Chapter 2
The Digitization of Word-of-Mouth

Abstract From the first article published on the topic of electronic word-of-mouth (eWOM) research has rapidly increased, underlining the importance of this phenomenon in various business contexts. Customers’ purchasing behavior has increasingly changed with the development of Information and Communication Technologies and social media. Therefore, what had traditionally been defined as word-of-mouth (WOM) needs to be reconsidered and studied in light of recent trends. This chapter will analyze the evolution of the concept from WOM to eWOM and main dimensions for an analysis of WOM. Specific attention will be paid to credibility and possible biased information.

2.1 The Concept of Word-of-Mouth

The development of new technologies, and especially the increasing use of social media by travelers described in the previous chapter, pointed out the need to reconsider the received concept of WOM (also called Buzz), in the light of recent changes (Stauss 1997; Buttle 1998; Breazeale 2009).

Arndt (1967) and Koenig (1985) define word-of-mouth as an oral, person-to-person communication between a receiver and a communicator whom the receiver perceives as non-commercial, regarding a brand, product or service. According to Stern (1994) “WOM involves the exchange of ephemeral oral or spoken messages between a contiguous source and a recipient who communicate directly in real life… WOM communication vanishes as soon as it is uttered, for it occurs in a spontaneous manner and then disappears.” Moreover, WOM is perceived as different from advertising because it is independent and not paid by the company (Stern 1994). For this reason, it is considered genuine and more credible by customers (Bateson and Hoffman 1999; Ogden 2001). In fact, a study of Goldenberg et al. (2001)
demonstrates that WOM, both in the case of weak ties and strong ties,\(^1\) has a deeper influence in information dissemination than advertising. Over the years, research has confirmed the powerful influence of WOM on perceptions, expectations (Webster 1991; Zeithaml et al. 1993; Lee and Youn 2009), attitude, and customer behavior (Dye 2000). Referral WOM can be used by customers as an important source of pre-purchase information (input WOM) or after the experience as a way of offering information and recommendations to other customers (output WOM) (Buttle 1998).

### 2.2 Word-of-Mouth and Electronic Word-of-Mouth

The spread of the Internet and wireless systems, with the consequent increased use of social media by customers (OECD 2012), highlight the need to reconsider the traditional concept of WOM (Stauss 1997; Buttle 1998; Breazeale 2009; Cheung and Thadani 2010, 2012). The opportunity for individuals to share their experiences with other people all over the world (Dellarocas 2003; Inversini et al. 2010) takes power away from companies and delivers it into the hands of consumers (Hennig-Thurau et al. 2004). Online user-generated content can be shared through posted reviews (consumer opinions on opposite websites such as blogs or commercial review websites), mailbags (customer opinions on the seller’s website), electronic mailing lists and personal emails (consumer opinions sent by email), chat rooms and instant messaging (one-to-one real conversation on the Internet and Mobile), and posts on social networks (posts on Facebook, Linkedin, etc.).

In the light of these trends, eWOM can be defined as “…any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet” (Hennig-Thurau et al. 2004). However, this kind of communication is not limited to brands, products, or services but can be related also to an organization, a destination, etc. (Buttle 1998).

The analysis of the traditional concept of WOM and of the definition of eWOM is a useful preliminary step to an identification of the main differences between the two concepts (Table 2.1).

A first aspect to be considered is the nature of the message. Unlike the traditional concept of WOM, eWOM is generally a written message, more and more visual

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\(^1\) Social ties can be classified as strong or weak (Granovetter 1973). Strong ties are represented by closer relationships with the individual’s social network such as family and friends. On the other hand, weak ties are generally weaker and less personal social relationships that facilitate the information search about a specific topic (such as colleagues). According to Duhan et al. (1997) a tie can be characterized by various degrees of strength: it is weak if the recommender is just an acquaintance or is not known to the consumer and it is strong when the consumer knows the recommender personally. For an authoritative analysis of this topic, see also Pigg and Crank (2004), Gruen et al. (2006), and Chu and Kim (2011).
Table 2.1 WOM versus eWOM

<table>
<thead>
<tr>
<th>Nature of the message</th>
<th>WOM</th>
<th>eWOM</th>
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<tbody>
<tr>
<td>Form of the message</td>
<td>Direct</td>
<td>Indirect</td>
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<tr>
<td>Persistence</td>
<td>Lower persistence</td>
<td>Higher persistence</td>
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<tr>
<td>Synchronism</td>
<td>Synchronous</td>
<td>Asynchronous</td>
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<tr>
<td>Accessibility/speed of diffusion</td>
<td>Low/low</td>
<td>High/high</td>
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<tr>
<td>Credibility</td>
<td>Known source of information</td>
<td>Unknown source of information</td>
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</table>

Source author’s elaboration on the basis of Buttle (1998), Breazeale (2009), Cheung and Thadani (2010, 2012)

