# Living in the Era of Social Media: How the Different Types of Social Media May Affect Information Acquisition Process

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**Abstract.** The main objective of this research is to study the role of social media in the information acquisition process. We study social media as "information sources" and we give answer to the question: Do consumers use different types of social media when they seek for pre-purchase information? In order to address this question, firstly we investigate the existence of a typology of social media based on their characteristics as information sources; and we study the factors that affect consumers to use different types of social media during their pre-purchase information acquisition process.

Keywords: social media, typology, factors.

#### 1 Introduction

Social media have attracted a lot of research attention over the last years as sources of information. For Mangold & Faulds, (2009)"... social media have become Internet users' number one choice of gathering information". The results of a recent study (Brenner, 2013) have shown that 89% of Internet users spend at least 3 hours per day in order to communicate with friends via facebook; in the same research, 76% of the respondents mention that they spend at least four hours per day in order to search information about products in social media. Academics from the areas of Marketing ((Jepsen, 2007); (Grant, Clarke, & Kyriazis, 2007); (Putrevu & Ratchford, 1997)), Sociology ((Sciglimpaglia, 2013); (Cole, 2011)), Psychology ((Peterson & Merino, n.d.); (Kim & Eastin, 2011).) and Information Systems ((Lee, Kim, & Chan-Olmsted, 2011); (Niu & Hemminger, 2012)) study their effect on consumer behavior and make comparisons with the offline environment.

The main objective of this research is to study the role of social media in the information acquisition process. In this context, we study social media as "information sources" and we try to give answers to two questions: (1) Do different types of social media exist, based on their characteristics as sources of information, and (2) which are the factors that affect the use of different types of social media?

# 2 Background and Hypotheses

### 2.1 The Role of "Sources" in the Information Acquisition Process

The information acquisition process has been studied by numerous academics during the last decades (e.g.(Klein & Ford, 2003), (Jacoby & Szybillo, 2013), (Tidwell, 2005)). In this paper the following definition is adopted, which is most commonly used in the pertinent literature:

"Information acquisition is the stage of the decision making process wherein consumers actively collect and integrate information from numerous sources, both internal and external, prior to making a choice" (Klein & Ford, 2003).

The information acquisition process consists of three parts (Dickson & Wilkie, 2013): the source, the message and the receiver. The majority of literature is focused "on the exploration of (1) the needs that make a consumer search for information, (2) the sources that have been visited in order for the consumer to collect the information, and (3) the factors that influence seeking information in different sources" (Vogt & Fesenmaier, 1998).

The following research is focused on the *sources* that have been used by the receivers of the message. Since 1996, the pertinent literature has studied the electronic sources. In the beginning, academics considered as electronic sources the websites of the firms, the newsletters and the emails ((Van Rijnsoever, Castaldi, & Dijst, 2012); (Mourali, Laroche, & Pons, 2005)). Since 2002, academics have focused on electronic word of mouth (e-wom); they study the role of e-wom in consumer behavior ((J. Brown, Broderick, & Lee, 2007); (J. J. Brown & Reingen, 2013)). *Social Media* consist the mean of transferring e-wom; their official definition mentions that they are *sources with user-generated content*.

The basic areas of study in the literature of social media are: the factors that influence consumers in order to participate in social media (Tidwell, 2005), the factors that influence consumers to express themselves positively or negatively(Bagozzi & Dholakia, 2002), the way that consumers choose their "electronic friends" (Niu & Hemminger, 2012).

The main gap in the literature exists in the study of social media as sources of gathering pre purchase information. Which are the factors that affect consumers to visit social media during the pre-purchase phase of their decision process? The basic objective of our research is to investigate this gap.

Our research is divided into two parts: in the former we analyze the term social media and we discover the possibility of existence of different types of social media, based on their characteristics as sources of information. Based on "uses and gratification theory", *purpose of use* consists the most important characteristic of a source. The question that arises in this part of the study is:

Question 1: Can we develop a typology of social media based on their purpose of use?

