have all agreed too book a good hotel, as you are most likely to spend some time at the hotel.

You have been given the responsibility to find and book the hotel, as you are the one with the most experience booking hotels and normally the one to take these decisions.

You have used a long time looking at hotels, through different sites, to find a hotel that fits you all. Eventually, you find a hotel with good location. Imagine that you found many reviews on the hotel but you decided to concentrate on one review before you decided whether to book the hotel or not

(Or)

(Low Involvement)

You and four friends are going on summer vacation together. You have used a long time to agree upon a destination that fits you all and have decided to stay 7 nights at a hotel. You have all looked forwards for the trip and to enjoy some quite days after finishing your exams.

The next thing that needs to be done is to find and book a hotel. You have all agreed too book a good hotel, as you are most likely to spend some time at the hotel.

One of your friends have been given the responsibility to find and book the hotel, as he is the one with the most experience booking hotels and normally is the one to take these decisions.

Your friend has used a long time looking at hotels, through different sites, to find a hotel that fits you all. Eventually, he has selected a hotel. Although you know, that at this moment, your opinion cannot change anything, you still want to read about the hotel. You have found a site with reviews about the hotel. You decide to concentrate on one review.

(Measurement of Involvement)

We now want you to put a mark on the line you feel best described your role in the process of finding and booking the hotel in the story. *The midpoint of the scale is a neutral point and do not relate to any of the words on the endpoint (e.g.*

Important/Unimportant). The stronger you feel the words describe the situation, the further towards the endpoints you put your mark.

My role in finding and booking the hotel in the story was:

1. Important	__ __ __ __ __ __ __	Unimportant
2. Involving	__ __ __ __ __ __ __	Not involving
3. Unnecessary	__ __ __ __ __ __ __	Necessary
4. Beneficial	__ __ __ __ __ __ __	Not beneficial
5. Relevant	__ __ __ __ __ __ __	Irrelevant

(PAGE BREAK)

(High Argument Quality with Disclosure of Source)

Imagine that the following person has written the review about the hotel you have decided to concentrate on:
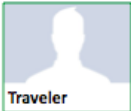
Profile – Traveler

About Me: Globetrotter as hobby and as work
Occupation: Travel Leader
I Travel Because Of: The Experience

Below you will find the review written by "traveler":

Traveler

"A great hotel that delivers what it promises. I was very impressed with customer service and facilities. The staff was attentive, friendly and very helpful. The rooms were large and clean, as was the bathroom. Although the hotel was at the heart of the city right there was little or no noise. All in all, a hotel of very high standard".

(Or)

(High Argument Quality without Disclosure of Source)

Below you will find the hotel review:

"A great hotel that delivers what it promises. I was very impressed with customer service and facilities. The staff was attentive, friendly and very helpful. The rooms were large and clean, as was the bathroom. Although the hotel was at the heart of the city right there was little or no noise. All in all, a hotel of very high standard".

(Or)

(Low Argument Quality with Disclosure of Source)

Imagine that the following person has written the review about the hotel you have decided to concentrate on:

Profile – Traveler

About Me: Globetrotter as hobby and as work
Occupation: Travel Leader
I Travel Because Of: The Experience

Below you will find the review written by "traveler":

Traveler

"Wow! What a fantastic hotel. After spending hours searching for a good hotel, I decided to book this hotel and I have no regrets what so ever. I had a great vacation. The weather was amazing, no rain, could not be happier or more satisfied. This is by far one of my better holidays. I am guaranteed to go back"

(Or)

(Low Argument Quality without Disclosure of Source)

Below you will find the hotel review:

"Wow! What a fantastic hotel. After spending hours searching for a good hotel, I decided to book this hotel and I have no regrets what so ever. I had a great vacation. The weather was amazing, no rain, could not be happier or more satisfied. This is by far one of my better holidays. I am guaranteed to go back"

(Common section, all participants where subjected to these questions)

(Source Credibility)

Based in the information about the sender of the review, please consider the following questions: *The midpoint of the scale is a natural point and do not relate to any of the words on the endpoint (e.g. Knowledgeable/Not Knowledgeable). The stronger you feel the words describe the situation, the further towards the endpoint you put your mark.*

- **How knowledgeable is the person recommending the hotel?**
  Not knowledgeable: 1——2——3——4——5——6——7   Knowledgeable
- **To what extent is the person recommending the hotel an expert?**
  Not expert: 1——2——3——4——5——6——7   Expert
- **How trustworthy is the person recommending the hotel?**
  Not trustworthy: 1——2——3——4——5——6——7   Trustworthy
- **How credible is the person recommending the hotel?**
  Not credible: 1——2——3——4——5——6——7   Credible

(Argument Quality)

Based on the review you have just read, please consider whether you agree/disagree to the following statements, where 1 is "totally agree" and 7 is "totally disagree":

- **The review contains relevant information about the hotel:**
  Totally agree: 1——2——3——4——5——6——7   Totally disagree

- **The information in the review helps me understand the quality of the hotel:**
  Totally agree: 1——2——3——4——5——6——7   Totally disagree

- **The information about the hotel in the review is objective:**
  Totally agree: 1——2——3——4——5——6——7   Totally disagree

(Purchase Intention)

Based on the information you have been given, and only that, please consider the following statement:

- **How likely is it that you would book this hotel?**
  Very likely: 1——2——3——4——5——6   Very unlikely
- **How likely is it that you would recommend this hotel to your friends?**
  Very likely: 1——2——3——4——5——6   Very unlikely

(PAGE BREAK)

(Demographics)

- Gender (Male or Female)

- Age

- Education (Middle-school, High-school or College/University)

Appendix 14: Original Questionnaire in Norwegian, with all manipulations

This questionnaire contains all manipulations in one. Respondents though, were only subjected to one of each manipulation

(Introduksjon)

Hei!

I forbindelse med vår masteroppgave ønsker vi dine meninger om ulike aspekter ved hotellbestilling. Siden vi er ute etter dine personlige oppfatninger er det selvsagt ingen rette eller gale svare og vi vil helst at du svarer på undersøkelsen alene. Besvarelsen er anonym or resultatene vil kun bli brukt i forskningsøyemed.

Undersøkelsen vil ta ca. 7-10 minutter.

Takk for at du tar deg tid til å svare denne spørreundersøkelsen. Din respons er til stor hjelp!

Mvh. Kai V. Johansen og Filip L. Hovland

(PAGE BREAK)

Vi ønsker nå at du skal sette deg inn i en kort historie. Det er viktig at du setter deg nøye inn i situasjonen og prøver å forestille deg at dette skjer i ditt liv.

(High Involvement)

Du og fire venner skal på sommerferie sammen, dere har brukt lang tid på å finne en destinasjon som passer dere alle og har bestemt dere for å overnatte 7 netter på et hotell. Dere hare gledet dere lenge til turen og ser fram til å nyte noen rolige dager etter en lang eksamensperiode.

Det som gjenstår er å finne og bestille hotellet for oppholdet. Dere er alle enige om at dere ønsker et bra hotell, da dere mest sannsynligvis vil komme til å oppholde dere en del på hotellet.

Du har fått ansvar for å finne og bestille hotellet, fordi du er den som har mest erfaring med å bestille hotell og normalt er den som tar slike avgjørelser.

Du har brukt lang tid på å se etter hoteller, gjennom ulike nettsteder, for finne et som passer bra. Du har til slutt funnet et hotell med attraktiv beliggenhet. Se for deg at du har funnet mange anmeldelser av det aktuelle hotellet, men du bestemmer deg for å konsentrere deg om én enkel anmeldelse, før du bestemmer deg for å bestille hotellet eller ikke.

(Eller)

(Low Involvement)

Du og fire venner skal på sommerferie sammen, dere har brukt lang tid på finne en destinasjon som passer dere alle og har bestemt dere for å overnatte 7 netter på et hotell. Dere har gledet dere lenge til turen og ser fram til å nyte noen rolige dager etter en lang eksamensperiode.

Det som gjenstår er å finne og bestille hotell for opphodet. Dere er alle enige om at dere ønsker et bra hotell, da dere mest sannsynligvis vil komme til å oppholde dere en del på hotellet.

En av vennene dine har fått ansvaret for å finne og bestille hotell, fordi han er den som har mest erfaring meg å bestille hotell og normalt sett er den som tar slike avgjøreleser.

Din venn har brukt lang tid på å se etter hoteller, gjennom ulike nettsteder, for å finne et som passer bra. Han har til slutt bestemt seg for et hotell. Vel vitende om at din mening ikke kan endre utfallet, ønsker du allikevel å lese om det aktuelle hotellet, og har kommet over en nettside med anmeldelser av hotellet. Du har bestemt deg for å konsentrere deg om én enkel anmeldelse.