(Rosen 2009), not necessarily direct because customers publish their impressions on the Net often without addressing them to a specific known person. They publish user-generated content (text, images, and videos) about their experience which remains on that website. The message is therefore persistent because it does not vanish easily and asynchronous because it is not necessary for the interaction between the communicator and the receiver to take place at the same time (Cheung and Thadani 2012). On the contrary, other consumers can read these reviews even after a long period of time (Buttle 1998; Hennig-Thurau et al. 2004; Breazeale 2009), while searching for information online about a specific product or service (Ward and Ostrom 2002). The persistence of the message in online repositories makes it also possible for companies and researchers to measure eWOM (Cheung and Thadani 2012; Cheung and Lee 2012), an operation that was extremely difficult in the case of traditional WOM. Moreover, for what concerns accessibility, in the case of traditional WOM customers may ask the opinion of people they know, generally composing small groups, whereas in the electronic environment, millions of people, usually strangers, can gain access to the opinions of others (Libai et al. 2010) also for long periods of time (Hennig-Thurau et al. 2004; Hung and Li 2007; Park and Lee 2009). In this context it is difficult for the reader to determine the credibility of the message because the information comes from individuals who have little or no prior relationship with the seeker (Chatterjee 2001; Xia and Bechwati 2008; Schindler and Bickart 2005), are geographically and culturally dispersed (Gruen et al. 2006) and belong to diverse backgrounds (Litvin et al. 2008). Therefore, customers activate “weak-ties” with others in order to obtain information on specific features of the product (Brown and Reingen 1987; Gruen et al. 2006).

Online WOM can be distinguished in “organic/intrinsic,” that occurs spontaneously by the customer, or “amplified/extrinsic,” that occurs when the company

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2 According to Rosen (2000) we are moving from “old” online buzz mainly text-based to the new visual buzz based on images.

3 Actually, before the development of IT and online review sites, it was possible to publish a written product review on specific magazines; for example, the magazine of a consumers’ association.
encourages customers to accelerate the spread of WOM (Godes and Mayzlin 2004; Libai et al. 2010). These actions are the base of viral marketing campaigns in which a company develops online marketing messages and stimulates customers to forward these messages to other members of their social network (van der Lans et al. 2010). Even though, as mentioned before, WOM is different from advertising, the act of rewarding customers in several ways for the action of spreading reviews (Buttle 1998) can generate a credibility bias especially in the online environment where the source of the message is unknown.

2.3 Electronic Word-of-Mouth Outcomes

Over the last few years, we have witnessed an increasing interest by researchers on the topic of eWOM. Several studies have endeavored to explain how people are influenced by received WOM information.

Most studies about eWOM communication adopted a dual process theory of human information processing (Cheung and Thadani 2012) that “divides the mental processes underlying social judgments and behavior into two general categories depending on whether they operate automatically or in a controlled fashion” (Gawronski and Creighton 2013). The most prominent dual process theories, mainly used in eWOM research, are the elaboration likelihood model (ELM) (Petty and Cacioppo 1984) and the heuristic systematic model (HSM) (Chaiken 1980). These models try to answer a central question: how different aspects of a persuasive message (e.g., strength of arguments, attractiveness of the source) influence the effectiveness of persuasive appeals. Other interesting dual process models investigate how attitudes are formed and changed and the mechanisms through which attitudes guide behavior. This is the case of Motivation and Opportunity as Determinants-MODE model (Fazio 1990) and the Dual attitude model (Wilson et al. 2000).

The cited theories have been employed by authors in different ways to analyze the impact that eWOM has on customer attitudes and consequently on behavior and purchase intentions and decisions. Recent reviews of the literature on the topic show that eWOM studies can be classified into two levels (Cheung and Thadani 2010, 2012): a market-level analysis, focused on the impact of eWOM on product sales by examining objective data extracted from specific websites (i.e., reviews on TripAdvisor) (Chen and Xie 2005; Chevalier and Mayzlin 2006; Dellarocas and Zhang 2007; Duan et al. 2008; Zhu and Zhang 2010) and an individual-level

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4 Godes and Mayzling (2009) use the term “exogenous WOM” to describe the proactive actions of companies which induce their consumers to spread the word about their products online (Godes and Mayzlin 2004, 2009).

5 Viral marketing will be analyzed in Chap.4.

6 For a literature review on the topic of dual process theories, see Gawronski and Creighton (2013).
analysis, focused on the influence that the communication process between a communicator and a receiver may have on attitude and purchase decisions (Park and Kim 2009; Cheung et al. 2009).

Several academic studies on the topic of eWOM point out the impact of consumer reviews on attitude, purchase intentions, and customers’ decisions (Schindler and Bickart 2005; Goldsmith and Horowitz 2006; Park et al. 2007; Buhalis and Law 2008; Law et al. 2008; Doh and Hwang 2009). In turn, Chang et al. (2005) found that attitude has a significant impact on online purchase intentions and decisions. According to Gruen et al. (2006), online customer-to-customer exchange activities have a considerable effect on the overall value of the firm’s offering and consequently on the loyalty intentions.

The economic impact of reviews on companies’ financial performances was demonstrated also empirically by analyzing in particular the valence (positive or negative) of the message and the volume of reviews (Chevalier and Mayzlin 2006; Liu 2006; Dellarocas 2003, 2006, 2007; Forman et al. 2008; Villanueva et al. 2008; Luo 2009; Godes and Mayzlin 2009). Although the previous view is the most widespread, some other studies showed that customer comments on the web are predictors of sales, but do not influence them (Chen et al. 2004; Duan et al. 2008). Schindler and Bickart (2005) found that customers consult online reviews for these main reasons: to gather information about brands or products by learning about the experience of other people and to support or confirm a previously-made decision. Even in these cases, and even though sometimes people search for information just for fun, with no serious intention to purchase and with an apparent passive approach, this action can influence future purchase decisions.