In the latter, we study the factors that affect the use of every type of social media, by consumers who seek pre purchase information. Based on the literature the factors that influence the use of a source are separated into three groups: individual

characteristics, situational characteristics and product characteristics (Morrison, 2000). Thus, the research questions that arise are:

**Question 2:** How consumers' individual characteristics may affect the use of different types of social media, when they seek for pre-purchase information?.

**Question 3**: How the product characteristics may affect the use of different types of social media, when consumers seek for pre-purchase information?.

**Question 4**: How the situational characteristics may affect the use of different types of social media, when consumers seek for pre-purchase information?.

## 3 Methodology

### 3.1 Developmentnof the Typology

In order to develop the social media typology, we use Hunt's theory (1991). In the first step we study the literature and understand the axes on which the typology may be based on. Studying the pertinent literature, we identify the existence of different definitions about the phenomenon. Their difference is based on the different functionalities of the "brands" (e.g. facebook, twitter, flickr, etc) which are described by the authors. Collecting the basic characteristics of the definitions, we identify the existence of three types of social media (based on their functionalities): social networking sites, blogs and review pages. Our goal is to study, if the different functionalities make consumers use the different types of social media for different purposes. "Uses and Gratification" theory (Quan-Haase & Young, 2010) help us to define the purpose of use of information sources. In the second step we visit the 44 most popular brands of social media, and we try to recognize their functionalities; the objective of this step is the recognition of the three types of social media, based on actual data. In the third step, we conduct a survey in order to investigate the purpose of use of each type of social media. We use "Uses and Gratification theory" items in order to develop our questionnaire; we collect 1096 answers by internet users. The results of the survey show that consumers use the different types of social media for different purposes. More specific, they use social networking sites for entertainment and communication; they use blogs in order to collect information about specific general topics (e.g. health); and review pages in order to collect information about transactions. This step proves the existence of the typology of social media, based on perceived data. In order to complete all the steps of Hunt's methodology we evaluate the typology based also on actual data. In the final step, we visit the most popular "brand" of each type of social media and we analyze 1000 movements (e.g posts, comments, uploads etc ) by each one. The analysis is also based on the items of "Uses and Gratification Theory". The results of the procedure evoke the existence of three types of social media: social networking sites, blogs/ forums and review pages, based on their purpose of use.

#### 3.2 Factors that Affect the Use of Different Types of Social Media

In the second part of our research, we study the factors that affect the use of different types of social media, when consumers search for pre-purchase information. In this part of the study we want to answer the questions 2, 3 and 4. For this reason, we conduct a quasi experiment, in which we use two different services: gathering health information vs gathering travel information

**Definition of the Situation.** Wilson (1994) declares that in order to study information acquisition process, it is important to define the "the situation within a need arises". Moreover, he mentions that in every situation "the person who searches for information performs a role in an environment". Based on Wilson, in order to design our research, we should define the following variables:

- The Environment (= context) in which the research will take place
- What kind of information do the person need
- What is the role of the person

The Environment/ Context. Morisson (2000) mentions that information acquisition process may differ between the commerce and the non-commerce environment. For this reason, in order to study the role of social media as sources of information, we will conduct two different studies: in the first one the participants should search information about products/ services that they intend to buy (Chapter 6.1). In the second one the participants should find information about a non-commercial topic. Regarding the second study of the non-commerce environment, many academics have focused their research on the search of information of health issues (Cotten, 1998; Morisson 2008). ELTRUN research (2012) shows that the 84% of internet users use Internet in order to find health information. For this reason, the second part of our research will be focused on the healthcare environment (Chapter 6.2). In order to be able to manipulate the variables, in two studies we will conduct quasi experiments.

**Type of Information need.** In order to develop the scenarios of each quasi experiment, we should define the type of information that the person will look for. Weights (1993) proves that three types of information need exist:

- Need for new information
- Need to elucidate the information held
- Need to confirm information held

In parallel, Peterson and Merino (2003) two types of information search exist:

• Specific Information search: In this type of search, the information characteristics are: extremely motivated, having instrumental orientation, situational involvement, seeking utilitarian benefits, focusing on goal oriented choices

• General Information search: In the second type of search the information characteristics are: intrinsically motivated, having ritualized orientation, enduring involvement, hedonic benefits, non-directed search.