(Measurement of Involvement)

Vi ønsker nå at du skal markere det punktet du følte best beskrev din rolle i prosessen med å finne og bestille hotellet i historien. *Midtpunktet av skalaen er et nøytralt punk og relaterer ikke til noen av ordene på ytterpunktene. (f.eks. Viktig/Uviktig). Desto sterkere du føler ordene beskriver situasjonen ovenfor, desto lenge mot ytterpunktene markerer du.*

Din rolle i prosessen med å finne og bestille hotellet var:

1. Viktig   __ __ __ __ __ __ __   Uviktig

2. Involverende   __ __ __ __ __ __ __   Ikke Involverende

3. Ikke Nødvendig   __ __ __ __ __ __ __   Nødvendig

4. Fordelaktig   __ __ __ __ __ __ __   Ikke Fordelaktig

5. Relevant   __ __ __ __ __ __ __   Irrelevant

(PAGE BREAK)

(High Argument Quality with Disclosure of Source)

Se for deg at følgende person har skrevet anmeldelsen av hotellet som du har valgt å konsentrere deg om:

Profil – Traveler

Om meg: Globetrotter som jobb og hobby
Yrke: Reiseleder
Jeg reiser stort sett på grunn av: Opplevelse

Under finner du anmeldelsen av hotellet skrevet av "Traveler":

Traveler

"Et veldig bra hotell som leverer det de lover. Jeg ble veldig imponert over kundeservicen og fasilitetene. De ansatte var imøtekommende, hyggelige og veldig behjelpelige. Rommene var store og renslige, det samme gjaldt badet. Selv om hotellet lå midt i bykjernen var det lite, eller ingen støy. Alt i alt et hotell av meget høy standard"

(Eller)

(High Argument Quality without Disclosure of Source)

Under finner du anmeldelsen av hotellet:

"Et veldig bra hotell som leverer det de lover. Jeg ble veldig imponert over kundeservicen og fasilitetene. De ansatte var imøtekommende, hyggelige og veldig behjelpelige. Rommene var store og renslige, det samme gjaldt badet. Selv om hotellet lå midt I bykjernen var det lite, eller ingen støy. Alt I alt et hotell av meget høy standard"

(Eller)

(Low Argument Quality with Disclosure of Source)

Se for deg at følgende person har skrevet anmeldelsen av hotellet som du har valgt å konsentrere deg om:

Profil – Traveler

Om meg: Globetrotter som jobb og hobby
Yrke: Reiseleder
Jeg reiser stort sett på grunn av: Opplevelse

Under finner du anmeldelsen av hotellet skrevet av "Traveler":

Traveler

"Wow! Et fantastisk hotell. Etter å ha brukt lang tid på å finne et godt hotell, bestemte jeg meg for dette hotellet og har ikke angret et sekund. Jeg hadde et supert opphold. Været var skikkelig bra hele tiden, null regn, kunne ikke vært mer fornøyd. En av de bedre feriene mine på lenge. Kommer garantert til å dra tilbake."

(Eller)

(Low Argument Quality without Disclosure of Source)

Under finner du anmeldelsen av hotellet:

"Wow! Et fantastisk hotell. Etter å ha brukt lang tid på å finne et godt hotell, bestemte jeg meg for dette hotellet og har ikke angret et sekund. Jeg hadde et supert opphold. Været var skikkelig bra hele tiden, null regn, kunne ikke vært mer fornøyd. En av de bedre feriene mine på lenge. Kommer garantert til å dra tilbake."

(Source Credibility)

Basert på informasjonen om avsender av anmeldelsen, vær vennlig å ta stilling til følgende spørsmål: *Midtpunktet er et nøytralt punkt som ikke relaterer til noen av ordene (f.eks. Kunnskapsrik/Ikke Kunnskapsrik) på enden av skalaene. Desto*

sterkere du føler (f.eks. Kunnskapsrik/Ikke Kunnskapsrik) beskriver personen,

desto nærmere skal du markere på denne enden av skalaen.

- **Hvor kunnskapsrik er personen som anbefaler hotellet?**

  Ikke Kunnskapsrik: 1——2——3——4——5——6——7   Kunnskapsrik

- **I hvilken grad er personen som anbefaler hotellet ekspert?**

  Ikke Ekspert: 1——2——3——4——5——6——7   Ekspert

- **Hvor troverdig er personen som anbefaler hotellet?**

  Ikke Troverdig: 1——2——3——4——5——6——7   Troverdig

- **Hvor pålitelig er personen som anbefaler hotellet?**

  Ikke Pålitelig :   1——2——3——4——5——6——7   Pålitelig

(Argument Quality)

Basert på anmeldelsen, vær vennlig å ta stilling til i hvilken grad du er Enig/Uenig
i følgende utsagn, hvor 1 er "Helt Enig" og 7 er "Helt Uenig"- Midtpunktet er et
nøytralt punkt som ikke relaterer til noen av ordene (Enig/Uenig) på enden av
skalaen. Desto sterkere du føler at du er Enig/Uenig påstanden, desto nærmere
skal du markere på denne enden av skalaen.

- **Anmeldelsen innholder relevant informasjon om hotellet:**

  Helt Enig: 1——2——3——4——5——6——7   Helt Uenig

- **Informasjonen i anmeldelsen hjelper meg til å forstå kvaliteten på hotellet:**

  Helt Enig: 1——2——3——4——5——6——7   Helt Uenig

- **Informasjonen i anmeldelsen er objektiv:**

  Helt Enig: 1——2——3——4——5——6——7   Helt Uenig

(Purchase Intention)

Med utgangspunkt i informasjonen du har blitt gitt, og kun den, ønsker vi at du nå
skal ta stilling til følgende utsagn:

- **Hvor sannsynlig er det at du ville bestilt dette hotellet?**
  Veldig Sannsynlig: 1——2——3——4——5——6   Veldig Usannsynlig
- **Hvor sannsynlig er det at du ville angefalt dette hotellet til en av dine venner?**
  Veldig Sannsynlig: 1——2——3——4——5——6   Veldig Usannsynlig

(Demografi)

- Kjønn (Mann eller Kvinne)

- Alder

- Hva er din høyeste, fullførte utdannelse? (Ungdomsskole, Videregående eller Høyskole/Universitet)

Filip Lundberg Hovland: **0856876**
Kai Vegard Johansen: **0856988**

Preliminary Thesis Report

Handelshøyskolen BI

- Online Customer Reviews-

Eksamenskode og navn:
GRA 1901 Master Thesis

Innleveringsdato:
16.01.2012

Studiested:
BI OSLO

Content

Oslo, January 16 2012

Acknowledgements

This preliminary thesis report is the beginning of the end of a two years of work for the MSc Strategic Marketing and Management at BI Norwegian School of Management. We have truly enjoyed working on the topic and are looking forward to writing this final assignment about a contemporary and highly relevant topic.

As of now, the theory covering argument quality and source credibility is limited, due to unforeseeable events. We acknowledge that we still need to work with our research question and research model in order to differentiate our thesis concerning our contribution to the research field.

We look forward to working with our supervisor Line Lervik Olsen, as her research interests are within the service-marketing field.

Kai Vegard Johansen   *Filip Lundberg Hovland*

1.0 Introduction

A person is looking for a hotel for his next vacation. He is not able to evaluate the hotel of interest in person, so he goes online and seeks information and recommendations from other consumers who have experienced the hotel of interest. He looks at star ratings, other generalizing measures and half a dozen different customer reviews. With no ability to assess the person's degree of expertise or experience in the area, he still makes a confident choice. How does he sort through the advice in these reviews to decide which action to take? This scenario exemplifies one problem of information transfer in social networking sites, specifically information utilization and adoption. The increasing use of web 2.0 applications has generated numerous online user reviews that offers customers a glimpse of what their peers are saying about any title. Prior studies have revealed the influence of customer reviews on the sales of products such as books, movies and hotel booking.

Customer reviews arises from a possibly unlimited number of unknown participants, and the presence of the numerous amount of unfiltered information makes the information validity uncertain. In most cases, it is not possible to determine the source credibility due to e.g. anonymity or aliases; leaving users to rely on limited information about the source. Yet, consumers rely on and make decisions based on these recommendations. Nevertheless, the aggregation power of online discussion forums, on the other hand, provide additional cues that help users to evaluate the credibility of online recommendations compared to traditional word-of-mouth communication.

This thesis examines how individuals are influenced to follow certain courses of action, based on actual advice, recommendations, and suggestions they receive by reading customer reviews. It seeks to explore the dimensions that influence information usefulness and adoption among information seekers. In an effort to explain the processing of information through customer reviews more precisely, automated and unintentional effects- heuristics that simplify the decision process are of great interest. These unintentional effects influence the evaluation of products or services even when consumers do not intend to use this information in their judgment.

The paper draws on dual process theories in information system literature that are used to explain how people are influenced in adopting ideas, knowledge or information. Specifically, Susmann and Siegal's (2003) information adoption model, which is a derivate from the elaboration likelihood model of persuasion (ELM) of Petty and Cacioppo (1986), are of great interest and adapted to the context of online customer reviews.

In this introductory part, we give a brief overview of social networking sites (SNS), present our research question and objectives and elaborate on our theoretical and managerial contribution. Thereafter follows a literature review on electronic word-of-mouth. We elaborate upon the central and peripheral rout of persuasion in a CMC context, which in turn leads to the development of our research model and research hypotheses. In the following, we present the empirical method, data analysis, and results, with data collected on Tripadvior users.