The role played by WOM recommendations in consumers’ decision-making processes depends on the type of product. This is especially true of services or intangible products (Murray and Schlacter 1990; Gremler 1994) that present a higher involvement and perception of risk due to the difficulties in evaluating their quality prior to consumption (Baccarani and Golinelli 1992; Rosen 2000, 2009; Dye 2000; Laroche et al. 2004; Zeithaml et al. 2012). Moreover, in services industries, the feature of inseparability between service production and consumption and the importance of the customer experience make the influence of online recommendations even more important (Lindberg-Repo 2001; Grönroos 2000). For these reasons, the impact of eWOM on consumer behavior has been an interesting topic for many scholars who study the services industries and its subsectors. In particular, the phenomenon has been examined also in relation to the travel and tourism industry, main objects of this book, and a very important business in the services sector. In tourism and hospitality, online customer reviews generally affect information searching, holiday planning, and purchase decisions (Gretzel and Yoo 2008; Gretzel 2007; Litvin et al. 2008; O’Connor 2008; Papathanasssis and Knolle 2011; Sidali et al. 2009; Vermeulen and Seegers 2009; Ye et al. 2009, 2011). A recent study by Anderson (2012) demonstrates how the score generated by the online feedbacks of guests can increase hotel performance in terms of occupation index and RevPar.
2.4 eWOM Biased Information

eWOM communication presents some biased information related to the purchase, the customer, and the company/third party organizations. The problem of legitimacy and authenticity of reviews posted on commercial travel review websites is one of the key current challenges. The main reasons of biased messages can be identified.

First, the online feedbacks are generally written by consumers who purchase the product (purchasing bias) and hence display a favorable disposition toward a product (Hu et al. 2009).

Second, people who post a comment on the Net are generally extremely satisfied or extremely dissatisfied (Anderson 1998; Litvin et al. 2008) because consumers with a moderate satisfaction are not stimulated by the same motivation to report online their perceptions (under-reporting bias) (Hu et al. 2009).

Third, consumers rely on the rating (the average rating given by the grade of online reviews) because it is intuitive and easy to understand, especially in cases with a lot of information to be selected. Sometimes they operate a first selection of travel services considering only the rating and not the content and the distribution of the reviews (Hu et al. 2009, 2012). Due to the subjective nature of online recommendations, this could be misleading for the travelers because the score does not always express fully the quality of the service experienced, unlike the content of the reviews (Lappas 2012).7 We could name this bias “consumer bias”. However, some studies suggest that the receiver of the message (user of social media during the travel planning process) is generally conscious of these two biases (purchasing and under-reporting) and compensates by using additional information about online product reviews to form the quality perceptions and decide whether to purchase or not (Hu et al. 2009). In fact, according to Banerjee and Fudenberg (2004), consumers who search information online are smart and aware of the presence of self-selection bias in online product reviews.

A fourth source of user-generated biased information is the possibility of deliberate manipulation of online reviews (deceptive reviews, Banerjee and Chua 2014) thanks to possible decontextualization and anonymity.8 This may generate fake positive or negative reviews which could be posted by professionals (the company and the competitors) or by customers. Hu et al. (2012) define reviews manipulation as “vendors, publishers, writers, or any third-party consistently monitoring the online reviews and posting non-authentic online reviews on behalf of customers when needed, with the goal of boosting the sales of their products”.

Along the same line Mukherjee et al. (2012) describe opinion spamming as the

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7 Banerjee and Chua (2014) identify two types of misleading reviews: disruptive and deceptive. Disruptive reviews refer to messages that “are frivolous and contain unmistakably irrelevant text,” while deceptive reviews concern messages that “are maliciously written to appear genuine, and hence not easily detected as spam”.

8 Anonymity can be reduced through personal identifying information (PII) (Xie et al. 2011).
human activities (e.g., writing fake reviews) that try to deliberately mislead readers by giving unfair reviews to some entities (e.g., products) in order to promote them or damage their reputation”.

Manipulators can be both customers and professionals. In the first case, hotel guests could try to extort hotels in order to obtain discounts or favorable services. In the second case, professional manipulators may be the service producer aiming to improve its reputation or a competitor who tries to damage the reputation of a rival firm. Recently, manipulating companies designate groups of spammers, i.e., groups of people who are paid to write fake positive or negative reviews about a target product. This can be particularly damaging because a group can take control of the “sentiment” on a certain product (Mukherjee et al. 2012).9

The probability to consult fake reviews changes according to the website considered and the type of verifying policy. The anonymity of the message can increase ease of manipulation. There are two categories of online social media which allow people to spread word-of-mouth: peer networks (i.e., Facebook, Twitter, LinkedIn, etc.) and anonymous review websites (i.e., TripAdvisor, Yelp) (Tiwari and Richards 2013). Peer networks have the advantage of a higher trust than anonymous review websites which, however, offer deeper knowledge, and different perspectives (Cheung and Lee 2012). Another frequent distinction in the travel sector is that between the well-known anonymous travel review websites (i.e., TripAdvisor, Yelp) and OTAs (like Expedia and Booking). Anyone can post a review on a travel review website, while some OTAs allow customers to post a review only following an actual booking. The different organization of these operators determines a higher volume of reviews with a possible higher percentage of fake comments in comparison with OTAs (Mayzlin et al. 2012). In fact, to book a hotel room on an OTA you have to insert the number of your credit card and this generally discourages manipulators. But OTAs too are sometimes affected by problems with fake reviews. First of all, some other OTAs such as Orbitz allow anyone to post a review. However, there is a major difference in comparison with anonymous travel review websites: reviews are checked and classified as “verified” if the customer has booked the hotel room on the website and “unverified” if no booking has occurred (Mayzlin et al. 2012). Moreover, we have to consider the opportunity to review a service for which we do not have paid, for example a dinner or the Spa service. After having booked a room in a hotel paying only for the night, the traveler can actually review all the services of the hotel. But how is it possible to ascertain whether the customer had dinner at that hotel if this information is not included in the booking?