The previous types of search would involved in the description of the scenarios. The role of the perceived benefits received by the use of the product/ service has been studied as a factor that affect the use of a source (Sojung et al, 2011). In our study, we will investigate the role of hedonic/ utilitarian benefits as a factor which affect the use of different types of social media.

**Research Model.** In order to study the research questions, we develop the following research model.

**Individual Characteristics.** Beatty and Smith (1987) mention that the term ""individual characteristics" consists of three basic sub-categories of factors: demographic characteristics (gender, age, etc), socio-economic characteristics, and cognitive traits (ability, experience, expertise). In this research we focus our study in the third sub-category (cognitive characteristics). More specific we study the factor "user's experience"; how familiar is the consumer with the product.

**Product Characteristics.** Peterson and Merino (2013) mention that the type of information that consumers search for, is based on the type of the product. They assume that two types of information search exist: specific information search which is characterized as extremely motivated, with utilitarian benefits, being focused on goal directed choices; general information search, which is characterized as intrinsically motivated, with hedonic benefits. For this reason in our study we focus our research in the perceived benefits of the product (hedonic/ utilitarian)

**Situational Characteristics.** Ashfor et al (1983) develop Feedback Seeking Behavior Model. "This model conceptualizes information seeking as a process of uncertainty reduction in the specific situation" (Ashfor et al, 1983). In their model, the most important characteristic is perceived value of the feedback that the consumer gets from the source. Fedor (1992), studies the importance of source credibility. In our research we study the role of source credibility in our model.

Based on the previous analysis the hypotheses of the research are formed as follow:

H1: Users' experience affect the use of different types of social media

H2: Hedonic/ Utilitarian benefits of the product affect the use of different types of social media

H3: The credibility of the source affect the use of different types of social media

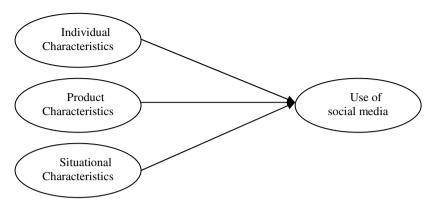


Fig. 1. Factors that affect the use of different types of social media- General model

#### 4 Results and Discussion

The results of the quasi experiment are based on 1.105 answers and show that:

- When the consumer is familiar with the service/product, (s)he uses blogs and review pages (sig. 0.001)
- When a consumer searches information about services/ products with hedonic
  perceived benefits, (s)he uses review pages and social networking sites. On the
  other hand, when the consumer searches information for services/ products with
  utilitarian benefits, (s)he uses review pages and blogs. (sig. 0.000)
- Finally, the source credibility influences the use of all types of social media. (sig. 0.000)

The implications of our study in the academic sector is the existence of a social media typology, which is based on the variable "purpose of use". We study social media as sources of information and we recognize factors that affect the use of different types of social media. Academics have the opportunity to study more factors from the different groups and analyze their influence on the different types of social media. On the other hand, as for the business implications of our study, we may help marketers to develop a more specific and effective social media strategy for their products. Using the previous results marketers have the opportunity to design a social media strategy more focused to their needs and their products.