1.1 Social Networking Sites (SNS)

Traditional (offline) word-of-mouth is the act of consumers providing information to other consumers through oral person-to-person communication. The particularity of word-of-mouth and its influence is that neither party represents a company or product mentioned. It is built upon people's natural desire to share experiences with family, friends, colleagues etc. With the advantages of Web 2.0, social networking sites (SNS) in particular, it is easier for customers to share information and opinions with others. Word-of-mouth online is in literature referred to as electronic word-of-mouth" (hereafter eWOM). Because electronic dialogues are electronic by nature, communication between consumers does not only happen from mouth to ear. It happens from keyboard to eye as well, communicating with a multitude of other consumers. As a result, we have witnessed a shift where the content on the web is becoming increasingly user-generated (Mangold & Faulds, 2009; Ashling 2007; Kane et al., 2009).

eWOM takes place on numerous platforms (e.g., Facebook, forums, blogs etc) as illustrated by table 1 (Appendix 1), and provides information on almost every area of consumption. A recent study from the Nielsen Company (2009) examined the global outreach of social networking sites (SNS). The results show that two-thirds of the global Internet population visits these sites, and it accounts for almost 10 percent of all Internet time. In fact, SNS are now the fourth most popular activity on the Internet, ahead of personal email. In 2008, time spent on these sites increased dramatically, growing at over 3 times the rate of overall Internet growth, and they are eating into the share of time committed on Internet (Burmaster et al., 2009). When people spend more time on SNS, available information has fundamentally shifted towards user-generated content and consumers are increasingly exposed to others experiences and opinion. These emerging sources of online information that are created, initiated, distributed and used by consumers intent to educate each other about variety of issues, results in a collaborative and participatory culture that continuously shapes online users opinions and influences various aspects of their consumer behavior (Blackshaw & Nazzaro, 2006; Smith, 2009; Karakaya & Barnes, 2010; Subramani & Rajagopalan, 2003).

1.2 Research Question

Based on the introductory discussion above, for this thesis the following research question is framed:

"To what extent are opinion seekers willing to accept and adopt information in online customer reviews and which factors are encouraging adoption?"

Customer reviews has become a significant source of information in consumers search for products and services, and consumer knowledge sharing in the Internet environment together with the great potential impact of eWOM has been a popular research area in recent years (Rafaeli and Raban, 2005; Lee et al., 2006; Karakaya and Barnes, 2010; Blackshaw & Nazzaro 2006). In fact, prior and current studies have mostly focused on the factors driving consumers to share knowledge/information, and very little attention has been paid to the information receivers' perspectives. The impact of online consumer discussion is not limited to serve as a place for consumer sharing, but also has great potential to affect

readers if they intend to use the online recommendation for purchase decisions.

For marketing researchers and practitioners, it is essential to investigate this phenomenon of information adoption in online communities because it contributes to the consumer's attitude towards a product or service or the extent to which he or she holds a favorable or unfavorable view of a product or service. The reason for this interest is the well-known belief that the more favorable attitudes are, the more likely a purchase of the product or service becomes. Park, Lee and Han (2007) examined the effect of online consumer reviews on consumer purchase intentions; they found that both the quality and quantity (i.e. review scores) of online consumer reviews have a positive impact on consumer purchase intention. This is consistent with Hu, Liu and Zhang's (2008) results, they investigated online reviews effect on product sales and showed that changes in online reviews are associated with changes in sales. Hopefully, this thesis can improve research in the field and contribute to the need for such analyses.

1.3 Theoretical and managerial contributions

As products and services play an important role in people's life, they are natural subjects of discussion. Online customer reviews have become a major informational source for consumers. With the large increase in consumer engagement on SNS and its impact on different aspects of consumer behavior, there is a need to better understand which elements of consumer reviews that affects consumers' perceived usefulness, and adoption of information when exposed to others experiences and opinions. Companies are definitely seeking new ways to reach their customers and market their products on social networking sites. Clearly, there are still numerous open questions concerning online dialogs.

The results of the study can be both theoretical and practical. From a managerial perspective the results will increase their behavioral knowledge about their most important assets, their customers. This study can imply that companies should have a clear strategy on how to handle customer reviews, as well as general tips for web site and forum moderators for facilitating such presentation in a manner useful to the members of their online communities.

From a theoretical point of view, the findings can demonstrate that previously validated theory on dual process theory in information system literature can be applied to online customer reviews. In addition, the processing of information through customer reviews will be explained more precisely. Especially the potential of automated and unintentional effects- heuristics that simplify the decision process.

2.0 Literature review

In this section, we will provide an overview of the literature on electronic word-of-mouth and how it influences purchasing decisions. We will also review the relevant literature relating to information adoption, argument quality (information quality) and source credibility.

2.1 Electronic word-of-mouth (eWOM)

The importance of word-of-mouth (WOM) has been reported at length in standard textbooks in consumer behavior (i.e. Shiffman et al., 2008) and marketing (i.e. Keller & Kotler 2008). One of the most widely accepted notions is that word-of-mouth (WOM) plays an important role in shaping consumer's attitudes and behavior. Prior research has shown that WOM has a significant influence on consumers purchase decision (Katz & Lazarsfeld 2009; Engel et al. 1969; Richins & Root-Shaffer, 1988). With the arrival of Web 2.0, research on WOM has experienced a renaissance, but in an online context. eWOM is considered as an extension of WOM, referred to as "any positive or negative statement made by potential, actual or former customers about a product or company, which is made available to a multitude of people and institution via the Internet" (Hennig-Thurau et al., 2004, p.39). Traditional (offline) WOM functions base on social networking and trust: people rely on families, friends, and significant others in their social network. eWOM have extended consumers' alternatives for product or service related information gathering and provides them with the opportunity to offer their own consumption related advises by engaging in eWOM. Keyboard-to-keyboard communication is in its nature less personal than traditional WOM (or maybe just as personal, but in a different way), but consumers are as likely to take advices from consumers they have never met in person, and they often make

offline decisions based on online information (Hennig-Thurau et al., 2004; Dellarocas, 2003).

A study from Nielsen Global Online Consumer Survey (2009) shows that nine in every ten Internet consumers worldwide (90 percent) trust recommendations from people they know, while seven in every ten (70 percent) trust consumer opinions posted online. In fact, personal recommendations and consumer opinions posted online have become the most trusted forms of advertising global (Burmaster et al. 2009). A study conducted by Opinion Research Corporation (ORC) (2008) found that 61 percent of the respondents reported consulting online reviews, blogs and other sources of online customer feedback before purchasing a new product or service, with search engines being the preferred method of conducting the research. Further, 83 percent of the respondents indicated that online product evaluation and reviews had at least some level of influence on their purchasing decisions (Werbler & Harris, 2008).

2.2 Information adoption model

Customer reviews has become an important source of information. However, when explicit information is transformed into internalized knowledge and meaning, the impact of the information received can provoke different responses among different of recipients (Chaiken and Eagly, 1976; Nonaka, 1994). This has inspired researchers to study the information adoption process in order to understand the extent of informational influence on people.

While adoption models are a useful first step in understanding how intentions towards a message are formed, these models were not designed to answer questions about the influence process itself. For instance, returning to our earlier example, when a consumer receives information from several customer reviews regarding hotels, what aspects of a received message are more or less substantial in influencing him to follow a piece of advice? Further, how is it that different people can be influenced by the same message in different ways? When are people most likely to ignore the quality of the argument made? In the existing information systems literature, dual process theories are used to explain how

people are influenced in adopting ideas, knowledge or information (Sussman and Siegal, 2003; Bhattacherjee and Sanford, 2006; Cheung et al., 2008).

Since the irruption of Internet in the communication strategies, researchers have begun applying the ELM to assess the impact of this new context on different aspects of consumer behavior, such as individuals' responses to online advertising (Karson & Fisher 2005) or satisfaction (Rodgers et al. 2005) as well as trust (Yang et al. 2006) in online purchases. The Elaboration Likelihood Model (ELM) is one of the most popular theories used to explain the individual's persuasion process (Petty & Cacioppo 1979), and was developed by Petty and Cacioppo (1986) to account for reported differences in influence results across individual context. The ELM identifies argument quality as the critical determinant of informational influence under conditions of high elaboration likelihood. When an individual is either unable or unwilling to process the arguments presented in a message, peripheral cues will play a more critical role in the influence process. Peripheral cues are informational indicators that people use to assess content other than the content itself (Petty and Cacioppo, 1986).

 A study by Park and Kim (2008) found that the number of reviews were more important for "novices" than for "experts." As such, number of reviews served as a peripheral cue, and plays a more critical role in the influence process for individuals with lower expertise and experience when evaluating alternatives. As elaboration likelihood decreases, peripheral cues have increasingly important effects on recipients' attitude, belief, and consequent influence, since recipients use these cues as heuristics or decisions rules rather than undertaking the greater cognitive effort of elaboration (Petty and Cacioppo, 1986). Interestingly, Karakaya and Barnes (2010) found that consumers with higher level of engagement in online activities are more likely to emphasize other consumers' opinions upon choice of brand. As such, the central route occurs when recipients carefully consider the issues presented by the reviews, and it involves attending to the content of the message, scrutinizing and assessing its content, and reflecting on issues relevant to the message. Research indicates that individuals following the peripheral route can be influenced by the source's attractiveness, likeability, and credibility. To understand how individuals are influenced by advice transmitted via customer reviews, we are interested in the peripheral cues and that

are most salient in such context. As information presented verbally differs from information presented on the Internet, it creates an issue for individuals' effort in determining the source attractiveness, likeability and credibility. When not able to evaluate these influences a potential infinite number of heuristics might exist. These unintentional effects influence the evaluation of products or services even when consumers do not intend to use this information in their judgment. While there are many potential cues which may operate within a CMC context, this research focuses on the peripheral cue, source credibility. As more people utilize product information from eWOM network for making purchase decisions; the process by which people evaluate the credibility of these online consumer recommendations is particularly interesting. It is believed that people reflect on the credibility of eWOM to a greater extent than traditional WOM when seeking online recommendations, and will only take the online advice they perceived to be credible (Wathen and Burkell, 2002).

