### Exploring the Power of Electronic Word-of-Mouth in the Services Industry



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# Exploring the Power of Electronic Word-of-Mouth in the Services Industry

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A volume in the Advances in Marketing, Customer Relationship Management, and E-Services (AMCRMES) Book Series



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The assistance of advancing information technology leads consumers to freely share their experiences and positive or negative opinions on consumer-generated media (CGM) platforms, including various forms of online communications such as customer review sites, blogs, social network sites, and discussion forums. This new electronic form of traditional word of mouth (e-WOM) is becoming increasingly powerful for its creation and worldwide propagation of consumer comments. Such comments are valued as trustworthy by potential customers. This chapter adopts a descriptive approach to present fundamental research on the framework and the theoretical perspective of e-WOM and provides valuable insight to practitioners.

### Chapter 2

Relationship marketing is a field of knowledge that emerged in the 1980s. The relationship between online consumers and brands is embedded in the same relationship marketing paradigm but become a significant issue for companies in the 21st century with the proliferation of Web 2.0. In order to give insights about online engagement and the process behind, this chapter aims (1) to conduct a systematic literature review on online stimuli experience, adaptability, e-WOM, positive/negative emotions, memory, and online engagement; (2) to present a comprehensive framework exposing the flow from stimuli to e-WOM on online retail consumers. Findings allow the authors propose online retailer recommendations and suggestions for further research.

### Chapter 3

Sentiment (opinion) refers to the feelings of a human being, which are generally reflected through speech and writing in a particular natural language. The analysis of these sentiments are therefore carried with the help of natural language processing, text analysis, and computational linguistics to identify and extract subjective information in source materials. Generally speaking, sentiment analysis aims to determine the attitude of a speaker or a writer with respect to some topic or the overall contextual polarity of a document. Sentiment analysis is widely applied to reviews and social media for a variety of applications, ranging from marketing research, political reviews, policy making, decision making, customer service, etc. In this chapter the authors include the introduction to sentiment analysis, various approaches for classification of sentiment analysis, various tools used, the application areas, challenges, and future research direction in this most demanding area.

### Chapter 4

Customer complaints are unavoidable in any businesses and how firms handle such complaints will affect the public's perception of the company's brand and reputation. While storytelling is being embraced by an increasing number of companies as a different way to communicate their brand, many customers are now also using storytelling as an approach to voice their unfavourable experiences on the social media in regards to a particular unsatisfactory purchase as part of electronic word-of-mouth (eWOM). Such creative and humorous complaints serve as a way to cut through the clutter in order to gain the company's attention. Those companies that embrace such complaints by responding in an equally humorous and creative manner as part of their service recovery process will manage to recover their customers as well as their employees. As such posts are often shared publicly on the Internet, they may become viral and thus can create great positive effect on the company's reputation. Hence, it is important to empower the employees to recover the services using untraditional responses.

### Chapter 5

Today's consumer is in constant interaction with the environment thanks to social media and technology. Consumers who communicate more with each other have pushed businesses to take action on this issue. In this study, network analysis will be processed by marketing approach. Previous studies focus on different aspects of network analysis while examining methodological details. There are a few integrated studies regarding to network analysis from marketing perspective. This study aims to fill this research gap with integrated approach combining marketing scenarios with network analysis methods and social media data. Study consists of two main parts: theoretical background and methodology sections. Theoretical background includes electronic word of mouth, social media and customer networks, network analysis parts. Methodology section includes four different cases regarding to network analysis, social media, and

web. Businesses corporating network analysis to their marketing decision-making process can improve their marketing knowledge regarding to changing marketing environment.

### Chapter 6

Electronic word-of-mouth (e-WOM) is a very important way for firms to measure the pulse of its online reputation. Today, consumers use e-WOM as a way to interact with companies and share not only their satisfaction with the experience, but also their discontent. E-WOM is even a good way for companies to co-create better experiences that meet consumer needs. However, not many companies are using such unstructured information as a valuable resource to help in decision making: first, because e-WOM is mainly textual information that needs special data treatment and second, because it is spread in many different platforms and occurs in near-real-time, which makes it hard to handle. The current chapter revises the main methodologies used successfully to unravel hidden patterns in e-WOM in order to help decision makers to use such information to better align their companies with the consumer's needs.

### Chapter 7

Electronic word of mouth is one of the keys elements for marketing decision making. e-WOM has been focus of marketing research as technology and social media become larger part of consumers' lives. This study set out to examine e-wom concept with sentiment analysis methodology in service industry context. The structure of study is twofold including theoretical backgound of related concepts and application section. Theoretical background section contains electronic word of mouth, new consumer and sentiment analysis concepts, and included selected studies for sentiment analysis. The application section which this study has focus on includes a three-stage plan for sentiment analysis practices. Each stage has three different scenarios. One algorithm and one real-life application for each stage are included. Nine scenarios for different service organizations imply that sentiment analysis supported with other methodologies can contribute to understanding of electronic word of mouth.

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When Consumers' Complaints Fall Into Public Domain: Negative e-WOM on Social Media............ 124

Daniela Langaro, Instituto Universitario de Lisboa, Portugal

Sandra Maria Correia Loureiro, Instituto Universitário de Lisboa, Portugal

André Soares, Instituto Universitario de Lisboa, Portugal

Despite previous studies having revealed that the content created by users in social media is predominantly positive, recent studies have challenged this understanding revealing by means of sentiment analysis the predominance of negative and neutral brand related content. The current chapter focuses on the new hybrid form of negative e-WOM in which individual's complaints are directed at firms, which were originally limited to the domain of offline customer care teams. Thus, previous studies are reviewed from the area of crisis management and service recovery strategies with the intent to offer a relevant scope of

theoretical propositions that may be considered by managers and researchers while preparing response strategies to deal with this new hybrid form of negative e-WOM. In total, eight theoretical propositions are presented and organized in three groups of guidelines associated to responses' format, content, and context with fait-holders and hate-holders being considered as part of the negative e-WOM rhetoric.

### Chapter 9

Electronic word of mouth (e-WOM) is rapidly becoming an empowering tool for consumers to express their experiences on services or products, on social media or other platforms. Beyond the obvious implications of such content to potential consumers, interest is also high among researchers, industry players, and other stakeholders who strive to analyze before-and-after sales expectations, emotions, and perceptions of customers. The need to find efficient ways of extracting and then analyzing online content rendered the reuse of tools and methodologies initially applied in other fields as well as the development of new approaches. In this chapter, the authors identify high-impact scientific work related to e-WOM and point out the analytical methods for analyzing e-WOM content. Furthermore, this chapter refers to the most relevant studies employing such methods and their findings. More specifically, it discusses clustering, sentiment analysis, supervised and unsupervised machine learning, lexicon-based approaches, corpus-based approach, summarization and predicting, and regression analysis.

### Chapter 10

Word-of-mouth (WoM) has always exerted a great effect on consumers' behaviors and intentions. With the advent of internet, this influence has grown both in terms of potential audience reachable and of potential effect led to firms' sales and reputation. Hence, the marketing literature has recently started to investigate motivations and drivers able to foster/hinder electronic-WOM (e-WOM). Therefore, this research aims to explore the effect on the propensity to share comments and reviews online (active WOM) of the following three drivers: (1) propensity to rely on passive WOM; (2) expected service quality; (3) propensity to spend. The authors tested their hypotheses on the fashion industry, collecting 1454 usable answers from Italian consumers. The results indicate that both passive WOM and propensity to spend are drivers able to foster the spread of e-WOM. On the other hand, expected service quality shows a significant negative direct effect and a significant positive indirect effect on active e-WOM: these two effects compensate each other. Thus, the total effect is negligible.

### Chapter 11

Matteo De Angelis, Luiss Guido Carli University, Italy Roberto Florio, Luiss Guido Carli University, Italy Cesare Amatulli, University of Bari "Aldo Moro", Italy

Word-of-mouth is today considered among the most effective marketing communication tools. Indeed, consumers trust more their friends or other consumers than companies, advertisements, and brands. Moreover, due to the digital revolution, the electronic word-of-mouth plays a central role in consumers' purchasing decisions. In particular, electronic word-of-mouth may be central in the context of services, where the perceived risk of the intangible offering triggers consumers' need to find preliminary support from other consumers. This chapter focuses on comments and reviews regarding tourist products and other services shared by customers on different types of online platforms. The empirical analysis sheds light on the role that key motivational drivers, such as customer satisfaction, altruism, and self-esteem, may have in affecting consumers' decision to share comments about traditional versus sharing economy businesses. Findings demonstrate that the observed motivational drivers significantly and differently affect consumers' decision to engage in electronic word-of-mouth.

### Chapter 12

This chapter explores the elements influencing online reviews' usefulness by focusing on the language that consumers use when writing online reviews and on reviewers' attributes. By using text mining tools, the authors investigate how reviews' language affects their usefulness perception (i.e., the number of times readers have marked them as useful). The dataset consists of more than 54,000 online reviews from the most frequently used e-WOM source currently available and covers the period 2005-2017. The results suggest that word count and some of reviews' linguistic features (e.g., the subjectivity score, authenticity score) influence their usefulness perception. Reviewers' attributes (i.e., their number of reviews, age, class, and gender) also affect their reviews' perceived usefulness. The chapter concludes by describing the study results' implications for theory development, for empirical research, and for managerial practice.

### Chapter 13

In the digital age, electronic word-of-mouth plays a role extremely important for the hospitality industry. Due to the intangibility of the tourism product, travelers need to seek information in order to reduce the perceived risk. They usually compare different options and search for accurate and reliable information to make choices, such as user-generated contents. Moreover, tourists pay much more attention to digital platforms that foster interaction and information exchange between users. This study aims to investigate, through an online questionnaire, the managerial behavior of 103 hotels of the province of Rimini towards the electronic word-of-mouth phenomenon. The findings highlight the proactive attitude of

hotels towards the phenomenon, to increase the booking and to improve the service quality. The study conducted provides hints of originality because it filled some gaps emerging in the literature regarding the dealing with responses, the stimulation of generating comments, and the impact of online reviews on hotel performance.

### Chapter 14

Analyzing the Impact of e-WOM Text on Overall Hotel Performances: A Text Analytics Approach240

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Anu G. Aggarwal, University of Delhi, India

Sanchita Aggarwal, University of Delhi, India

A flourishing of the importance of customer reviews has been observed in this digital era. This is especially true in hotel sector, which allows guests to express their satisfaction towards the service in the form of open-structured online reviews and overall ratings over travel agency websites. Using reviews data of 2001 hotels from Tripadvisor.com, the chapter analyzes the overall hotel performances through linguistic features of e-WOM such as its length, readability, sentiment, and volume. The chapter develops a regression model for evaluating guest satisfaction by using overall ratings as its measure, validated through hotel review data. Data analysis result shows that review volume, sentiment index, and readability have significant positive affect over guest satisfaction whereas length shows the negative influence. This chapter discusses beneficial implications for researchers and practitioners working in this field.

### Chapter 15

The widespread access of electronic word of mouth (e-WOM) enables contemporary consumers to assess the opinions of others, irrespective of geographical boundaries, about products and services. This research examines the impact of e-WOM on building international brand awareness when the former is used as a core part of a company's overall digital marketing strategy. By applying the survey methodology, the findings provide support for this positive effect; namely, the integration of e-WOM in the overall digital marketing strategy and activities applied by an organization can enhance brand awareness beyond country borders and contribute towards the overall organizational effectiveness and success. Taken together, the study provides further insight into eWOM and cross-border brand awareness relationship and outlines several questions that deserve further study.

### Chapter 16

There are several paths in marketing to communicate with the consumers. More creative ways are reaching to the market increasing the fascia and trying to overcome customers' demands. Consumers have changed and are now more informed, demanding, and empowered. They are talking with brands and about them

with other consumers but also about their personal experience, which means that the impact of the communication between them has evolved in massive terms. The new trends in digital communications has brought profound changes to the tourism sector. Tourists are now more critical in their decision-making process. The increasing access to new technologies by individuals has made travel research and planning easier, placing the stakeholders in a permanent challenge to meet the consumer's needs. In this respect, some points come out: are the new means of communications fundamental determinants in the consumer decision purchase in tourism products? Will companies beneficial to start including this new means as communication tools? Should they be incorporated in their communication plans?

### Chapter 17

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Ilenia Confente, University of Verona, Italy	
Vania Vigolo, University of Verona, Italy	
Federico Brunetti, University of Verona, Italy	

Recent studies have focused on the influence of online word-of-mouth (WOM) on tourist behavior. However, the role of traditional versus online WOM on travel decisions remains to be expanded. This chapter addresses this research gap by empirically investigating the impact of offline and online WOM on travel decisions across four different cohorts: Generation Y, Generation X, the Baby Boomers, and the Silent Generation. In addition, it explores generational differences with regard to online booking intentions. Findings reveal that traditional WOM affects travel decisions by all cohorts, with a higher impact for the Baby Boomers and the Silent Generations. Online WOM has a higher influence for younger cohorts, who also show a higher intention to purchase online than older generations. Still, the results show that senior individuals are well aware of the possibilities offered by the Internet as both an information source and a purchase channel.

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This chapter will provide a description of affiliate marketing models, their advantages and disadvantages. A lot of companies use affiliate marketing models for providing better consumer acquisition and sales results in online arena recommending to other companies or users their products or services. The authors present business case of Catena Media and Askgamblers.com, the leading Casino Affiliate Business Model. Affiliate programs are business that use affiliate marketing to promote their casino worldwide. Today most online casinos offer commissions to private advertisers for sending traffic to their website. They usually use commission-based fee or revenue sharing models to pay affiliates.

### Chapter 19

This chapter aims at understanding the dynamics that led to the exchange and value co-creation/co-production in the interaction between P.A. and citizens during natural calamities. In addition, it proposes a horizontal communication model in which both actors cooperate to respond to crisis, a semantic and

semiotic space on the net able to satisfy their information needs. When natural disasters occur, citizens' primary need is to reach as much information as possible about the status of loved ones possibly involved in the accident, road traffic, how to give an effective contribution to the cause without hindering, etc. On the other hand, P.A. and rescuers need to know as much information as possible about the reports, on the site of the disaster so as to intervene promptly to help the population in danger. Therefore, P.A. and citizens are called upon to cooperate to guarantee crisis containment, crisis management, and also future crisis prevention.

### Chapter 20

How Consumers Respond to Editorial Communication Strategies: Is Content Marketing	
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Amélia Maria Pinto da Cunha Brandão, Universidade do Porto, Portugal	
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With the advent of Web 2.0 and the fact that brands can now communicate directly with consumers, it has been suggested that content marketing is replacing publicity. However, to the best of the authors' knowledge, no previous study has supported this relationship. The purpose of this chapter is to explore this theory, drawing a comparative study on how consumers respond to both approaches. The effects of content marketing and publicity on message credibility, attitude toward the brand and purchase intention are analyzed, as well as the impact of consumers' antecedents on these indicators. The findings indicate that publicity is still relevant and is not being replaced by content marketing. This chapter illustrates the power of content in influencing customer decision making and provides relevant insights into how content must be used to serve consumers' needs more effectively, allowing a 360° view.

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### **Preface**

The phenomenon of Electronic Word of Mouth (eWOM) reflects the paradigm shift of Marketing we are currently experiencing. Triggered by the advent of digital technologies and social media, consumers transform themselves from passive product and service consumers to becoming increasingly self-expressive, empowered brand influencers, lovers, haters and even co-creators. Mirroring the motive of sharing experiences and digital socialization as the original drivers of Social Media, user opinions about service experiences have been extensively acknowledged to play a key role in influencing the consumption decisions of other customers. The widespread adoption of Internet technologies and digital planning services, such as TripAdvisor, has amplified enormously the volume and the potential impact of such customer generated content in the form of eWOM. This book brings together a comprehensive sample of research work addressing state-of-the art customer, corporate and other stakeholder experiences in the utilization of eWOM for informing decision making in service businesses under still quite uncertain conditions.

