

NEGATIVE ONLINE BUZZ

“HOW YOU ARE INFLUENCED BY YOUR ONLINE FRIENDS”



MASTER THESIS

MASTER OF SCIENCE IN ECONOMICS AND BUSINESS

SPECIALIZATION IN MARKETING

SUPERVISOR: DR. H.R. NAM



Raymond Vlietstra
376844
MSc. Economics and Business
Marketing
Erasmus School of Economics
Erasmus University Rotterdam
July 2014

ACKNOWLEDGEMENTS

This master thesis is the final piece of work in my academic career. With this research I am finishing my master study. During my study I have learnt a lot about economics and marketing and gathered a broad experience in these fields. During my Bachelor and Master social media were a hot topic. While studying a lot of social media appeared and disappeared. So, a very interesting field to research.

During my study I have met a lot of new friends and further build on my network of professional relationships. Also my work as research assistant for Nuno Camacho helped me a lot in finding the right academic literature for this research. However, the end of this study also means a new beginning. I already started as a consultant for a big international firm, but finishing this master thesis will give a further boost to my business career.

Without the contribution of some people it would have been a lot harder to actually finish this research, therefore I would like to thank a few people. First I would especially like to thank my thesis supervisor Dr. H.R. Nam for her critical eye, fast feedback, in-depth insights and flexibility. I am very grateful for her patience and her positive way of thinking. Also I would like to thank, my girlfriend, Willemijn Kaal for her support, critical remarks and reviews. Furthermore I would like to especially thank Patrick van Dijn and Melvin Vlietstra for their cooperation and support. Not to forget I want to thank all other people who supported me during the writing process.

I hope you will enjoy reading this master thesis and that this thesis will be an added-value to both your personal as academical knowledge about the effects of negative online buzz.

Raymond Vlietstra

Amsterdam, 26-07-2014

ABSTRACT

The present research seeks to extend existing theory on the evaluation of negative word of mouth to an online context and contribute to the knowledge base and understanding about which factors influence the evaluation of brand attitude and purchase intention after being exposed to negative word of mouth. An experimental study has been conducted in order to investigate how people evaluate brand attitude and purchase intention of search and experience goods after having been exposed to negative word of mouth on a social media platform. Results showed that tie strength has an effect on the evaluation of purchase intention as trustworthiness has an effect on the change in brand attitude. Furthermore trustworthiness mediates the relationship between tie strength and purchase intention. Also the change in brand attitude and purchase intention is influence by the type of product, as experience goods are more likely to be influenced by online negative word of mouth than search goods. The findings of this study offer new insights into the understanding of how negative word of mouth is evaluated by users of an online social media platform, add to the literature on online negative word of mouth, and shape future directions for research and practice on the evaluation of online negative word of mouth.

Keywords: Social media, word of mouth, online word of mouth, negative word of mouth, tie strength, trustworthiness, brand familiarity, search and experience goods.

TABLE OF CONTENTS

Acknowledgements	2
Abstract.....	3
Chapter 1: Introduction.....	6
1.1 Problem definition.....	6
1.2 Research objective	7
1.3 Academic Relevance.....	7
1.4 Thesis Structure.....	9
Chapter 2: Relevant Literature	10
2.1 Social media.....	10
2.2 Word of Mouth (WOM).....	11
2.2.1 <i>Traditional Word of Mouth (WOM)</i>	12
2.2.2 <i>Electronic Word of Mouth (eWOM)</i>	12
2.2.3 <i>Participation in electronic Word of Mouth ((e)WOM)</i>	13
2.3 Characteristics influencing the effect of (e)WOM.....	14
2.3.1 <i>Tie strength</i>	14
2.3.4 <i>Trust</i>	15
2.3.5 <i>Brand familiarity</i>	18
2.3.6 <i>Experience versus Search Goods</i>	18
Chapter 3: Conceptual framework and hypotheses.....	20
3.1 Conceptual framework.....	20
3.2 Hypotheses.....	20
3.2.1 <i>The influence of (electronic) Word of Mouth ((e)WOM)</i>	21
3.2.2 <i>The influence of tie strength</i>	21
3.2.3 <i>The influence of trust</i>	22
3.2.4 <i>The influence of Brand familiarity</i>	24
3.2.5 <i>The influence of product type</i>	25
Chapter 4: Research methodology.....	27
4.1 Concept	27
4.2 Experimental design	28
4.3 Operationalization.....	28
4.4 Data collection method	30
4.5 Variables and measures	31
Chapter 5: Data analysis and research results	35
5.1 Collected data.....	35
5.1.1 <i>Respondents</i>	35
5.1.2 <i>Preparation of the data</i>	35
5.2 Analysis of the data	37
5.2.1 <i>Brand attitude</i>	38
5.2.2 <i>Purchase intention</i>	40
5.3 Summary of hypotheses results	43

Chapter 6: General discussion	44
6.1 Conclusion	44
6.2 Discussion	45
6.3 Limitations and future research	47
6.4 Implications	48
References.....	50
Appendix 1	61
Appendix 2	72

CHAPTER 1: INTRODUCTION

A few years ago, the damage of Negative Word of Mouth (NWOM) was limited to a fairly small audience, probably to direct friends and family. The customer's power to speak up has been increased; many consumers use the Internet to air a brand's dirty laundry (Marketing Week, 2013). Nowadays an online message posted on a social medium may reach millions of people, because of the social interaction of friends, family and unknown social media users within a short period of time and can damage a company's brand in terms of reputation and sales (Tripp and Gregoire, 2011). Particularly a message does not have to go viral to create any damage. Even if only friends and relatives will read the posted message this might already influence their behavior.

1.1 PROBLEM DEFINITION

Social media are powerful when it comes to WOM. The poster of NWOM can easily reach a lot of people within a short period of time (Tripp and Gregoire, 2011). The consumers creating the NWOM do this with several goals in mind: attracting the attention of the company in the hopefulness that they will still solve the problem (25%), helping other consumers (21%), ventilate negative emotions (19%) and revenge (12%) (TNS Nipo, 2012). Dissatisfied customers can cause damage to a brand by posting their messages on Social Media. However, it is interesting to know what makes these messages so influential. Especially the damaging effects on purchase intention and brand attitude are interesting variables to research in this context. The main question addressed in this study is: "Which factors drive the effect of NWOM in social media on brand attitude and purchase intention". Sub-research questions to be answered throughout the research include: (a) What is the effect of trustworthiness on the relationship between tie strength, brand attitude and purchase intention? (b) Does brand familiarity have an effect on the evaluation of purchase intention and brand attitude after being exposed to NWOM? (c) Does product type, experience or search good, have an effect on the evaluation of purchase intention and brand attitude after being exposed to NWOM?

1.2 RESEARCH OBJECTIVE

The objective of this research is to come-up with new insights on what makes NWOM messages on Social Media influential to consumers exposed to the NWOM. This study is one of the first attempts to capture these effects in a Social Media setting. The research focuses on the manipulation of the tie strength of the NWOM message poster, which results in a certain level of trust. Brand familiarity or the type of product may moderate the effect of the NWOM-message to the variables purchase intention. Consumers are creating more negative online buzz and it is a trend to complain more online to create more awareness for their problems. This behavior will become a bigger problem for companies in the near future. By researching this topic companies will know what the effects are and by which variables these effects are influenced.

1.3 ACADEMIC RELEVANCE

Several previous studies that focus on Electronic WOM (eWOM) discuss the effect of eWOM to pre-release movie evaluation, the impact of online hotel reviews on consumer consideration, the effect of WOM on Sales of books, the impact of NWOM on cash flows and stock prices and how eWOM platforms influence consumer product judgment.

The studies of Chakravarty, Liu and Mazumdar (2010) indicate that the persuasive effect of EWOM is stronger on infrequent than on frequent moviegoers, especially when it is negative. The effect of NWOM on infrequent moviegoers is enduring even in the presence of positive reviews by movie critics. The relative influence of WOM and critical reviews are asymmetric with infrequent moviegoers more influenced by WOM, while frequent moviegoers more influenced by the reviews (Chakravarty *et al.*, 2010). Basuroy, Chatterjee and Ravid (2003) found that critics affect box office revenue. Basuroy, Chatterjee and Ravid (2003) concluded that both cases, positive and negative reviews, are correlated with the weekly box office revenue over a

period over eight weeks. However, the critics have less impact for movies with popular moviestars and bigger budgets.

An experimental study by Vermeulen and Seegers (2009) shows that on average, exposure to online reviews enhances hotel consideration in consumers. This is because positive as well as negative reviews increase the consumer awareness of hotels, whereas positive reviews, in addition, improve attitudes toward hotels. These effects are stronger for lesser-known hotels.

The study of Chevalier and Mayzlin (2006) suggests that customer WOM affects consumer-purchasing behavior at two Internet retail sites. The improvement in a book's review leads to an increase in relative sales at the certain website. For most samples in their study, the impact of one-star reviews is greater than the impact of five-star reviews.

Following Luo (2009), whom performed a study about the impact of NWOM on cash flows and stock prices, NWOM has significant direct short- and long-term effects on firm cash flows and stock prices.

Lee and Youn (2009) explored whether and how different online platforms to which EWOM communication is posted influence consumers' judgments of reviewed products. Their findings indicated that, *ceteris paribus*: "participants exposed to the review posted on a personal blog were more likely to attribute the review circumstances and less likely to recommend the product to friends than those who were exposed to the review either on the independent review website or the brand's website. The effect of the EWOM platforms on consumer willingness to recommend the product to friends was found only when the review was positive. When the review was negative, there were detrimental effects on consumer willingness to recommend the product to friends regardless of the EWOM platform" (Lee and Youn, 2009).

The present study investigates which variables make NWOM-messages posted on Facebook influential to the

readers of these messages. Although it is known that NWOM has an effect on consumer behavior, it has never been tested in an experimental setting on a social medium like Facebook. Also the variables used in the study are different from other studies and might give new insights. Therefore, this study will yield different results compared to other eWOM studies. Besides, given that results from this research might give understanding about the behavior of third parties after being exposed to NWOM on Social Media.

1.4 THESIS STRUCTURE

This master thesis has been written in order to come to new insights on negative word of mouth ventilated on Social Media. In order to answer the research question and the sub-questions postulated this study contains several chapters. This study is structured as followed:

In the first chapter the problem definition, objectives and academic relevance have been outlined. In the second chapter the theoretical framework for this master thesis will be presented. The current literature about (online) word of mouth and tie strength will be reviewed. Based on the literature different hypotheses are formulated and the conceptual framework is presented in chapter three. In the fourth chapter the methodological approach is presented and is outlined how to find an answer on the hypotheses postulated in the third chapter. In the fifth chapter the gathered data are analyzed, this data analysis supports answering the hypotheses. To draw a final conclusion the results will be further discussed in the sixth chapter. In the sixth chapter also the limitations of this research and the directions for future research are outlined.

CHAPTER 2: RELEVANT LITERATURE

This chapter contains the theoretical framework of this thesis. In this theoretical framework the central concepts of this research paper will be discussed and relevant theory will be enumerated. As this research focuses on negative WOM online in a social media context, first the concept of social media will be outlined. Second the theoretical theme of this paper, (online) WOM, will be outlined. Furthermore the concepts tie strength, trust, product class familiarity and search / experience goods will be discussed. These concepts might have an influence on the effects of the eWOM process on the variables purchase intention and brand attitude and are therefore highlighted in this study. Based on this literature review different hypotheses will be postulated in the next chapter in order to answer the research questions.

2.1 SOCIAL MEDIA

The context of this research will take place in a social media environment. To better understand the concept of social media and in particular the social medium Facebook, this paragraph will outline this concept.

In the Netherlands there are several social media available: Facebook, YouTube, Twitter, Google+, LinkedIn, Pinterest, Instagram and Hyves. According to a yearly large-scale research consumers take social media for granted. More than a half of the respondents (54%) expected that social media will become more important in their lives as it comes to the way they are gathering information (Boekee, 2013).

It is hard to find a good definition of social media as social media is still in development; existing social media get new functions and also new social media pop-up. Kaplan and Haenlein (2010) developed a framework to categorize different social media initiatives, based on self-presentation / self-disclosure and social presence / media richness.

This research has a focus on the social medium Facebook. In the Netherlands Facebook has 7.9 million users of which 5 million are using Facebook daily (Oosterveer, 2013), worldwide Facebook reached more than 1 billion active users in

October 2012 (Schroeder, 2012). Facebook is the most used social medium in The Netherlands (Oosterveer, 2013). Within the framework of Kaplan and Haenlein (2010) Facebook can be categorized as a Social Networking Site (SNS). They describe social networking sites as: “an application that enable users to connect by creating personal information profiles, inviting friends and colleagues to have access to those profiles, and sending e-mails and instant messages between each other” (Kaplan and Haenlein, 2010).

Facebook is chosen as social medium for this research paper because it is the most used social medium in The Netherlands. The content on Facebook is generated by it's own users, this makes Facebook a very interesting social medium to research eWOM. On Facebook, users are able to control which of their messages can be seen by others but also which messages they can see themselves. This causes that the users can easily estimate the *tie strength* of the sender of the message. Tie strength is an important variable in this research, therefore this concept will be discussed in the literature review.