Susmann and Siegal (2003) adopted the elaboration likelihood model (ELM) and proposed a theoretical model of information adoption to explain how people are influenced to adopt information posted in computer-mediated communication (CMC) context. The researchers integrate the Technology Acceptance Model (Davis, 1989), which is a derivate of the Theory of Reason Action (Ajzen & Fishbein, 1980), with dual-process models of informational influence (Petty & Cacioppo 1986, Chaiken and Eagly 1976) to build a theoretical model of information adoption. They proposed two different ways that people can adopt information, as similar to the ELM model, centrally and peripherally. The model highlights the assessment of information usefulness as a mediator of the information adoption process. As such, it is an alternative model for teasing out some of the important effects of this extremely complex information adoption process.

To understand the process by which individuals will be influenced by the messages that they receive, we draw on the Elaboration Likelihood Model (ELM) of informational influence and its derivate, the information adoption model developed by Sussman and Siegel (2003). Accordingly, when ELM is applied in a CMC context, the information adoption model has two key propositions:

First, the information adoption model considers argument quality as the central influence and source credibility as the peripheral influence.

2.3 The role of argument quality and source credibility

Sussmann and Siegal (2003) did not test which dimensions of argument quality and source credibility that influence information usefulness and information adoption. Cheung, Lee and Rabjohn (2008) further developed Sussman & Siegal's (2003) model and tested different dimensions of argument quality and source credibility as important influences on information seeking. Relevance, comprehensiveness, timeliness and accuracy were used to measure argument quality. The study found that comprehensiveness and relevance were the most effective components of the research model, making them key influencers of information adoption. Source expertise and source trustworthiness were used to measure source credibility. From their study, source credibility had almost no impact (Cheung et al., 2008).

Argument quality

As anyone can post information online, some of the information found online will be of limited quality. Argument quality refers to the persuasive strength of arguments embedded in an informational message (Battacherjee and Sandford, 2006). It is the extent to which information receivers perceive the quality or strength of the message arguments.


Source credibility

Source credibility is defined as the extent to which an information source is perceived to be believable, competent, and trustworthy by information recipients (Petty and Cacioppo, 1986). As such, it refers to a message recipient's perception of the credibility of a message source, reflecting nothing about the message itself (Chaiken, 1980). Hovland and Weiss (1951) found changes in opinion to be significantly related to the credibility of the communication source, where the recipients were more inclined to change opinions in the direction advocated by the credible source. However, because of the nature of online customer reviews, evaluation of the source is difficult or not possible to assess.

Source credibility (or, more carefully expressed "perceived credibility") consists of two broad dimensions: expertise and trustworthiness. Expertise is commonly represented by scales such as experienced-inexperienced, informed-uniformed, skilled-unskilled and expert-not expert (O'Keefe, 2002, p. 182), and trustworthiness by honest-dishonest, trustworthy-untrustworthy, fair-unfair and just-unjust (O'Keefe, 2002, p.183). A communication source with perceived expertise is believed to know the truth and know what is right and not. Perceived trustworthiness concerns whether the communicator is inclined to tell the truth

3.0 Research model and statement of hypotheses

Figure 1 depicts the research model used in this study. Our model is based on the model conducted by Cheung et al. (2009). The model consists of argument quality and source credibility, leading to information usefulness and further on to information adoption.

3.1 The research model
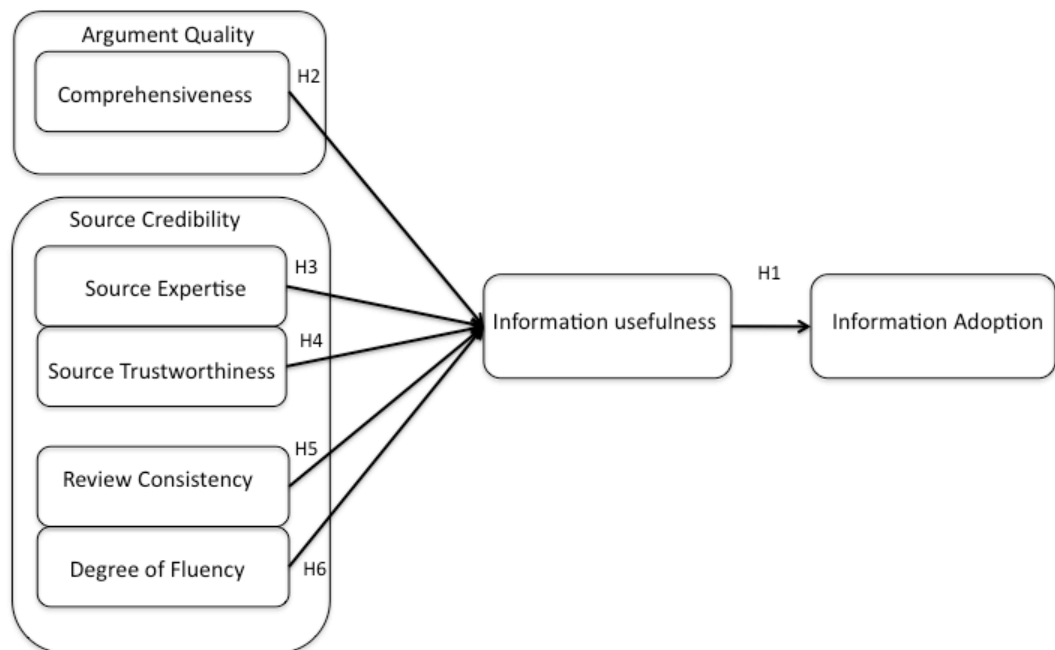
3.2 Information usefulness and information adoption

Information adoption behavior is one of the principal activities that users seek to conduct in virtual communities (Cheung et al.2008), and it involves purposeful selection of useful information applied to own frame of reference. Sussmann and Siegal (2003) highlighted the assessment of information usefulness as a mediator

of the information adoption process. As such, peoples' individual perception whether information from others' comments, reviews or opinions are helpful for them to make better decisions tells us about perceived information usefulness. If people find information useful, their intention of adopting the information will be higher. An example of information adoption is users reading others' comments in online communities, before making a purchasing decision based on their adopted information (Cheung et al., 2008). For information to be adopted it must be perceived as useful. Thus, we propose the following hypothesis:

> *H1: Messages perceived to contain information of high usefulness would result in higher levels of information adoption than messages perceived to contain information of low usefulness.*

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3.3 Argument quality

We have decided to use comprehensiveness as the dimension of argument quality. Comprehensiveness is referring to the completeness of the messages. The more detailed the information, and the wider breadth of user categories and orientation of the web page; result in it being more likely to acquire users and retention (Cheung et al., 2008). A good review can be said to be detailed, provide substantial argumentation and justification, and cover all relevant topics of the product or service of interest. Review length is closely connected to comprehensiveness, where longer reviews are considered more helpful than shorter ones. (Pan and Zhang 2011; Mudambi and Schuff 2010). This because a long review can be assumed to provide more justification to the hotel rating (i.e. 1-5 stars), whereas a short review will be more likely to be perceived as superficial, thus less helpful. Korfiatis N. et al. (2011) found that word length provided an indicator to why a review was considered highly helpful by a consumer. The more comprehensive the message is perceived to be, the more useful it will be.

> *H2: The higher the perceived comprehensiveness of a message, the more useful the message will be.*

3.4 Source Credibility

Source credibility is often measured through two main dimensions, expertise and trustworthiness (O'Keefe, 2002; Cheung et al., 2008; Sussman & Siegal, 2003). One can assume that a message from a reviewer with high expertise and

trustworthiness will increase the likelihood of the information to be adopted. Communication source with perceived expertise is believed to know the truth and know what is right and not. Perceived trustworthiness concerns whether the communicator is inclined to tell the truth. Thus, we propose the following hypotheses:

H3: A message source perceived to have high expertise will increase the information usefulness.

H4: A message source perceived to have high trustworthiness will increase the information usefulness.

Reviews accessible on tripadvisor.com revolve around experience goods, meaning users either need first-hand experience or others' opinion to evaluate the product or service of interest. Whether the reviews provide correct information is difficult to evaluate, thus users must rely on cues to determine source credibility.

Users are often presented with a large pool of reviews, meaning the user have the possibility to compare the different reviews. Cheung et al. (2009) found that consistency among reviewers increase the perceived credibility of the messages. Similarly, results from Pan and Zhang's study (2011) suggest that there is a negative relationship between a review's perceived helpfulness and the disagreement among available reviews. It is therefore reasonable to assume that a high degree of review disagreement will decrease users' ability to evaluate whether a review is correct or not. When the available reviews are similar, (i.e. there is consensus among reviewers) we believe the reviews will be perceived as more credible. Thus, we hypothesize that:

H5: High review consistency will increase information usefulness.