The utility of eWOM can be addressed from diverse perspectives such as digital consumer behavior and decision making, consumer brand relationships, brand building, marketing communication, knowledged on customer preference and satisfaction, feedback analysis for service and product innovation, social trends and innovative data gathering and analytical methodologies amongst others. Studies regarding these distinct and often interconnected perspectives are usually found in their own specialized publication venues, which aggravate a holistic view of the challenges and potential of eWOM. Moreover, eWOM studies usually involve a narrow perspective due to the time required to analyse meaningful sets of customers' feedback. This publication, therefore, aims to integrate distinct perspectives. It constitutes a timely and exclusive contribution as it captures the essence of eWOM as a whole just when the emergence of (semi-) automated ICT tools is imperative due to the ever vaster amounts of information available: specialized blogs and magazines, social networks, company's websites, services aggregators, etc. Moreover, this book aims to offer a comprehensive selection of current research addressing the utilization of user generated content, with a dual purpose: offering an ample perspective of the variety of applications of such information for customer, company and even societal decision making. A further objective is to illustrate a range of state of the art approaches, methods and technologies that can be used for an effective information extraction and analysis of data. It addresses different dimensions of analysis to shed light on the relevant features of eWOM in order to foster the development of adequate ICT tools to (semi-) automatically and effectively process such sources. The existence of adequate ICT tools allows scaling up the amount of data effectively processed and to systematically extract value from such data.

The book targets a multidisciplinary audience in consumer, business and academic contexts. Consumers become aware of their potential contributions to improve other consumers' decisions and to a

truely co-creating and constructive relationship with businesses and other stakeholders. This book is regarded a very beneficial source for managers to improve their strategic planning competences. The book specifically emphasizes the importance of adapting strategic planning competences of managers due to influences of eWOM on existing strategies, such as branding/international branding, consumer brand relationships, customer engagement, marketing communication, or on the competence to develop new digital strategies, such as online advertising and media strategies. Hence, the book contributes to reducing the managers' level of uncertainty triggered by new technological developments and implicitly increasing customer empowerment, control and influence. Furthermore, managers can use the book as a basis for designing professional training in a number of areas: becoming knowledgeable of new factors of online customer behavior models; achieving higher levels of pro-activity when embracing the digital movement; developing more appreciative attitudes toward eWOM, user generated content and digital customer control; creating heightened awareness of the importance of eWOM for corporate online reputation; better predicting online customers' behavior; customizing digital strategies to new online behavioral factors of customers; developing appropriate response and service recovery strategies. Another important target segment are academics - Professors, researchers, and post-graduate students both on a Master/MBA and Doctorate level - as it as a source for providing a coherent and structured body of knowledge and research methodologies to better underpin the new Marketing paradigm. Specifically, the book is useful for young researchers by providing a variety of research methodologies such as systematic literature review, quantitative surveys, econometric modelling or case study based research. In addition, it creates awareness of still existing problems and a direction for future innovative research avenues in this fledgeling research stream, such as negative e-wom, stronger emphasizing cross- cultural dimensions, the relations to new digital business models (i.e. sharing economy) or story telling as a new eWOM and respective response technique. In addition, this book will be beneficial for IT developers and researchers, education managers and other professionals related to the information society, ICT and education.

The following summaries of the book chapters underline the prevalence of eWOM for the service industry due to its high level of intangibility, high risk perception and implicit need for support by other customers' opinions. The chapters relate in most of the cases to the hospitality and tourism industry complemented by references to the casino, fashion and retailing industry. Indeed, the first introductory group of five chapters is offering fundamentals and theoretical background on e-WOM. The next five chapters are devoted to Mmethodologies to analyse e-WOM. When moving to the next group of five chapters, one can see empirical studies based on e-WOM. The final group of five chapters is dedicated to e-WOM and business strategies.

Akbıyık and Güliz Uğur adopt a descriptive approach to present fundamental research on the framework and theoretical perspective of eWOM resulting in valuable insight for practitioners. They sections of the work are structured as the Communicators, the Receivers, the Stimuli, the Response and the Context in eWOM. The authors suggest social learning and social comparison theory for studying eWOM. Practitioners are recommended to address the wants and needs of the audience to achieve positive eWOM and to apply effective approaches to engage the consumers and point to a loss of credibility as soon as a forum discussion moves from being consumer-controlled to marketer-controlled. Further research is suggested to delve into the multitude of eWOM areas or identifying diverse customer behavior in a variety of platforms.

In the context of retailing, Loureiro and Bilro point to the heightened importance of the consumer brand relationship due to the proliferation of Web 2.0. The authors conduct a systematic literature review on online stimuli experience, adaptability, eWOM, positive/negative emotions, memory and online

engagement. Derived from the literature, a conceptual framework depicting the flow from stimuli to e-WOM on online retail consumers is presented. This chapter suggests that positive emotions not only create positive memories, but also engage the consumers in the process of using the online platform, resulting in a positive approach behavior. Recommendations to retailers relate to consider trust and safety of online transactions, interactive online platforms, customization of websites, providing a sense of control and empowerment to online consumers and reducing perceived risk. Exemplarily for future research directions, the authors suggest a mix of social media, other digital media, and non-digital media appropriate for each stage of the customer engagement process.

Dhawale and Chaudhari Introduce sentiment analysis, the study of computing sentiments, opinions and emotions from a text to detect subjective information from text and define the respective author's mind set. Moreover the author survey approaches for classifying sentiment analysis, data sources, various tools used, the application areas, and challenges.

Ying Mei, Bagaas and Relling explore storytelling as a creative complaint approach to voice eWOM and in particular customer complaints on Facebook, as result of unfavourable service experiences. The authors hold that if companies are proactively using the opportunity to respond to the customer's initiative in the same manner using storytelling as a service recovery strategy, win-win success stories for both parties can emerge. The authors illustrate the phenomenon by analysing customer posts relating to five corporate cases. It is suggested to train employees in terms of alertness for creative complaints, fast response and on high confidence levels to respond and recover the service in the same story telling manner reflecting the respective type of complaint. As to future research agendas, the authors suggest to consider the influence of diverse cultural backgrounds of the customers.

Pinarbasi regards the Social media concept to be of paramount importance for marketing management. The traditional word of mouth concept applied to electronic word of mouth, social media and review websites still has a crucial role to play. The study aims to fill the research gap of an integrated approach combining marketing scenarios with network analysis methods and social media data based on four cases: detection of network structure of a specific theme in Social Media; detection of key influencers in networks for markets; evaluation of hashtags' network; network of restaurant cuisines. Context and industry-based research, more detailed research, and research with time dimensions are suggested as avenues for further research. Strategic planning regardless of the variety of communication is recommended to practitioners.

Regarding eWOM as an extremely important source for measuring the online reputation of the firms, Guerreiro and Loureiro revise the main methodologies used successfully to unravel hidden patterns in e-WOM. Text mining or sentiment an to support decision makers to use such information to better align their companies with the consumers 'needs. However, the authors warn of challenges still to be overcome in text mining and sentiment analysis. Solutions for still existing problems are provided such as word sense disambiguation. Future research efforts are directed to network relations between consumers that share eWOM messages. The connections between consumers in a network, known as graph mining, to detect consumer communities, opinion leaders and to study network dynamics.

Nur Canbolat and Pinarbaşi examine the eWOM concept with the sentiment analysis methodology in the service industry context. The theoretical background section comprises electronic word of mouth, new consumer and sentiment analysis concepts and includes selected studies for sentiment analysis. The application section designs a three stage plan for sentiment analysis practices with each stage having three different scenarios. One algorithm and one real- life application for each stage is included. The three step-plan for e-wom makes strategic planning necessary in terms of integrating e-wom actions into

marketing strategy and planning. Nine scenarios for different service organizations imply that sentiment analysis, supported with other methodologies, can contribute to improve understanding of the electronic word of mouth concept. From a technical viewpoint, the appropriate methodology for sentiment analysis can differ between industries or brands. For global brands, methodological differences can occur due to local languages.

Langaro, Loureiro and Soares point to the predominance of negative and neutral brand related eWOM rhetoric and content creation by customers. By this new hybrid form of negative eWOM a customer's complaints are voiced to firms and simultaneously socialized. The authors offer and categorize theoretical propositions that may be considered by managers and researchers while preparing response strategies. The work suggests a conceptual synthesis of customer satisfaction, reputation management, crisis management and service recovery. Managers are recommended to apply humanized communications reflecting attentiveness and empathy when handling complaints and designing responses. Future research samples are suggested to combine review analysis with empirical research with employees who directly deal with social platforms, and customers having different experiences with organizations (failure/recovery situations) in both, private and public domains.

The empowering feature of digital marketing is further expanded on by Stivaktakis and Kokkinaki. Applying a systematic literature review, the authors provide a comprehensive overview of high-impact scientific work related to eWOM and the analytical methods for analyzing eWOM content focusing on 27 elicited key articles. These publications were divided into five core research areas: participation in eWOM; typification of participants; impact on user behavior; used media; used content. More specifically, the analytical methods of clustering, sentiment analysis, supervised and unsupervised machine learning, lexicon based approaches, corpus-based approach, summarization and predicting, and regression analysis are discussed. The readers is recommended a stepwise approach that needs to be followed in order to gather eWOM information as well as the pre-processing techniques that are implicated.

Relating to the fashion context, Devigili, Pucci, Fiorini and Zanni aim to explore the effect of three drivers on the propensity to share comments and reviews online: propensity to rely on passive WoM; expected service quality; propensity to spend based on a sample of 1454 Italian consumers. Based on a linear regression analysis, the results indicate that both passive WOM and the propensity to spend are drivers able to foster the spread of eWOM. On the other hand, expected service quality shows a significant negative direct effect and a significant positive indirect effect on active eWoM with the total effect being regarded negligible. Further research is suggested to distinguish between positive or negative WOM or eWOM.

De Angelis, Florio and Amatulli provide an empirical analysis on Sharing Economy Services. Particularly, the authors stress a central role of electronic word-of-mouth in the context of services, where the perceived risk of the intangible offering triggerst the consumers' need for preliminary support from other consumers. Empirical research with a sample of 210 participants sheds light on the role that key motivational drivers, such as customer satisfaction, altruism and self-esteem, may have in affecting consumers' decision to share comments about traditional versus sharing economy businesses. Hence, the relationships between those drivers are independent variables, and the intention to generate WOM ist the dependent variable with the type of business (traditional vs. sharing economy) representing the moderator. Altruism and satisfaction turned out to be important drivers for eWOM. Further research is suggested to investigate a potential influence of culture on the drivers mentioned before.

D'Acunto, Tuan and Dalli answer the research question if online reviews are helpful for consumers in the hospitality industry based on big data evidence from TripAdvisor. By using text mining tools, the

authors investigate how reviews' language affects their usefulness perception. 54,000 online reviews between 2005 – 2017 have been analysed via a multiple linear regression model. A key finding is that the perceived usefulness of online reviews mainly depends on the reviewer's background and particularly on her/his expertise and reputation. For effectively managing consumer reviews, managers are advised to predict consumers' eWOM behaviors focusing on the review's perceived usefulness. Future research is suggested to elicit data from different review platforms and analyze different contexts.

By a quantitative study, Gabbianelli and Pencarelli investigated the managerial behavior of 103 hotels in the province of Rimini/Italy, specifically, in terms of the level of a proactive attitude of hotels towards eWOM and user-generated contents. The authors cover gaps emerging in the literature regarding a perceived a lack of exploiting the eWOM phenomenon in general, the dealing with customer responses, the stimulation of customer generated comments and the impact of online reviews on hotel performance in particular. Research was conducted analysing Tripadvisor for each of the municipalities of the province of Rimini having extracted 900 hotels. Customers aim to transforming itself from simple consumers to becoming a consumption-author of his own tourist experience. The findings imply that sellers can convert complaining customers into customers with repurchase intentions. Practitioners are recommended to better take care of online reputation, responding actively to customer comments and monitoring them to increase bookings and improve service quality.

Using the data of TripAdvisor.Com, Aakash, Aggarwal and Aggarwal investigate a conceptual relationship between the overall hotel ratings and eWOM measures such as number of reviews, review length, sentiment index and readability through econometric modelling. This modelling enables the marketer to understand the impact of each independent variable onto the dependent variable. These models are applied on secondary data collected from an online travel agency (OTA). A python program has been applied to process the data for the hypotheses testing. An exemplary finding is that eWOM\_Volume and eWOM\_Sentiment have a positive relation with overall hotel ratings. Hence, marketers are supported with useful information regarding customer preferences, feedback and satisfaction levels enabling her/him to connect with the customer base in a cost and time effective manner.

Makrides, Vrontis and Christofi examined the impact of eWOM on building international brand awareness when the former is used as a core part of a company's overall digital marketing strategy in the concierge industry context. The research provides so far missing insight into whether a local service company can increase its brand awareness overseas via eWOM through digital media and more specifically in understanding these issues in the context of Cyprus. Beyond raising brand awareness overseas via eWOM, the authors are interested in the differentiated impact of digital media and in ways to enhance customer engagement. A quantitative survey based on 200 questionnaires was conducted applying frequency analysis. The sampling criteria comprised nationality, gender and age. The authors conclude that the integration of eWOM in the overall digital marketing strategy and activities applied by an organization can enhance brand awareness beyond country borders. More research on eWOM and its impact on various brand-related outcomes in the the context of eWOM are called for.

Having reviewed an extensive body of literature, Ferreira, Loureiro and Pereira discuss the interrelationship between tourism marketing and digital technologies. Research questions relate to the benefits of integrating digital media as communication tools, specifically in the communication mix of brands, the role of social media in the decision making process of tourism customers and the nature of the impact of the non-traditional communication tools, namely, Blogs, YouTube, Facebook, Virtual Reality, Artificial Intelligence, on the customers' buying decision. The authors conclude that brands should start integrating their social media practices into their marketing communication strategies, especially to reach consumers

who are less likely to be reached by traditional media. In doing so, brand managers should be well aware of differentiated strategies of social media. Three major streams of research are pointed out: customers' interactions with with machines/robots; deep immersion of customers in online platforms; a possible future role of intelligent robots behaving as consumers, i.e spreading the word through other robots.

Confente, Vigolo und Brunetti investigated the influence of eWOM on the intention to purchase online. This chapter addresses a perceived research gap in terms of a comparative perspective of offline and online WOM influencing travel decisions differentiated by four cohorts: Generation Y, Generation X, the Baby Boomers and the Silent Generation. The researchers adopted a quantitative methodology with data having been collected via a self-administered questionnaire. Frequency tables present the findings from a sample of 1,236 respondents aged from 18–93 years. The findings reveal that eWOM positively affects travel decisions but with a higher influence on younger cohorts (Generation X followed by Generation Y). Future studies are suggested to a cross-cultural dimension and to use probability sampling to validate the findings.

Damnjanović juxtaposes advantages and disvantatges of affiliate marketing models, as part of an online advertising strategy, to increase consumer acquisition and sales results in the online arena by attracting traffic to websites. This book contribution surveys affiliate categories, characteristics of online versus traditional casinos and their main players, and compares business models in the online service industry with that of Catena Media and Askgamblers.com, the leading Casino Affiliate Business Model.