This paragraph provided a deeper insight into what social media are, why social media is important nowadays and why people use social media. Also a definition of social media has been given and it has been discussed what kind of social medium Facebook is. In the next paragraph the theoretical theme of this thesis will be outlined: (online) word of mouth.

2.2 WORD OF MOUTH (WOM)

Word of Mouth (WOM) is an important mechanism for spreading information. The mechanism is known for consumers communicating with each other exchanging brand, product or company experiences in particular. WOM has been acknowledged for many years as a major influence on what people know, feel and do (Buttle, 1998). People believe other people faster than any advertising on any medium (Katz and Lazarfeld, 1955; Engel *et al.*, 1969). The last years the ways consumers could engage in WOM developed. These changes are the result of the rise and the development of the Internet. Next to traditional WOM consumers are also able to engage online in WOM, this is called electronic word of mouth (eWOM). In this

paragraph an introduction into WOM will be given and the difference between these forms of WOM will be outlined.

2.2.1 TRADITIONAL WORD OF MOUTH (WOM)

Traditional WOM can be characterized as oral, person-to-person communication between a receiver and a sender, a communicator, whom the receiver perceives as non-commercial, regarding a brand, product or service (Arndt, 1967). Schiffman & Kanuk (1995) describe WOM as a channel of marketing communication, which is dominated by the consumer and where the sender is independent from the market. Because of this altruistic intention of the sender, the message will be perceived as more reliable, credible and trustworthy compared to “regular” marketing communication by a company (Schiffman & Kanuk, 1995 in Brown *et al.*, 2007, 4; Arndt, 1967). Also Williams and Buttle (2011) and Murray (1991) found that trust and credibility are part of the success of WOM. Therefore the effect of trust on the variables brand attitude and purchase intention will be researched in an online social media context. This concept will be discussed later on in this literature review.

Traditional WOM as outlined in this paragraph has been extensively researched during the past decades. Electronic WOM can be seen as an evolution of the traditional form of WOM. The roots of eWOM, which will be discussed in the next paragraph, can be found in the literature of the traditional WOM.

2.2.2 ELECTRONIC WORD OF MOUTH (EWOM)

With the rise of the Internet an electronic version of WOM has been born, eWOM. The modern web changed the way information is produced, distributed and consumed forever. This digital variant of WOM differs from the traditional WOM in several ways. The main differences between traditional WOM and eWOM are the channel used for communication, the Internet, and the ability to reach more people. Where traditional WOM had one sender and a small group of receivers, eWOM can reach a very big audience at once (Zeithaml *et al.*, 2006). With eWOM consumers are able to directly reach a broad public, which makes the reach of the message bigger. Just like WOM in a traditional way, the trustworthiness of eWOM is high. Nielsen

(2012) found that 70% of the online consumers trust online consumer reviews (Nielsen, 2012). Both WOM and EWOM seem to have an influence on the purchase intention of consumers (Sweeney *et al.*, 2008). A recent research from Cone Communication (2011) showed that 80% of the Internet users gave up a purchase based on a negative review on the Internet. Furthermore the motivations to participate in WOM are quite similar for WOM as eWOM (Dellarocas and Narayan, 2006).

Two forms of eWOM can be distinguished; anonymous eWOM and personal eWOM. Anonymous eWOM was the first form of eWOM. Anonymous eWOM is WOM where the receiver does not know who the sender of the message is. Recently the Web entered a new, more social and participatory phase; Web 2.0. The so-called Web 2.0 or social web focuses on consumers interacting with each other. Users of the social web are people creating their own content (UCG) and sharing this content with friends or other Internet users. This is known as personal eWOM. With Personal eWOM, the receiver of the message is able to identify the sender. As this thesis researches the effects in a social media context, there is a focus on personal eWOM.

In the next paragraph different motivations for participation in eWOM will be outlined, before discussing the different characteristics influencing the eWOM process.

2.2.3 PARTICIPATION IN ELECTRONIC WORD OF MOUTH ((E)WOM)

Hennigh-Thurau, Dwiner, Walsch and Gremler (2004) published an extensive framework for motivations to take part in eWOM. This framework finds its origination in the study of Sundaram *et al.* (1998), in the end they come up with 11 motives to take part in eWOM. The writers of the article categorize the different motivations in 5 categories: focus-related utility, consumption utility, approval utility, moderator-related utility and homeostase utility.

These utilities include motives for participating in NWOM (Hennigh-Thurau *et al.*, 2004): concern for other consumers, exertion of (collective) power over companies' self-enhancement, economic reward. The *homeostase utility* is based on the notion

that people have a basic desire for balance in their lives. The balance theory suggests individuals will strive to restore equilibrium after their originally balanced state has become unbalanced. In the context of this research a dissatisfying consumption experience, the source of unbalance comes from either a strong positive or strong negative consumption experience. In this case writing a comment on an opinion platform can restore balance. Two motives from WOM communication literature are associated with the homeostase utility: *expressing positive emotions* and *venting negative feelings* (Hennigh-Thurau *et al.* 2004). This thesis is researching the effect of different variables on the evaluation of NWOM messages when consumers complain online via social media, this form of venting negative feelings will be outlined in the context of complaining.

2.3 CHARACTERISTICS INFLUENCING THE EFFECT OF (E)WOM

In the literature there are different characteristics mentioned which seem to have an influence the effect of (e)WOM. Some of these characteristics are already mentioned during the discussion of the central concept of this thesis, WOM. In this paragraph these different characteristics will be discussed in further detail. The following characteristics will be discussed in order to measure the effect of these characteristics in the (e)WOM process: *tie strength, trust, product class familiarity and experience / search goods*.

2.3.1 TIE STRENGTH

De Bruyn and Lillien (2008) found that characteristics of the social tie influenced recipients' behaviors. People have different social ties, which can be defined as a relationship you have with another.

The type of the relationship people have is defined by the strength of the tie between those people. *Tie strength* is one of the central topics within this thesis. Therefore it is important to further define what tie strength is and to further examine tie strength as a theoretical concept in the context of this research.

Granovetter introduced the term *tie strength* (1973). He defines the strength of the ties as follows: "the strength of a tie is a (probably linear) combination of the

amount of time, the emotional intensity, the intimacy (mutual confiding) and the reciprocal services which characterize the tie.” (Granovetter, 1973)

Granovetter (1973) characterized two types of ties *strong ties* and *weak ties*. *Strong ties* are ties with the people you really trust, people whose social circles tightly overlap with your own. Often, *strong ties* are also most resembling with themselves. *Weak ties*, on the other hand, are the merely acquaintances. *Weak ties* often provide access to new information, information not circulating in the close network of strong ties (Gilbert and Karahalios, 2009). *Weak ties* also act as an alley for useful information on computer-mediated communication (Constant *et al.*, 1996 in: Gilbert and Karahalios, 2009 P.212). *Strong ties* diversify, communicating through many channels (Haythornthwait , 2002 in: Gilbert and Karahalios, 2009 P.212), whereas *weak ties* often rely on a few commonly available media (Haythornthwait and Wellman, 1998 in: Gilbert and Karahalios, 2009 P.212).

According to a study of Weimann (1983), most of the influence is carried through strong ties. Where weak ties are providing the bridges to cross the boundaries of social groups, strong ties are influencing the decision making process in each group. In a more recent study, Levin and Cross (2004) found a link between strong ties and receipt of useful knowledge, this link was mediated by competence- and benevolence-based trusted. However, when they controlled for these two trustworthiness dimensions, they found the structural benefit of weak ties. Because weak ties are not found in your own direct social circle it is more likely to gather new knowledge, you were not able to get from your strong ties, from weaker ties. It can be concluded that when a weak tie is considered to be reliable, in combination with the character of a weak tie, this weak tie can be considered to be more valuable than a strong tie.

2.3.4 TRUST

Trust is conceptualized as existing when one party has confidence in an exchange of reliability and integrity of the partner (Morgan and Hunt, 1994). People trust others differently because not all people are equal. Therefore there are also different tie strengths as outlined in the previous paragraph. Tie strength has a positive influence

on trust. The stronger the tie, the more trust someone has in the relation (Levin and Cross, 2004). However, it can be said that a strong tie does not always have to be valued with more trust, as Levin and Cross (2004) found a trusted weak tie can share richer knowledge than a strong tie. An important reason for the difference in knowledge between the strong and the weak tie can be that the weak tie is more competent and knowledgeable about a certain subject (Levin and Cross, 2004).

This research focuses on the effect of an eWOM message on different variables of the receiver. Because WOM is a form of communication, there should be an emphasis on trust in the communication. The most definitions emphasize the reliability of information and the conviction by the receiver that the source of a message has given truthful and complete information (Renn and Levine, 1991). Renn and Levine (1991, p. 179) suggested the following definition for defining trust in the context of communication: "Trust in communication refers to the generalized expectancy that a message received is true and reliable and that the communicator demonstrates competence and honesty by conveying accurate, objective and complete information."

TRUST IN AN ONLINE CONTEXT

Trust in the context of computer mediated communication (CMC) is an important consideration. First, mediated interactions carry an increased risk. Users might be placed in different contexts or cultures, misunderstandings become more likely. When risks increase and become more difficult to evaluate, users of collaborative technologies face more complex decisions. CMC seems to require a more *a priori* trust than face-to-face communications. Second, many users of advanced technology state that they find it hard to develop trust with someone they cannot see face-to-face. This problem is commonly attributed to the fact that these technologies do not convey full richness of face-to-face encounters. They omit cues that are thought to be crucial for trust building. So when new communication technologies are replacing traditional face-to-face encounters, there is a danger of a proliferation of low-trust interaction. In the long run, low-trust interactions can be more costly than trust-based interactions (Riegelsberger, Sasse and McCarthy, 2003).

Contrary to the finding of Riegelsberger, Sasse and McCarthy (2003), the personal character of social media like Facebook leads to a better estimation of trustworthiness, as through Facebook the sender of a message can be estimated in the same way as offline (Arndt, 1967). As stated before, the rise of social network sites like Facebook have made the Internet a lot less anonymous. People are choosing their own friends on social media, which causes a better overlap with their social capital than in the case of anonymous eWOM. In this way, active Facebook users may be better estimating whether a person in their friends list is trustworthy than in the case of an anonymous user of the Internet. Dwyer, Hiltz and Passerini (2007) performed a study in which they examined trust and privacy concern within social networking sites. They concluded that Facebook members expressed trust in Facebook as a medium and in its members and were willing to share more identifying information than users of another social media, called MySpace. Whereas MySpace users reported significantly more experience in using the site to meet new people. There results suggest that in online interaction, trust is not as necessary in the building of new relationships as it is in face-to-face encounters. The research of Dwyer, Hiltz and Passerini (2007) focuses on the trust that users have in a social networking site, research that researchers have in a particular online message on a social medium and the influence of this message has not been researched thoroughly thus far.

THE INFLUENCE OF TRUST

The trustworthiness of a source in WOM is considered as an important factor for the success of WOM. This subject has been researched a lot in the last decades. Also source credibility has been researched in the context of purchase decisions of consumers (Sussman and Siegal, 2003; Sweeney *et al.*, 2008). The results of the qualitative as well quantitative study performed by Sussman and Siegal (2003) are that source trustworthiness has a positive influence on the adoption of information, thus indirect on the purchase decision.

The qualitative study performed by Sweeney *et al.* (2008) also found that source trustworthiness has a positive influence on the purchase decision of consumers.

When asking existing and potential customers of a German financial institution about source credibility they found that if the source can be seen as credible this has a positive effect.

In an offline context the influence of source credibility on purchase intention has been proved. In an online context there are also several studies that looked into the influence of source credibility on the purchase behavior of consumers (Brown *et al.*, 2007; Cheung, Lee *et al.*, 2008; Bruyn and Lilien, 2008; Cheung, Luo *et al.*, 2009).

Source trustworthiness has a positive influence on the value of the message for the receiver (Brown *et al.*, 2007). The study of Cheung *et al.* (2008) into the information adoption of eWOM on an online review website found that source trustworthy and source expertise have no influence on the adoption of information. However they concluded that the sources of the website are anonymous and it is hard to trace the identity of the publisher of the review.

2.3.5 BRAND FAMILIARITY

When consumers are more knowledgeable about a certain product class this might affect information search behavior and as a consequence the consumers' purchase decision-making process. Different studies support this view of the effects of having prior product class knowledge, also known as product familiarity or product expertise (Joseph and Hutchinson, 1987; Brucks, 1985).

Joseph and Hutchinson (1987) propose that consumer knowledge has two major components: familiarity and expertise. They define familiarity as "the number of product related experiences that have been accumulated by the consumer". Expertise has been defined as "the ability to perform product related tasks successfully". In their study they found that consumer expertise is distinguished from product related experience.