The detection of manipulated online reviews is a problem dealt with in various researches. Scholars have studied fake online reviews in different ways: detecting spam in collaborative settings (Mukherjee et al. 2012; Feng et al. 2012); exploring

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9 Companies have been created recently with the specific aim to produce and sell fake reviews to travel companies. UK and U.S. public authorities have started to intervene through specific legal actions (see Sect. 2.7.1).
the impact of this manipulation on consumers and firms (Dellarocas 2006; O’Connor 2010); examining the market factors which can influence the propensity to engage in online manipulation (Mayzlin et al. 2012)\(^\text{10}\); understanding how customers respond to products when there is the suspect of manipulated reviews (Hu et al. 2012); and analyzing the attacker perspective, that is how to create a fake review that seems to be authentic (Lappas 2012). Many of these studies focus on the rating of the review while others prefer to concentrate on the text of the message to overcome what was termed above “consumer bias” (Hu et al. 2012; Lappas 2012).\(^\text{11}\) The focus on the content of the message rather than on the rating comes from the conviction that the average rating can fail in evaluating the quality of an item because it does not consider the numerous attributes involved in the process and present in the content of the message (a mix of comments characterized by a positive and negative polarity). Therefore, analyzing the writing style could be a way of detecting manipulated reviews (Banerjee and Chua 2014). According to Hu et al. (2012) authentic reviews are different from manipulated ones because they are random and express a personal view of the experience arising from the specific background of the reviewer (i.e., culture, education, occupation, etc.). In the case of spamming groups which monitor the rating of a certain product and then, when it increases/decreases, start writing to manipulate the result, the message cannot be random and the writing style will tend to use emotive (positive/negative) sentiment to influence customers’ choices.\(^\text{12}\) Semantic analyses of reviews are particularly useful for social media like Facebook or Foursquare where quality evaluation is expressed only through text messages and visual content. Nevertheless, other scholars believe that trying to decide which reviews are manipulated by means of a semantic analysis is particularly difficult and sometimes misleading; this is why they developed other methodologies. An interesting case is the contribution of Mayzlin et al. (2012) based on the comparison of the hotel reviews distribution and rating between two different websites (TripAdvisor and Expedia) exploiting the cited difference in organizational structure that should determine a different distribution of online reviews.

However, since consumers expect to find fake reviews as the volume and quality of user-generated content increases, they interpret and filter what they read and see considering also this bias. Awareness that readers will have this perception even in case of authentic reviews could lead companies to manipulate online reviews with the aim to compensate (Dellarocas 2006).

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\(^{10}\) An interesting stimulus for future research is offered by Mayzlin et al. (2012) who found that independent hotels engage more than multi-unit branded hotels in reviews manipulation.

\(^{11}\) Online consumers’ reviews are generally composed by a numerical rating of the product, a textual message, and visual content (i.e., photos, videos).

\(^{12}\) Contradictory to prior research, a recent study of Banerjee and Chua (2014) found that genuine reviews contain fewer self-references than deceptive reviews.
2.5 Dimensions for An Analysis of eWOM

If attitudes influence purchase intentions and decisions, it is useful to assess the main eWOM communication factors that can influence customers’ attitude toward a product, a brand, or a company. Electronic WOM communication can be analyzed considering the four major elements in social communication: the message, the communicator, the receiver, and the response (outcome) (Cheung and Thadani 2010, 2012). We will further analyze the features that contribute to generate eWOM outcomes already described in the previous section (Table 2.2).

2.5.1 The Message

The main dimensions for the analysis of messages transmitted by the communicator to the receiver in the traditional WOM literature are valence (positive, negative) and volume (quantity of information) (Mauri 2002; Blal and Sturman 2014). These dimensions are considered also by eWOM studies, but sometimes with slight adaptations. Valence is contemplated through recommendation framing and recommendation sidedness. The first dimension refers to the valence of the message (positively framed or negatively framed), while the second refers to the balance of positive and negative content in the same message: one-sided when it contains alternatively positive or negative information and two-sided when it contains both positive and negative information.

Another important dimension considered by researchers in order to analyze the content of the message is argument quality, also named argument strength, that can be defined as “the persuasive strength of arguments embedded in an informational message” (Bhattacherjee and Sanford 2006). Argument strength is the extent to which the receiver of the message views the argument as convincing or valid in supporting its position. Argument quality evaluation depends on (Cheung and Thadani 2012):

- relevance, the extent to which messages are applicable and useful for decision making;
- timeliness, the extent to which messages are current, timely and up-to-date;
- accuracy, the user’s perception that the information is correct and reliable;
- comprehensiveness, the extent to which the message is perceived as complete.

Filieri and McLeay (2014) in their study on antecedents of information adoption in accommodation add another dimension of argument quality to the model: value-

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13 Mauri (2002) identifies the following dimensions for the analysis of word-of-mouth: valence (positive and negative); intensity (quantity of comments); speed (number of contacts in certain period of time); persistency (length in time); importance (role of comments in the customer decision-making process); credibility (in terms of assurance and confidence of the source of the message).
added information, that is “the extent to which information is beneficial and provides advantages from their use” (Filieri and McLeay 2014). In fact, by means of online-generated content, travelers can get further information generally not included in the corporate websites. Some studies demonstrate that undetailed or very general messages are considered untrustworthy, while description of a detailed first-hand experience are viewed as a cue of the message validity (Schindler and Bickart 2005; Schlosser and Kanfer 2001; Doh et al. 2009).