With increasing nonfluencies (e.g. superfluous repetition of words or sounds, articulation difficulties, incorrect terminology etc.) in delivery, a speaker's expertise decreases (O'Keefe 2002:183). Transferring this to non-verbal messages, nonfluencies can be said to include spelling errors, incorrect use of terminology and low degree of sentence structure. Fluency in non-verbal messages can be assumed to serve as a cue for expertise along with the use of correct terminology. O'Reilly and Marx (2011) investigated how young, technical consumers assess online WOM credibility. Through a grounded theory method

they found that assessment of WOM credibility was based on the logic and articulation of posts. Their results show that if a review was perceived to have valid arguments the receiver was more likely to develop positive attitudes towards the information. The notion of "valid arguments" include aspects such as the use of "proper" grammar, correct spelling, and professional language. Therefore:

H6: The higher degree of fluency and correct use of terminology in a review, the more useful the message will be.

4.0 Research methodology

As this study focuses on the dimensions affecting information usefulness and information usefulness' influence on information adoption within online customer reviews, the research model will be tested on an existing consumer opinion platform, TripAdvisor (www.tripadvisor.com). With the growth of social media and customer-review sites, the customer-review website TripAdvisor has grown rapidly. TripAdvisor have made a strong impact on the tourism and hotel industry and plays a central role in the travel planning process. TripAdvisor is a platform used for sharing information about travel related issues all over the world. Product descriptions might not provide sufficient information and the quality of the product can only be evaluated after trying or inspecting it. Key attributes are subjective and difficult to compare, and there is a need to use one's senses to evaluate quality. Details about TripAdvisor, design, participants (demographic data), instruments, measures, procedure and thoughts about the statistical procedures we will use in order to test the hypothesis will be discussed in the following section.

4.1 TripAdvisor (www.tripadvisor.com)

We have chosen to examine TripAdvisor, defined by the tag line "Get the truth, then go." TripAdvisor is a user generated travel guide and research website where customers can gather travel information, post opinions and share meaning of travel related issues and engage in interactive forums. This information is used by the website to rank popularity and quality of service provided by the travel sector. TripAdvisor also has a booking function, where you are forwarded to several major booking suppliers, providing consumers the opportunity to compare deals and prices. TripAdvisor is purported to be the largest online travel community,

acting as repository of more than 45 million customer reviews that contributes over 40 million unique monthly visitors. Trip Advisor currently operates websites in 27 countries worldwide and makes it content available in 28 languages (Screenshots of webpage are available in appendix 2, figure 1-3). The reviews provide quantitative information through a rating system that is based on the total number of respondent's comment on classification of hotel/destination on a scale from one to five. Qualitative feedback is also available through individual written reviews (appendix 2, figure 4).

4.2 Design

An information adoption model was developed to examine the factors affecting information adoption of online opinion seekers in online customer reviews. By collecting primary data through surveys, we want to establish relationship between variables and constructs, prior to assumptions and hypothesis regarding the nature of these relationships. Collecting one's own research data gives control over both the structure of the sample and the data obtained from each respondent. This gives greater confidence that the data will match the study objectives. The model will be tested empirically by gathering quantitative data, through questionnaires from respondents who have experience with the online customer community, TripAdvisor. Based on the idea that social phenomena can be quantified, measured and expressed numerically, we will use a relativist research designs and within this area, surveys are the preferred methodology (Easterby-Smith et al., 2010).

4.3 Participants

The targeted respondent of this study are individuals who visit particular opinion platforms and who are influenced by the comments shared with the platform. As TripAdvisor was chosen as our test community, the respondents should have had some experience with TripAdvisor. Looking at TripAdvisors customer profile/demographic data (Appendix 3), will give us some indications of the respondents demographic that the survey will generate. The gender ratio is 51 per cent male and 48 per cent female. Approximately 25 per cent are 25-34 years old, 24 per cent are 35-44 and 25 per cent are 45-54 years old. Around 21 per cent has

a total household income $50 000-$74. 999. Most of the TripAdvisors customers
use it to purchase Airline tickets/reservation and Hotel/motel reservations
(Appendix 3).

Sampling procedure

The sampling method will therefore be a non-probability, convenience sample.
The advantage being that this type of sampling is feasible and economic. When
collecting data through surveys, cost per respondent is low for large samples
compared with any method that requires face-to-face contact with individuals
(Pedhazur &Schmelkin, 1991; Easterby-Smith et al., 2010). The negative aspect
being the principal of bias and lack of control over the respondents' demographics
(nationality, age etc.), but one can reason with the respondents being
representative of the sites users. In addition, with this sampling procedure we have
more reassurance that the subjects have prior experience with TripAdvisor.
Ideally, the respondents should be randomly picked to be representative for the
population, but because this is a specific site, with hotel reviews, the results must
be generalized with caution. It is impossible to guarantee that the sample achieved
in this way represents our population of interest.

4.4 Instruments

A web-based online survey service called Questback (www.questback.com) was
used to develop the questionnaire. Questback allows us to publish the
questionnaire on the Internet, and enable respondents to enter data on the Internet
when entering www.tripadvisor.com. The data will later be downloaded and made
available for analysis. Practically the program generates data files that can be
exported in a format that SPSS can import, but the program have provisions for
data analysis, graphic presentation and report formats. These features will be very
useful in order to monitor the survey's progress. Burns and Bush (2006) pointed
out that at least four distinct advantages of such software programs: "they are
easier, faster, and friendlier and provide significant functionality beyond what is
available with a traditional word processor" (p. 348). In addition, it is easy to use
and without any expenditure for students.

4.5 Measures

The survey used a multi-item approach with each construct being measured by a few items for construct validity and reliability. Table III shows the 21 items used to measure the model's seven constructs. All the construct measures were adopted from literature where they had been demonstrated to have good measurement characteristics.

	Measure	Value	Frequency (%)
	Gender	Male	
		Female	
	Age	18 or below	
		19-24	
		25-34	
		35-44	
		45-54	
		55-64	
		65 or above	
	Highest education level	Grammar School	
		High school or equivalent	
		Jr. College/Vocational school	
		Some College	
		College Graduate	
		Master's Degree (MS)	
		Doctoral Degree (PhD)	
		Professional Degree (MD, JD, etc.)	
		Other	
	People in household	1	
		2	
		3	
		4	
		5	
		6 or above	
	Marital Status	Single	
		Married	
		Separated/divorced	
		Widowed	
		Partnership/Couple	
	Monthly income	Below $25,000	
	before taxes (US$)	$25,000-$34,99	
		$35,000-$49,000	
		$50,000-$74,999	
Table I.		$75,000-$99,999	
Demographic		$100,000-$149,000	
data		$150,000 or above	

	Measure	Value	Frequency (%)
	The reason for visiting TripAdvisor (can choose multiple options)	To get a better understanding of hotel/destination of interest	
		Look for suggestions of hotel/destination	
		Purchase airplane tickets	
		Purchase Hotel tickets	
		Just for fun	
		Share experience	
		Other	
	How did you find this site? (please chec all that apply).	Followed a link/graphical icon from another Web page	
		Found using a search engine	
		Received link by email	
		Was told URL by friend	
		read about it in a newspaper or magazine	
		Other sources	
	How ofte do you og on	1-2	
Table II.	vacations per year (on	3-4	
Traveling	average)	More than 5 times	
habits of the			
respondents			

Comprehensiveness	AQC1	The comments in TripAdvisor sufficiently complete your needs
	AQC2	The comments in TripAdvisor include the neccesary values
	AQC3	The comments in TripAdvisor cover your needs
	AQC4	The comments in TripAdvisor have sufficient breadt and depth
	AQC5	Long reveiws are more usefull then shorter reviews
Source experise	SCSE1	People who left comments in TripAdvisor are knowledable in evaluating quality of the hotel/destination
	SCSE2	People who left comments in TripAdvisor are experts in evaluating quality of hotel/destination
	SCSE3	I was not able to directly evaluate the source expertise
Source trustworthiness	SCST1	People who left comments in TripADvisor are trustworthy
	SCST2	People who left comments in TripADvisor are reliable
	SCST3	I was not able to directly evaluate the source expertie
Review consistency	SCRC1	A review consistent with other reviews are considered more credible
	SCRC2	High degree of review disagreement decreases the ability to evaluate whether a review is correct or not
Degree of fluency	SCDF1	The comments in TripAdvisor containing correct treminology are more credible
	SCDF2	The comments in TripAdvisor without spelling errors are more credible
	SCDF3	The comments in TripAdvisor with fluent language are more credible
Information usefulness	IU1	The comments in TripAdvisor are valuable
	IU2	The comments in TripAdvisor are informative
	IU3	The comments in TripAdvisor are helpful
Information adoption	IA1	You agree with the opinions suggested in the comments
	IA2	With the repsect to the next three months, to what extent would you follow the suggestions in the reviews and chose a hotel or destination of interest

Table III.
Measures.

4.6 The Questionnaire

TripAdvisor operates in a global market. A possible question bias may arise because we do not speak the language of all possible respondents. We have therefore decided to design the questionnaire in a common language (English) and then survey only bilingual respondents. However, this approach is generally unsatisfactory because of the many opportunities for miscomprehension. Ideally, multilingual individuals with expertise in translation and questionnaire design should be used (Burns & Bush, 2006).