2.3.6 EXPERIENCE VERSUS SEARCH GOODS

Electronic WOM might not always be helpful in the decision making process of the consumers. Mudambi and Schuff (2010) performed a study into what makes a

helpful online review. In this study they make a difference between experience and search goods. This taxonomy of two types of goods is outlined by Philip Nelson (1970; 1974). An experience good can be defined as a good where consumers are unable to get full information for dominant product attributes prior to their purchase. It is more difficult / expensive to acquire information on dominant attributes for experience goods than for search goods. This is because no full information on dominant attributes can be acquired without experiencing them directly or by searching for information for dominant attributes in the case of experience goods. However, in the case of search goods the intrinsic attributes are easy to access, most of the times concrete and more objective. This causes that the quality between the different search goods are also easier to compare. For experience goods this comparison is harder, so the consumers will rely more on different extrinsic cues in order to judge the quality of the different experience goods, this is also because of the higher perceived risk of experience goods (Zeithaml, 1988).

A study performed by Bei, Chen and Widdows (2004) showed that consumers of experience products are tending to use more information from online sources than consumers of search products. In this study Bei, Chen and Widdows (2004) also found that online information sources from other consumers and neutral sources were perceived to be more important and were more used by the consumers of experience products. Consumers of search products perceived retailer and manufacturer websites to be more useful. This shows that consumers looking for experience products rely more on the recommendations of others than the users of search products prior to their purchase decision. The search for a nice restaurant or hotel, for example, is more based on experiences of others than the search to a new television. This is the reason why consumers rely on other sources of information prior to their purchase decisions for different types of goods.

CHAPTER 3: CONCEPTUAL FRAMEWORK AND HYPOTHESES

In the previous chapter the relevant literature for this research has been outlined. This chapter will focus on the effects found in earlier literature and based on the findings the different hypotheses are postulated. In paragraph 3.1 the conceptual framework of this research is presented, the hypotheses based on the earlier discussed literature are postulated in paragraph 3.2.

3.1 CONCEPTUAL FRAMEWORK

Based on the discussed literature in chapter 2, the conceptual model presented in figure 1 has been designed. As can be derived from this model it has been expected that trustworthiness holds a mediating factor in the relationship between the independent and dependent variables. The independent variable is tie strength as the dependent variables are brand attitude and purchase intention. Furthermore it is expected that brand familiarity and the type of product will moderate the relationship between tie strength and the dependent variables. Furthermore the direct effects of the different variables on the dependent variables will be tested.

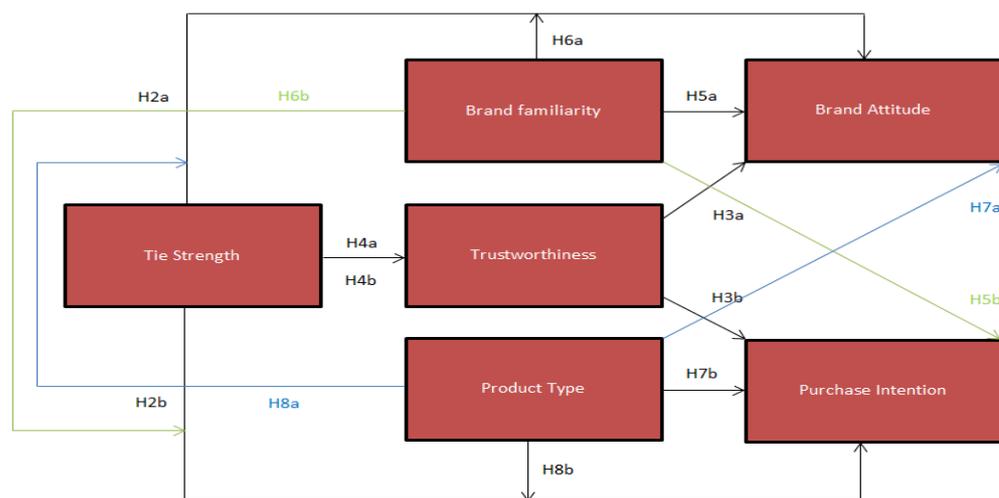


Figure 1: Conceptual framework; NWOM in an online social media setting

3.2 HYPOTHESES

Based upon the literature discussed in chapter 2, some of the effects found will be further outlined in this paragraph. Based on these effects and literature, the hypotheses as outlined in the conceptual framework will be postulated.

3.2.1 THE INFLUENCE OF (ELECTRONIC) WORD OF MOUTH ((E)WOM)

The last decades a lot of research has been focused to WOM and in particular traditional WOM. Therefore the effect of WOM has been proven different times in different areas. In this paragraph the outcomes of different studies to eWOM relevant for this thesis will be outlined.

Research to eWOM found that when people give feedback on an online marketplace, people bid higher amounts of money on products auctioned at the website (Ba and Pavlou, 2002; Dellarocas, 2003). In a study to consumers' usage of online recommendation sources and their influence on online product choice some similar results were found. The results of the study indicated that subjects who consulted product recommendations (eWOM) selected recommended products twice as often as subjects who did not consult recommendations. Furthermore the type of recommendation influenced the results; a personalized recommendation was more influential than more traditional recommendations sources such as human experts. In addition, recommendations for an experience product were significantly more influential than recommendations for a search product (Senecal and Nantel, 2004). This study proves that personalized messages are more influential on consumers, but this study did not look to tie strength. The following hypothesis can be postulated based upon the theory and effects described:

H1: NWOM postulated on an online social media platform has a negative effect on (a) the brand attitude and (b) the purchase intention of people confronted with the NWOM on that social media platform.

3.2.2 THE INFLUENCE OF TIE STRENGTH

De Bruyn and Lillien (2008) looked at the strength of ties in their study to eWOM. Tie strength significantly influenced the decision of the recipient to open an e-mail message he or she received also the more affinity the receiver has with the sender of the message the more interested they are in the message (De Bruyn and Lillien, 2008). This study shows that tie strength might have an influence on the eWOM process.

The different effects of WOM and eWOM are researched and proved in different situations and conditions focused to different topics. The research of Senecal and Nantel (2004) focused specifically on personal eWOM and proved the potential of this topic within WOM research. However, they did not look into the influence of different strengths of ties. Research proves that it can be interesting to distinguish between different ties and also distinguish between other groups, for example celebrities.

In an offline context tie strength has a strong influence on the purchase decision process of consumers, this is the outcome of several studies (Brown and Reingen, 1987; Bansal and Voyer, 2000; Sweeny *et al.*, 2008). However, in an online context the influence of tie strength on the purchase intention on consumers has not been found yet. The research performed in this field by Brown *et al.* (2007) and Steffes and Burgee (2009) did not find any influence. The research by Steffes and Burgee (2009) found that in the search for a future professor by students, anonymous sources are consulted more often and have more influence on their decisions than the recommendation of friends and study advisors. However, the choice of a professor might be another process than the choice for physical goods or other services. The following hypothesis is postulated:

H2: The tie strength between the sender and the reader of the NWOM has a negative effect on (a) the brand attitude and (b) the purchase intention of people confronted with the NWOM on that social media platform.

3.2.3 THE INFLUENCE OF TRUST

Trust is also an important factor if it comes to (e)WOM. This has been confirmed by the study of Levin and Cross (2004). It is therefore relevant to look further into trust and in particular the reliability of different ties. The trustworthiness of a source in WOM is considered as an important factor for the success of WOM. This subject has been researched a lot in the last decades. Also source credibility has been researched in the context of purchase decisions of consumers (Sussman and Siegal, 2003; Sweeney *et al.*, 2008). The results of the qualitative as well quantitative study performed by Sussman and Siegal (2003) are that source trustworthiness has a

positive influence on the adoption of information, thus indirect on the purchase decision.

The qualitative study performed by Sweeney *et al.* (2008) found that source credibility has a positive influence on the purchase decision of consumers. When asking existing and potential customers of a German financial institution about source trustworthiness, they found that if the source can be seen as trustworthy, this has a positive effect.

In an offline context, the influence of source trustworthiness on purchase intention has been proved. In an online context there are also several studies that looked into the influence of source trustworthiness on the purchase behavior of consumers (Brown *et al.*, 2007; Cheung, Lee *et al.*, 2008; Bruyn and Lilien, 2008; Cheung, Luo *et al.*, 2009).

Source trustworthiness has a positive influence on the value of the message for the receiver (Brown *et al.*, 2007). The study of Cheung *et al.* (2008) to the information adoption of eWOM on an online review website found that source trustworthiness and source expertise have no influence on the adoption of information. However, they conclude that the sources of this website are anonymous and it is hard to trace the identity of the publisher of the review.

In a more recent research performed by Cheung, Luo, Sia and Chen (2009) a strong influence of source trustworthiness on purchase intention has been found. This study measures the eWOM review adoption. However they ask (in)direct to the influence of eWOM on purchase intention. Therefore can be concluded that the results of this study are not restricted to information adoption, but also say something about purchase intention of consumers in the case of eWOM.

H3: When the receiver of the NWOM on a social media platform perceives the sender of the NWOM as more trustworthy, it has been expected that the (a) brand attitude and (b) purchase intention of the receiver of the NWOM will be influenced more negatively than when the receiver perceives the sender as less trustworthy.

Levin and Cross (2004) found that the link between strong ties and receipt of useful knowledge was mediated by competence- and benevolence trust. So according to their study, trustworthiness may hold a mediating relationship in the receipt of useful information. Useful information can also be NWOM sent on a social media platform. This information can be used to evaluate brand attitude and purchase intention.

H4: Trustworthiness mediates the relationship between tie strength and (a) the brand attitude and (b) the purchase intention of people confronted with the NWOM on that social media platform.

3.2.4 THE INFLUENCE OF BRAND FAMILIARITY

As outlined in the previous chapter, previous experience with a brand or product has an effect on the further evaluation of the brand or product. Studies to the effect of product familiarity found that greater familiarity increased learning during a new purchase decision (Johnson and Russo, 1981). Moorthy *et al.* (1997) presented a comprehensive theoretical framework for understanding consumers' information search behavior. This model emphasized the effect of prior brand perceptions on the search process. It can be concluded that prior product class knowledge encourages information search because it enables to process new product information easily. This conclusion is also supported by the research of Brucks (1985). The results of this study indicate that prior knowledge facilitates the acquisition of new information and increases search efficiency.

A more recent study by Park and Kim (2009) investigated the effects of consumer knowledge on message processing of eWOM via online consumer reviews. In their research Park and Kim (2009) found that the effect of cognitive fit (type of review) on purchase intention is stronger for experts than for novices while the effect of the number of reviews on purchase intention is stronger for novices than experts. So this study indicates that online reviews have a stronger effect on the purchase intention for consumers with prior product expertise.

H5: Brand familiarity of the receiver of the NWOM will have a negative effect on (a) the brand attitude and (b) the purchase intention of people confronted with the NWOM on that social media platform.

Senecal and Nantel (2004) also distinguish “human experts” on the Internet as a separate group of senders of eWOM messages. Another study of Chakravarty, Liu and Mazumdar (2010) digs deeper into this group of “human experts”. They make a difference between the effect of “anonymous” reviews and the effect of “movie critics” reviews, which can be classified as “experts” in the eWOM process. Their study found that infrequent moviegoers are persuaded more by comments from anonymous reviewers, which can be considered as the “mass” taste, and even more so when the comments are negative. Frequent moviegoers are more influenced by critic reviews from “experts”. So different user roles seem to have an influence on the eWOM process. In this context, the different user roles can be seen as brand familiarity.

H6: Brand familiarity has a moderating effect on the relationship between tie strength and (a) the brand attitude and (b) the purchase intention of people confronted with the NWOM on that social media platform.

3.2.5 THE INFLUENCE OF PRODUCT TYPE

Different types of goods have different purchase decisions processes. Looking to search goods consumers make their decision based on product attributes. Experience goods are perceived with a higher risk prior to the purchase of the goods, because they can't make their decision based on product attributes. In the case of experience goods, consumers also often lack the knowledge to perceive the value of experience goods, therefore consumers looking for experience goods are relying more on experiences of their own or from others (Hsieh, Chiu and Chiang, 2005).

A study to the effects of eWOM shows that the effects of eWOM are greater for negative eWOM than for positive eWOM and greater for experience goods than for search goods (Park and Lee, 2009). This study by Park and Lee (2009) also found that

the impact of negative eWOM on the eWOM effect is greater for experience goods than for search goods.

H7: The change in the evaluation of (a) the brand attitude and (b) the purchase intention of people confronted with the NWOM on that social media platform. is effected by the type of product (search vs. experience good). It is expected that the change in (a) the brand attitude and (b) the purchase intention is higher for experience goods.

As Hsieh, Chiu and Chiang (2005) mentioned, consumers looking for experience goods are relying more on experiences of others. De Bruyn and Lilien (2008) indicated that the more affinity the receiver has with the sender of the message the more interested they are in the message.

H8: The type of product has a moderating effect on the relationship between tie strength and (a) the brand attitude and (b) the purchase intention of people confronted with the NWOM on that social media platform.