Filieri and McLeay (2014) found that information accuracy, value-added information, and information relevance are more influential than other dimensions in predicting travelers’ adoption of online information in the hospitality industry.

In this first group of dimensions related to the message, we have to consider also some peripheral cues that allow people searching for opinions on a product or service to obtain shortcut information helping them to evaluate the recommendation.14 A first

Table 2.2  Dimensions for an analysis of WOM

<table>
<thead>
<tr>
<th>Elements of eWOM</th>
<th>Dimensions</th>
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<tbody>
<tr>
<td>Message</td>
<td>Recommendation framing</td>
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<tr>
<td></td>
<td>Recommendation sidedness</td>
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<tr>
<td></td>
<td>Volume</td>
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<tr>
<td></td>
<td>Argument quality/strength</td>
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<tr>
<td></td>
<td>• Relevance</td>
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<tr>
<td></td>
<td>• Timeliness</td>
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<tr>
<td></td>
<td>• Accuracy</td>
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<tr>
<td></td>
<td>• Comprehensiveness</td>
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<td></td>
<td>• Value-added</td>
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<tr>
<td></td>
<td>Recommendation consistency</td>
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<td></td>
<td>Recommendation rating</td>
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<td></td>
<td>Product rating/ranking</td>
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<tr>
<td>Communicator</td>
<td>Source credibility</td>
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<td></td>
<td>Source type</td>
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<tr>
<td></td>
<td>Social tie</td>
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<tr>
<td></td>
<td>Homophily</td>
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<tr>
<td>Receiver</td>
<td>Expertise</td>
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<tr>
<td></td>
<td>Confirmation of prior belief</td>
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<td></td>
<td>Involvement</td>
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<tr>
<td></td>
<td>Motivation to process information</td>
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<tr>
<td></td>
<td>Cognitive personalization</td>
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<tr>
<td></td>
<td>Personal features (culture, gender, etc.)</td>
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Source author’s elaboration on the basis of Cheung and Thadani 2010, 2012

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14 Dual process theory considers how different types of influences affect the persuasiveness of online consumer reviews. Informational influence depends on the content of the message (central route factors), while normative influence concerns the impact of online social aggregation mechanisms (peripheral route factors) (Petty and Cacioppo 1984; Cheung et al. 2009).
2.5 Dimensions for An Analysis of eWOM

dimension is volume, i.e., the number of reviews/posts published by customers on a specific product, brand, company, etc., that creates an awareness effect about other people’s interest, influencing product sales (Duan et al. 2008). In fact, the number of reviews/posts is often associated to product popularity (Chevalier and Mayzlin 2006) and should be considered when evaluating the ranking of a product (Viglia et al. 2014). Namely, a first position on TripAdvisor of a hotel in a destination with only 10 reviews should be considered weaker than a second position with 80 reviews. However, these are aspects that sometimes the traveler does not take into account in the decision process (Filieri and McLeay 2014) and that generally prove more important for novices than for experts (Park and Kim 2008).

Other peripheral cues are recommendation consistency, recommendation rating, and product ranking and rating, also called normatively based determinants (Cheung et al. 2009). Recommendation consistency refers to the congruence of the message with the opinions of others about the product (the consensus of other reviewers on the topic). For example, a customer searching for a product, in the case of a remarkable presence of positive framed messages and only few negative feedbacks, could think that the authors of the negative reviews were unable to use the product according to instructions. Recommendation rating shows the perception of other customers about the topic of the review, offering readers an evaluation of the usefulness of the message. For example, more and more websites ask readers consulting reviews whether they proved useful (“Was this review helpful?”; see Fig. 2.1); this information is then sometimes published under the message (i.e., “30 people found this review helpful”). Product rating refers to the overall evaluation of a product or service by a consumer. It is a numerical information, generally a score given to the product, according to different scales and symbols on the basis of the website (e.g., five green bubbles in TripAdvisor, 1–10 scale in Booking.com, five stars in Expedia, etc.) (Minazzi 2010). The average score is also evaluated to create a ranking. Sometimes other indicators are added as, for example, the certificate of excellence of TripAdvisor shown under the ranking of the hotel (Fig. 2.1). In the travel sector, ranking and rating could be useful shortcut information to select accommodation options and reduce the number of alternatives in a context where the number of accommodations online and of published reviews are rapidly increasing. Product ranking in hospitality is one of the most significant antecedents of travelers’ adoption of information from online reviews (Filieri and McLeay 2014). According to a study by Blal and Sturman (2014), ratings have a major influence on the performance (sales) of upper-tier hotels rather than on volume. Figure 2.1 illustrates in black boxes an example of ranking, rating, review information, and indicators of review volume and consistency in the TripAdvisor page of a hotel.

In the case of social networks, these last two dimensions are expressed for example by the “like” option of Facebook or the pins of Pinterest which are ways to tell others that you like that message, sharing the content with your network without necessarily having to write one specific post.
2.5.2 The Communicator

Shifting to the communicator of the message, the difference between WOM and eWOM regarding the generally unknown source of the message causes concern.

Fig. 2.1 Ranking and rating of TripAdvisor. Source www.tripadvisor.com (September 2013)
about the credibility of online reviews (Park et al. 2007). Therefore, source type and credibility are highly valued by customers reading online recommendations and posts. Source credibility is the extent to which a source of information is perceived to be believable, competent (characterized by a certain expertise), and trustworthy by information receivers. It refers to the reputation of the website where the review is published (Brown et al. 2007) and of the reviewer. In this last case, it is sometimes conferred by the administrator of the website and, at other times, is indicated by specific and formal ranking on the basis of the message’s helpfulness (Hennig-Thurau et al. 2004; Zhang and Watts 2008).