As the questions begin to take shape, we continually evaluated the questions and its response options. The questionnaire was also pretested in order to ensure that

the questions are focused, simple, brief and clear. It is important that the respondents understand the questions, since misunderstanding is a common problem with online surveys (Burns & Bush, 2006;Easterby-Smith et al. 2010). We have conducted a dry run of the survey on a small, representative set of respondents in order to discover errors before the survey will be lunched. Before the questionnaire was administered, participants were informed that this is a pretest and their cooperation is requested in spiting words, phrases instruction, question flow, and other aspects of the questionnaire that appear confusing, difficult to understand, or otherwise a problem. Eight students at BI Oslo Norwegian school of management that have experience with www.tripadvisor.com were involved in the pretest. Some revision was necessary as common wording problems across the group were evident. In addition, the number of complicated and difficult to answer questions required a lot of time and effort when answering. Every one word in a question can result in bias that will distort the findings of the survey, according to the findings in the pretest, this was regulated and in addition, number of attitude measure on six-point Likert scale was reduced slightly.

Some comments on the questionnaire organization

To facilitate respondents' ease in answering questions, we organized the set of questions after a sequence of questions commonly found in questionnaires (Burns and Bush, 2006). Since this is an online questionnaire that people do not volunteer to participate in, one objective is to keep the questionnaire as short as possible, as long questionnaires have negative effect on the response rate. Overall, there are 23 questions. As a function of the introduction in the questionnaire, we include a screening question. This will be used to screen out respondents who do not meet the qualifications necessary to take part of the study. For all those who answer "no," the survey is terminated with a polite "Thank you for your time." We ask the screening question early on, because we do not want to gather data from respondents that do not meet the necessary qualifications. Once the individual is qualified by the screening question, the next three serve a "warm-up function" to heighten respondent's interest and to demonstrate the ease of responding to the research request. Further, transition statement is used to guide the respondent and to let the respondent know that changes in question topic. As common questionnaire practice reveals, it is good practice to place more

complicated and difficult-to-answer questions deep in the questionnaire. There are many scaled-response questions in our questionnaire. Even though the difficult-to-answer questions arrive relatively early, the pretest indicate that the respondents are somewhat caught up in a responding mode. After the regulations as mentioned earlier, we believe that the amount of questions in this section do not require too much mental effort. The respondents will also be informed about how many percent that is completed. Finally, demographics questions are used to classify respondents into various groups. This we placed last in the questionnaire because some respondents will consider certain demographic questions personal, and they may refuse to give answer to questions about the e.g. highest level of education or income. When placing them last in the questionnaire, hesitation will be reduced (Burns & Bush, 2006).

4.7 Procedure

In order to carry out our study we would collaborate with TripAdvisor. An often-used method for distributing this kind of surveys is to include a pop-up on the site with the questionnaire. This required confirmation from the company, we contacted TripAdvisor by their "contact us" function and they provided positive feedback towards our inquiry. As we are on the proposal stage, they called for additional information and wanted to verify the questionnaire. In addition, they wanted to post the questionnaire themselves and have access to sample data. As this communication progresses, alternative sites or methodology (e.g. experiments) will be evaluated and carefully considered. For now, a web-based online survey service called Questback was used to create the questionnaire and it will be distributed online (as pop-up on www.tripadvisor.com) to gain access to informant's diacritics, subjective attitudes and behavior. Such decision was made because online questionnaires can be transmitted to thousand of potential respondents in seconds and their submitted responses are available for analysis almost instantaneously. This may further be justified by time and financial constraints as well as the wish to stay within the context and our emphasis on maintaining the contextual meaning of informants' responses. As we wish to investigate if the consumers adopted and in turn made a decision based on the information in the reviews, the questionnaire needs to address their past experience with TripAdvisor.com. Therefore, the pop-up would need to appear at

the front page at the first visit. The participants will be randomly selected when entering tripadvisor.com, and their answers will be kept anonymous. It is reasonable to assume that this method of data collection would generate many responses as TripAdvisor has 20 million users. The data will be collected during winter/spring of 2011/2012, at that point in time many vacations are planned and purchased for the summer.

4.8 Data analysis and results

Obviously, we do not have any results at the proposal stage. However, we have some ideas about the statistical procedures we will use in order to test the hypothesis.

To test the hypothesized relationships in the research model Structural equation modeling (SEM) will be performed on the sample data using LISREL 8 (Jöreskog and Sörbom, 1993). LISREL is the most widely used SEM program and its terminology has become popularized when describing models and results (Jöreskog & Sörbom, 1993). "SEM can be specified to investigate measurement issues, to examine structural relationships among sets of variables, or to accomplish both purposes simultaneously" (Baumgartner & Homburg, 1996, p. 141). Of the LISREL statistics, model-fit indices, overall explanatory power, estimated path coefficients, and associated t-values of the path of the research model are of interest. All of the indicators are hypothesized to have significant loadings on information usefulness. Then information usefulness is hypothesized to be in a subsequent relationship with information adoption. By using SEM we are able to see how many percent of the variation in information usefulness and the variance in information usefulness that is explained by the exogenous variables. From the statistics, we can also see if our stated hypotheses are significant. Obtain information usefulness impact on information adoption, and get information of the dimensions of argument quality and source credibility that is found to have significant or insignificant impact on information usefulness

Our proposed model should first of all adequately account for the data, while the alternative is that there is a significant amount of discrepancy; $H_0 : \Sigma = \Sigma(\theta)$ and $H_A : \Sigma \neq \Sigma(\theta)$. To assess if the model fits the data, it is suggested to rely on at

least one absolute fit index and one incremental, in addition to the X^2 results. The X^2 test is highly sensitive to the size of the sample, such that the test might lead to a rejection of the null hypothesis even when the factor model is appropriate (Hair et al., 2010). Absolute fit indices such as the $\chi 2$ statistic and the goodness-of-fit index (GFI) as well as the root mean square error of approximation (RMSEA) will be used, in addition to Incremental Fit indices such as the Comparative Fit Index (CFI). Each provides different information about the fit of the CFA solution (Brown, 2006; Hair et al., 2010).

Before accepting the results, we should assess the degree of reliability and validity of the results. Although the reliability of the customer reviews on TripAdvisor can be questioned, research by Hensens, Struwig and Dayan (2010) used four arguments that challenge the reliability of TripAdvisor, to prove the contrary. This research indicated that although it is possible to post false reviews on TripAdvisor, it is not common practice. It was, therefore, concluded that TripAdvisor provides a reliable and rich source of information for users. Another problem might be that the sample does not represent the population. In our study, samples are randomly acquired among the users and we expect the survey to generate high response rate. Further, only users that indicate some experience with TripAdvisor will be selected. Ideally, our survey will gather the respondents honest opinions, however the problem of not getting the truth on attitudes and behavior exists. We will check this at the end of the data collection by comparing early and late respondents. Demographic statistic will be used to correct for over or under representation to avoid skewness.

Convergent validity

Convergent validity indicates the extent to which the items of a scale that are theoretically related to each other should be related in reality (Shiu et al. 2009). It will be examined by use of construct reliability (CR) and the average variance extracted (AVE). The critical values for CR and AVE are 0.70 and 0.50 respectively (Hair et al., 2010). CR and AVE should fulfill the recommended levels to provide adequate evidence of convergent validity, indicating that internal consistency exists. In addition, factor loadings for the path estimates/factor loadings should be at least 0.5 and ideally 0.7 or higher to be related to their associated construct (Hair et al., 2007).

AVE and CR will be calculated by following these formulas (Hair et al. 2010):

$$AVE = \frac{\sum\limits_{i=1}^{n} L_i^2}{n} \qquad CR = \frac{\left(\sum\limits_{i=1}^{n} L_i\right)^2}{\left(\sum\limits_{i=1}^{n} L_i\right)^2 + \left(\sum\limits_{i=1}^{n} e_i\right)}$$

Discriminant validity

Discriminant validity is the extent to which a construct is truly distinct from other constructs. It is indicated by low correlations between the measure of interest and the measure of other constructs (Hair et al., 2010). Evidence of discriminant validity can be demonstrated by comparing the AVE values for any two constructs with the square of the correlation estimate between these two constructs. If this is the case, adequate discriminant validity of all measurements are provided.

5.0 Time Schedule

The following table will be our guideline in the progression if the thesis:

January:

- Preliminary thesis submission January 16th
- Decide on further direction
- Continue to read literature
- Meet with supervisor to discuss and clarify final research question and progress

February:

- Writing
- Preparation of data collection and research method
- Gathering of primary data through survey or experiments

March:

- Data gathering
- Analysis
- Work on potential weaknesses of the paper

April:

- Analysis

May:

- Analysis
- Writing

June:
- Work on potential weaknesses of the paper
- Finish draft and submit to supervisor

July:
- Work on potential weaknesses of the paper

August:
- Work on potential weaknesses of the paper

September:
- Submission deadline September 1st

6.0 References

ACNielsen (2009), "Global faces and networked places: A Nielsen report on
social networking's new global footprint," March

Ajzen, I. and Fishbein, M. (1980), "Understanding attitudes and predicting social
behavior," *Prentice-Hall*, Englewood Cliffs, NJ

Ashling, J. (2007), "Blogs & social media forum 2: What's on the corporate
horizon?," *Information Today*, Vol. 24 No. 7, p. 29.