CHAPTER 4: RESEARCH METHODOLOGY

In order to test the formulated hypotheses scientific research will be conducted. Scientific research can be distinguished in three forms: exploratory, constructive and empirical research. When it comes to research design, two major types of research design can be distinguished: qualitative research and quantitative research. For this research an online experiment will be conducted. This online experiment will be held in the form of a survey. A survey is one of the most common used types for quantitative research. This research can be classified as empirical. The results gathered from the online experiment are a source of knowledge acquired by means of observation or experimentation.

In this chapter the concept of this online experiment, the operationalization and how each measurement in the online experiment refers to the conceptual framework will be outlined.

4.1 CONCEPT

Nowadays NWOM posted on social media sites like Facebook is influencing consumer behavior. The role of social media in our daily lives is getting more and more important. Because social media probably have a prominent role in purchase decision-making and in affecting the attitude of consumers towards the brand, it is important to look further into this phenomenon. The hypotheses postulated in the previous chapter and the conceptual model, designed in order to answer the research questions, need to be tested. In order to test these hypotheses, an online experiment will be conducted. The design of this online experiment will be outlined in the next paragraph.

The respondents of this online experiment need to be aware that they are exposed to messages, in this case negative messages, on their Facebook timeline. Therefore the research has been designed in a Facebook- setting. These NWOM might influence the behavior of consumers exposed to this form of NWOM. However, it has been expected that some other variables will influence this relationship. In order to test the concept of tie strength on the variables brand attitude and purchase

intention, the sender of the message should be manipulated. Trust might mediate the relationship between tie strength and brand attitude as well as the relationship between tie strength and purchase intention. Therefore in the online experiment, the level of this probably mediating variable will be measured.

Expected is that brand familiarity will moderate the effect of NWOM postulated in an online setting. Also, different product types (search vs. experience goods) will probably moderate the effect of NWOM. This will be tested in the online experiment.

In the survey, a negative message posted by a “friend” on his or her own timeline will be showed. As a connection on Facebook, the respondent is exposed to this NWOM. The level of negativity is tried to be kept the same during each case. The effect of the NWOM will be measured in different phases of the process. This means that the brand attitude and purchase intention will be pre-measured and post measured in order to measure the effect that the different variables might have on the relationship.

4.2 EXPERIMENTAL DESIGN

The experiment is designed in a way that every respondent gets a pre-measurement on the dependent variables purchase intention and brand attitude. In addition to this the familiarity with the brand will be pre-measured. Furthermore, after exposing the respondent to the different cases, a post-measurement will follow. All respondents will also get post-measured on their purchase intention and brand attitude. The design for this experiment is defined as a pre-post design. Which is a special, but common used type of a mixed factorial design.

4.3 OPERATIONALIZATION

The online experiment has to be realistic to the respondents. In order to accomplish this realistic scenario, some real Facebook pages have been designed. Thus, when people are participating in the experiment, it feels like that they are on their own Facebook accounts.

The target group of the online experiment has been divided into two groups. The first group contains students of the Erasmus School of Economics Marketing Masters Program. The second group will consist out of friends of the researcher. More about the target groups and the method of data collection will be discussed in paragraph 4.4. In the online experiment, research will be conducted to tie strength. Because the concept of tie strength has to be measured in this online experiment, the profiles used in the experiment have to be “real life” persons. In order to accomplish this, a real life person has been selected to be part of the online experiment. This person is not selected randomly but is selected in line with the target group of the online experiment as discussed above.

The person used in the experiment is Patrick van Dijn, his permission has been asked to use his name and Facebook profile photo. Patrick van Dijn is 26 years old and participated in the specialization Marketing in the Master program Economics and Business of the Erasmus School of Economics. Patrick van Dijn has been selected because he is part of the Facebook Group of the Marketing Program and also actively contributed to this group. So people in this group will know Patrick van Dijn whereas direct friends of the researcher will not know person Patrick.

For the experiment two different products has been chosen. One of the products will be a search good, in this case a MacBook laptop. The other product will be an experience good, in this case a hotel visit at one of the Hilton Hotels.

The experiment will start with introduction questions in order to test whether the respondent is a Facebook user, how many times the respondent uses Facebook in order to say something about platform familiarity, if they are familiar with NWOM on Facebook. Than the respondent will get two cases with a pre- and post-measurement on brand attitude and purchase intention. Also the respondents will be asked different questions to measure tie strength. At the end of the experiment the respondent will be questioned to answer questions on demographics.

4.4 DATA COLLECTION METHOD

The online experiment will be hosted on the Qualtrics platform, which is a web-based tool for hosting online surveys. People are thus able to do the experiment online by filling in an online survey. This decreases the effort that respondents have to put in, because they can easily fill in the survey from home. In order to get respondents for this research, people will get invited on Facebook privately. The reason why people will be invited in private is because this might increase the response rate. People will also be invited privately because, in this way, they can be assigned to one of the target groups. The method used for data collection will be further examined in this paragraph.

As stated in paragraph 4.3 the target group will be divided in two parts, the students active in the Marketing Masters Facebook group and the direct friends of the researcher. A survey is designed to distinguish search products and experience products. The respondents will get invited to participate in the survey by a private Facebook message. Fifty percent of this survey consists out of students who are active in the Marketing Masters Facebook group. The other fifty percent will be a direct friend from the researcher. This distinction has been made in order to have an equal sample size when it comes to the prediction of the strength of the ties. When invited, the respondents can click on the link and they will be introduced in the Qualtrics environment.

Every respondent will get a short introduction and explanation about the experiment. After the welcoming words and explanation, the experiment will start. First, the participants will be asked some introduction questions. These introduction questions are about their Facebook usage profile.

After having answered the introduction questions, the pre-measurement starts. In this phase, the brand familiarity will be measured as well the attitude and purchase intention towards the product in the experiment. Following the introduction questions, the first case with will be presented to the respondent. The first case will show a complaint from Patrick about a product good. The respondents are asked several questions to measure tie strength and trustworthiness. The last phase

contains the post measurement of the variables purchase intention and brand attitude.

After the respondents filled in the answers from the first case, the second case will show a complaint from Patrick about an experience good. The process for the second case is similar to the questions from the first case.

The difference between the two cases is that the first case shows a complaint about a search good as the second case shows a complaint about an experience good.

4.5 VARIABLES AND MEASURES

INDEPENDENT VARIABLE TIE STRENGTH

The study measuring tie strength in virtual social networks of Petróczi, Nepusz and Bazsó, (2007) gives more insights into tie strength in an online context. Their study found that dimensions earlier successful in an offline context also are effective indicators in an online context. They conclude that indicators in virtual groups are similar to those in offline networks (Petróczi, Nepusz and Bazsó, 2007). So the dimensions introduced by Granovetter (1983) are for the most part also applicable in an online setting. The study of Gilbert and Karahalios (2009) about predicting tie strength with social media looked more closely to the different dimensions. Their study, which focused to the social networking site Facebook, found that the strength of a tie could be measured by asking questions. The question: *“How strong is your relationship with this person?”* seems to be the most accurate measure in measuring tie strength (Gilbert and Karahalios, 2009). It seems to be that people are able to measure whether a tie is strong or weak easily. In their model the question if you would ask this person for a loan of \$100 or more seems also to be a very accurate measure of tie strength. They use a continuous scale instead of a discrete scale for three reasons: First, tie strength may in fact be continuous. Second, a continuum lends itself to standard modelling techniques. Finally, applications can round a continuous model’s predictions to discrete levels as appropriate (Gilbert and Karahalios, 2009).

MEDIATING VARIABLES

Trust may be a mediating variable in the relationship between the independent and dependent variables. In order to measure this variable, the respondents will be asked directly to evaluate the message sender on five different scales. One of the reasons why the receivers of the message trust traditional WOM, is because they can easily estimate the trustworthiness of the sender through the face-to-face interaction (Arndt, 1967). In an online context this has not been researched so far. However, it can be said that with the personalization of the Internet nowadays trust can be handled in the same way as in an offline context (Hiltz and Passerini, 2007). Ohanian (1990) identified different measurement scales to measure trustworthiness.

MODERATING VARIABLES

Brand familiarity as well as **product type** may have, next to a direct effect, a moderating effect on the relationship. The product type is manipulated within subjects. Every participant will be exposed to two cases. The first case will be about a search good (MacBook Pro) and the second case will be about an experience good (stay at one of the Hilton Hotels). The brand familiarity is measured by asking if the respondents have enough information about the brand to make an informed judgment about whether or not to make a selection for this brand and what their previous experiences are with the particular brand. The scales used by Laroche, Kim and Zhou (1996) are used for measuring the brand familiarity.

DEPENDENT VARIABLES

The independent variables are **purchase intention** and **brand attitude**. These variables will be post- and premeasured in order to find any changes after being exposed to the case. The scales (seven point) used for the measurement of these independent variables are the scales defined by Spears and Singh (2004). They developed a standard scale on the basis of scales reported in prior studies. In the end they came up with five measures for purchase intention and five measures for attitude towards the brand.

OPERATIONALISATION

In the data analysis, different variables are used in order to answer the hypotheses. Some of the variables have been combined in order to easily test the hypotheses with the variables. How the different variables are composed is outlined in this section. An overview of the research operationalization can be found in table 1. An example of the survey as answered by one of the respondents can be found in appendix 1 at page 61.

Brand attitude / Purchase intention

The attitude towards the brand is pre- and post-measured on five different seven-point semantic scales. The five different measurements are totaled up and divided by five to get the average pre-and post-brand attitude. In the data analyzed these different scales are summarized into one variable, the change in brand attitude. This variable has been established by subtracting the post measurement from the pre measurement. This approach has also been used to create the purchase intention variable in order to measure the change in purchase intention. Both the change in brand attitude as the change in purchase intention can have a value from -7 to 7. The data show in case of brand attitude a maximum change of -6.00 / +2.00 (mean: -1.6783) and for purchase intention -4.00 / 2.20 (mean 0.7868).

Tie strength

Tie strength has been measured on two different continuous (semantic) scales. These measurements have been totaled up and divided by two to get the average tie strength across these two measurements. Minimum tie strength is 0.00 as the maximum is 100.00 (mean: 18.5349).

Trustworthiness

Trustworthiness has been measured on five different seven-point semantic scales. These measurements have been totaled up and divided by five to get the average trustworthiness across these five measurements. Minimum trustworthiness is 1.00 as the max is 7.00 (mean: 4.7752).

Brand familiarity

Brand familiarity has been measured on two different nine-point semantic scales. These measurements have been totaled up and divided by two to get the average brand familiarity across these two measurements. Minimum brand familiarity is 1.00 as the max is 9.00 (mean: 5.0231).

Variable	Question	Method	Scale	Academic references
1 Facebook usage	Do you have a Facebook account?	Validated regular questions	Yes/no	
	How many times are you using Facebook on average?			
	How many FaceBook friends do you have?		1-1000	
	Did you ever see a negative message about a brand or product posted on Facebook by one of your connections?		Yes/no	
2 Tie strength	Please indicate how strong your relationship is with the person in the above Facebook post?	Continuou s (semantic) scale		Gilbert, E & Karahalios, K. (2009). Predicting tie strength with social media. <i>Proceedings of the SIGCHI Conference on Human Factors in Computing Systems</i> , 211-220
	Barely know this person – we are very close		0-100	
	How would you feel asking [person] to loan you 100 EUR or more?			
	Would never ask – Very comfortable		0-100	
3 Trustworth iness	Please indicate how you evaluate [person] on the five different scales	7-point semantic scale		Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. <i>Journal of Advertising</i> , 19(3), 39-52.
	Dependable – undependable		1-7	
	Honest – dishonest		1-7	
	Reliable – unreliable		1-7	
	Sincere – insincere		1-7	
Trustworthy - Untrustworthy	1-7			
4 Brand familiarity	Do you know the brand [brand]?	9-point semantic scale	Yes/no	Laroche, M., Kim, C., & Zhou, L. (1996). Brand familiarity and confience as determinants of purchase intention: An emperical test in a multiple brand context. <i>Journal of Business Research</i> , 37(2), 115-120.
	To which extent do you feel you have enough information to make an informed judgement about whether or not to make a selection for this brand?		1-9	
	What are your previous experience with this particular brand?		1-9	
5 Brand attitude	What is your attitude towards [brand]?	7-point semantic scale		Spears, N., & Singh, S. N. (2004). Measuring attitude toward the brand and purchase intentions. <i>Journal of Current Issues & Research in Advertising</i> , 26(2), 53-66
	Unappealing – appealing		1-7	
	Bad – good		1-7	
	Unpleasant – Pleasant		1-7	
	Unfavorable – Favorable		1-7	
Unlikeable – Likeable	1-7			
6 Purchase intention	When you are about to buy [xxx] how likely would you buy [brand]?	7-point semantic scale		Spears, N., & Singh, S. N. (2004). Measuring attitude toward the brand and purchase intentions. <i>Journal of Current Issues & Research in Advertising</i> , 26(2), 53-66
	Never – definitely		1-7	
	Definitely do not intend to buy – definitely intend to buy		1-7	
	Very low purchase interest – high purchase interest		1-7	
	Definitely not buy it – definitely buy it		1-7	
Probably not buy it – probably buy it	1-7			
7 Demograp hics	What is your gender?	Validated regular questions	0=man 2= woman	
	What is your age?			
	Highest education			
	What is your occupation			

Table 1; Research operationalization

CHAPTER 5: DATA ANALYSIS AND RESEARCH RESULTS

The collected data has been analyzed using different methods. In the first paragraph of this chapter, the usefulness of the collected data will be outlined. In the second paragraph the data is analyzed in order to test the formulated hypotheses. In the last paragraph of this chapter, the research results will be discussed.