Based on value co-creation and social-mediated crisis communication theory, Capolupo and Piscopo aim at understanding the dynamics which lead to the exchange of information between public administration and citizens during natural calamities. The chosen case vignette is the Rigopiano avalanche, occurred on the afternoon of 18th January, 2017. The authors propose a horizontal communication model, in which both actors are called to co-operate in crisis response and prevention, a semantic and semiotic space on the net able to satisfy their information needs. This model is suggested to support all relevant actors to improve their information receptivity. In methodological terms, sentiment analysis is proposed. For their research on Twitter, the authors used a free data extractor software called Tweet Reach, which allowed to collect Tweets with the hashtag #Rigopiano. The analysis found 100 Tweets in an 8-days period. For this interactive platform the authors recommend no hierarchies to exist, timeliness and skills concerning the filter communicators, active citizens' Twitter knowledge and accuracy in reporting the catastrophes, co-operation with public administration and rescue units being in charge of this activity.

Pinto da Cunha Brandão and Monteiro Machado pioneer in investigating the relationship between content marketing and publicity and their mutual effect on message credibility, brand attitudes and purchase intention. A comparative study analysed how consumers respond to both approaches using parametric statistical tests, especially independent T-tests and one-way ANOVAs. The findings indicate that publicity is still relevant and is not being replaced by content marketing. Furthermore, this chapter provides relevant insights into how content should be used to serve consumers' needs more effectively, allowing for a 360° view. The sample for the quantitative research proportionally replicates the 2017 national results from Pordata, a database which provides certified statistics about Europe and, more specifically, Portugal and comprised 400 questionnaires. The authors encourage comparative studies in other countries.

Conclusively, the book significantly impacts the field by sharpening both, the ontological and epistemological perspectives of the eWOM phenomenon. From an ontological viewpoint, the book contributes to a more unanimously shared understanding of the eWOM concept and facilitates the development of more detailled definitions. It compares innovative digital concepts with traditional marketing concepts

and points to existing interrelationships and distinctions. It repeatedly heralds the emergence of new factors of digital customer behavior and decision making antecedents and consequences, also in context of relationships to other stakeholders and machine/robot interactions. Several chapters provide a contribution to new knowledge by innovatively explaining the nature of relationships of new dependent, independent and moderating digitally derived variables. So far scattered data on eWOM are transformed to intelligence in terms of innovative categorizations (i.e. active and passive eWOM; digital analytical methods; platforms; contexts; digital information styles; customers). Summarizing, a more confidence inspiring scientific basis of the phenomenon is provided.

From an epistemological viewpoint new methodologies are provided, i.e. for analysing data generated by eWOM (with TripAdvisor as a central data source), such as textmining, sentiment analysis or graph mining. New patterns of so far 'hidden' data relationships are detected. Researchers new to field are supported by a detailed description of analytical tools. New digital data gathering approaches are provided. Interdisciplinary theories are discussed to better explain eWOM such as social mediated crisis communication theory, social learning and social comparison theory, value co-creation, service-dominant logic.

Pursuing an applied science approach, a better and more coherent knowledge base of eWOM will finally enable practitioners to design and adapt integrated online and offline marketing strategies and tactics to reach higher levels of effectiveness and efficiency.

# Chapter 1 Fundamentals of Electronic Word of Mouth

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### **ABSTRACT**

The assistance of advancing information technology leads consumers to freely share their experiences and positive or negative opinions on consumer-generated media (CGM) platforms, including various forms of online communications such as customer review sites, blogs, social network sites, and discussion forums. This new electronic form of traditional word of mouth (e-WOM) is becoming increasingly powerful for its creation and worldwide propagation of consumer comments. Such comments are valued as trustworthy by potential customers. This chapter adopts a descriptive approach to present fundamental research on the framework and the theoretical perspective of e-WOM and provides valuable insight to practitioners.

### INTRODUCTION

People often share opinions, news, and information with others about various topics. When such informal communication is directed at other consumers about the ownership, usage, or characteristics of particular goods and services or their sellers, this is described as "Word of Mouth" (WOM) (Westbrook, 1987). Wirtz & Chew (2002) indicated that WOM created high credibility among consumers' communications since the content was created by other consumers. Parasuraman et al.'s (1985) service quality model indicated that customer's expectation would be influenced by WOM. Litvin et al. (2008) generalized that affects, altruism, self-interest, and reciprocity motivated consumers to share experiences with others after the act of buying.

With the development of information technology, sources of WOM communication have expanded. Instead of only commenting in a physical environment, today's consumers also can share and exchange their thoughts in a virtual environment. Sun et al. (2006) stated that there was no more limit on review-

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ers' physical location since the content could be transferred through the Internet. Harrison-Walker (2001) indicated that the development of the Internet and the enormous communication capabilities it created facilitated the development of online comment forums. A new form of WOM, electronic WOM (e-WOM), has emerged with recent advances in information technologies (King et al., 2014; Litvin et al., 2008), and is considered as one of the most important sources of information influencing the point of purchase (Litvin, Goldsmith, & Pan, 2008). WOM influence can be far more influential than advertising or personal selling.

Every possible product can be reviewed in online comment forums (Puri, 2007). Presently, consumers are enthusiastic about sharing their experiences and perceptions after consuming a product or service. Henning-Thurau et al. (2004) found that the desire for social interaction, concern for others, and the potential to enhance self-worth were significant motivations for writing online reviews. Walsh et al. (2004) similarly determined that there were several personal motivations for writing online reviews. First, there was an obligation to share with a sense of community. Second, reviewers could gain pleasure by sharing their experience and feelings. Third, there was an altruistic desire to help other people.

Researchers have found that this non-traditional marketing strategy has more persuasive power than traditional marketing campaigns because the source of WOM (peer consumers) is considered more credible than the source of the latter (advertisers) (Cheung, Lee, & Thadani, 2009; Huang, Lin, & Lin, 2009). Due to this enormous impact on consumers, WOM has been extensively studied in the field of marketing research (Berger, 2014; King et al., 2014). Previous WOM research has focused on finding antecedents, moderators, and consequences of WOM (Bughin, Doogan, & Vetvik, 2010; Buttle, 1998; Derbaix & Vanhamme, 2003; Leskovec, Adamic, & Huberman, 2007; Mangold, Miller, & Brockway, 1999; Trusov, Bucklin & Pauwels, 2009) and WOM communication patterns and message characteristics (Bone, 1992; Dichter, 1966; Richins, 1983; Spangenberg & Giese, 1997; Swan & Oliver, 1989), and also e-WOM communications in discussion forums (Andreassen & Streukens, 2009), UseNet groups (Godes & Mayzlin, 2004), product reviews (Kim & Gupta, 2012; Lee & Youn, 2009; Sen & Lerman, 2007), blogs (Dhar & Chang, 2009; Kozinets, De Valck, Wojnicki, & Wilner, 2010; Thorson & Rodgers, 2006), and social networking sites (SNSs) (Chu & Choi, 2011; Trusov et al., 2009) has been investigated.

Research into e-WOM is fragmented, and few studies have measured the influence strategic communication and marketing tactics have on e-WOM communication. Besides, with technological advances happening at a rapid pace, current research quickly becomes outdated. Previous studies regarding e-WOM communication have centered on the reach and influence of e-WOM messages. This chapter adopts a descriptive approach with the aim to present fundamental research on the framework and the theoretical perspective of e-WOM and provide valuable insight to practitioners. This study then goes a step further by exploring how customer relations and marketing professionals can use e-WOM to inform a strategy that can influence the dialogue between consumers.

Nowadays, many for-profit or non-profit organizations seek to create a positive WOM about a variety of topics with external audiences via various methods, including using existing relational networks (Baker, Donthu, & Kumar, 2016; Berger & Schwartz, 2011; Rosen, 2009). Creating products and services that address the wants and needs of the audience is the first step in creating positive e-WOM. After that, there are several ways to approach consumer engagement. Some tactics have been successful; many have failed. Gaining a better understanding of e-WOM communication effects is advantageous for customer relations professionals as they create integrated marketing plans and communication tactics. The "loss of control" unease comes about because it stands in contrast to the old communications model in which the organization held a high level of control. However, integrated strategic communications

and marketing campaigns should involve social media and other non-traditional forms of media with a goal of provoking consumer involvement in the message. This study suggests that being aware of the fundamentals and background of e-WOM behavior enables strategic planning which can help brands retain some level of control over the messages.

### **BACKGROUND**

Research about the effects of mass media reveals that the media can and affect the individuals' attitudes and behaviors. Although the extent of those effects remains unclear, previous studies reveal that WOM communication is often viewed as the most effective.

Word-of-mouth communication has been defined as "a form of noncommercial interpersonal communication among acquaintances" (Cheung & Lee, 2012, p. 219). It "transforms commercial information into cultural stories that are relevant to members of a particular community" (Kozinets, de Valck, Wojnicki & Wilner, 2010, p. 86).

The primary difference between WOM and e-WOM is the medium. Increased use of the internet has led to increased electronic word-of-mouth communication. WOM is typically face-to-face communication while e-WOM is online communication. An increasing number of consumers are using the internet to seek information about products and services. e-WOM refers to anonymous reviews or comments posted by consumers on the internet in which product or service experiences are shared (Litvin et al., 2008). e-WOM is also referred to as word of mouse and word of keyboard (Breazeale, 2009). While e-WOM communication shares some common characteristics with traditional WOM communication, it also involves personal scalability, and there is no need for all communicators to be present when the information is exchanged (Cheung & Thadani, 2012). e-WOM communication, which includes social media, blogs and Internet forums, is more voluminous, persistent and accessible than traditional WOM, and typically involves no familiarity between senders and receivers (Cheung & Thadani, 2012; Gupta & Harris, 2010).

The consumers' WOM and e-WOM have a larger impact on other consumers than do the message of a company (Cheung et al., 2008). e-WOM, particularly, has given consumers the ability to connect with many different people at a time. WOM also allows consumers' messages to be seen long after the messages are written. With the emergence of e-WOM communication and its ability to be persuasive, it is imperative for professionals to realize the effects of e-WOM communication and understand strategies that can influence the conversations that are taking place between consumers.

In e-WOM, consumers view information from fellow consumers who share similar interests as more credible than marketer-driven information. The Cheung and Thadani (2012) research indicating that consumers trust recommendations from unknown consumers more than traditional marketing is supported by a study conducted by Bickart and Schindler (2001). The survey found that exposure to online discussions generated more product interest than exposure to marketer-generated sources of information, such as corporate websites (Bickart & Schindler, 2001).

WOM communication had taken on increased influence in large part due to a shift to a new customer relations/marketing paradigm in which avenues such as social media had made society more connected than ever before and moved primary control of the message from the company to the consumer. The digital age provides avenues for e-WOM marketing to thrive as the advent of the Internet has facilitated the consumer-to-consumer sharing of information across time and space (Graham & Havlena, 2007).

Emerging communication technologies and Web 2.0 platforms challenge companies with the phenomenon of social media, blogs and Internet forums, which have rapidly become the preferred method for consumers to disseminate information on products and services (Mangold & Faulds, 2009). This new paradigm calls on customer relations managers to recognize the power of discussions between consumers online.

As Mangold and Faulds (2009) suggest, customer relations managers "must accept the reality that individual consumers are communicating a vast amount of information about their products and services to other consumers" (p. 360). However, customer relations and marketing professionals must not view this shift in power negatively. With the growth of technology comes a multitude of avenues to engage the public. If utilized correctly, those expanded choices offer an excellent opportunity to develop relationships with consumers and influence the messages carried through e-WOM communication.

### **FUNDAMENTALS OF E-WOM**

e-WOM is located in consumer-generated media which are online commenting channels and also known as User-Generated-Content (UGC). Its advent has provided consumers with public communities to express their satisfaction or dissatisfaction with the products or services they have purchased (Jeong & Jeon, 2008). UGC has three main characteristics. They create e-WOM that has greater credibility than marketer-generated information. UGC is more relevant to consumers, and also it can generate strong empathy among readers (Bickart & Schindler, 2001). UGC also is considered to be a critical channel to improve customer satisfaction (Sanes, 1993). In this context, these platforms are essential sources for potential consumers, marketers, and managers to gain access to fewer inhibitions and public self-awareness and more unbiased and honest product information generated by patrons (Henning-Thurau et al., 2004; Sun et al., 2006).

In studying e-WOM communication, Cheung and Thadani (2012) identify an integrative framework that consists of five essential components: communicators, receivers, stimuli, responses and contextual factors (p. 468). Research of e-WOM involves looking at the impact (responses) of e-WOM communication, which represents sharing of messages (stimuli) involving both the information-seeking customers (receivers) and information-sharing customers (communicators) (Cheung & Thadani, 2012). Contextual factors, then, refer to a variety of cues that are present in a review that receivers look for when determining the quality of the communication (Cheung & Thadani, 2012).

### The Communicators

In discussing persuasion, Miller and Levine (2009) identify source effects, which make a source more or less influential. They contend that credible sources hold a definite advantage and that trustworthiness is commonly recognized as contributing to a source's credibility (Miller & Levine, 2009). Furthermore, the authors believe people are more likely persuaded by sources they see as likable or similar to them (Miller & Levine, 2009). Those concepts are what make WOM and e-WOM communication so persuasive, as these types of communication take place either between acquaintances or between people of similar interests and attitudes.

The Vazquez-Casielles, Suarez-Alvarez and Del Rio-Lanza (2013) study argues that the sender's strength of expression has great influence on e-WOM, as does how actively e-WOM is sought. When

the strength of expression is high, and when recommendations are actively pursued, e-WOM has a significant influence on the receiver's purchase probability (Vazquez-Casielles et al., 2013). When a sender is perceived as knowledgeable, the receiver is motivated to seek information actively. Accordingly, a positive relationship exists between the two (Vazquez-Casielles et al., 2013). This indicates a need to direct e-WOM campaigns at senders with the strength of expression who can communicate with receivers who are motivated to seek information.

In examining how a firm can create an e-WOM campaign, Godes and Mayzlin (2009) discuss the idea of "opinion leaders" and explore how a firm can identify those customers who will most likely create impactful e-WOM, while also considering the extent of that impact. The findings point to less loyal customers as providing more significant influence in an e-WOM campaign (Godes & Mayzlin, 2009). Godes and Mayzlin (2009) contend that because loyal customers' networks have probably been informed about the product for some time, the incremental e-WOM created by a campaign may have little impact (p. 17). Furthermore, loyal customers' opinions are seen as less reliable because their views become clouded due to the relationship they have developed with the company and the product or service.

Lastly, Cheung and Lee (2012) found that a sense of belonging had the most impact on motivating consumers to share e-WOM, while the enjoyment of helping others and the opportunity to improve one's reputation (being seen as an expert) also serve as motivation. Other factors such as reciprocity and moral obligation do not produce significant motivation (Cheung & Lee, 2012).

### The Receivers

Readers often share similar interest or attitudes with e-WOM communicators and therefore view the information exchanged as more relevant to the reader. Social comparison theory, which will be discussed more in depth later in this review, suggests that "similarity ought to be positively related to the persuasiveness of information being communicated and to behavioral intentions as well" (Prendergast, Ko & Yuen, 2010, p. 692-93).

Another factor in the influence of e-WOM communication is the reader's view of the forum. If an individual has a positive attitude towards the forum, the intensity of the relationship between the individual and the forum is likely to increase (Prendergast et al., 2010). User attitudes towards the forum strongly predict purchase intentions as well as having an indirect effect in determining the forum's persuasiveness (Prendergast et al., 2010).

Also, consumer loyalty is an important variable. As the receiver's level of loyalty toward a brand increases, e-WOM communication has less of an impact (Vazquez-Casielles et al., 2013). Previous experience with the product or service can reduce the influence of WOM communication, although this effect is minimal (Sweeney, Soutar & Mazzarol 2014). However, the more knowledgeable people are or, the more experiences they have with a product or service, the less likely they are to seek information actively.