The source type is also very important because receivers of the message are influenced more by personal sources of information (i.e., friends and colleagues) than by unknown sources. Social ties between the two actors of the communication are critical elements. For example, in order to exploit the strong and personal social ties among people in the net, the commercial review website TripAdvisor allows users to log-in with Facebook credentials, thus offering them the possibility to identify the recommendations of Facebook friends. The opportunity to log-into other social media, websites, and Apps by means of one’s Facebook profile offers more and more information about the communicator, helping the receiver to better interpret his or her credibility or assess similarity. In fact, the content of the message is evaluated in a different way according to the degree to which the receiver perceives to be similar to the communicator of the message, generally considering age, gender, education, social status, etc. (homophily). According to various studies, the presence of details and personal identifying information (PII) of the reviewers (Xie et al. 2011) is generally a cue of the message’s validity (Ayeh et al. 2013). However, in the online environment this information is missing, reduced, or sometimes even intentionally fake. Therefore, according to some scholars, the conceptualization of homophily in this context is more associated with shared interests and behaviors (for example similar previous purchases, hotel preferences, etc.) rather than other personal information (Brown et al. 2007; Kusumasondjaja et al. 2011).

2.5.3 The Receiver

The response to a certain message coming from the same source of information can change according to the receiver’s perceptions, experience, and involvement. Several studies show that receivers’ features mediate information perceptions and therefore the impact on attitude and behaviors (Park et al. 2007; Zhang and Watts 2008; Cheung et al. 2009; Park and Kim 2009; Park and Lee 2009). Involvement (motivation) and prior knowledge (expertise) are highest on the list of the receiver’s features in eWOM communication research (Cheung and Thadani 2012). Moving from previous studies, we have identified the following main factors related to the receiver:

- expertise, prior knowledge of the review/post topic and of the platform in which it is published. The expertise level of receivers can change over the customer’s
life cycle (i.e., prospects and customers display different expertise about the products) and the product life cycle (products in their first stages versus products in their maturity stages) (Park and Kim 2008);

- confirmation of prior belief, the extent to which the message confirms/disconfirms the prior belief of the reviewer about a product, a brand, etc.;
- involvement, refers to the personal relevance of a product, a brand, etc. to the receiver, depending on her/his emotional and affective tie with the message;
- motivation to process information, refers to the desire to engage in a cognitive activity by reading and evaluating information. This is more intense when receivers are searching for something to satisfy a personal need (focused search) (Zhang and Watts 2008);
- cognitive personalization, concerns the inclination of people to interpret events and messages in a self-referential manner that is “the extent to which readers find resonance in the review and think about how they would feel in a situation described in the review” (Xia and Bechwati 2008).

Examining the receivers’ features that influence attitudes and purchase intentions and decisions, Park and Lee (2009) investigate also the role of national culture by comparing U.S. and Korean consumers’ behaviors. Moreover, Ricci and Wietsma (2006) in a study conducted in relation to the travel sector demonstrate the existence of a significant difference in the way men and women interact with online recommendations. Men show a high propensity to trust the opinion of the reviewer, while women seem less influenced by reviews and base their decision more on their own opinion of the product.

### 2.6 Recommendation Framing

This section will focus on the social recommendation framing of the message which is generally seen as a crucial dimension by researchers engaging in analyses of eWOM. Several studies on the topic of UGC found that the valence of the message (positive or negative) influences consumer behavior and sales (Sen and Lerman 2007; Vermeulen and Seegers 2009; Ye et al. 2011) sometimes in different ways according to the type of product (hedonic versus utilitarian). There is a direct relationship between valence of the message and booking intentions and decisions (Sen and Lerman 2007; Ye et al. 2011; Sparks and Browning 2011; Mauri and Minazzi 2013). This means that a prevalence of positive messages impacts positively on travelers’ behavior and, in turn, a prevalence of negative WOM has a negative impact on customers’ purchase intentions and decisions (Chatterjee 2001; Bambauer-Sachse and Mangold 2011; Mauri and Minazzi 2013).

Moreover, the balance of positive and negative comments can be a factor which consumers take into account. (Purnawirawan et al. 2012). In fact, if consumers perceive a low level of consensus, they may infer that the authors of negative reviews are unable to use or evaluate the product. On the contrary, in the case of
wider consensus on the negative side, customers will develop negative inferences toward the product and the brand (Laczniak et al. 2001). Furthermore, a recent study of Tanford and Montgomery (2014) found that, at the stage of travel decision, the presence of a single negative review can influence in a negative way the decision process, even if the majority of reviews offered favorable feedbacks.

According to various studies, the influence of negative WOM is greater than that of positive WOM because of its detrimental impact on businesses. Moreover, dissatisfied customers are more likely to share negative experiences with other people (Richins 1983; Morris 1988; Hart and Heskett 1990; Tax et al. 1998). Negative consumer reviews have negative effects on perceptions of company reliability and purchase intentions, especially when a company is unfamiliar to the consumer (Chatterjee 2001) and especially for experience goods (Park and Lee 2009; Pan and Chiou 2011). Although the majority of researchers endorse this opinion, other studies on the contrary showed that the influence of negative and positive WOM can be very similar (Ricci and Wietsma 2006). Both positive and negative reviews increase consumers’ awareness of hotel existence, balancing the effect of negative comments on consumer opinions (Vermeule and Seegers 2009). This is true especially when the volume of negative WOM is small.