Baumgartner, H. and Homburg, C. (1996), "Applications of structural equation
modeling in marketing and consumer research: A review," *International
Journal of Research in marketing,* Vol. 13, pp. 139-61

Bhattacherjee, A. and Sanford, C. (2006), "Influence processes for information
technology acceptance: an elaboration likelihood model," *MIS Quarterly*,
Vol. 30 No.4, pp. 805-25.

Blackshaw, P. and Nazzaro, M. (2006), "Consumer-generated media (CGM) 101:
word-of-mouth in the age of the web-fortified consumer," *Nielsen
BuzzMetrics White Paper*

Brown, A.T. (2006), "Confirmatory Factor Analysis for Applied Research," *The
Guilford Press,* New York

Burmaster, A., Lee, L. and McGiboney, M. (2009),"Nielsen global online
consumer survey," *The Nielsen Company,* April

Burns, A. C. and Bush, R. F. (2006), "Marketing Research," 5th edition *Prentice
Hall Copyright*

Chaiken, S. and Eagly, A. H. (1976), "Communication modality as a determinant
of message persuasiveness and message comprehensibility," *Journal of
Personality and Social Psychology*, Vol. 34 No. 4, pp. 605-14.

Chaiken, S. (1980), "Heuristic versus systematic information processing and the
     use of source versus message cues in persuasion," *Journal of Personality
     and Social Psychology*, Vol. 39 No. 5, pp. 752-66.

Cheung, C.M.K., Lee, M.K.O. and Rabjohn, N. (2008), "The impact of electronic
     word-of-mouth: The adaption of online opinions in online customer
     communities," *Internet Research,* Vol. 18 No. 3, pp 229-47.

Cheung, M. Y., Luo, C., SIA, C. L. and Chen, H. (2009), "How do people
     evaluate electronic word-of-mouth? Informational and normative based
     determinants of perceived credibility of online consumer recommendations
     in china," *Conference on Information Systems,* Vol. 11, pp. 69-81

Dellarocas, C. (2003), "The digitalization of word of mouth: Promise and
     challenges of online feedback mechanisms," *Management Science,* Vol. 49
     No 10, pp 1407–24.

Davis, F. D. (1989), "Perceived usefulness, perceived ease o fuse, and user
     acceptance of information technology," *MIS Quart.* 13(3) 319-40

Easterby-Smith, M., Thorpe, R. and Jackson, P. R. (2008), "Management
     Research," 3^{ed}, *SAGE publication*

Engel, J.F., Blackwell, R.D. and. Kegerreis, R.J. (1969), "How Information is
     used to adopt an innovation,"*Journal of Advertising Research*, Vol. 9 No.
     4, pp. 3-8.

Hair Jr., J.F., Black, W.C., Babin, B.J., and Anderson, R.E. (2010), "Multivariate
     Data Analysis: A Global Perspective," Seventh Edition. Upper Saddle
     River, New Jersey: Pearson Education, Inc.

Hensens, W., Struwig, F.W. and Dayan, O. (2010), "The reliability of data from
     guest reviews on Tripadvisor as a contemporary social media platform,"
     22Nd Southern Africa Institute for Management Scientists Conference,
     Rhodes University, South Africa.

Hennig-Thurau, T., Gwinner, K.P., Walsh, G. and Gremler, D.D. (2004),
     "Electronic word-of-mouth via consumer-opinion platforms: What
     motivates consumers to articulate themselves on the Internet?"*Journal of
     Interactive Marketing,* Vol. 18 No 1, 38–52.

Hovland, C.I. and Weiss, W. (1951), "The influence of source credibility on
     communication effectiveness", *The public opinion quarterly*, Vol. 15
     No. 4, pp. 635-50.

Hu, N., Liu, L. and Zhang, J.J. (2008), "Do online reviews affect product sales?

The role of reviewer characteristics and temporal effects", *Inf Technol Manage*, Vol. 9, March, pp. 201-14.

Jöreskog, K. and Sörbom, D., (1993) "*Lisrel 8: Structural Equation Modeling with the SIMPLIS Command Language",* Lincolnwood IL: Scientific Software International, Inc.

Kane, G.C., Fichman, R.G., Gallaugher, J. and Glaser, J. (2009), "Community Relation 2.0: With the rise of real-time social media, the rules about community outreach have changed", *Harvard Business Review,* November

Karakaya, F. and Barnes, N.G. (2010), "Impact of online reviews of customer care experience on brand or company selection", *Journal of Consumer Marketing*

Karson E. J. and Fisher, R. J. (2005), "Reexamining and extending the dual mediation hypothesis in an online advertising context", *Psychology & Marketing*, 22:333–51.

Katz, E. and Lazarsfeld, P.F. (2009), "Personal influence: The part played by people in the flow of mass communications", *Transaction Publisher, New Brunswick, New Jersey. Originally published in 1955 by The Free Press.*

Korfiatis, N., Garcia-Bariocanal, E. and Sánchez-Alonso, S. (2011), "Evaluating content quality and helpfulness of online product reviews: The interplay of review helpfulness vs. review content." *Electronic Commerce, Research and Application.* 2011

Lee, M.K.O., Cheung, C.M.K., Lim, K.H. and Sia, C.L. (2006), "Understanding customer knowledge sharing in web-based discussion boards: an exploratory study", *Internet Research*, Vol. 16 No. 3, pp. 289-303.

Mangold, W.G. and Faulds, D.J. (2009), "Social media: The new hybrid element of the promotion mix", *Business Horizons,* Vol. 52, 357-65.

Mudambi, S. M. and Schuff, D. (2010), " What makes a helpful online review? A study of customer reviews on amazon.com," *MIS Quarterly* Vol. 34 No. 1, pp. 185-200.

Nonaka, I. (1994), "A dynamic theory of knowledge creation," *Organization Science*, Vol. 5 No. 1, pp. 14-37.

O'Keefe, D. J. (2002), "Persuasion: theory and research" 2[ed], *Thousand Oaks, CA: Sage publications INC*

O'Reilly, K. and Marx, S. (2011),"How young, technical consumers assess online

WOM credibility." *Qualitative Market Research: An International Journal.* Vol. 14 No. 4, pp. 330-59

Pan, Y. and Zhang, Q. J. (2011),"Born Unequal: A study of the helpfulness of user-generated product reviews. *Journal of Retailing.* Vol. 87, No. 4, pp. 598–612.

Park, D. H., Lee, J. and Han, I. (2007),"The effect of on-line consumer reviews on consumer purchasing intention: the moderating role of involvement", *International Journal of Electronic Commerce,* Vol. 11 No. 4, pp. 125-48.

Park, D. H. and Kim, S. (2008), "The effects of consumer knowledge on message processing of electronic word-of-mouth via online consumer reviews," *Electronic Commerce Research and Applications,* Vol. 7, pp. 399–410.

Pedhazur, E.J. and Schmelkin, L.P. (1991), "Measurement, design and analysis," *Lawrence Elbraum associates Inc.* Hillsdale, New Jersey

Petty R. E. and Cacioppo J. T. (1979)," Issue involvement can increase or decrease persuasion by enhancing message-relevant cognitive responses," *Journal of Personality & Social Psychology,* 37:1915–26.

Petty, R. E. and Cacioppo, J. T. (1986), "Communication and persuasion: Central and peripheral routes to attitude change", *Springer-Verlag*, New York, NY.

Rafaeli, S. and Raban, D.R. (2005), "Information sharing online: a research challenge," *International Journal of Knowledge and Learning,* Vol. 1 No. 1/2, pp. 62-79.

Richins, M. L. and Root-Shaffer, T. (1988), "The role of evolvement and opinion leadership in consumer word-of-mouth: An implicit model made explicit," *Advances in Consumer Research*, Vol. 15, 32–6.

Rodgers W., Negash S. and Suk K. (2005) "The moderating effect of the online experience on the antecedents and consequences of online satisfaction," *Psychology & Marketing,* 22:313–31.

Shiu, E., Hair, J. Jr., Bush, R. and Ortinau, D. (2009), "Marketing Research," *McGraw Hill Higher Education*

Smith, T. (2009), "The Social media revolution," *International Journal of Market Research,* Vol. 51 No 4, pp. 559-61.

Subramani, M.R. and Rajagopalan, B. (2003), "Knowledge-sharing and influence in online social networks via viral marketing", *Communication of the*

AMC, Vol. 46, No 12, pp. 300-7.

Sussman, S.W. and Siegal, W.S. (2003), "Informational influence in organizations: An integrated approach to knowledge adaption", *Informational Systems Research,* Vol. 14, No. 1, pp. 47-65.

Wathen, C.N., and Burkell, J. (2002), "Believe it or not: Factors influencing credibility on the Web," *JASIST*, (53: 2), pp. 134-144.

Werbler, C. and Harris, C. (2008) "Online consumer reviews significantly impact consumer purchasing decisions", *Opinion Research Corporation (OCR).*

Yang S. C, Hung W. C and Sung K. (2006), "Investigating initial trust toward e-tailers from the elaboration likelihood model perspective," *Psychology & Marketing*, 23:429–45.