The motivation level of the reader also plays a significant role in determining the influence of e-WOM communication. Consumers with more motivation to process information usually spend more time shopping and go through careful consideration of the product. Therefore, they use e-WOM as an argument instead of solely basing their decisions on e-WOM recommendations (Gupta & Harris, 2010). Those with lower motivation tend to include the recommended product as part of a limited search, and thus, e-WOM recommendations redirect their consideration often leading to suboptimal decision making (Gupta & Harris, 2010). Either way, there is evidence that limited amounts of e-WOM communication may influence choice. Even highly-motivated consumers, although they continue to make optimal

choices, can be influenced to sacrifice their preferences based on the recommendations of others (Gupta & Harris, 2010).

### The Stimuli

Consumers are often motivated to share their experiences via e-WOM due to social ties and virtual friend networks (Chan & Ngai, 2011). Extreme experiences (very enjoyable or very bad) routinely lead customers to post their experiences in the form of anonymous reviews (Namkung et al., 2007). Once customers have an extreme experience, several factors may motivate them to engage in e-WOM activity, including (a) venting negative feelings; (b) showing concern for other customers; (c) reaping social benefits; (d) gaining economic incentives; (e) helping the company; and (f) seeking advice (Hennig-Thurau et al., 2004). However, Han and Ryu (2012) found that the perception of high monetary switching costs may diminish the customer's intent to engage in a negative e-WOM activity. Monetary switching costs include benefits such as coupons, gift certificates, member services, and value pricing. Nonmonetary switching costs such as time, effort and uncertainty of a new eating-place have no impact.

Dissatisfactory purchase experience can easily trigger Consumer Complaining Behavior (CCB) (Singh, 1988) and e-WOM. Jacoby and Jaccard (1981) defined user complaining as an individual action in communicating negative perspectives of a product or service. Singh and Howell's (1984) and Singh's (1988) research defined CCB as a combination of behavioral and non-behavioral responses that involves communications of consumers' negative perceptions triggered by dissatisfaction in a purchased episode. These responses included voicing complaints to product/service provider when the dissatisfaction occurred or afterward, venting and spreading negative WOM to families, friends, and others, complaining to a third party, changing future purchasing behavior, and taking no actions (Day & Landon, 1977; Singh, 1988; Rogers et al., 1992). According to Spark and Browning's (2010) summary, WOM was common complaining behavior for consumers to air negative concerns to other people. It had a significant influence on other consumers' purchasing decisions.

In some cases, customers might engage in e-WOM activity to seek assistance from platform operators to resolve a particular issue, or for positive self-enhancement (Hennig-Thurau et al., 2004). Hennig-Thurau and colleagues characterized e-WOM participants in a number of ways. They may be self-interested helpers, i.e. those who are strongly driven by incentives; multiple motive consumers, i.e. those who are motivated by a variety of factors; consumer advocates, i.e. those motivated primarily by concern for other consumers; or true altruists, i.e. those motivated by both concern for other consumers and the desire to help the business. Hence, positive or negative experiences alone may not be enough to trigger e-WOM activity. They are likely to be coupled with other drivers discussed above, such as the desire to help or to take revenge on the company.

Service failure and customer dissatisfaction are the main triggers for negative e-WOM (Keaveney, 1995). Revenge behavior in consumers also motivates them to post negative e-WOM (Wetzer et al., 2007). Wetzer and colleagues analyzed the negative emotions that can be experienced and how these negative emotions evolve into different goals for engaging in N-WOM (negative WOM) activity. For instance, the goal of anger and frustration could be revenge, in which case N-WOM is used to hurt a business. Anger, irritation, frustration, disappointment, regret, and uncertainty were the most common negative emotions. Regret results in a negative feeling about oneself or a feeling of having made a bad choice, so the goal of an N-WOM would be to try to prevent others from making similar mistakes. When people are worried or uncertain, the goal is advice, in order to reduce uncertainty.

### The Response

Making a decision to purchase a product involves risk, prompting some customers to depend on e-WOM to guide their choice. Moreover, positive e-WOM may help the brand to build a positive image, as well as increase customers' intentions to purchase (Jeong & Jang, 2011).

Pantelidis (2010) described a business that suffered due to its inadequate response to a single negative e-WOM incident. As a result, the owner was forced to close his business.<sup>1</sup>

Graham and Havlena (2007) found evidence that advertising can stimulate positive WOM communication through a two-step flow where mass persuasion drives person-to-person influence. They found that advertising stimulates significantly higher levels of brand advocacy and that e-WOM plays a significant role in generating offline brand advocacy independent of advertising's influence. The study also indicates that WOM significantly adds to advertising's effect (Graham & Havlena, 2007).

Responses to customer comments have the potential to destroy or strengthen a brand's reputation. Zhang et al. (2010) found that consumer-created reviews and the volume of these reviews significantly increase the online popularity of the brand. In contrast, reviews and ratings created by editors had a negative impact on the intention of consumers to visit a company's webpage. Practitioners need to carefully plan a strategy to monitor and respond to the customer comments in online forums. Pantelidis (2010) found examples of brand managers who successfully responded to comments in an electronic forum and, in so doing, turned dissatisfied customers into loyal patrons.

### **Contextual Factors**

It is clear that some recommendations are more persuasive than others which refers to the persuasiveness of each recommendation. Bickart & Schindler's (2001) study of Internet forums identifies three characteristics that give a platform greater influence. Credibility, the opinions, and accounts are from trustworthy sources with the authors being fellow consumers with no vested interest in the product and no intent on manipulating the reader. Relevancy, the information is expected to reflect typical product performance. Lastly, empathy; the information recounts personal experiences which are not found in company-generated information (p. 32-33).

Multiple studies conclude that positive e-WOM has significantly more impact than negative e-WOM (Vazquez-Casielles et al., 2013; Sweeney et al., 2014). Sweeney et al., (2014) found that strength of e-WOM is less critical in terms of delivering a positive message than a negative message. Companies must develop strategies to encourage positive e-WOM while making efforts to avoid negative e-WOM (Vazquez-Casielles et al., 2013).

Zhang, Craciun, and Shin (2010) examine the issue of positive vs. negative e-WOM from the consumer's mindset. They categorize consumers as having either a "promotional focus"—more concerned with advancement and achievement through product consumption—or a "prevention focus"—more concerned with the avoidance of negative outcomes (Zhang et al., 2010). In studying consumers of a software program, a positive bias (readers find positive reviews more useful than negative reviews) was found for products associated with "promotion" consumption goals and a negative bias for products associated with "prevention" goals (Zhang et al., 2010).

### Theoretical Perspective

Social learning theory, also referred to social cognitive theory, is also relevant in studying e-WOM. Albert Bandura developed the theory when he studied the learning process that occurs in interpersonal contexts and conducted research on the acquisition of behaviors through social observation (Bandura, 1977). Social learning theory views learning as a cognitive process that takes place in a social context. The theory holds that portions of an individual's knowledge acquisition can be directly related to observing others within the context of social interactions, experiences and outside influences. Social learning theory is useful in explaining how people acquire knowledge and develop new behaviors or opinions by observing other people. It stresses the role of imitation and modeling behavior of others. When people observe others performing a behavior, and see the consequences of that behavior, they use that information to guide subsequent behaviors.

Chen, Wang, and Xie (2011) found links between WOM and observational learning and contend that the two social interactions jointly influence consumers. Observational learning can be connected with Bandura's study of social learning as people observe the actions of others in order to shape their own beliefs. While actions are not 'observed' in e-WOM communication, behaviors and attitudes are communicated from one individual to another individual or numerous individuals. Those behaviors and actions are therefore learned by receivers based on experiences of the e-WOM communicators. Through e-WOM messages, actions are communicated to people, who use the learned information to influence their beliefs, actions, and attitudes.

e-WOM communication includes avenues such as social media, blogs, and Internet forums. Receivers of e-WOM messages go to these platforms looking for information. For instance, consumers often search for recommendations from blogs or product reviews before making purchases. This is an effort to learn more about the product or service they are considering. e-WOM receivers take the information conveyed through those platforms by e-WOM communicators and use that information to shape their attitudes and behaviors.

### SOLUTIONS AND RECOMMENDATIONS

As previously mentioned, social comparison theory can help explain the persuasiveness of WOM and e-WOM. The theory suggests that people tend to compare their attitudes and capabilities with those of others as a way to satisfy a need for self-evaluation (Festinger, 1954). Festinger (1954) hypothesizes that people evaluate their opinions and abilities through comparisons to other people. That tendency to compare oneself with another person increases as that person is seen to be similar because individuals assume that similar people have similar needs and preferences (Prendergast et al., 2010).

When searching for recommendations, a communicator who is perceived to be like the receiver is more persuasive; if someone is seen as similar—such as a fellow consumer—then the views of that person are seen as more relevant. e-WOM is effective because people are often referred by someone they trust. Even if the communicator is not someone the receiver knows personally, a connection may be drawn if the communicator is a fellow consumer with similar interests. Social comparison theory suggests that people view fellow consumers as credible recommenders, and information shared from these people is more trustworthy than traditional marketing material, which may be biased (Prendergast et al., 2010).

e-WOM is instigated by motives of both communicators and receivers. By comparing themselves with others, receivers develop connections with communicators with whom they identify.

An examination of Internet forums will find that the participants have many commonalities and share similar interests. Both communicators and receivers go to these forums looking to connect with people similar to them. Electronic WOM communications that offer consumers the ability to exchange information and develop relationships with others who share similar interests have the potential to generate more significant interest.

In order to shape online conversations, Mangold and Faulds (2009) outline methods that can influence online discussions. They suggest corporations: (1) provide network platforms for like-minded individuals; (2) use blogs and social media to engage consumers, offering the opportunity for them to submit feedback; and (3) use traditional and Internet-based promotional tools to engage consumers. In the past, one of the companies challenged customers to create short videos describing "how they left their old cleaning method for a new try." The contest drew a large amount of positive attention for the company. The consumers are more likely to talk about companies and products if they know a lot about them, so providing information can sway the conversation. Mattel accomplishes that by including a "GrownUps & Parents" blog on its website with valuable information about the company's toy products.

The results of the Prendergast et al. (2010) study indicate that marketers wanting to initiate positive e-WOM communication on online forums should ensure that the group's interests closely match those of their product's users. That can be accomplished by first conducting research to identify specific common interests among intended users and then monitoring discussion topics to identify which discussions appear to be of most interest to the target consumers (Prendergast et al., 2010).

Cheung & Lee (2012), who established a sense of belonging, reputation, and enjoyment of helping others as factors that motivate e-WOM communicators to share information, recommend allowing users to set-up personal profiles, publically recognizing membership status and providing mechanisms to identify members who have helped others as ways to achieve those motivational factors. Also, "connecting contributors and readers via person-to-person messaging and chat functions enable readers to show their appreciation for reviews received" (Cheung & Lee, 2012, p. 224).

Saxton and Waters (2014) urge public relations and marketing professionals to adapt their concepts, theories and methods to the new reality and Saffer et al. (2012) recommend that social media be used to build relationships with publics strategically. Online polls or chat rooms allow consumers to feel engaged, and Mangold and Faulds (2009) contend that people are more likely to communicate through word-of-mouth and social media when they are engaged with the product, service or idea (p. 362).

Kozinets et al. (2010) examine seeding campaigns, which are efforts to place a product among influential consumers so that they can communicate favorably about it to other consumers. In the study, 90 influential bloggers were chosen to receive new mobile phones based on the lifestyle-related relevance of their blog content and traffic in the hope that they would share positive reviews of the phone with their readers and followers. There are general rules and ethical implications to consider with seeding campaigns, and Kozinets et al. (2010) found that the bloggers were simultaneously flattered and threatened when selected. There is also no guarantee that the bloggers' reviews will be positive, so seeding campaigns should be carefully conducted.

Creating products and services that address the wants and needs of the audience is the first step in creating positive WOM and e-WOM. After that, there are several ways to approach consumer engagement. Some tactics have been successful; many have failed. Marketers need to remember that forums and social media are consumer generated and as soon as a discussion moves from being consumer-controlled to

marketer-controlled, the forum can quickly lose credibility and users (Prendergast et al., 2010). However, engaging and interacting with consumers on these platforms is not only needed but has become expected.

### **FUTURE RESEARCH DIRECTIONS**

Growth in technology has placed greater emphasis on the role of e-WOM communication. As technology changes, e-WOM communication and how companies interact with consumers' changes. That continuing growth means that any research in this area can quickly become outdated. Therefore, research on this topic must continue to take place as technology evolves.

This chapter explores e-WOM in a general sense. Electronic WOM messages are shared through a multitude of means; consumers are conversing in avenues that include social media, blogs, online reviews and Internet forums. This study examines just one specific medium of message transmission—social media. However, investigating the difference in how consumers engage in e-WOM through other platforms would complement this study. Behaviors of people on social media likely differ from those in online discussion forums or online customer review sections. Research that delves into the multitude of e-WOM areas would provide a comprehensive understanding of consumers' habits regarding e-WOM. Also taking a closer look at the behaviors of consumers when using the variety of platforms and identifying the differences would provide added direction to customer relations and marketing professionals who are looking to engage their consumers through social media. Offering insight into specific social media networks would be beneficial in creating social media strategies and campaigns.

### CONCLUSION

While the level of control marketers once held over their message has declined, it is essential to recognize that control is not entirely lost as e-WOM provides more significant opportunity to engage consumers. If engagement is active, dialogue can be influenced, and a limited amount of control over the message can be maintained. Web 2.0. interactivity allows users to take advantage of richer information when considering e-WOM messages. It is essential for customer relations to include two-way communication, interactivity, and dialogue.

Many research found the advantages of two-way communication plentiful, specifically in the use of social media. This type of communicating has several benefits; one of the majors is offering a low-cost way of developing relationships with various publics. Also, two-way communication allows for immediate feedback, and it enhances and facilitates a mutual understanding. The amount an organization communicates with its social media followers positively affects the perceived organization-customer relationship. Companies can maintain significant control on the message if they are present and active in communication.

The power of online discussion is remarkable for both customers and companies. Research indicates that many customer relations professionals feel the importance of social media however lack an understanding of how to engage consumers. On the other hand, it is no longer just about getting the consumers' attention, continuity of companies' social media engagement is also crucial. Studies give the responsibility of building a relationship with customers, to the organizations for managing and maintaining e-WOM to interact with the customers. Strategically developed integrated marketing campaigns should involve

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social media and other non-traditional forms of media with a goal of provoking consumer involvement in the message. Companies can achieve "dialogic outcomes" if they actively seek conversation through the messages they are sending.

Enabling consumers to co-create brand meaning and tell stories is essential to e-WOM. Social media can, and should, be used to build relationships with the customers strategically. Customers who are more satisfied and more knowledgeable about the company are more likely to view the quality positively, leading to more influential (positive) WOM communication. Nevertheless, most brands use social media only to spread their promotional messages instead of connecting with their customers and the public. Social media should not be just an advertising platform to promote products or services. Social media opens an organization up to both internal (leaks, criticism of management, embarrassing employee behavior) and external (criticism, false information) difficulties.

Customer relationship or brand managers and relevant practitioners can take advantage of this study to better understand how the overall opinion of customers may differ from those who post online reviews. They can then take action to bring opinion expressed on the two platforms closer together. This may be by providing an incentive to more of their regular customers to go and post online reviews or encourage customers to post feedback immediately after the product experience. Additionally, for practitioners, this study emphasizes the relative importance of various fundamentals and can help professionals in prioritizing focus on specific elements.

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#### **KEY TERMS AND DEFINITIONS**

**Communicator:** It refers to the individual who writes his/her opinions or experiences about a service or product through the internet.