WOM valence can have an influence on customer expectations too (Grönroos 1982; Zeithaml et al. 1993). During the stage of information research, customers gather information about the service from various known (WOM) and generally unknown (eWOM) sources, with a positive or negative valence (Mauri 2002), and try to determine what to expect by a specific service (Mauri and Minazzi 2013). If negative WOM could have a detrimental impact on customer booking intentions, a prevalence of positive reviews could increase customer expectations. This is sometimes risky for companies as they have to monitor the online environment continuously to align actual service to customer expectations. Therefore, consulting guests’ reviews can be an effective way to tune into the market, improving the service offered and gaining a competitive edge (Zhang et al. 2010; Ye et al. 2011).

2.7 Credibility of User-Generated Content

Due to the possible biased information of the review, decontextualization, and frequent anonymity, before adopting online information customers try to find cues of credibility in the messages. This is particularly true of the tourism sector because

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15 Bambauer-Sachse and Mangold (2011) confirm the same result, also in the case in which the customer is familiar with the brand.

16 According to Grönroos (1982) WOM is a key factor that influences expected quality along with marketing communication, company image, price, and customers’ needs and values. Perceived quality is then the result of the comparison between expected quality and experienced quality (Grönroos 1982; Oliver 1980, 1993; Parasuraman et al. 1985; Lovelock and Wright 1999).
of the intangible nature for tourism services and the psychological risk perceived during the travel decision-making process.

Credibility perceptions of eWOM are influenced by informative determinants (argument strength, recommendation framing, recommendation sidedness, source credibility, and confirmation with receiver’s prior belief) (Zhang and Watts 2008; Cheung et al. 2009; Park and Lee 2009) and normative cues (recommendation consistency, recommendation rating) that may be able to supplement informational ones (Cheung et al. 2009).

Information usefulness, information relevance, and eWOM credibility have been demonstrated to impact positively on eWOM adoption and, consequently, on purchase intentions (Cheung and Thadani 2012). Argument quality of an online message and source credibility have proved most influential in relation to information adoption. For what concerns recommendation framing, although positive messages can be helpful in promoting positive attitudes, the presence of a few negative recommendations about the product has been demonstrated to be not so critical, since, on the contrary, it reduces the suspicious behavior of receivers (Doh and Hwang 2009). Moreover, considering the content of the message, two-sided information (with both positive and negative information) is generally considered more credible because the consumer thinks that each product has positive and negative features. Therefore, two-sided descriptions are perceived as more detailed information positively influencing argument strength (Cheung et al. 2009). In fact, as noted in the previous sections, the presence of details (Sparks et al. 2013) and personal identifying information (PII) of the reviewers (Xie et al. 2011) are generally considered cues of the validity and credibility of the message (Ayeh et al. 2013). A study of Xie et al. (2011) found that the presence of PII has a positive effect on online reviews perceived credibility, which in turn significantly affects users’ intention to book the hotel. Besides, the presence of personal information about the reviewer enables the reader to assess her/his degree of affinity with the reviewer, an aspect which influences the way the message is interpreted. In light of this, websites that publish recommendations require reviewers to provide personal identifying information (PII) in their profiles (e.g., name, state of residence, gender, and date of visit/stay) (Xie et al. 2011). Since in the online environment similarities among people are evaluated mainly with respect to shared interests (e.g., likes, dislikes, values and experiences) (Brown et al. 2007; De Bruyn and de Lilien 2008), some websites stimulate reviewers, sometimes offering incentives, to add supplementary personal information such as motivations, kind of job, hobbies, etc.

Due to the uncertainty related to online WOM, customers try to find recommendation consistency with their prior knowledge or expectations (Xie et al. 2011) and with the opinions of others on the product (the consensus of other reviewers on the topic). In fact, Xia and Bechwati (2008) found that the influence of the comment depends on the cognitive personalization initiated by the reader. If she/he perceives

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17 Doh and Hwang (2009) demonstrate that a perfect set of positive messages is not required to influence receivers’ behaviors.
the situation as familiar, she/he processes the information in a self-referential manner and the review becomes more credible, valid, and trustworthy. The same happens if the receiver of the message finds it congruent with the opinions of other customers publishing feedbacks on the topic.

Source credibility is another widely accepted cue that influences the credibility of the message and then information adoption. It refers to the reputation of the reviewer and the reputation of the platform where the comment is published (Brown et al. 2007). As mentioned above, the reputation of a reviewer is sometimes conferred by the administrator of the website and at other times it is indicated by specific and formal ranking on the base of the helpfulness of the message (Hennig-Thurau et al. 2004; Cheung et al. 2009). Figure 2.1 shows how TripAdvisor gives information about the reputation of reviewers. In particular, these are classified as reviewers or contributors according to the number of published recommendations, while the helpfulness of feedbacks is represented by the number of people who found that review useful.

In particular, the trustworthiness of the source of the message (reviewer and website) has been demonstrated to be more influential than expertise (Ayeh et al. 2013). The degree of trustworthiness of the communicator is a significant predictor of trust in the travel sector (Yoo and Gretzel 2011 and 2012). Tiwari and Richards (2013) found that peer networks (Facebook, LinkedIn, Twitter, etc.) are more influential than anonymous review websites (TripAdvisor, Yelp) in determining restaurant choice.

According to Brown et al. (2007) online communicators are more and more influenced by the websites rather than individuals credibility. In this case, source credibility depends on the expertise and trustworthiness of the website that publishes the review, rather than on the reviewer himself. Very popular blogs or websites can influence credibility perception, as well as the type of website. For example a corporate blog is generally regarded as less credible than those on consumer-to-consumer virtual communities (such as TripAdvisor, Zoover, etc.) (Park et al. 2007). This is why companies sometimes prefer to attach a link to the corporate website instead of creating a guest comment page.