5.1 COLLECTED DATA

The Internet has been used for a method of data collection. In order to verify if the data can be used for the analysis, several methods have been used in order to make sure the data used for the analysis is reliable. In paragraph 5.1.1 the number of respondents will be discussed and in paragraph 5.1.2 the reliability of the collected data will be discussed.

5.1.1 RESPONDENTS

The survey data has been collected through Facebook invites. As a result 216 people started with the survey. However, a total of 152 respondents completed the survey. From these 152 completed surveys, 6 respondents indicated that they don't have a Facebook account. These 6 respondents without a Facebook account have been excluded from the analysis. Furthermore, a validation check was included in the experiment to check whether the respondents filled in the survey randomly. This question asking to select the option "blue" has been chosen by 129 out of the 146 respondents. These restrictions make the total sample size 129 respondents.

5.1.2 PREPARATION OF THE DATA

As discussed in paragraph 5.1.1, the reliability of the data has been verified by using a validation check in the experiment. This brought back the number of respondents from 146 to 129. Furthermore, different reliability checks have been carried out on the data in order to validate if the used scales are reliable.

FACTOR ANALYSIS

In order to test the different variables used in this research, a principal factor analysis has been carried out. This factor analysis is performed to look if the different

scales used in this research are valid and that they observe the underlying dimensions (Field, 2009). The factor analyses showed the different components per variable. In table 2 the components within the different values have an eigenvalue above 1. Furthermore every component measured has a value of at least 0,45. These are the two conditions of a factor- analysis. In other words, it can be said that the different components measuring the variable can be taken together in order to represent one single variable.

Construct	Item Scales	Components Matrix values	Component matrix (highest value)	Eigenvalue
Tie strength	2	0,943	0,943	1,777
Trustworthiness	5	>0,45	0,970	4,077
Brand Familiarity (Search good)	2	0,883	0,883	1,558
Brand Familiarity (Experience good)	2	0,923	0,923	1,703
Purchase intention (Search good) – Pre	5	>0,45	0,981	4,620
Purchase intention (Search good) – Post	5	>0,45	0,983	4,767
Purchase intention (Experience good) – Pre	5	>0,45	0,965	4,464
Purchase intention (Experience good) - Post	5	>0,45	0,972	4,669
Brand attitude (Search good) – Pre	5	>0,45	0,931	4,124
Brand attitude (Search good) – Post	5	>0,45	0,962	4,510
Brand attitude (Experience good) – Pre	5	>0,45	0,980	4,366
Brand attitude (Experience good) – Post	5	>0,45	0,962	4,622

Table 2; Factor analysis

RELIABILITY ANALYSIS

The different variables tested in the survey are verified on their reliability. As outlined by Cortina (1993), the results of a variable can be evaluated as reliable when they have a Cronbach's alpha score above 0,7. Only one variable, the variable brand familiarity of search goods, has a Cronbach's alpha score below 0,7. However, this difference is only 0,003. It has been decided to use this scale in this research. In some cases deleting a component could increase the reliability. However, this was just a minimal increase, so these components will remain in this research.

Construct	Cronbach's alpha
Tie strength	0,874
Trustworthiness	0,937
Brand Familiarity (Search good)	0,697
Brand Familiarity (Experience good)	0,821
Purchase intention (Search good) – Pre	0,979
Purchase intention (Search good) – Post	0,988
Purchase intention (Experience good) - Pre	0,969
Purchase intention (Experience good) - Post	0,982
Brand attitude (Search good) – Pre	0,946
Brand attitude (Search good) – Post	0,973
Brand attitude (Experience good) – Pre	0,980
Brand attitude (Experience good) – Post	0,973

Table 3; Reliability analysis

5.2 ANALYSIS OF THE DATA

The data collected has been verified on reliability. The scales used for measuring the different variables seem to be reliable. In this paragraph, the data will be analyzed in order to answer the different formulated hypotheses.

First, it has to be tested whether the NWOM had an impact on the brand attitude and purchase intention of the respondents. During the survey the respondents are pre and post tested. A dependent Sample T-test has been performed in order to test if the pre and post measurement differ significantly from each other. The pre (mean: 5,2845) and post measurement (mean: 3,6062) of brand attitude differ significantly ($p= 0.000$). Also the pre (mean: 4,3357) and post measurement (mean: 3,5488) of purchase intention differ significantly ($p=0.000$). This means that the NWOM had a significant negative impact on both (the difference between pre and post) brand attitude and purchase intention. Thus, H1a and H1b can be supported.

In order to test the relationship between the brand attitude and purchase intention and the independent variables, a multiple regression analysis has been performed. The results of the regression analysis are given in Table 4 (brand attitude) and Table 5 (purchase intention). Both regression models consist out of three models. Furthermore, a mediator analysis has been performed in order to test whether

trustworthiness holds a mediating relationship between tie strength on the one hand and brand attitude and purchase intention on the other hand.

5.2.1 BRAND ATTITUDE

In order to test the hypotheses a multiple regression analysis has been performed. Y of each regression is the difference between pre and post evaluation of brand attitude. In the first model, the effect of NWOM (the difference between pre and post) on brand attitude was predicted by using different control variables. None of the control variables has a significant effect on the change in brand attitude after having been exposed to NWOM (Facebook usage $p = 0.619$, Facebook Friends $p = 0.548$, Age $p = 0.718$, Gender $p = 0.341$). In the second model, the independent variables are added and in the third model the moderation effects are added. The different effects are outlined per variable. The second regression model has been used because the change between model 2 and 3 was not significant. In the third model also some multicollinearity (Multicollinearity, n.d.) has been found with the variables "Tie strength" and "Tie strength * Brand Familiarity" however the change between the third model was not significant it has been decided to keep the variables in the model.

Tie strength

In order to test whether tie strength has an influence on brand attitude, a regression analysis has been performed. The results showed in Table 4 indicate a non-significant effect between tie strength and brand attitude (model 2: $B = 0.001$; $p > 0.05$). Based upon this analysis H2a is rejected.

Trustworthiness

In order to test whether trustworthiness has an influence on brand attitude, a regression analysis has been performed. The results showed in Table 4 indicate a significant effect between brand attitude and trustworthiness (model 2: $B = -0.240$; $p < 0.05$). Based upon this analysis H3a is supported. The perceived trustworthiness in the sender of the message has a significant effect on the evaluation of the brand attitude. The more trustworthy the source has been evaluated in the experiment,

the more the brand attitude decreases (trustworthiness has been evaluated on a 7 point likert scale where 1 is the least trustworthy and 7 the most trustworthy).

In order to test whether trustworthiness has a mediation relationship between tie strength and purchase intention, a mediator analysis has been performed. This mediator analysis consists out of four steps that test all possible relations. All these steps need to have a significant effect in order to conclude that trustworthiness mediates the relationship.

1. The regression coefficient between tie strength (independent) and the brand attitude (dependent) is not significant (B: -0.004; $p > 0.05$);

Based on the mediator analysis performed H6a is rejected. Trustworthiness does not mediate the relationship between tie strength and brand attitude.

Brand familiarity

In order to test whether brand familiarity has an influence on brand attitude, a regression analysis has been performed. The results showed in Table 4 indicate a non-significant effect between brand familiarity and brand attitude (model 2: $B=0.032$; $p > 0.05$). Based upon this analysis H4a is rejected. From the third model can also be concluded that brand familiarity has no interaction effect with tie strength, (model 3: $B= 0.002$; $p > 0.05$) so H7a is rejected.

Product type

In order to test whether the type of product has an influence on brand attitude, a regression analysis has been performed. The results showed in Table 4 indicate a significant effect between product type (0= search good; 1= experience good) and brand attitude (model 2: $B=-0.765$; $p < 0.05$). Based upon this analysis H5a is supported. In the case of an experience good the brand attitude of the receiver of the NWOM is affected more negatively than in the case of a search good. From the third model can be concluded that brand familiarity has no interaction effect with tie strength (model 3: $B= 0.000$; $p > 0.05$), so H8a is rejected

	Model 1 (Control)	Model 2 (Independents)	Model 3 (Moderation)
(Constant)	-0.927	0.892	1.105
Facebook Usage	-0.077	-0.148	-0.146
Facebook Friends	0.000	0.000	0.000
Age	-0.004	-0.008	-0.008
Gender	-0.181	-0.175	-0.193
Tie strength		0.001	-0.012
Trustworthiness		-0.240**	0.247**
Product Type		-0.765***	-0.755**
Brand Familiarity		0.032	-0.004
Tie strength * Product Type			0.000
Tie strength * Brand Familiarity			0.002
R2	0.007	0.128	0.136
R2 adjusted	-0.008	0.099	0.101

* p < 0.05; ** p < 0.01; *** p < 0.001

Gender: 0= men; 1 = women Product type: 0= experience good; 1= search good

Table 4; Regression model – Independent variable change in Brand Attitude

5.2.2 PURCHASE INTENTION

In order to test the hypotheses a multiple regression analysis has been performed. Y of each regression is the difference between pre and post evaluation of purchase intention. In the first model, the effect of NWOM (the difference between pre and post) on purchase intention was predicted by using different control variables. None of the control variables has a significant effect on the change in purchase intention after having been exposed to NWOM (Facebook usage p =0.974, Facebook Friends p=0.718 , Age p=0.679 , Gender p=0.072). In the second model, the independent variables are added and in the third model the moderation effects are added. The different effects are outlined per variable. The second regression model has been used because the change between model 2 and 3 was not significant. In the third model also some multicollinearity (Multicollinearity, n.d.) has been found with the variables “Tie strength” and “Tie strength * Brand Familiarity” however the change between the third model was not significant it has been decided to keep the variables in the model.

Tie strength

In order to test whether tie strength has an influence on purchase intention, a regression analysis has been performed. The results showed in Table 5 indicate a significant effect between tie strength and purchase intention (model 2: B=-0.008; p

< 0.05). Based upon this analysis H2b is supported. The stronger the tie with the sender of the NWOM, the more the purchase intention is influenced negatively in the perception of the receiver of the NWOM.

Trustworthiness

In order to test whether tie trustworthiness has an influence on purchase intention, a regression analysis has been performed. The results showed in Table 5 indicate a non-significant effect between trustworthiness and purchase intention (model 2: B=-0.020; p > 0.05). Based upon this analysis H3b is rejected.

In order to test whether trustworthiness has a mediation relationship between tie strength and purchase intention, a mediator analysis has been performed. This mediator analysis consists out of different steps that test all possible relations. All these steps need to have a significant effect in order to conclude that trustworthiness fully mediates the relationship.

1. The regression coefficient between tie strength (independent) and the purchase intention (dependent) is significant (B: -0.008; p < 0.05);
2. The regression coefficient between tie strength and the “mediating” variable trustworthiness is significant (B: 0.026; p < 0.05);
3. The regression coefficient between trustworthiness and purchase intention is significant (B: -0,112; p < 0.05);

In order to test whether the mediator carries the influence of the independent variable (tie strength) to the dependent variable (purchase intention), a Sobel (Preacher and Leonardelli, 2001) test has been performed. The results are indicated in Figure 2 and state that trustworthiness carries the influence of the independent variable to the dependent variable (p < 0.05).

Input:		Test statistic:	Std. Error:	p-value:
a	0.026	Sobel test: -2.29663282	0.00126794	0.02163972
b	-0.112	Aroian test: -2.29007828	0.00127157	0.02201678
s _a	0.002	Goodman test: -2.30324396	0.0012643	0.02126512
s _b	0.048	Reset all	Calculate	

Figure 2; results mediation analysis (Sobel Test)

Based on the mediator analysis performed H6b is supported. Trustworthiness does mediate the relationship between tie strength and purchase intention.

Brand familiarity

In order to test whether brand familiarity has an influence on purchase intention, a regression analysis has been performed. The results showed in Table 5 indicate a

non-significant effect between brand familiarity and purchase intention (model 2: B=-0.031; p > 0.05). Based upon this analysis H4b is rejected. From the third model can be also concluded that brand familiarity has no interaction effect with tie strength (model 3: B= 0.001; p > 0.05), so H7b is rejected.

Product type

In order to test whether product type has an influence on purchase intention a regression analysis has been performed. The results showed in Table 5 indicate a non-significant effect between product type (0= search good; 1= experience good) and purchase intention (model 2: B=-.0682; p < 0.05). Based upon this analysis H5b is supported. In the case of an experience good, the purchase intention of the receiver of the NWOM is effected more negatively than in the case of a search good. From the third model can be concluded that brand familiarity has no interaction effect with tie strength (model 3: B= 0.003; p > 0.05), so H8b is rejected.