7.0 Appendix

1. Social media platforms

Table 1. Examples of social media
- Social networking sites (MySpace, Facebook, Faceparty)
- Creativity works sharing sites:
  - Video sharing sites (YouTube)
  - Photo sharing sites (Flickr)
  - Music sharing sites (Jamendo.com)
  - Content sharing combined with assistance (Piczo.com)
  - General intellectual property sharing sites (Creative Commons)
- User-sponsored blogs (The Unofficial Apple Weblog, Cnet.com)
- Company-sponsored websites/blogs (Apple.com, P&G's Vocalpoint)
- Company-sponsored cause/help sites (Dove's Campaign for Real Beauty, click2quit.com)
- Invitation-only social networks (ASmallWorld.net)
- Business networking sites (LinkedIn)
- Collaborative websites (Wikipedia)
- Virtual worlds (Second Life)
- Commerce communities (eBay, Amazon.com, Craig's List, iStockphoto, Threadless.com)
- Podcasts ("For Immediate Release: The Hobson and Holtz Report")
- News delivery sites (Current TV)
- Educational materials sharing (MIT OpenCourseWare, MERLOT)
- Open Source Software communities (Mozilla's spreadfirefox.com, Linux.org)
- Social bookmarking sites allowing users to recommend online news stories, music, videos, etc. (Digg, del.icio.us, Newsvine, Mixx it, Reddit)

Source: *Mangold and Faulds (2009, p. 358).*

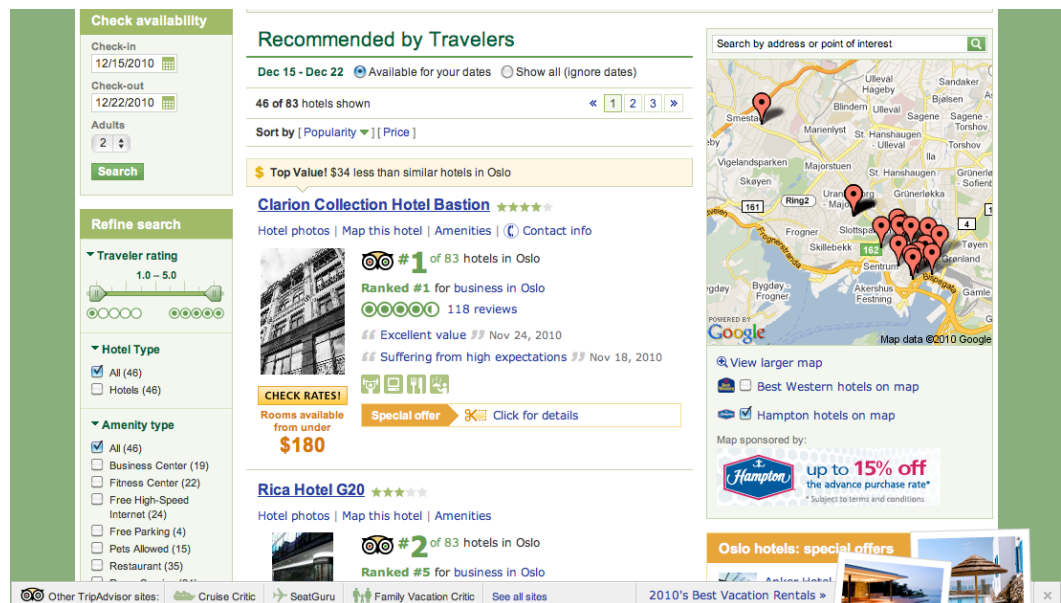### *2. Screenshots of webpage (www.tripadvisor.com)*

<u>Figure 1.</u>

Screenshot of the TripAdvisor homepage.
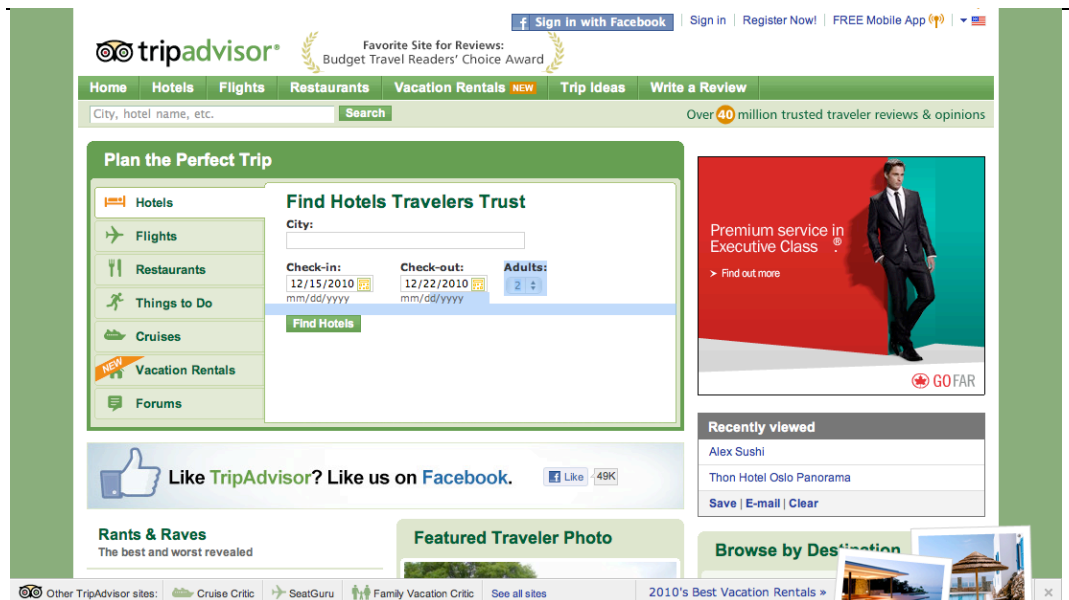
Figure 2.

Screenshot of search engine on TripAdvisor.

Figure 3.

Screenshot of the customer reviews on TripAdvisor.

Figure 4.

Screenshot of qualitative and quantitative information on TripAdvisor

"Memorable week in the casablanca"

⊙⊙⊙⊙⊙

Date of review: Apr 23, 2011 - New

Our room was in front of 43 st it was very beautiful but noisy, almost very good stay.

Reviewer ratings for this hotel:

⊙⊙⊙⊙⊙ Value   ⊙⊙⊙⊙⊙ Service
⊙⊙⊙⊙⊙ Rooms   ⊙⊙○○○ Sleep Quality
⊙⊙⊙⊙⊙ Location
⊙⊙⊙⊙⊙ Cleanliness

Date of stay: April 2011
Visit was for: Leisure
Traveled with: Spouse/Partner
Member since: April 23, 2011

Recommended by this reviewer? Yes

Was this review helpful? Yes
less ▲
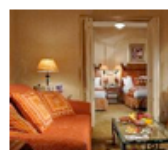
AndresGu... ▼
Mexico City,
Mexico
1 contribution

3. TripAdvisor-Media kit

Purchasing Behavior

Online and Offline Travel Purchasing

Personal Purchases	Online %	Online Index	Offline %	Offline Index
Airline Tickets / reservations	35.02	121	9.23	110
Hotel / Motel reservations	33.40	146	14.14	120
Car rentals	17.35	146	5.88	112
Bus / Railroads tickets / reservations	2.61	102	2.73	151
Travel Insurance	3.33	136	4.00	178

Detailed Demographics

User Demographics

Age	% Unique TripAdvisor Users	Composition Index - All Internet Users
18-24 yrs old	6.91	78
25-34 yrs old	25.93	143
35-44 yrs old	24.64	108
45-54 yrs old	25.36	89
55-64 yrs old	11.13	84
65+ yrs old	6.02	70

Gender	% Unique TripAdvisor Users	Composition Index - All Internet Users
Male	51.37	103
Female	48.63	97

Total Household Income	% Unique TripAdvisor Users	Composition Index - All Internet Users
Less than $25,000	14.93	85
$25,000 - $34,999	11.92	88
$35,000 - $49,999	13.25	81
$50,000 - $74,999	21.35	105
$75,000 - $99,999	19.72	158
$100,000 - $149,999	12.41	127

Education Level	% Unique TripAdvisor Users	Composition Index - All Internet Users
Attended High School, did not graduate	1.65	70
High School Graduate	18.80	94
Attended College, no degree	27.37	98
Graduated college with degree	32.67	103
Attended graduate school, no degree	5.65	99
Completed Graduate School, degree	13.87	114

Number of Children in Household	% Unique TripAdvisor Users	Composition Index - All Internet Users
0	55.49	94
1	15.93	93
2	15.11	101
3	9.43	155
4	3.68	213
5+	0.37	41

Marital Status	% Unique TripAdvisor Users	Composition Index - All Internet Users
Single, never married	21.70	107
Living with domestic partner	4.28	65
Married	65.32	114

Value of Primary Residence	% Unique TripAdvisor Users	Composition Index - All Internet Users
$99,999 or less	9.78	64
$100,000 - $249,000	27.05	102
$250,000 - $499,999	17.11	112
$500,000 - $999,999	10.63	166
$1 million or more	0.88	131

Source: http://www.tripadvisor.com/MediaKit/