**Consumer-Generated Media:** It refers to online commenting channels which contain user-generated content.

#### Fundamentals of Electronic Word of Mouth

**Credibility:** It is the believability of an e-WOM message. It indicates that the message is from a trustworthy source and free of manipulation.

**Receiver:** The individual who seeks for e-WOM.

**Stimuli:** An individual's internal trigger of sharing his/her opinions or experiences regarding a service or product.

**Word of Mouse:** It refers to sharing customer experiences through a user-generated platform, the electronic (online) form of word of mouth.

**Word of Mouth:** It is a form of communication between consumers about sharing information and opinions of certain products, companies, and services.

#### **ENDNOTE**

When a service offered constructive criticism, the employer wrote "Dear Lorraine; you are an idiot we don't need your feedback." Lorraine forwarded this to her friends, and the word-of-mouth quickly spread. The story was also covered in the conventional press, and the website that posted the email exchange received over twenty thousand hits.

### Chapter 2

# Be or Not Be Online Engaged: Exploring the Flow From Stimuli to e-WOM on Online Retail Consumers

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#### **ABSTRACT**

Relationship marketing is a field of knowledge that emerged in the 1980s. The relationship between online consumers and brands is embedded in the same relationship marketing paradigm but become a significant issue for companies in the 21st century with the proliferation of Web 2.0. In order to give insights about online engagement and the process behind, this chapter aims (1) to conduct a systematic literature review on online stimuli experience, adaptability, e-WOM, positive/negative emotions, memory, and online engagement; (2) to present a comprehensive framework exposing the flow from stimuli to e-WOM on online retail consumers. Findings allow the authors propose online retailer recommendations and suggestions for further research.

#### INTRODUCTION

Society is evolving fast in technology and internet users are growing all over the world (McAndrew & Jeong, 2012). Actually, more than 60% of individuals in the Europe of 28 countries (EU28) use the internet daily (Eurostat, 2016a).

In the European Union (EU28), the proportion of individuals aged 16 to 74 having ordered goods or services (mainly clothes and sport goods) for private use over the internet ("e-buyers") has continuously risen, from 30% in 2007 to 53% in 2015 (Eurostat, 2016b) and 68% in 2017 (Eurostat, 2018). Therefore, the relationship between the market, consumers and brands are constantly being challenged. In this turbulent environment, consumers make choices bearing in mind several variables in their decision process.

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As Internet usage grows, brands are becoming even more important than they have been in other channels or environments. With new options emerging every day from many unknown providers all over the world, consumers want to choose a supplier that represents a set of values or attributes that are meaningful, clear and truthful (Bergstrom, 2000).

In a highly competitive world, goods and services are easily duplicated or replaceable. Therefore, brands become an important asset for simplifying the decision-making process for consumers. If we are able to properly manage this asset, this can create differentiation, relevance and affinity (Otim & Grover, 2006). Actually, brand name is one of the main factors that consumers use to differentiate providers, due to its connection to the perception of brand trust (Ruparelia, White, & Hughes, 2010).

This changing world leads to a profound transformation on brand management for those who seek to operate within the new global business environment, particularly the online environment. Indeed, in what new companies concern, branding is a crucial issue for their success in market because helps to capture customers, retain customers and build a favorable reputation (Bresciani & Eppler, 2010).

Therefore, in recent years many people have spent time and effort to study online consumer behavior. From top researchers to college students, the online environment has become a "must follow" area in marketing trends. Inside this wide spectrum, the online retail consumers have been object to high attention. Thus, a question arises: what are the main topics and issues that have been discussed in literature about online retail context?

The stimulus-organism-response paradigm (or S-O-R) has been employed to analyze consumer behavior (online and offline) with companies. This paradigm is aligned with consumer-brand relationship field of research. Therefore, could literature provide an explanation for the following questions? Which online stimuli and experience (and type of adaptability) are more effective in influencing the consumer intentions and electronic word-of-mouth (e-WOM)? Particularly, could emotions and memory created have an important role on enhancing a favorable response by online consumers?

The main aims of this chapter are (i) to conduct a systematic literature review on online stimuli experience, adaptability, e-WOM, positive/negative emotions, memory and online engagement; (ii) to present a comprehensive framework exposing the flow from stimuli to e-WOM on online retail consumers.

#### **BACKGROUND**

Relationship marketing emerges in the 1980's as a new paradigm that shift from transactions to relationships. Relationship marketing create, involve, integrate and maintain suppliers, distributors, consumers and other partners within a company or an organization, working together in activities of marketing and development. Several conceptualizations of relationship marketing are shown in Table 1.

Although all definitions focus the ongoing process of stablish and maintain relational exchanges, the one provided by Gummesson (1999) open the door to the online relationships, social networks and other online platforms. Concomitantly, Fournier (1998) publishes her seminal article on the relationship theory associated to brands. Brands can be born, live and interact with consumers. This anthropomorphic metaphor - considering a brand as a partner in a relationship - gave wings to the research line of consumer-brand relationships. The brand relationship quality model comprises six components that express the quality of the relationship consumer and brand: love/passion, self-connection, commitment, interdependence, intimacy and brand partner quality. Between a brand and a consumer can grow an emotional attachment (e.g., Schouten & McAlexander, 1995; Ahuvia, 2005; Thomson, 2006), a kind

Table 1. Definition of relationship marketing

Definition of relationship marketing	Source
Attracting, maintaining, and –in multi-service organization-enhancing customer relationships	Berry (1983, p. 25)
Process of identifying and stablishing, maintaining, enhancing, and when necessary terminating relationships with customers and other stakeholders, at a profit, so that the objectives of all parties involved are met, where this is done by a mutual giving and fulfilment of promises	Grönroos (1997, p.407)
All marketing activities directed toward establishing, developing, and maintaining successful relational exchanges.	Morgan and Hunt (1994, p. 22)
Total relationship marketing is marketing based on relationships, networks and interaction, recognizing that marketing is embedded in the total management of the networks of the selling organization, the market and society. It is directed to long term win-win relationships with individual customers and other stakeholders, and value is jointly created between the parties involved.	Gummesson (1999, p. 24).
Relationship marketing is the ongoing process of engaging in cooperative and collaborative activities and programs with immediate and end-user customers to create or enhance mutual economic value at reduced cost.	Seth and Parvatiyar (2000, p. 9)

of passion or love. Self-connection means the ability of a brand create and express an identity in which consumers identified themselves with the brand. Commitment reflects the intention to keep going with the relationship. Interdependence involves frequent interactions. Intimacy means closeness and mutual knowledge. Finally, the relationship strength and satisfaction are called brand partner quality.

In this domain several other models have emerged. For instance, the Relationship Investment (RI) model (Rusbult, 1980), proposed initially to the close relationship in social psychology context, was then adapted to management and marketing context. The model considers three drivers to commitment: satisfaction (positive or favorable relationship with the partner); quality of alternatives (compare the quality of the relationship with the partner with the relationship of alternative partners); and relationship investment (the desire to continue the relationship even if it means sacrifices).

Although S-O-R model comes from the perspective of environmental psychology, several studies have been employed this model in the retail context, after having been introduced by Donovan and Rossiter (1982). Actually, this model has been used in both offline (e.g., Baker, Grewal, & Parasuraman, 1994; Sherman, Mathur, & Smith, 1997; Sherman & Smith, 1987) and online environment (e.g., Dailey, 2004; Eroglu, Machleit, & Davis, 2003; McKinney, 2004; Menon & Kahn, 2002; Wu, Cheng, & Yen, 2008).

Another emblematic model arises from the work of Batra, Ahuvia and Bagozzi (2012), is called brand love prototype and comprises seven dimensions: passion-driven behaviors (willingness to invest resources, passionate desire to use, the involvement with things done in past), self—brand integration (self-identity and life meaning and intrinsic rewards), positive emotional connection (intuitive fit, emotional attachment and positive affect), long-term relationship, anticipated separation distress, and attitude /valence and strength). Attitude includes satisfaction or favorable evaluation and also how strongly hold feelings/evaluations.

Later, Park, Eisingerich, and Park (2013) propose the Attachment–aversion (AA) model. This model considers, for the first time, the positive and the negative side of consumer-brand relationships. Actually, consumers could feel attracted for a brand and aversion for another brand, or even the quality of the relationship could evolve and change over time.

#### SYSTEMATIC LITERATURE REVIEW

#### **Methodological Process**

A systematic literature review is conduced to find relevant studies on the topic of online retail. Therefore, several criteria in terms of quality, time range, scope of study, among others. The process starts with a comprehensive and systematic search on the data base ABI/INFORM Complete (containing several journal editors indexed, such as: Emerald, Elsevier, Taylor and Francis, Wiley and Sage), to find expressions or words related to "online" and "internet". After this, researchers considered the following keyword expression for further search: "online", "brand" and "internet companies". These keywords were joined by terms that reflect the scope of the study, that is, how to "create", "build", "engagement" and "manage" online brands.

We can identify in literature three type of retail organizations: the traditional brick-and-mortar companies (traditional offline brands), the hybrid companies (online and offline, also called as 'brick-and-click') and online internet companies (born online).

Several filters are used to select only the best quality research articles published:

- **Full-Text Papers:** With this first filter it was guaranteed that we were working only with full-text papers available;
- **Peer-Reviewed Papers:** With this second filter it is assure that the papers used have scientific standard:
- **Scholarly Journals:** With this third filter it is assured to only consider papers published on scientific journals.

In order to be able to conduct the quality journals selection, it is used the Journal Quality List – Fifty-seventh Edition, 18<sup>th</sup> April 2016, compiled and edited by Professor Anne-Wil Harzing. From this one, it was chosen to use the WIE 2008 — WU Wien Journal Rating May 2008 List. The use of WIE 2008 list includes only A/A+ journals. We consider articles from the following topic areas: Marketing, Entrepreneurship, General Management and Strategy and Management Information Systems - Knowledge Management. Our intention is to cover the whole possible areas that could address the core topic.

#### **Findings**

This study considers a time frame from 2004 to 2015. The advent of Web 2.0 and the turning-point identified by O'Reilly in 2014 (Constantinides & Fountain, 2007) lead us to consider articles only from 2004. From an initial group of 198 articles, we check the abstract and final the full text and only 20 remain. The last core leading articles are shown in Table 2.

The analysis of the core articles and also other findings during the search process allow us to highlight three main points:

- 1. S-O-R framework is one of the most used framework in both online and offline context;
- 2. The study of online behaviors becomes more important than the study of motivations to use online retail platforms (this aspect is related with the emerging studies on engagement);
- 3. Study moderating effect is still a recommendation.

Table 2. Core leading articles on online branding and business

Authors (year)	Journal Title	Insights
Constantinides, E. (2004)	Management Decision	Fast paced environment of the online business requires continuous evaluation of market conditions, frequent strategy assessment and close monitoring of competitive moves; Permanent orientation towards innovation and expansion as a prime strategic as a mean of surviving, maintaining competitive advantages and growth
Laroche, M., et al. (2004)	Journal of Service Research	Significant strong impact of mental intangibility on perceived risk; the intangibility-perceived risk model had a stronger relationship with generic products than with brand products; in the online environment, factors as privacy, security, assurance and trust also influence perceived risk
Sultan, F., Rohm, A. (2005)	MIT Sloan Management Review	Identify six major issues to consider before implementing a mobile-marketing strategy: Exploiting the capabilities of mobile marketing; using universal appeals to tap into global markets; addressing privacy concerns; aligning value-chain partners; integrate the mobile platform with other media; develop mobile-specific metrics
Pan, Yue, Zinkhan, G. (2006)	Journal of Retailing	An e-retailer site should have a clearly stated privacy policy; the mere existence of such privacy policy increases consumer trust
Lwin, M. O., Williams, J. D. (2006)	The Journal of Consumer Affairs	The presence or absence of brand name was found to influence perceived risk, product quality and purchase intention. The interaction with the warranty information was consider insignificant (retailer reputation moderates the effect of expressed warranty)
Collier, J. E., Bienstock, C. C. (2006)	MIT Sloan Management Review	A consumer evaluates an online retailer's through five website attributes (ease of use, privacy, simple design, consistency and flexibility, and good information), the capability to deliver the product (time frame between placing the order and receiving the product, accuracy of the order and the condition of the order received) and the ability to solve a problem.
Otim, S., Grover, V. (2006)	European Journal of Information Systems	Web-based companies can foster customer loyalty by focusing mainly on post-purchase customer service dimensions, especially customer support; pre-purchase and transaction-related services are somewhat important, support product search and evaluation have a weaker effect on customer repeat purchase intentions
Khalifa, M., Liu, V. (2007)	European Journal of Information Systems	Experience and habit appear as important effects on repurchased intention, which is indicative of online consumer retention
William, K. et al. (2008)	European Journal of Information Systems	Creation of a Digital service design taxonomy, through the analysis of four design dimensions (Service delivery, Malleability, Pricing/funds and Service maturity) and their dependencies of design objectives (business, interaction and technology)
White, T. B. et al. (2008)	Marketing Letters	Consumers' responses to highly personalized messages are dependent on their perceived of being justified; high distinctive personalized messages had, at best, equal click-through intentions than lower distinctiveness messages.
Fueller, J, Von Hippel, E. (2009)	MIT Sloan Management Review	Online communities have the potential to create strong brands at low cost; high brand engagement from communities' members to communities brands
Urban, G. L. et al. (2009)	MIT Sloan Management Review	Marketing is communication and morphing to cognitive styles enhances communication. Ratings increase significantly from a non-morphing site to a morphing site on the relevant measures: trust, helpfulness, ease of use and information identification
Benedicktus, R. L. et al. (2010)	Journal of Retailing	Favorable consensus information led to increased trustworthiness perceptions and purchase intentions; physical presence stimulates trustworthiness of unknown retailers, but brand familiarity presents similar level of benefits (convey trustworthiness with consumers and increase purchase intentions)
Hur, WM. et al. (2011)	Management Decision	Identified that brand community trust and affect leads to brand community commitment; and that brand community commitment leads to brand loyalty behaviors; brand community commitment has a strong effect on word-of-mouth
Sashi, C.M. (2012)	Management Decision	Customer engagement focus on costumers and their needs, provide superior value relative to competitors (generating, disseminating, and responding to customer needs and market orientation) and build trust and commitment with costumers

continues on following page

#### Be or Not Be Online Engaged

Table 2. Continued

Authors (year)	Journal Title	Insights
Rose, S. et al. (2012)	Journal of Retailing	Perceived control affects customers' affective state and their confidence in online shopping decision (connectedness, customization and ease-of-use); Cognitive Experiential State and Affective Experiential State are identified as part of Online Customer Experience; confirm the relationship between the main Online Customer Experience outcomes: satisfaction, trust and repurchase intention.
Garrigos-Simon, F. J. et al. (2012)	Management Decision	The impact of social networks and especially the new context Web 3.0 in organizations is increasing and supplant other areas in organizational structures. Community managers and crowdsourcing process are acquiring increasing importance
Weill, P., Woerner, S. L. (2013)	MIT Sloan Management Review	Three main trends: every aspect of business becomes increasingly digital; the increasing number of "digital natives" (young current and future customers and employees); dawning of the age of customer voice; Many industries are moving quickly from "Place" to "Space" (from physical content, packaging and infrastructures) to a hybrid or pure-online offer of products, services and contents
Floyd, K. et al. (2014)	Journal of Retailing	1) Provide a quality product that delivers on its brand promise and meets or exceeds consumers' expectations 2) Retailers must establish mechanisms for detecting service and product failures, and have established procedures and well-trained employees in place to redress such situations 3) Retailers should encourage consumers who have a favorable product experience to recommend the product to others on the seller's website and on other third-party websites Online engagement: that is, since potential consumers are apt to interpret a greater number of positive online product reviews as supporting an accurate assessment, retailers should facilitate the writing of reviews by satisfied consumers. However, it is important that retailers encourage positive e-WOM without appearing to engage in unethical or deceptive practices. 4) There is some evidence of retailers posting fake positive reviews to boost their ratings and unfavorable reviews denigrating competitors. Such transgressions breed mistrust among consumers and are likely to prompt a negative backlash in the marketplace.
Hollebeek, L.D. et al. (2014)	Journal of interactive marketing	Develop a comprehensive scale to measure online brand engagement: cognitive processing, affection, activation

Note: Although the last article is not directly related with retailing, we included because it is the first attempt to develop a comprehensive scale for online brand engagement

#### Framework: From Stimuli to e-WOM on Online Retail Consumers

Brands are used by consumers as an important tool for organizing information and simplifying their decision making process, both in cyber and traditional marketplaces (Merrilees & Fry, 2002). As Leone et al. (2006) point out, effective brand management is critical and it is a mistake to ignore its important role in developing long-term profit streams for firms, whether they are manufactures or retailers.