	Model 1 (Control)	Model 2 (Independents)	Model 3 (Moderation)
(Constant)	-0.556	0,209	0.317
Facebook Usage	0.003	-0.004	-0.004
Facebook Friends	0.000	-0.000	-0.000
Age	-0.003	-0.002	-0.002
Gender	-0.230	-0.294*	-0.301*
Tie strength		-0.008**	-0.014
Trustworthiness		-0.020	-0.023
Product Type		-0.682***	-0.740***
Brand Familiarity		-0.031	-0.044
Tie strength * Product Type			0.003
Tie strength * Brand Familiarity			0.001
R2	0.013	0.162	0.164
R2 adjusted	-0.002	0.135	0.130

* p < 0.05; ** p < 0.01; *** p < 0.001

Gender: 0= men; 1 = women Product type: 0= experience good; 1= search good

Table 5; Regression model – Independent variable change in Purchase Intention

5.3 SUMMARY OF HYPOTHESES RESULTS

In table 6 an overview of the results can be found per hypothesis.

Hypotheses summary		Result
H1a	<i>NWOM postulated on an online social media platform has a negative effect on the brand attitude of people confronted with the NWOM on that social media platform.</i>	<i>Supported</i>
H1b	<i>NWOM postulated on an online social media platform has a negative effect on the purchase intention of people confronted with the NWOM on that social media platform.</i>	<i>Supported</i>
H2a	<i>The tie strength between the sender and the reader of the NWOM has a negative effect on the brand attitude of people confronted with the NWOM on that social media platform</i>	<i>Rejected</i>
H2b	<i>The tie strength between the sender and the reader of the NWOM has a negative effect on the purchase intention of people confronted with the NWOM on that social media platform</i>	<i>Supported</i>
H3a	<i>When the receiver of the NWOM on a social media platform perceives the sender of the NWOM as more trustworthy, it has been expected that the brand attitude of the receiver of the NWOM will be influenced more negatively than when the receiver perceives the sender as less trustworthy.</i>	<i>Supported</i>
H3b	<i>When the receiver of the NWOM on a social media platform perceives the sender of the NWOM as more trustworthy, it has been expected that the purchase intention of the receiver of the NWOM will be influenced more negatively than when the receiver perceives the sender as less trustworthy.</i>	<i>Rejected</i>
H4a	<i>Trustworthiness mediates the relationship between tie strength and the brand attitude of people confronted with the NWOM on that social media platform.</i>	<i>Rejected</i>
H4b	<i>Trustworthiness mediates the relationship between tie strength and the purchase intention of people confronted with the NWOM on that social media platform.</i>	<i>Supported</i>
H5a	<i>Brand familiarity of the receiver of the NWOM will have a negative effect on the brand attitude of people confronted with the NWOM on that social media platform.</i>	<i>Rejected</i>
H5b	<i>Brand familiarity of the receiver of the NWOM will have a negative effect on the purchase intention of people confronted with the NWOM on that social media platform.</i>	<i>Rejected</i>
H6a	<i>Brand familiarity has a moderating effect on the relationship between tie strength and the brand attitude of people confronted with the NWOM on that social media platform.</i>	<i>Rejected</i>
H6b	<i>Brand familiarity has a moderating effect on the relationship between tie strength and the purchase intention of people confronted with the NWOM on that social media platform.</i>	<i>Rejected</i>
H7a	<i>The change in the evaluation of brand attitude and of people confronted with the NWOM on that social media platform. is effected by the type of product (search vs. experience good). It is expected that the change in brand attitude is higher for experience goods</i>	<i>Supported</i>
H7b	<i>The change in the evaluation of purchase intention of people confronted with the NWOM on that social media platform. is effected by the type of product (search vs. experience good). It is expected that the change in purchase intention is higher for experience goods</i>	<i>Supported</i>
H8a	<i>The type of product has a moderating effect on the relationship between tie strength and the brand attitude of people confronted with the NWOM on that social media platform.</i>	<i>Rejected</i>
H8b	<i>The type of product has a moderating effect on the relationship between tie strength and the purchase intention of people confronted with the NWOM on that social media platform.</i>	<i>Rejected</i>

Table 6; Hypotheses summary

CHAPTER 6: GENERAL DISCUSSION

The influence of WOM has been proven in an offline context. Also in an online context eWOM has been researched and it has been proven that it is influential in the decision making process of consumers. This research shows that NWOM on Facebook has an impact on the evaluation of the brand attitude and purchase intention of search and experience goods. This research paper also tries to give an insight in the question whether there are any other variables influencing this relationship. In this chapter, the research question that has guided this thesis will be discussed. Furthermore the limitations of this research and directions for future research will be presented, and the implications of this research will be outlined.

6.1 CONCLUSION

In this master thesis, different factors are examined in order to try to explain the effect of NWOM placed on a social media platform on brand attitude and purchase intention. By explaining the influences of the different variables, this thesis tended to measure the effect that NWOM has on brand attitude and purchase intention. This study answers the following main question addressed for this research:

“Which factors drive the effect of NWOM in social media on brand attitude and purchase intention”

During the experiment performed for this Master thesis, the different factors that were observed which might have an influence on brand attitude and purchase intention are the following: tie strength, trustworthiness, brand familiarity and product type. The study is controlled by various control variables: Facebook usage, number of Facebook friends and demographics. In order to determine if these factors can have an actual influence on the brand attitude and the purchase intentions of the receivers of the NWOM on Facebook, a multiple linear regression analysis was conducted. Furthermore, in order to test whether the manipulation had any effect on the respondents, an independent T-test has been performed.

Based on the results as outlined in the previous chapter, it can be concluded that the present study partly determines the negative effect on brand attitude and purchase

intention as a result of NWOM postulated on Facebook. Previous research papers and literature outline that tie strength, trustworthiness, brand familiarity and product type might have an influence on the evaluation of brand attitude and purchase intention. However, the results found in this study indicate that only tie strength influences purchase intention and that trustworthiness influences brand attitude. Furthermore, the type of product (search vs. experience good) has an influence on both brand attitude and purchase intention. The other variables used in the research model do not seem to influence the brand attitude and purchase intention of the receivers of NWOM in a Facebook context. It can be concluded that this study indicates that there are undoubtedly other factors that are not included in this research that might influence the change in brand attitude and purchase intention when confronted with NWOM on Facebook.

6.2 DISCUSSION

The research performed is an expansion of the literature about online and offline WOM research to the effect of NWOM on brand attitude and purchase intention. The current research shows some agreements with the earlier published literature. Nevertheless this present study also gives new insights on the subject of the evaluation of online NWOM.

The literature about the effects of (electronic) WOM found that the attitude towards a product before purchasing the product is more influenced by traditional face-to-face WOM than by a normal marketing message (Kardes and Kim, 1991). The study of Senecal and Nantel (2004) found that personalized messages are more influential on consumers. The present study also found that the WOM ventilated on Facebook has an effect of the evaluation of brand attitude and purchase intention of the receivers of the NWOM.

De Bruyn and Lillien (2008) looked also to the strength of ties in their study to eWOM. Their study found that tie strength significantly influenced the decision of the recipient to open an e-mail message he or she received. According to a study of Weimann (1983), most of the influence is carried through strong ties. A study measuring tie strength in virtual social networks gave more insight into tie strength

in an online context. This study by (Petroczi, Nepusz and Bazso, 2007) found that dimensions earlier successful in an offline context also are effective indicators in an online context. In an offline context, tie strength has a strong effect on the purchase decision process of consumers; this is the outcome of several studies performed (Brown and Reingen, 1987; Bansal and Voyer, 2000; Sweeny *et al.*, 2008). The researches performed to this phenomenon in an online context did not find any influence (Brown *et al.*, 2007; Steffes and Burgee, 2009). The present research found that tie strength has an effect on the evaluation of purchase intention, as earlier found in an offline context. Tie strength did not have any influence on the evaluation of brand attitude.

Sussman and Siegal (2003) found that source credibility has a positive influence on the adoption of information, thus indirect on purchase decision. Sweeney *et al.* (2008) found that source credibility has a positive influence on the purchase decision of consumers. In an online context Brown *et al.* (2008) found that source credibility has a positive influence on the value of the message for the receiver. A more recent research performed by Cheung, Luo, Sia and Chen (2009) found a strong influence of source credibility on purchase intention. However, the present study did not find an effect of trustworthiness on purchase intention. Although the present study found that trustworthiness has an influence on how the respondent evaluated the brand attitude.

In an earlier study by Levin and Cross (2004) a link has been found between strong ties and the receipt of useful knowledge. This link was mediated by competence- and benevolence-based trust. They found that tie strength has an influence on trust, the stronger the tie the more trust someone has in the relation. This mediating relationship has been examined in the present research. The present study did not find a mediating relationship for trustworthiness between tie strength and brand attitude. However, for the relationship between tie strength and purchase intention trustworthiness holds a mediating effect on the relation between tie strength and purchase intention.

Different studies performed in the past support the view of the effects of having prior product class knowledge (Joseph and Hutchinson, 1987; Brucks, 1985). The study of Park and Kim (2009) found that online reviews have a stronger effect on the purchase intention for consumers with prior product expertise. The present study looked to this in terms of brand familiarity and found that brand familiarity did not have a significant influence on brand attitude and purchase intention in the experiment conducted for the present study.

A previous study performed by Bei, Chen and Widdows (2004) showed that consumers of experience products are tended to use more information from online sources than consumers of search products. As outlined by Hsieh, Chiu and Chiang (2005) consumers often lack knowledge to perceive the value of experience goods, therefore consumers looking for experience goods are relying more on experience of their own or from others. The present study found also that both for brand attitude and purchase intention the effect for experience goods was more influential, so it can be said that people are more influence by others in the case of experience goods. Product type has a direct effect on brand attitude and purchase intention. However, product type does not have a moderation effect between tie strength and brand attitude or purchase intention.

6.3 LIMITATIONS AND FUTURE RESEARCH

In the current study several variables are observed in order to determine the effect of NWOM on the evaluation of brand attitude and purchase intention. Although the different factors partly determined the effect of NWOM on brand attitude and purchase intention, this study did not achieve the results as expected. Several limitations in the present research can be outlined. These limitations can be used for future research into these phenomena.

The first limitation is the person used in the experiment. This person has been chosen carefully. However, a certain person has a limited number of connections / ties. This can be seen as a limitation because the number of real strong ties is very small compared to the number of weak ties. Future research should use different persons to come up with a better variation in tie strength and trustworthiness.

The second limitation is the sample size of the experiment performed. Although the respondents fitted the proposed population criteria's, the used sample size of the experiment is not representative for the total community active on Facebook worldwide. The sample used did not include a good spread in age, nationality and cultural differences. Future research should optimize the sample by looking better to other variables such as geography, age, etc.

The third limitation in the sample is the types of brands used for the experiment. Other brands may have led to other results. Future research should use a broader brand portfolio in order to test the phenomena for different products and categories.

A fourth limitation is that the respondents could have been influenced by the order of the survey held. In all cases the respondents were first exposed to a search good and in the second case to an experience good. This lack of randomization may have had an influencing effect on the respondents. In order to avoid this in the future, researchers should include randomization in their surveys and shift cases and questions.

6.4 IMPLICATIONS

This research shows some interesting insights in how people evaluate information posted on Facebook. Although it can be said that the results in this thesis did not fully support all postulated hypothesis, it may contain valuable implications for managers.

The results show that NWOM aired on Facebook have an effect on the brand attitude and purchase intention of the receivers of the NWOM. Managers should try to minimize NWOM in first place by handling problems of consumers in the first place. When NWOM is aired on Facebook, it will have an effect on people reading the message. As people on Facebook have relatively strong ties in their network of ties, it has a direct effect on purchase intention.

Especially managers of companies, which are selling experience goods should be even more aware of NWOM as the evaluation of brand attitude and purchase intention is more influenced by this product type.

“From the present study can thus be implicated that to prevent is better than to cure. In particular for managers of companies dealing with experience goods.”