2.7.1 Reviews, Rankings, and Ratings in the Tourism Sector: The TripAdvisor Experience

TripAdvisor is the most popular travel website that enables tourists to plan their trip consulting reviews, rankings, and ratings of various travel services such as accommodation, restaurants, and attractions. It is a consumer-to-consumer virtual community where people share knowledge and search for recommendations about travel services. The website, launched in 2000, has now more than 260 million unique monthly visitors, employs more than 1,600 people, and operates in 42 countries worldwide. Over 150 million reviews and opinions covering more than 4
millions of accommodations, restaurants, and attractions are published from travelers around the world (TripAdvisor, July 2013).

TripAdvisor collects the recommendations of travelers producing informational and normative based cues of the product quality. In the case of accommodation, we can identify several indicators (see also Fig. 2.1):

- the rating, a numerical information on a scale from 1 to 5 (5 being the best) represented by green bubbles. Hotels have an aggregate rating that reflects the average of individual ratings for each review. The rating is also presented according to the type of consumer (families, couples, solo, business) and to the service quality area (location, sleep quality, rooms, service, value, cleanliness);
- the ranking (popularity index), refers to the position of the hotel with respect to other competitors in the same area on the base of quality, quantity and recency\(^\text{18}\) of its content on TripAdvisor;
- the volume, refers to the number of reviews published. It is generally interpreted as another indicator of the popularity of the hotel;
- the certificate of excellence, that is an award for hotels with high performances concerning rating and ranking;
- the reviewer reputation, refers to the indicators of reviewers’ expertise. Since 2012 TripAdvisor introduced “badges” for reviewers according to the number of feedbacks published, classifying them from basic to top levels which are visually represented by a star of different color on the base of the level (Fig. 2.2);
- the number of reviews in the same category, for example regarding accommodation, the number of recommendations the reviewer has published in the same category (hotels);

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\(^{18}\) Recency refers to the date the review was posted. Recent reviews influence more strongly the popularity rankings while older reviews have less impact on a hotel’s ranking over time. See more at: [http://www.tripadvisor.com/TripAdvisorInsights/n543/how-improve-your-popularity-ranking-tripadvisor#sthash.Xw6o9uKR.dpuf](http://www.tripadvisor.com/TripAdvisorInsights/n543/how-improve-your-popularity-ranking-tripadvisor#sthash.Xw6o9uKR.dpuf).
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- the recommendation rating, refers to the usefulness of judgments expressed by other customers about the topic of the review. TripAdvisor asks each reader: Was this review helpful? The number of reviewers who view the message as helpful is then published under reviewer’s score.

Credibility of reviews, especially those of TripAdvisor and other travel review websites, has been criticized because it is easy to publish fake feedbacks. In fact, all customers, including those who have never visited a certain hotel, can publish a review (Feng et al. 2012; Mayzlin et al. 2012). This is an opportunity for companies to publish positive reviews to enhance their reputation, and negative ones to damage competitors. Hotels sometimes offer incentives to consumers in order to lead them to publish positive comments by rewarding them with discounts and service upgrading. Moreover, some companies specialize in techniques aimed at hiding their identities by creating fake online profiles on consumer review websites or paying freelance writers (this phenomenon is called “astroturfing”). On the other hand, a study of O’Connor (2010) on 100 hotels randomly selected from the 1,042 listed on TripAdvisor’s site for the London market, suggests that, unless some reviews are suspect, the majority of them seems not to be fake.  

Nowadays, customers pay more attention to the credibility hints of messages and virtual communities’ validation procedures are more and more under control by public authorities. Following a request by some hotels, UK’s Advertising Standards Authority (ASA) has recently ordered TripAdvisor to rewrite its trust claim (remove the term “trust” from the website communication) (Ayeh et al. 2013). The Attorney General’s office of New York has investigated on the topic and has penalized 19 companies which have to pay more than $ 350,000 for violation “of multiple state laws against false advertising” and engagement “in illegal and deceptive business practices” (New York State office of Attorney General, 23rd September 2013).  

Considering this current trend, Google has communicated the intention to fight against fake reviews by changing its algorithm in order to ensure more authentic recommendations (Google 2013). In response to criticism, TripAdvisor explains the methods employed to manage the legitimacy of reviews:

19 O’Connor (2010) applied the criteria suggested by Keates (2007) for the identification of false reviews (namely extreme scores and a solitary visit by the reviewer to join and post the review). In the same way, an experimental study of Mukherjee et al. (2013) demonstrates that Yelp filtering is reliable.


21 See the response of TripAdvisor to the studies on fake reviews. Available at: http://www.tnooz.com/article/tripadvisor-responds-to-provocative-study-of-bogus-online-reviews/#sthash.Qh6fAER6.dpuf
• Systems, reviews are systematically screened by TripAdvisor proprietary site tools;
• Community, users warnings about suspicious content;
• Quality Assurance Teams, an international team of quality assurance specialists investigate suspicious reviews that are flagged by the previous two tools.

However, recent statistics about the travel sector confirm that also customers who purchase offline use mainly the Internet to compare prices and to read reviews by other customers (PhoCusWright 2012). Therefore, despite criticism, TripAdvisor and other similar virtual communities are increasingly employed by customers who are generally able to interpret the messages considering biased information previously described. These trends should be seriously considered by travel companies.

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