De Chernatony and Christodoulides (2004) suggest that consumer evaluate brands through a hierarchy structure, emphasizing the rational values first (functional values, emotional values and promised experienced). Delgado-Ballester and Hernández-Espallardo (2008) highlight consumers' beliefs, attitudes and intentions as main factors on building online brands. Da Silva and Alwi (2008) allude that brand characteristics and assets such as customization, customer service, ease of use and security are the most important in online context.

Later, Chabowski, Samiee, and Hult (2013) identify five relevant fields of research for online and offline brand context: international branding strategy, brand positioning, brand/country origin, brand

image, and brand performance. In a globalized world, international brand strategies have a multifaceted nature because sometimes local brand are foreign-owners. For instance, McDonalds and Starbuck have a global strategy without forget local specificities of the product/experience offered. This is the case of McDonalds, using rice instead of potatoes in China and soup in Portugal. Thus, positioning becomes important in the moment of creating the differentiation, that is, brands should ask themselves what could be the added value for each culture and country that could make the different to other brands with the same product category. Actually, cross-national studies, ethnographic studies and country-of-origin branding and images emphasize consumers' perceptions of local and global brands.

Although more studies are needed in international context, Alden, Steenkamp, and Batra (2006) highlight that global consumption orientation reduces consumer animosity. This could be the case of brands like Google or Amazon. Finally, brand performance shows its face through brand equity (a set of associations, knowledge, perceptions, and intentions about a brand), purchase likelihood, or even product consideration and brand relevance (Erdem, Swait, & Valenzuela, 2006; Fischer, Völckner, & Sattler, 2010).

Embedded in the consumer-brand online relationships, the literature review reveals three constructs as the most cited and studied: trust, behavioral intentions and satisfaction. Trust is commonly identified in the literature as an important aspect in managing online brands. Therefore, trust appears by far as the main positive indicator for online brand loyalty and customer quality judgment (Collier & Bienstock, 2006). Actually, trust reduce perceived risk in online environment (Laroche, McDougall, Bergeron, & Yang, 2004) and increase consumers purchase intentions (Benedicktus, Brady, Darke, & Voorhees, 2010). The presence or absence of brand name is also found to influence perceived risk, product quality and purchase intention and appears to be a strong driver to trust (Lwin & Williams, 2006).

Trust influences consumers when dealing with specific websites, such as brand communities (Hur, Ahn, & Kim, 2011), or connecting with sellers (current or potential consumers-sellers interactions). Indeed, a favorable evaluation of the websites, its design and features, the positive emotions of the consumers using the websites lead to consumer engagement to online product/brands (Brodie, Hollebeek, Juric, & Ilic, 2011); with some consumers becoming fans of certain brands (Sashi, 2012). Consumers engaged are more willingness to perceived benefits of purchasing online and trust on product/brand. On the other hand, an unfavorable evaluation of the websites may lead to negative emotions, perceived risk and eventual problems, insecurity and an overall negative evaluation of the products/brand and even the whole system (see figure 1).

The second main construct that emerges from the literature review is behavioral intentions. This construct is conceptualized as the intention to buy more or buy again the same product/brand or even use the same website, but could also include the willingness to pay more for the same product or the recommendation to others, using positive or negative electronic word-of-mouth (e-WOM). As suggested by Otim and Grover (2006), repurchase intention can be used as a measure for consumer loyalty or actual behavior. Therefore, we can find that behavioral intentions can be regard as a proxy of repurchase or actual behavior (Hur et al., 2011) and that the emotional state of consumers and their trust in a brand influence their decision to purchase online (Rose et al., 2012). Although companies must follow an integrated policy to approach and manage the relationship with their customers or potential customers, post-purchase services are the most important in the development of customer loyalty (Otim & Grover, 2006).

Past online experience and habit or the actual experience (see figure 1) also appear as constructs that influence consumers (Khalifa & Liu, 2007) and can be used as indicators of online consumers' retention.

Brands that are able to develop different consumers experience strategies to respond to different online consumers profiles and shopping habits can take advantage in repurchase intention (Novak, Hoffman, & Yung, 2000).

Customer satisfaction influences transactions and the selection or the use of a product/brand in both online and offline context. However, customer satisfaction depends on privacy issues and security aspects (e.g., seeking information, use of social networks or online purchases). Moreover, literature proposes that customer satisfaction emerges from risk evaluation (perception of low risk using the website or service), trust and perceived quality. Privacy policy increases consumer trust and satisfaction (Pan & Zinkhan, 2006).

Customer satisfaction is also related with consumer engagement. As suggested by Sashi (2012), consumer engagement deals with the attraction, involvement and long-term relationship with the consumer. Consumer engagement represents an important role for generating higher corporate performance, including sales growth, superior competitive advantage and profitability (e.g., Kumar & Pansari, 2017; Gupta, Pansari, & Kumar, 2018). The justification underlying these assertions is that engaged consumers play a key role in viral marketing activity by providing borders and recommendations for specific goods, services or brands to others. With the proliferation of social networks these activities have become even more important, rapid and effective. As suggested by Fueller and Von Hippel (2009), online communities have the potential to create strong brands at low cost.

Customer satisfaction can be influenced by both cognitive (comparison between expectations and perceived performance) and affective (emotions) antecedents (e.g., Jones, Reynolds, & Arnold, 2006; Loureiro Miranda, & Breazeale, 2014). The customized and differentiated strategies (adaptive strategies) have been employed by brands to adapt to the market and the environment. Literature supports that website design, functionality, visual appeal, information content and other features can affect purchase probabilities and that 'one size fits all' may not be the most effective strategy (see figure 1). Actually, targeted messages can build empathy and increase sales (Urban, Hauser, Liberali, Braun, & Sultan, 2009).

The conceptual framework proposed in the current chapter and shown in figure 1 represents an extension of S-O-R framework and intends to organize constructs in a flow from stimuli to e-WOM on online retail context. The framework is based on literature but, as far as we know, not yet fully empirically tested and analyzed.

In S-O-R framework stimuli are represented by a set of attributes that affect the consumers' perceptions (Arora, 1982; Buckley, 1991). These attributes are: actual and past experience using the online platforms; the website quality (e.g., website design and visual appeal, information content, interactive features) (Loureiro, 2015); and usability and adaptability (ease of use and ability to improve and adapt to the system). Stimuli are cues that enter in consumers' mind and arouse or initiate the process that leads to behavior.

Between the stimuli and the outcome, a whole internal process occurs in which consumers transform the stimuli into meaningful information that help them to make judgments and decisions. The process causes a change in the emotional state of consumers (PAD: pleasure, arousal and dominance) and we propose that emotions contribute to create memories and help consumers to be involved with the process that could create online engagement. Positive emotions can create a positive halo effect in the formation of attitudes (e.g., Bagozzi, 1996; Eroglu et al., 2003) and it is likely to result in positive memories (Dolcos & Cabeza, 2002). Thus, positive emotions and memories will help in the process of online engagement due to the deeper involvement with the process.

Organism contains pleasure (emotion that means the degree to which a person feels good, joyful, happy, or satisfied), arousal (the extent to which a person feels stimulated, active, or excited) and dominance. The last one refers the extent a consumer feels powerful vis-à-vis the environment that surrounds him/her (Eroglu et al., 2003; Menon & Kahn, 2002). When a consumer feels that is able to influence or control over the situation, then he/she is more willing to create positive memories and become more engaged in using the online platform.

The final outcome is response and represents the final reaction of the consumers. Depending on emotions and memories created, consumers may be more approached to the website, product/brand or avoid it. This chapter suggests that positive emotions not only create positive memories, but also engage the consumers into the process of use the online platform, resulting in a positive approach behavior. This means that consumers will purchase more products/brand with higher frequency, will post positive online reviews and will recommend to other (positive e-WOM). By contrast, if the stimuli generate negative (at least less positive) emotions and create negative memories (or do not create memories at all), the engagement process may be compromised, and consumers will tend to avoid purchase again and will say negative things about.

This process that flow from stimuli to outcomes may be affected by variables that could intensify or reduce the strength of the relationships, such as: age, gender, education literacy. Thus, these variables may act as moderators. Depending on the degree of interest on the product/brand, gender may act as moderator. For instance, car industry may be a sector that motivated more male than female, but eventually clothing industry may be more appealing for female. Elder consumers may have less ability to navigate in online platforms than younger consumers. Education and culture may also active the internal process in a different way. The interpretation and the experience of use an online platform may create different emotions and feelings and lead to different reaction and e-WOM.

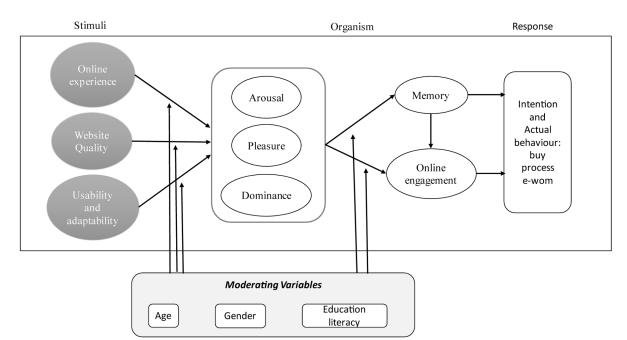


Figure 1. Conceptual framework: from stimuli to e-WOM on online retail consumers

#### ONLINE RETAILER RECOMMENDATIONS

The current study allows us to point out five major recommendations:

- 1. Consumers need to be sure that online transactions are safe, therefore retailers should develop trust with their consumers through brand familiarity, fulfil promises, and provide trustful information (do not create high expectations that cannot be achieved).
- 2. Online communities, crowdsourcing platforms and other online interactive platforms are mechanisms to be more in contact with consumers, as well as other stakeholders. This could be a good way to involve and engage consumers and co-create with them new products. Yet, do not try to eliminate negative e-WOM or create false positive reviews or false positive e-WOM, because consumers will know, and rather than eliminate problems, it could become the problem itself.
- 3. Online retailers should segment and customize the attributes and characterizes of websites in order to be more accurate to stimulate the internal process that leads to positive emotions and customer favorable behaviors: "One size fit all" may not be the most effective advertising strategy. Targeted messages can build empathy and increase sales.
- 4. The sense of control and empowerment of online consumers seems to be an important variable to leverage the online experience. Online retailers should provide the possibility of multiple interactions in order to improve the experience: consumer-company and consumer-consumer interactions.
- 5. Reduce perceived risk, continuously improve the experience and the website quality and usability, be honest and keep the relationship with customers and other stakeholders are keywords for the success of online retailers.

#### **FUTURE RESEARCH DIRECTIONS**

This chapter presents a systematic literature review and proposes a framework congregating constructs studied and relationships that emerge from literature but not yet properly analyzed. In this vein, the chapter open several avenues for further research:

- 1. Future research can examine the mix of social media, other digital media, and non-digital media appropriate for each stage of the customer engagement process. How to start the engagement process and how it evolves.
- 2. Analyze what stimuli are more (less) important in order to create positive emotions (negative emotions) (figure 1).
- 3. Memories may act as a mediator between emotions and online engagement: Positive memories could be more effective in achieving online engagement than negative memories on weaken online engagement? Or the strength of the relationships is independent of being positives or negatives?
- 4. Develop or at least adapt the Consumer Brand Engagement scale proposed by Hollebeek Glynn, and Brodie (2014) to the online retailers' context.
- 5. Explore the effectiveness of online reviews for products that vary in terms of *credence* and *performance risk* (Schiffman & Kanuk 2007), that is, analyze the effective negative impact of negative online reviews on online brand retailers.

#### CONCLUSION

The convenience to purchase everything in everywhere at the most appropriate price constitutes an advantage for which much has contributed the online retail. Nevertheless, create and maintain an online retail brand it is not an easy task. Consumers quickly can compare and shift to other online retail brand. In order to avoid waivers and retain customers, online brands should be credible and trustful, because provide good products (goods, services) is not enough. All kind of security systems are very welcome and online reviews should be honest. Interactive platforms are also a good bet to keep in touch with customers. Yet, this interaction must be effective, that is, online managers must be quick answering questions and improving the service and experience provided.

Both, the online reviews and the nature of product being reviewed influence online retailer performance (sales elasticities). As Floyd et al. (2014) point out online reviews valence (positive and negative e-WOM and posts) is more important than volume (the number of posts, comments) to exert influence on sales.

Online retailers should encourage consumers who have a good product (service/good) experience to recommend the product to others (e-WOM) and be engaged to the online brand. Actually, more studies on online engagement are demanding. Although Hollebeek et al. (2014) have developed a valuable scale to measure consumer brand engagement in social media, more adapted scales are needed, particularly to deal with online retail context.

The role of emotions and memory in changing behavior has been recognized in psychology and neuroscience (Dolcos & Cabeza, 2002), However, this issue is still and open door needing more research in online context.

Finally, the framework proposed in the current chapter should be empirically tested and analyzed. This process could be conducted in cross-cultural studies in order to get insights from different ways of life and countries.

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#### **KEY TERMS AND DEFINITIONS**

**Arousal:** The extent to which a person feels stimulated, active, or excited.

**Behavioral Intentions:** Comprises the willingness to purchase again the product (good/service) or purchase more frequently, the willingness to recommend the product to others (online and of line) (word-of-mouth) and even the willingness to pay premium price.

**Consumer-Brand Relationships:** a field of research that emerge from the shift of paradigm from transitional marketing to relationship marketing. This field of research deals with the multiple positive and negative, both online and offline, stablished between a brand and consumers.

**Dominance:** The extent a consumer feels powerful vis-à-vis the environment that surrounds him/her. **Emotions:** This chapter deals with pleasure, arousal and dominance.

**Memory:** The mental ability of retaining and recalling or recognizing experience.

**Online Experience:** The atmospheric cues in the online platforms, the interactivity between the organizations and customers and also among customers, or even among other stakeholders, create an experience lived in a virtual dimension.

**Online Stimuli:** Set of attributes present in websites and other online platforms.

Pleasure: Emotion that means the degree to which a person feels good, joyful, happy, or satisfied.

# Chapter 3

# Sentiment Analysis Techniques, Tools, Applications, and Challenge

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#### **ABSTRACT**

Sentiment (opinion) refers to the feelings of a human being, which are generally reflected through speech and writing in a particular natural language. The analysis of these sentiments are therefore carried with the help of natural language processing, text analysis, and computational linguistics to identify and extract subjective information in source materials. Generally speaking, sentiment analysis aims to determine the attitude of a speaker or a writer with respect to some topic or the overall contextual polarity of a document. Sentiment analysis is widely applied to reviews and social media for a variety of applications, ranging from marketing research, political reviews, policy making, decision making, customer service, etc. In this chapter the authors include the introduction to sentiment analysis, various approaches for classification of sentiment analysis, various tools used, the application areas, challenges, and future research direction in this most demanding area.