REFERENCES

- Andersen, P. (2007). *What is web 2.0?: Ideas, technologies and implications for education* JISC Bristol, UK.
- Anderson, E. W. (1998). Customer satisfaction and word of mouth. *Journal of Service Research*, 1(1), 5-17.
- Arndt, J. (1967). Role of product-related conversations in the diffusion of a new product. *Journal of Marketing Research (JMR)*, 4(3)
- Ba, S., & Pavlou, P. A. (2002). Evidence of the effect of trust building technology in electronic markets: Price premiums and buyer behavior. *MIS Quarterly*, , 243-268.
- Bansal, H. S., & Voyer, P. A. (2000). Word-of-mouth processes within a services purchase decision context. *Journal of Service Research*, 3(2), 166-177.
- Basuroy, S., Chatterjee, S., & Ravid, S. A. (2003). How critical are critical reviews? the box office effects of film critics, star power, and budgets. *Journal of Marketing*, 67(4), 103-117.
- Bei, L., Chen, E. Y., & Widdows, R. (2004). Consumers' online information search behavior and the phenomenon of search vs. experience products. *Journal of Family and Economic Issues*, 25(4), 449-467.
- Boekee, S., (2013). Social Media in Nederland 2013. Retrieved from <http://www.newcom.nl/publicatie/2/31/Social-media-onderzoek-2013>

- Bone, P. F. (1995). Word-of-mouth effects on short-term and long-term product judgments. *Journal of Business Research*, 32(3), 213-223.
- Brown, J. J., & Reingen, P. H. (1987). Social ties and word-of-mouth referral behavior. *Journal of Consumer Research*,
- Brown, J., Broderick, A. J., & Lee, N. (2007). Word of mouth communication within online communities: Conceptualizing the online social network. *Journal of Interactive Marketing*, 21(3), 2-20.
- Brucks, M. (1985). The effects of product class knowledge on information search behavior. *Journal of Consumer Research*, , 1-16.
- Buttle, F. A. (1998). Word of mouth: Understanding and managing referral marketing. *Journal of Strategic Marketing*, 6(3), 241-254.
- Chakravarty, A., Liu, Y., & Mazumdar, T. (2010). The differential effects of online word-of-mouth and critics' reviews on pre-release movie evaluation. *Journal of Interactive Marketing*, 24(3), 185-197.
- Cheung, C. M., Lee, M. K., & Rabjohn, N. (2008). The impact of electronic word-of-mouth: The adoption of online opinions in online customer communities. *Internet Research*, 18(3), 229-247.
- Cheung, M. Y., Luo, C., Sia, C. L., & Chen, H. (2009). Credibility of electronic word-of-mouth: Informational and normative determinants of on-line consumer recommendations. *International Journal of Electronic Commerce*, 13(4), 9-38.

- Chevalier, J. A., & Mayzlin, D. (2006). The effect of word of mouth on sales: Online book reviews. *Journal of Marketing Research*, 43(3), 345-354.
- Chiou, J., & Cheng, C. (2003). Should a company have message boards on its web sites? *Journal of Interactive Marketing*, 17(3), 50-61.
- Coleman, J. S. (1989). *Social capital in the creation of human capital* University of Chicago Press.
- Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of applied psychology*, 78(1), 98.
- De Bruyn, A., & Lilien, G. L. (2008). A multi-stage model of word-of-mouth influence through viral marketing. *International Journal of Research in Marketing*, 25(3), 151-163.
- Dellarocas, C. (2003). The digitization of word of mouth: Promise and challenges of online feedback mechanisms. *Management Science*, 49(10), 1407-1424.
- Dellarocas, C., & Narayan, R. (2006). A statistical measure of a population's propensity to engage in post-purchase online word-of-mouth. *Statistical Science*, 21(2), 277-285.
- Dwyer, C., Hiltz, S. R., & Passerini, K. (2007). Trust and privacy concern within social networking sites: A comparison of Facebook and MySpace. *Amcis*, 339.
- Engel, J. F., Kegerreis, R. J., & Blackwell, R. D. (1969). Word-of-mouth communication by the innovator. *The Journal of Marketing*, , 15-19.

- Field, A. (2009). *Discovering statistics using SPSS*. Sage publications.
- Gilbert, E., & Karahalios, K. (2009). Predicting tie strength with social media. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 211-220.
- Godes, D., & Mayzlin, D. (2004). Using online conversations to study word-of-mouth communication. *Marketing Science*, 23(4), 545-560.
- Godes, D., & Mayzlin, D. (2009). Firm-created word-of-mouth communication: Evidence from a field test. *Marketing Science*, 28(4), 721-739.
- Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology*, 78(6), 1.
- Granovetter, M. (1983). The strength of weak ties: A network theory revisited. *Sociological Theory*, 1(1), 201-233.
- Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & 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*, 18(1), 38-52.
- Herr, P. M., Kardes, F. R., & Kim, J. (1991). Effects of word-of-mouth and product-attribute information on persuasion: An accessibility-diagnostics perspective. *Journal of Consumer Research*, 17(4), 454.

- Hsieh, Y., Chiu, H., & Chiang, M. (2005). Maintaining a committed online customer: A study across search-experience-credence products. *Journal of Retailing*, 81(1), 75-82.
- Johnson, E. J., & Russo, J. E. (1981). Product familiarity and learning new information. *Advances in Consumer Research*, 8(1)
- Johnson, J. L., Cullen, J. B., Sakano, T., & Takenouchi, H. (1996). Setting the stage for trust and strategic integration in Japanese-US cooperative alliances. *Journal of International Business Studies*, 27(5), 981-1004.
- Joseph, A., & Wesley Hutchinson, J. (1987). Dimensions of consumer expertise. *Journal of Consumer Research*, 13(4), 411-454.
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! the challenges and opportunities of social media. *Business Horizons*, 53(1), 59-68.
- Katz, E., & Paul, F. Lazarsfeld (1955), personal influence: The part played by people in the flow of mass communications. *Glencoe, Illinois: The Free Press. Katz Personal Influence: The Part Played by People in the Flow of Mass Communication 1955,*
- Laroche, M., Kim, C., & Zhou, L. (1996). Brand familiarity and confidence as determinants of purchase intention: An empirical test in a multiple brand context. *Journal of Business Research*, 37(2), 115-120.

Lee, M., & Youn, S. (2009). Electronic word of mouth (eWOM) how eWOM platforms influence consumer product judgement. *International Journal of Advertising*, 28(3), 473-499.

Levin, D. Z., & Cross, R. (2004). The strength of weak ties you can trust: The mediating role of trust in effective knowledge transfer. *Management Science*, 50(11), 1477-1490.

Litvin, S. W., Goldsmith, R. E., & Pan, B. (2008). Electronic word-of-mouth in hospitality and tourism management. *Tourism Management*, 29(3), 458-468.

Luo, X. (2009). Quantifying the long-term impact of negative word of mouth on cash flows and stock prices. *Marketing Science*, 28(1), 148-165.

Moorthy, S., Ratchford, B. T., & Talukdar, D. (1997). Consumer information search revisited: Theory and empirical analysis. *Journal of Consumer Research*, , 263-277.

Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(3)

Mudambi, S. M., & Schuff, D. (2010). What makes a helpful online review? A study of customer reviews on amazon. com. *MIS Quarterly*, 34(1), 185-200.

Multicollinearity. (N.d.) Retrieved from <http://www.chsbs.cmich.edu/fattah/courses/empirical/multicollinearity.html>

Nelson, P. (1970). Information and consumer behavior. *The Journal of Political Economy*, , 311-329.

Nelson, P. (1974). Advertising as information. *The Journal of Political Economy*, 82(4), 729.

Nielsen global consumers trust in earned advertising grows. (2012). Retrieved from <http://www.nielsen.com/us/en/press-room/2012/nielsen-global-consumers-trust-in-earned-advertising-grows.html>

Nielsen global trust in advertising and brand messages. (2012). Retrieved from <http://www.nielsen.com/us/en/reports/2012/global-trust-in-advertising-and-brand-messages.html>

Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising*, 19(3), 39-52.

Oosterveer, D., (2013). Social Media in Nederland 2013: Groei van gebruik Twitter en Facebook afgevlakt. Retrieved from <http://www.marketingfacts.nl/berichten/social-media-in-nederland-twitter-en-facebook-het-meest-actief-gebruikt>

O'reilly, T. (2007). What is web 2.0: Design patterns and business models for the next generation of software. *Communications & Strategies*, (65)

- Park, C., & Lee, T. M. (2009). Information direction, website reputation and eWOM effect: A moderating role of product type. *Journal of Business Research*, 62(1), 61-67.
- Park, D., & Kim, S. (2009). The effects of consumer knowledge on message processing of electronic word-of-mouth via online consumer reviews. *Electronic Commerce Research and Applications*, 7(4), 399-410.
- Paxton, P. (1999). Is social capital declining in the united states? A multiple indicator assessment 1. *American Journal of Sociology*, 105(1), 88-127.
- Petróczi, A., Nepusz, T., & Bacsó, F. (2007). Measuring tie-strength in virtual social networks. *Connections*, 27(2), 39-52.
- Preacher, K. J., & Leonardelli, G. J., (2001). An interactive tool for mediation tests. Retrieved from <http://quantpsy.org/sobel/sobel.htm>
- Renn, O., & Levine, D. (1991). *Credibility and trust in risk communication* Springer.
- Richins, M. L. (1983). Negative word-of-mouth by dissatisfied consumers: A pilot study. *The Journal of Marketing*, , 68-78.
- Riegelsberger, J., Sasse, M. A., & McCarthy, J. D. (2003). The researcher's dilemma: Evaluating trust in computer-mediated communication. *International Journal of Human-Computer Studies*, 58(6), 759-781.

- Schoorman, F. D., Mayer, R. C., & Davis, J. H. (2007). An integrative model of organizational trust: Past, present, and future. *Academy of Management Review, 32*(2), 344-354.
- Schroeder, S., (2012). Facebook hits one billion active users. Retrieved from <http://mashable.com/2012/10/04/Facebook-one-billion/>
- Schultz, F., Utz, S., & Göritz, A. (2011). Is the medium the message? perceptions of and reactions to crisis communication via twitter, blogs and traditional media. *Public Relations Review, 37*(1), 20-27.
- Senecal, S., & Nantel, J. (2004). The influence of online product recommendations on consumers' online choices. *Journal of Retailing, 80*(2), 159-169.
- Singh, J. (1988). Consumer complaint intentions and behavior: Definitional and taxonomical issues. *The Journal of Marketing, , 93-107.*
- Spears, N., & Singh, S. N. (2004). Measuring attitude toward the brand and purchase intentions. *Journal of Current Issues & Research in Advertising, 26*(2), 53-66.
- Steffes, E. M., & Burgee, L. E. (2009). Social ties and online word of mouth. *Internet Research, 19*(1), 42-59.
- Sundaram, D. S., Mitra, K., & Webster, C. (1998). Word-of-mouth communications: A motivational analysis. *Advances in Consumer Research, 25*(1)

- Sussman, S. W., & Siegal, W. S. (2003). Informational influence in organizations: An integrated approach to knowledge adoption. *Information Systems Research*, 14(1), 47-65.
- Sweeney, J. C., Soutar, G. N., & Mazzarol, T. (2008). Factors influencing word of mouth effectiveness: receiver perspectives. *European Journal of Marketing*, 42(3/4), 344-364.
- Szymanski, D. M., & Henard, D. H. (2001). Customer satisfaction: A meta-analysis of the empirical evidence. *Journal of the Academy of Marketing Science*, 29(1), 16-35.
- Tripp, T. M., Grégoire, Y., & Business, S. (2011). When unhappy customers strike back on the internet.
- Vermeulen, I. E., & Seegers, D. (2009). Tried and tested: The impact of online hotel reviews on consumer consideration. *Tourism Management*, 30(1), 123-127.
- Weimann, G. (1983). The strength of weak conversational ties in the flow of information and influence. *Social Networks*, 5(3), 245-267.
- Wellman, B., & Wortley, S. (1990). Different strokes from different folks: Community ties and social support. *American Journal of Sociology*, 96(3), 558.
- Williams, M., & Buttle, F. (2011). The eight pillars of WOM management: Lessons from a multiple case study. *Australasian Marketing Journal (AMJ)*, 19(2), 85-92.
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *The Journal of Marketing*, , 2-22.

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 60(2)

Zeithaml, V. A., Bolton, R. N., Deighton, J., Keiningham, T. L., Lemon, K. N., & Petersen, J. A. (2006). Forward-Looking Focus Can Firms Have Adaptive Foresight?. *Journal of Service Research*, 9(2), 168-183.?

Graphic on front page:

http://www.marketinggenome.com/wp-content/uploads/2013/02/cartoon_550.jpg



Dear participant,

First, I want to thank you for participation in this online experiment. In this online experiment I will present 2 small cases to you. Please read these cases carefully and try to find the best suitable answers regarding these cases. I would ask you to please be open and honest in your responding. The most important thing that matters is your opinion, there are no right or wrong answers.

This research is part of a Masters thesis at the Erasmus School of Economics and is about the influence of Social Media. All answers are anonymous, your answers will only be used for this study and are not offered to third parties.

Please finish the whole experiment, otherwise your participation will not be useful. Under all fully filled surveys I will randomly give away 5 cinema vouchers. If you want to take a shot on this please fill in your e-mail address at the end of the survey.

Again many thanks for participating in this online experiment.

Love,
Raymond Vlietstra

>>



Do you have a FaceBook account?

Yes
 No

>>

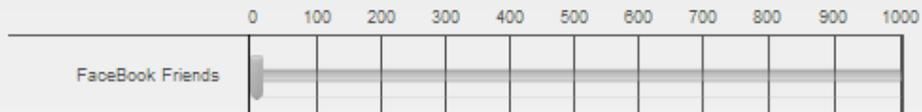


How many times are you using FaceBook on average?