### References

- Bagozzi, R.P., Dholakia, U.M.: Intentional social action in virtual communities. Journal of Interactive Marketing 16(2), 2–21 (2002), doi:10.1002/dir.10006
- 2. Brenner, J.: The Demographics of Social Media Users 2012 (2013)

- Brown, J., Broderick, A.J., Lee, N.: Word of mouth communication within online communities: Conceptualizing the online social network. Journal of Interactive Marketing 21(3), 2–20 (2007), doi:10.1002/dir.20082
- 4. Brown, J.J., Reingen, P.H.: Referral Ties Beav and Word-of or \* 14(3), 350–362 (2013)
- 5. Cole, C.: A Theory of Information Need for Information Retrieval 62(7), 1216–1231 (2011), doi:10.1002/asi
- Dickson, P.R., Wilkie, L.: Buyer Uncertainty and Information Search 16(2), 208–215 (2013)
- Grant, R., Clarke, R.J., Kyriazis, E.: A review of factors affecting online consumer search behaviour from an information value perspective. Journal of Marketing Management 23(5-6), 519–533 (2007), doi:10.1362/026725707X212801
- 8. Jacoby, J., Szybillo, G.J.: Information Acquisition Brand in Choice Situations Behavior 3(4), 209–216 (2013)
- 9. Jepsen, A.L.: Factors affecting consumer use of the Internet for information search. Journal of Interactive Marketing 21(3), 21–34 (2007), doi:10.1002/dir.20083
- Kim, S., Eastin, M.S.: Hedonic Tendencies and the Online Consumer: An Investigation of the Online Shopping Process. Journal of Internet Commerce 10(1), 68–90 (2011), doi:10.1080/15332861.2011.558458
- 11. Klein, L.R., Ford, G.T.: Consumer search for information in the digital age: An empirical study of prepurchase search for automobiles. Journal of Interactive Marketing 17(3), 29–49 (2003), doi:10.1002/dir.10058
- 12. Lee, C., Kim, J., Chan-Olmsted, S.M.: Branded product information search on the Web: The role of brand trust and credibility of online information sources. Journal of Marketing Communications 17(5), 355–374 (2011), http://www.tandfonline.com/doi/abs/10.1080/13527266.2010.484128
- 13. Mangold, W.G., Faulds, D.J.: Social media: The new hybrid element of the promotion mix. Business Horizons 52(4), 357–365 (2009), doi:10.1016/j.bushor.2009.03.002
- 14. Morrison, E.W.: Within-Person Analysis of Information Seeking. The Effects of Perceived Costs and Benefits 26(1), 119–137 (2000)
- Mourali, M., Laroche, M., Pons, F.: Antecedents of consumer relative preference for interpersonal information sources in pre-purchase search. Journal of Consumer Behaviour 4(5), 307–318 (2005), doi:10.1002/cb.16
- 16. Niu, X., Hemminger, B.M.: A Study of Factors That Affect the Information-Seeking Behavior of Academic Scientists 21669(2), 336–353 (2012), doi:10.1002/asi
- 17. Peterson, R.A., Merino, M.C. (n.d.): Consumer Information Search Behavior and the Internet 20, 99–121 (February 2003), doi:10.1002/mar
- Putrevu, S., Ratchford, B.T.: A Model of Search Behavior with an Application to Grocery Shopping 73(4) (1997)
- Quan-Haase, A., Young, A.L.: Uses and Gratifications of Social Media: A Comparison of Facebook and Instant Messaging. Bulletin of Science, Technology & Society 30(5), 350– 361 (2010), doi:10.1177/0270467610380009
- Sciglimpaglia, D.: The Traits Influence and of Cognitive Personality Consumer on Demographics Information Acquisition 8(2), 208–216 (2013)
- Tidwell, M.: Personality and Information Seeking: Understanding How Traits Influence Information-Seeking Behaviors. Journal of Business Communication 42(1), 51–77 (2005), doi:10.1177/0021943604272028

- Van Rijnsoever, F.J., Castaldi, C., Dijst, M.J.: In what sequence are information sources consulted by involved consumers? The case of automobile pre-purchase search. Journal of Retailing and Consumer Services 19(3), 343–352 (2012), doi:10.1016/j.jretconser.2012.03.008
- Vogt, C.A., Fesenmaier, D.R.: Expanding the Functional Information Search Model 25(3), 551–578 (1998)
- 24. Xiang, Z., Gretzel, U.: Role of social media in online travel information search. Tourism Management 31(2), 179–188 (2010), doi:10.1016/j.tourman.2009.02.016