#### INTRODUCTION

It is a general human tendency that whenever we want to take important decision, we seek the opinion from our friends or relatives and after thinking or analyzing the feedback or opinion of other people, we can reach the conclusion for taking final decision. Before the invention of Internet i.e World Wide Web, many of us asked our friends for which vehicle to purchase, whom they were planning to vote in elections, which washing machine to go for, which tourist place to visit, which doctor to concern, which bank to deposit money, which shopping place the best one, where to stay in city and which hotel to prefer

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etc etc.....But the limitation was; we could have to take decision based on limited number of people's opinion/feedback but the invention of World Wide Web made it possible to collect the feedback from large number of people and not limited to our friends or relatives, As a stranger we can get nonbiased and authenticate feedback.

The people can give the opinion or feedback on websites or blogs, given opinion or review may be in terms of text and it's possible for us to filter or mine the text data. Here the opinion mining comes in role. Sentiment analysis or opinion mining is the study of people's opinion, attitude or emotion towards anything. It is the process of finding users opinion about a particular topic or product. The topic can be anything like, news, event, movie, etc. There is a slightly different perception between sentiment analysis and opinion mining. Sentiment analysis identifies the sentiment expressed in a text form and then analyzes it whereas opinion mining extracts and analyzes people's opinion about an entity. But at most many researchers uses opinion mining and sentiment analysis interchangeably. Here also we use opinion mining and sentiment analysis interchangeably.

During vacations, many people plans for holidays. While planning the holidays they have to think lots of things related to destination to make their holiday more enjoyable which includes whether it's a peak season or off season over there?, what kind food they can get there?, availability of accommodation according to budget?, the local transport facility, how is the locality over there?, is there medical facility available if require?, etc. And here is a requirement of a good tool which answers all these questions.

For planning enjoyable holidays the planner needs to get all this information easily. The one choice for him to get all this information is that, he has to talk in person with different peoples already visited over there. But of course this is very tedious and hectic way. The better choice is to make use of Internet. As we know vast information is available over the Internet which includes many reviews and opinions of many different peoples regarding the different things. Many different applications related to tourism information are also available on the Internet which provides a huge amount of personal reviews for traveling related information. These reviews can appear in different forms like blogs, Wiki or forum websites, social networking website etc. The information in these reviews is useful to both tourist and traveling manager for understanding and planning the trip. But as we see there is lots of reviews are available related to particular place and it is not possible for the person to go through all, because the given reviews are not in specific format, they depend on the writer. So there must be some tool which filters the useful reviews according to the people's expectation and provide good results.

#### **BASICS OF SENTIMENT ANALYSIS**

Sentiment analysis is the study of computing sentiments, opinions and emotions from the text. The primary goal of sentiment analysis is to detect the subjective information from text and define the mind set of author about point

#### **Data Source**

The data is obtained from following sources-

#### Blogs

It's easy to create the blogs that's why people create the blog and uses this blog to share their opinion regarding any topics. We get a huge volume of data from the blogs.

#### **Review Sites**

Before purchasing any product firstly the user take the review of that product and a large number of reviews are available on Internet because the people share their opinion about any product that they used.

#### Dataset

The multi-domain sentiment dataset is available. Most of the work and analysis is done on movie reviews; that movie reviews dataset is used for classification.

#### Micro-Blogging

It is very popular communication tool on Internet. Daily millions of messages appear for micro-blogging such as Twitter, Facebook, and Tumbler etc. These messages sometimes used for classifying sentiment.

#### CLASSIFICATION OF SENTIMENT ANALYSIS

As sentiment analysis and opinion mining are latest area of research and much research work is done in this area, the existing work can be classified form different point of views: like which technique is used, the level of detail of text analysis, rating level, view of text etc.

The classification diagram is shown in Figure 1:

#### **Techniques of Sentiment Analysis**

The following three techniques are used for classification.

- 1. Machine learning
- 2. Lexicon-based
- 3. Statistical and rule-based approaches.

#### **Machine Learning**

This is one of the most useful techniques available in sentiment analysis to categorized sentence or document into positive, negative or neutral categories. This technique classified into two basic approaches as follows:

#### **Supervised Machine Learning Approach**

Supervised machine learning techniques are used for classified document or sentences into a finite set of class i.e. into positive, negative and neutral. The training data set is available for all kinds of classes (Jalaj et al, 2013). Some of the machine learning techniques like Naive Bayes (NB), Maximum Entropy (ME), for text categorization Support Vector Machines (SVM) is a more useful technique. Here we give some machine learning methods in the natural language processing area are K-Nearest neighborhood, ID3, C5, centroid classifier, winnow classifier, and the N-gram model.

Supervised learning can be further classified into Probabilistic classifier, Linear classifier, Decision tree classifier and Rule based classifier

#### **Probabilistic Classifier**

The Following methods are used in Probabilistic Classifier.

#### 1. Naïve Bayes Classifier(NBC)

The Naive Bayes classifier is one of the simplest and, most commonly used classifier.

In many real world problems like Sentiment analysis, email Spam Detection, email Auto Grouping, email sorting by priority, Document Categorization and Sexually explicit content detection Naïve Bayes Classifier is used. The major advantage of Naïve Bayes is it requires low processing memory and less time for execution. A naïve Bayes classifier is a simple probabilistic classifier based on Bayes' theorem and is particularly suited when the dimensionality of the inputs are high (Amit et al, 2014).

For Calculating the posterior probability P(c|x) from P(c), P(x) and P(x|c) Following equation used as

P(c/x)=(P(x/c)P(c))/P(x)

Where,

P(c|x) is the posterior probability of class (c, target) given predictor (x, attributes).

P(c) is the prior probability of *class*.

P(x|c) is the likelihood which is the probability of *predictor* given *class*.

P(x) is the prior probability of *predictor*.

#### 2. Bayesian Network(BN)

Assumption about the NB classifier is that it is independence of the features. The other extreme assumption is to assume that all the features are fully dependent. This leads to the Bayesian Network model which is a directed acyclic graph whose nodes represent random variables, and edges represent conditional dependencies. BN is considered a complete model for the variables and their relationships.

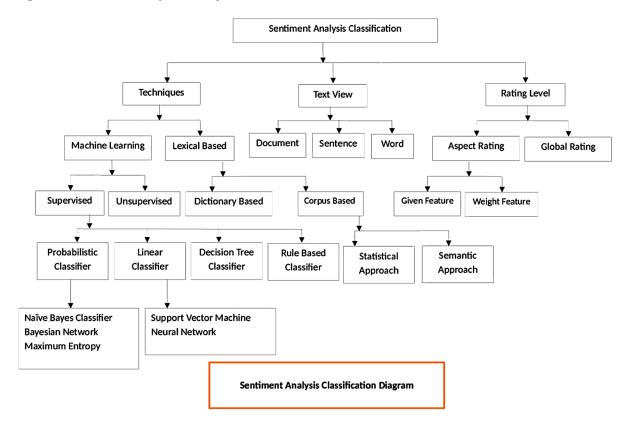


Figure 1. Sentiment analysis classification

It is not used frequently in Text mining, because the computation complexity of BN is very expensive (Vidisha et al, 2016).

#### 3. Maximum Entropy Classifier(ME)

In most of the natural language processing applications Maximum Entropy (ME) classifier proved effective in use. Unlike Naïve Bayes Classifier the Max Entropy does not assume that the features are conditionally independent of each other. Max Entropy classifier can be used for sentiment analysis and also to solve a large variety of text classification problems such as language detection, topic classification etc. In this classifier more time is needed to train as compare to Naïve Bayes.

Advantages of using MaxEntropy are specified as follows:

- Accuracy
- Consistency
- Performance / Efficiency
- Flexibility

#### Linear Classifier

There are following methods in Linear Classifier

#### Support Vector Machine

Support vector machine can be used for classification and regression purpose.

Generally in text categorization SVM machine learning classifier is used. It has been shown that Support Vector Machines (SVMs) to be highly effective at traditional text categorization. SVM have large-margin, rather than probabilistic classifiers. Main principle of SVM is to determine linear separators in search space which can best separate the different classes. The tweets to be classified are converted into word vectors. SVM seeks a decision surface to separate training data point into two classes and make decision based on support vectors (Yakashi et al, 2015).

#### 2. Neural Network

It consists of many neurons where the neuron is its basic unit. The inputs to the neurons are denoted by the vector over line Xi which is the word frequencies in the i<sup>th</sup> document. There are a set of weights A which are associated with each neuron used in order to compute a function of its inputs. Based on inputs and weights output is generated (Vidisha et al, 2016).

#### **Decision Tree Classifier**

Decision tree builds regression or classification models in the form of a tree structure means that the Decision tree classifier provides a hierarchical decomposition of the training data space in which a condition on the attribute value is used to divide the data.

It breaks down a dataset into smaller and smaller subsets while at the same time an associated decision tree is incrementally developed. The division of the data space is done recursively until the leaf nodes contain certain minimum numbers of records which are used for the purpose of classification (Vidisha et al, 2016). And finally we get a tree with decision modes and leaf nodes.

#### Rule Based Classifier

Rule based classifier is very simple. The only rule applied here is concerned with the emotions in text. This method returns the positive and negative emotions matched in text. Like positive emoticons are concerned with positiveness in text while negative emotions are concerned with negativeness (Yakshi et al, 2015).

In rule based classifiers, the data space is modeled with a set of rules. The left hand side represents a condition on the feature set expressed in disjunctive normal form while the right hand side is the class label. The conditions are on the term presence. Term absence is rarely used because it is not informative in sparse data (Vidisha et al, 2016).

#### **Unsupervised Machine Learning Approach**

To classify the document in categories text classification is useful. In text classification, it is easy to collect unlabeled documents but sometimes it is difficult to create labeled documents, this difficulty can be avoided by using the unsupervised method. It divides the document into sentence and categorize, each sentence using keyword list of each category's (Yakshi et al, 2015). As sentiment words and phrases maybe used for sentiment classification in an unsupervised manner so it is not hard to imagine that. Unsupervised machine learning techniques don't use training data set for classification. Means to classify data into categories Clustering algorithms like K-means clustering, Hierarchical clustering are used. The other unsupervised method Semantic Orientation also use to generate accurate result for classification.

#### The Lexicon-Based Approach

To calculate the sentiment polarity for a review; using the semantic orientation of words or sentences in the review; the lexicon-based approach is used. The subjectivity and opinion in text is measure in semantic orientation. It depends on finding the opinion lexicon which is used to analyze the text.

There are two methods in this approach.

#### **Dictionary Based Approach**

This approach depends on finding opinion seed words, and then searches the dictionary of their synonyms and antonyms.

#### Corpus Based Approach

Begins with a seed list of opinion words, and then finds other opinion words in a large corpus to help in finding opinion words with context specific orientations.

- 1. Statistical approach
- 2. Semantic approach

#### **Text View**

Sentiment analysis has been investigated mainly at three levels- document level, sentence level, feature level.

#### **Document Level Sentiment Analysis**

At this level of sentiment classification, a single review about a single topic is considered. Document level analysis is not desirable in forums and blogs. The important thing in this type of analysis is subjectivity or objectivity classification. The document level sentiment classification has its own advantages and disadvantages. We get an overall polarity of opinion text about a particular entity from a document is the advantage. The Disadvantage is that the different emotions about different features of an entity could not be extracted separately (Mohammed et al., 2014). In document level classification both supervised and

unsupervised learning methods can be used. Any supervised learning algorithm like Naive Bayesian, support Vector Machine, can be used to train the system. For training and testing data, the reviewer rating (in the form of 1-5 stars), can be used. The features that can be used for the machine learning are term frequency, adjectives from part of speech tagging, opinion words and phrases, negations, dependencies, etc. The unsupervised learning can be done by extracting the opinion words inside a document. The point-wise mutual information can be made use of to find the semantics of the extracted words.

#### **Sentence Level Sentiment Analysis**

In sentence level classification the same document level classification methods can be applied to the problem. The polarity of each sentence is calculated in the sentence level sentiment analysis. We have to find objective and subjective sentences. The subjective sentences contain opinion words which help in determining the sentiment about the entity. After which the polarity classification is done into positive and negative classes. In case of simple sentences, a single sentence bears a single opinion about an entity. Sentence level sentiment classification is not desirable in complex sentences. Knowing that a sentence is positive or negative is of lesser use than knowing the polarity of a particular feature of a product. The advantage of sentence level analysis lies in the subjectivity/objectivity classification. The traditional algorithms can be used for the training processes (Mohammed et al, 2014).

#### **Feature Level Sentiment Analysis**

This approach is the most important approach to opinion mining. The phrase level classification is done by finding out the phrases that contain opinion words. This analysis has advantage and disadvantage also. In some cases, the exact opinion about an entity can be correctly extracted. But in some other cases, where contextual polarity also matters, the result may not be fully accurate. Negation of words can occur locally. In such cases, this level of sentiment analysis suffices. But if there are sentences with negating words which are far apart from the opinion words, phrase level analysis is not desirable. Also long range dependencies are not considered here. The words that appear very near to each other are considered to be in a phrase (Mohammed et al, 2014).

#### **Applications of Sentiment Analysis**

#### Review-Related Websites

Sentient analysis helps in developing review-related websites. The capabilities that a review-oriented search engine would serve very well as the basis for the creation and automated upkeep of review and opinion aggregation websites. These sites are used as an alternative to sites that solicit feedback and reviews; one could imagine these sites to proactively gather such information.

Topics need not be restricted to product reviews, but could include opinions about candidates running for office, political issues, and so forth (Amit et al, 2014)

#### In Business

Sentiment analysis is used to predict the mood of people about any product, by comparing their product with their competitor products, also to check the opinion about the quality of their product.

Sentiment analysis helps in business to get customer real time opinion, and this real time opinion helps them for designing new marketing strategies to improve product feature and sell. In stock market also to detect whether the stock price is getting lower or higher and to help the investor for taking the decision related to buying or selling the stock; the sentiment analysis is used.

#### • Government Intelligence

Sentiment analysis would also help to predict the mood of public about political parties, politicians as well as to analyze the opinion of peoples about government regulations proposals and pending policies.

Means the sentiment analysis plays useful role for helping political parties to understand the issues that are close to voter's heart.

#### Different Domains

As the negative opinion from customers or any other party can damage your reputation, in the brand reputation management the main focus is on product, company and not on customer. So to determine how company's brand and service is being apparent by community; online sentiment analysis is used.

#### Recommender System

Recommender system is useful for extracting the rating text from user review. The sentiment analysis is used in recommender systems by recommending the product which has positive feedback only and not recommending the negative feedback product to the user.

#### • Summarization

There are large number of reviews are posted in web for one product and its difficult for customer to check which are the positive point of that product and which are the negative point. It's not possible to read all the reviews. Also it is hard for product manufacturer to analyze the review. By considering this fact the sentiment analysis and opinion mining use to provide the summary of product depending on their feature and key field, so it's easy to take decision for customer and product manufacturer.

#### Online Commerce

The sentiment analysis is generally used in ecommerce. The user has facility to share the experience about their shopping or the product quality and also they provide the summary of product by giving rating scores. Not only about the product but user can give feedback on hotels and travel destination also which is useful for other customer to select the good quality hotel and destination point.

#### Tools

See Table 1.