- Less than once in a month
- One time per month
- Several times per month
- Several times a week
- Once a day
- More than once a day

How many FaceBook friends do you have?

If you don't know how many FaceBook friends you have please [click here](#) in order to find out.



Did you ever see a negative message about a brand or product posted on FaceBook by one of your connections?

- Yes
- No





This research focuses to the influence of FaceBook connections to your behaviour towards a particular brand. Probably you have different friends on FaceBook. With the one you have a stronger relationship as with the other. People are able to easily identify these so-called tie-strengths themselves. A strong tie can be a very good friend as a weak tie can be someone you met once on a party and don't know that well. Please keep this in mind in answering the questions per case.





This is the first case please answer the questions stated below. After having answered these questions you will proceed to the experiment section.

Do you know the brand Apple (iPhone, iPad, iPod, iMac, MacBook etc.)?

- Yes
- No

To which extent do you feel you have enough information to make an informed judgement about whether or not to make a selection for this brand?

No information | | A great deal of information

What are your previous experiences with this particular brand?

No previous experience | | A lot of previous experience

What is your attitude towards Apple?

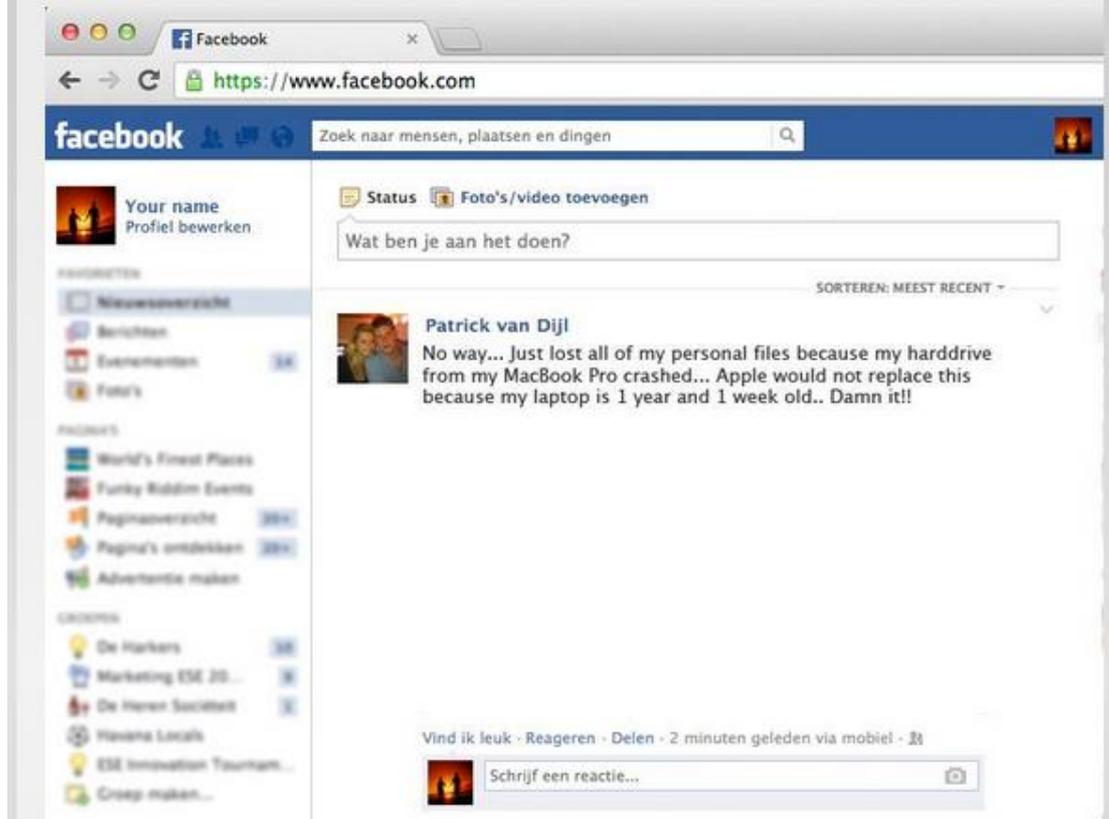
Unappealing	<input type="radio"/>	Appealing
Bad	<input type="radio"/>	Good
Unpleasant	<input type="radio"/>	Pleasant
Unfavorable	<input type="radio"/>	Favorable
Unlikeable	<input type="radio"/>	Likeable

When you are about to buy a laptop how likely would you buy a laptop from Apple

Never	<input type="radio"/>	Definitely
Definitely do not intend to buy	<input type="radio"/>	Definitely intend to buy
Very low purchase interest	<input type="radio"/>	High purchase interest
Definitely not buy it	<input type="radio"/>	Definitely buy it
Probably not buy it	<input type="radio"/>	Probably buy it



In the picture presented you see your current Facebook profile timeline. On your timeline you can see a message posted by Patrick van Dijn. Please carefully read the message and answer the questions.



Please indicate how strong your relationship is with the person in the above FaceBook post (Patrick van Dijl).

Barely know this person We are very close

0 Infinity

Strength of relationship

How would you feel asking Patrick to loan you 100 EUR or more?

Would never ask Very comfortable

0 Infinity

Loan of 100 EUR or more

Please indicate how you evaluate Patrick on the five different scales.

Dependable	<input type="radio"/>	Undependable
Honest	<input type="radio"/>	Dishonest
Reliable	<input type="radio"/>	Unreliable
Sincere	<input type="radio"/>	Insincere
Trustworthy	<input type="radio"/>	Untrustworthy

Now you have read the message posted by Patrick what is your attitude towards Apple?

Unappealing	<input type="radio"/>	Appealing
Bad	<input type="radio"/>	Good
Unpleasant	<input type="radio"/>	Pleasant
Unfavorable	<input type="radio"/>	Favorable
Unlikeable	<input type="radio"/>	Likeable

Now you have read the message posted by Patrick. When you are about to buy a laptop how likely would you buy a laptop from Apple?

Never	<input type="radio"/>	Definitely
Definitely do not intend to buy	<input type="radio"/>	Definitely intend to buy
Very low purchase interest	<input type="radio"/>	High purchase interest
Definitely not buy it	<input type="radio"/>	Definitely buy it
Probably not buy it	<input type="radio"/>	Probably buy it





This is the second and last case please answer the questions stated below. After having answered these questions you will proceed to the experiment section.

Do you know the brand Hilton Hotels?

- Yes
- No

To which extent do you feel you have enough information to make an informed judgement about whether or not to make a selection for this brand?

No information | | A great deal of information

What are your previous experience with this particular brand?

No previous experience | | A lot of previous experience

What is your attitude towards Hilton Hotels?

Unappealing	<input type="radio"/>	Appealing
Bad	<input type="radio"/>	Good
Unpleasant	<input type="radio"/>	Pleasant
Unfavorable	<input type="radio"/>	Favorable
Unlikeable	<input type="radio"/>	Likeable

When you are about to go to a hotel how likely would you go to a Hilton Hotel?

Never	<input type="radio"/>	Definitely
Definitely do not intend to buy	<input type="radio"/>	Definitely intend to buy
Very low purchase interest	<input type="radio"/>	High purchase interest
Definitely not buy it	<input type="radio"/>	Definitely buy it
Probably not buy it	<input type="radio"/>	Probably buy it



In the picture presented you see your current FaceBook profile timeline. On your timeline you can see a message posted by Patrick van Dijk. Please carefully read the message and answer the questions.



The screenshot shows a web browser window with the Facebook homepage. The address bar displays <https://www.facebook.com>. The page header includes the Facebook logo and a search bar with the text "Zoek naar mensen, plaatsen en dingen".

On the left side, there is a navigation menu with sections for "Your name" (with a profile picture and "Profiel bewerken" link), "Nieuwsverrichte" (News Feed), "Berichten" (Messages), "Evenementen" (Events), "Foto's" (Photos), "PROMOTS" (Promotions), "World's Finest Places", "Funky Rabbit Events", "Paginaoverzicht" (Page Overview), "Pagina's ontdekken" (Discover Pages), "Advertentie maken" (Create Ad), "GROEPS" (Groups), "De Markers" (Markers), "Marketing ESE 20...", "De Heeren Sociëteit", "Havana Locals", "ESE Innovation Tournam...", and "Groep maken..." (Create Group).

The main content area shows a status update by "Patrick van Dijk" with a profile picture. The text of the post reads: "Last night when I went to my hotel room at Hilton Amsterdam I found my bed full of hair and also there was blood on the cover sheets, DISGUSTING! When I noticed the receptionist she said that I caused this mess myself. I had to pay for new cover sheets... Really horrible... I directly filed a complaint... Will never go back to any Hilton Hotel again." Below the post, there is a reaction bar that says "Vind ik leuk · Reageren · Delen · 2 minuten geleden via mobiel" and a text input field for a reaction that says "Schrijf een reactie...".

Now you have read the message posted by Patrick what is your attitude towards Hilton Hotels?

Unappealing	<input type="radio"/>	Appealing
Bad	<input type="radio"/>	Good
Unpleasant	<input type="radio"/>	Pleasant
Unfavorable	<input type="radio"/>	Favorable
Unlikeable	<input type="radio"/>	Likeable

Now you have read the message posted by Patrick when you are going to a hotel how likely would you go to a Hilton Hotel?

Never	<input type="radio"/>	Definitely
Definitely do not intend to buy	<input type="radio"/>	Definitely intend to buy
Very low purchase interest	<input type="radio"/>	High purchase interest
Definitely not buy it	<input type="radio"/>	Definitely buy it
Probably not buy it	<input type="radio"/>	Probably buy it





Now that you have taken part in this online experiment. I would like to ask you some general questions.

What is your gender?

- Male
- Female

What is your age?

0 10 20 30 40 50 60 70 80 90 100

Age

A horizontal slider control for age. The scale ranges from 0 to 100 with major tick marks every 10 units. A vertical bar is positioned at the 0 mark, indicating the selected age.

What is your highest education?

- Master (University)
- Bachelor (HBO / University)
- MBO
- High School

What is your occupation?

- Unemployed
- Student
- Student doing an internship
- Student and working
- Working

Please select the choice "Blue"

- Red
- Yellow
- Blue
- Green

If you want to win a cinema voucher please fill in your e-mail address.

This is the end of the survey. **Please click NEXT to FINISH the survey.** Your participation in this online experiment has been appreciated a lot. Thank you very much for helping me graduate.

Please click NEXT to SAVE your results.

Have a nice day!

Raymond Vlietstra

>>



We thank you for your time spent taking this survey.
Your response has been recorded.

Correlations

	Facebook Usage	Facebook Friends	Age	Gender	Tiestrength	TrustworthinessReverseAVG	ProductType	BrandFamiliarity
Facebook Usage	1	,291**	-,055	,119	-,055	-,113	,000	,087
	Pearson Correlation		,383	,056	,381	,069	1,000	,164
	Sig. (2-tailed)		,258	,258	,258	,258	,258	,258
N	258	258	258	258	258	258	258	258
Facebook Friends	,291**	1	-,365**	-,021	-,058	,060	,000	,121
	Pearson Correlation		,000	,461	,545	,267	1,000	,051
	Sig. (2-tailed)		,258	,258	,258	,258	,258	,258
N	258	258	258	258	258	258	258	258
Age	-,055	-,365**	1	-,046	,038	-,069	,000	,106
	Pearson Correlation		,461	,731	,545	,267	1,000	,090
	Sig. (2-tailed)		,258	,258	,258	,258	,258	,258
N	258	258	258	258	258	258	258	258
Gender	,119	-,021	-,046	1	-,163**	-,012	,000	,029
	Pearson Correlation		,461	,731	,009	,854	1,000	,640
	Sig. (2-tailed)		,258	,258	,258	,258	,258	,258
N	258	258	258	258	258	258	258	258
Tiestrength	-,055	-,058	,038	-,163**	1	,554**	,000	,091
	Pearson Correlation		,545	,009	,554**	,000	1,000	,146
	Sig. (2-tailed)		,258	,258	,258	,258	,258	,258
N	258	258	258	258	258	258	258	258
TrustworthinessReverseAVG	-,113	,060	-,069	-,012	,554**	1	,000	-,015
	Pearson Correlation		,267	,854	,000	,554**	1,000	,809
	Sig. (2-tailed)		,258	,258	,258	,258	,258	,258
N	258	258	258	258	258	258	258	258
ProductType	,000	,000	,000	,000	,000	,000	1	-,549**
	Pearson Correlation		1,000	1,000	1,000	1,000	1,000	,000
	Sig. (2-tailed)		,258	,258	,258	,258	,258	,258
N	258	258	258	258	258	258	258	258
BrandFamiliarity	,087	,121	,106	,029	,091	-,015	-,549**	1
	Pearson Correlation		,090	,640	,146	,809	,000	,549**
	Sig. (2-tailed)		,258	,258	,258	,258	,258	,258
N	258	258	258	258	258	258	258	258

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