Table 1. Tool and Uses

Sr. No.	Tool Name	Uses
1	Stanford's Core NLP Suite (Jayashri et al, 2013)	part of speech tagging, grammar parsing (identifying things like verb phrases and noun), tokenization (splitting of text into words),named entity recognition,co-reference resolution system, bootstrapped pattern learning
2	Natural Language Toolkit (Jayashri et al, 2013)	tokenizing, parsing, and identifying named entities, classification, stemming, tagging, semantic reasoning, provides lexical resources such as WordNet
3	Apache OpenNLP (Jayashri et al, 2013)	tokenization, parsing, chunking, co-reference resolution, named entity recognition, part of speech tagging, and segmentation
4	GATE	tokenizer, POS tagging, co-reference tagger, gazetteer, sentence splitter, named entities transducer
5	WEKA (Wilson et al, 2005)	Machine learning algorithm for Data Mining, Data pre-processing, Classification, Regression, Clustering, Association rules, Visualization.
6	LingPipe (Jeonghee et al, 2003)	Entity extraction, Clustering, POS tagging, Classification.
7	Pattern (Si Li et al, 2010)	Data mining, POS tagging, Machine learning, Network analysis, Visualization, N-gram search, WordNet, Sentiment analysis,
8	Robust Accurate Statistical Parsing (Xiaohui et al, 2012)	Statistical Parser, Tokenization, Tagging, Lemmatization and Par
9	Review Seer tool (Modha et al, 2013)	The Naïve Bayes classifier approach is used in this to collect positive and negative opinion to assign the score for the extracted feature terms. Also it used for automate the work done by aggregation sites.
10	Web Fountain (Modha et al, 2013)	It uses the beginning definite Base NounPhrase (bBNP) heuristic approach for extracting the product features. It is possible to develop a simple web interface.
11	Red Opal (Modha et al, 2013)	This tool is used to determine the opinion depending upon the feature of the product. The score is assigned to each product base feature for the review of customer and the result shown with the web (Amit et al, 2014)
12	Opinion observer[(Modha et al, 2013)	This is an opinion mining system for analyzing and comparing opinions (Yakshi et al, 2015) on the Internet using user generated contents. This system shows theresults in a graph format showing opinion of the productfeature by feature. It uses WordNet Exploring method toassign prior polarity.
13	Earshot	It give the real time sentiment data filtered by location
14	Radian6	It uses sentiment analysis to streamline social media workflows.
15	VendAsta	This shows about how sentiment trends have shifted over time.
16	Yext	It generates the notification when sentiment start to fall
17	ListenLogic	Used for cleaning up your sentiment data
18	People Browser	To find all the reference of your brand, competitor and industry and analyze the sentiment.
19	Tweetstats	To generate the graph of your tweet statement this tool is used. You have to enter your Twitter handle.
20	Hootsuite	This tool allows you to manage as well as measure your social networks.
21	Marketing Grader	If you are regularly blog posting then it use over 35 metrics to calculate your grade.
22	EMOTICONS	In gives the emoticons contained in the text
23	LIWC	It uses for the dictionary and sentiment classified categories
24	SentiStrengh	It contains the LIEC dictionary with new features to weak and strength sentiments.
25	SentiWordNet	It has the lexical dictionary and gives the scores by using the semi machine learning approaches

continues on following page

Table 1. Continued

Sr. No.	Tool Name	Uses
26	SenticNet	For concluding the polarity at semantic level and uses Natural language Processing approach
27	Happiness Index	Affective Norms for English Words(ANEW) and scores for evaluating happiness in the text
28	AFINN	ANEW but it more focus on the language of microblogging platforms
29	Sentiment140	It is the API for allows to classify the tweets to polarity positive, negative and neutral
30	NRC	It has a set of human provided words with their emotional tags.
31	FRN	The feature relation network considering syntactic n-gram relations.

#### **CHALLENGES OF SENTIMENT ANALYSIS**

#### **Domain Specific Sentiment**

Sentiment is written according to the domain and the meaning of word is get change when the context changes. The accuracy of classification can be subjective according to the domain in which it applied because there are many words whose meaning change when the domain is change. E.g. if we consider the statement "go read the book" indicate positive sentiment while considering the book domain but it indicate the negative when concerning about the movie domain.

#### **Unavailability of Opinion Mining Software**

As the opinion mining software is very expensive so it is afforded by big company or government only the common citizen's not get the benefit of that software.

#### **Spam and Fake Reviews Detection**

The web data contains both necessary and unnecessary data, and to give accuracy in work the unnecessary data should eliminated before processing.

#### **Combined Sentence and Multiple Opinions in a Sentence**

The word appear in sentence is positive in one situation and negative in other situation also. The multiple opinions is given in single statement which goes positive in some part and negative in other; it's difficult to analyze such type of statement. E.g. the picture quality of camera is amazing, but it's too heavy to carry.

#### Different Ways to Express the Opinion

People give their opinion according as they think and they vary from person to person and they write their opinion in their language.

#### Use of Abbreviations, Orthographics and Shortform Words

Though people use social media more and use that for chatting, so they use shortforms for expressing their views that's why it's difficult to analyze the sentence. Also people use orthographic words for expressing their excitement e.g. Sooo Cute....

#### **Multilingual Sentiment Analysis**

There is lot of research in sentiment analysis for English language so most researchers give their focus on analyzing English language data because of the availability of resources like corpora and lexicons. There are less number of Internet user speak English so there is growing need to construct the lexicon and corpus for other languages.

#### Selection of Keyword

In topic based classification it uses a set of keywords to classify texts in different classes. In sentiment analysis we have to classify the review into positive and negative which are different from each other and to build up the right set of keyword is not a little task.

#### Co-Reference Determination

The problem occur in sentiment analysis is to determine the co-reference means which was a noun and which was pronoun. e.g. "I read that book and went to dinner; it was awful." Itrefers to what? The accuracy of sentiment analysis is improve by determining the co-reference determination.

#### **SUMMARY**

It has been seen that sentiment analysis and opinion mining is very large and interesting area of research. The chapter tell that there are different data sources are available to gather review data like blogs, review sites, dataset and micro blogging. The sentiment analysis can be classified depending upon the different factor like techniques, text view and level of rating. Some methods are there for classify like Naïve Bayes, Support Vector, Max Entropy etc. and each method used for specific purpose in classification. There are many tools are available on Internet for doing work on sentiment analysis. This chapter suggests many tools which are useful to perform different task. Also there are many challenges to perform sentiment analysis task like domain specific sentiment, spam and fake reviews detection, combined sentence and multiple opinions in a sentence, different ways to express the opinion, use of abbreviations, orthographics and shortform words, multilingual sentiment analysis, selection of keyword, co-reference determination and there is need to do research to solve these challenges efficiently.

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## Chapter 4

# Storytelling as an Approach to Voice Complaints and eWOM on Social Media/Facebook

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#### **ABSTRACT**

Customer complaints are unavoidable in any businesses and how firms handle such complaints will affect the public's perception of the company's brand and reputation. While storytelling is being embraced by an increasing number of companies as a different way to communicate their brand, many customers are now also using storytelling as an approach to voice their unfavourable experiences on the social media in regards to a particular unsatisfactory purchase as part of electronic word-of-mouth (eWOM). Such creative and humorous complaints serve as a way to cut through the clutter in order to gain the company's attention. Those companies that embrace such complaints by responding in an equally humorous and creative manner as part of their service recovery process will manage to recover their customers as well as their employees. As such posts are often shared publicly on the Internet, they may become viral and thus can create great positive effect on the company's reputation. Hence, it is important to empower the employees to recover the services using untraditional responses.

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## INTRODUCTION

Grégoire, Salle, and Tripp (2015) stress that with the possibilities of social media; a new world of Wild West has been created, where angry citizens and customers take the law into their own hands. Studies have shown that angry customers turn to social media channels such as Facebook as part of eWOM as they believe that the traditional channels are not as effective anymore. While eWOM can be both positive and negative, it is the negative eWOM that has detrimental effects on companies and firms, As complaints and negative eWOM have become more common in the recent years, customers who complain on social media have also become more creative as many unsatisfied customers are using stories and storytelling as ways to capture the attention of the companies. From the customers' point of view, storytelling as an approach can be used consciously or unconsciously as it is regarded an easy way to reach out and capture the listeners' attention through sympathy or humour. Such mindset is supported by the essence of storytelling, as human beings are able to remember stories better than pure facts, and stories are something that fascinate people (Lundqvist, Liljander, Gummerus, & van Riel, 2012). As explained by Woodside (2010, p. 535), "if you can harness imagination and the principles of a well-told story, then you get people rising to their feet amid thunderous applause instead of yawning and ignoring you". Furthermore, in many cases when storytelling as a complaint approach was initiated by the customers, some proactive companies also manage to recover the service by responding with stories as part of storytelling rather than providing standardised responses and apologies. Hence, storytelling can be used by a customer to voice a complaint, as well as by a company to subsequently respond to the complaint as part of its service recovery. Such approach creates elements of positive surprises, which turn the entire negative experience to something humorous and fun for both parties (Ferrari, 2015).

This chapter explores eWOM in the context of Facebook and customers' use of storytelling to voice their complaints as well as the companies' subsequent responses with storytelling in order to recover the service. While some of the examples are based on the retail sectors, Tronvoll (2012) argues that customer complaints in any sectors should consider the Service Dominant Logic (SD-Logic) approach. The SD-logic advocates that a service or a product does not have any value until it is being used by the customer (Vargo & Lusch, 2004). Customer complaint thus cannot be considered as an after-purchase behaviour but rather as a phenomenological, unfavourable service experience. Hence, service recovery is equally important in any sectors, not just service industries. Additionally, the retail industry is highly susceptible to service failure due to the number of people involved. Despite being a major industry in revenue generation, the study of service failures and recovery in the retail sector is still limited (Koc, 2018). Topics to be explored in this chapter includes storytelling, eWOM, word-of-mouse, service recovery, social media and Facebook as well as examples of creative complaints voiced as storytelling. While numerous studies have investigated customer complaints and service recoveries, investigating this topic through the lens of storytelling is still relatively under-researched (Mei, Hågensen, & Kristiansen, 2018).

## **BACKGROUND**

# Storytelling as an Approach to Voice Complaints

With roots in oral traditions, storytelling has been a natural way of communication between people (Kent, 2015). It is essentially a narrative form of telling everyday occurrences (Fog, Budtz, & Yakaboylu, 2005), although it is difficult to find one universal definition due to the complexity of the concept (Howison, Higgins-Desbiolles, & Sun, 2017). Human beings have always been fascinated by stories as stories influence people and help them to perceive and act in the world they live in (Weick, 1995). The more entertaining and dramatic the story is, the more popular the person or persons in the story will become (Mossberg & Johansen, 2006). Storytelling is also linked with memorability, as "human memory is storybased" (Schank, 1999, p. 12). When stories are stored in the memories, it is more likely for people to remember and relate to them. The power of story and storytelling is evident due to their significance in various field of research including human behaviour, psychology, history and other social studies (e.g. Green & Brock, 2000; McAdams, 2001; Scott, 2011; Singer & Bluck, 2001). There are various forms of storytelling including written or spoken as well as told through pictures, moving images, live audio or videos. While stories usually have a beginning, middle and an end, they do not necessary occur in that order or the story may simply convey a time and place (Lundqvist, Liljander, Gummerus & van Riel, 2012; Quesenbery & Brooks, 2010). Stories can also be used to describe a situation or context to illustrate a problem (Quesenbery & Brooks, 2010), an explanation which is relevant to this current chapter.

In business and marketing, storytelling is a type of content marketing, which has gained more attention in the recent years. While stories have existed as long as human beings have existed, using storytelling as a marketing approach or as a way to build a company's brands is rather recent. Explained by Woodside, Sood, and Miller (2008, p. 97) "...lectures tend to put people to sleep, stories move them to action. People relate to each other in terms of stories - and products and brands often play both central and peripheral roles in their stories". Hence, storytelling is now used by many companies to share their values and brands (Mossberg, 2008). Additionally, due to the development of the technology and changes in communication channels, it has also become easier for consumers to share their buying experiences. Many customers thus use their stories to reach and gain attention from the companies as well as other customers. Subsequently, it can be argued that customers are using storytelling as a tool to promote their opinions. This is also referred to as consumer narratives when WOM is structured as a story (Delgadillo & Escalas, 2004). For instance, Woodside et al. (2008) observe that many consumers are motivated to share their lived and buying experiences of brands online on various blogs and other types of personal journals. Although documenting buying experiences in such journals are not new, with the development of the Internet and social media, such experiences can be shared with the whole world (Kluth, 2006), which can create both opportunities and challenges for companies. Moreover, there are also some essentially differences between WOM and storytelling, as WOM may merely consist of facts or informative contents whereas storytelling is regarded as communication of both information and experiences, with stories that have the power to integrate cognitive and emotional elements, to engage listener and to produce a discourse about a particular experience (Howison et al., 2017; Minazzi, 2014; Solnet, Kandampully, & Kralj, 2010).

To determine whether a WOM communication is a message or a story, the structure is an important indicator (Howison et al., 2017). A story consists of two very important elements; that it is chronological and causal. In the case of chronology, the story takes place over time and it has a beginning, middle

and end as discussed. Furthermore, causality defines relationships between story elements, meaning there should be a series of events that trigger a psychological reaction in the main character in order to explain the character's subsequent actions (Delgadillo & Escalas, 2004; Pennington & Hastie, 1986). Essentially, consumers who act as the protagonist, tell a story to their listener by relating their experiences with products, services and brands to others (Delgadillo & Escalas, 2004). There are also various types of eWOM communication stories. Narrative poems are for instance a type of poetry that tells a story. The story is usually written in verses and they may have rhymes, although it is not always necessary. The story may be short or long, simple or complex but it is normally dramatic, with objectives (Meyer, 2005). The following section further explores the topic of WOM and eWOM.

# **CUSTOMER OPINIONS AND CONVERSATIONS**

# Word-of-Mouth (WOM)

There are several definitions of what WOM is. One of the first to look at the impact of WOM on customer behaviour was Arndt (1967) who explains it as an oral person-to-person communication between a sender and a recipient. Such communication must not be considered by the recipient as advertisement about a brand, product or service (Buttle, 1998). Additionally, Bone (1992) argues that WOM must be regarded as a group phenomenon, where comments, thoughts and ideas are shared between two or more individuals and none of the individuals represents a source of marketing. According to Buttle (1998) however, such definitions are not satisfactory, as WOM can also be a business strategy as companies are increasingly offering incentives or rewards for customers to spread positive WOM to others.

Delgadillo and Escalas (2004) argue that although there is not much a company can do to influence WOM communication, it is important for marketers to understand how such process works as WOM can be both positive and negative. A positive WOM can increase the likelihood that a customer chooses to purchase the product or service, while a negative WOM has the opposite effect (Litvin, Goldsmith, & Pan, 2008). Tronvoll (2012) explains that if someone receives negative WOM from a source they regard as credible, this could have a greater impact on the customer than information from the company itself. Negative WOM has also been shown to have a greater impact on customer perceptions than a positive WOM (Tronvoll, 2012). This indicates that negative WOM can be very damaging to a business, its brands and reputation, and it may take a lot of effort to correct a negative WOM. Some of the reasons for a negative WOM to occur may be dissatisfaction with a product or service, and a company's failed attempts to provide proper complaint handling to recover the service as well as inadequate responses to complaints (Bruhn, Schoenmueller, & Schäfer, 2012). There is also greater likelihood that customers who are dissatisfied with the way that company handles their complaints will spread negative WOM and are less likely to want to use the company again in the future (Tronvoll, 2007).

# Electric Word-of-Mouth (eWOM) and Word-of-Mouse

While it was common in the past to ask friends and acquaintances about experiences in regards to various products and services, consumers are now seeking information from strangers and customer reviews from different websites (Gelb & Sundaram, 2002). As discussed, customers are no longer just passive users as they also create and share content online (Edvardsson, Tronvoll, & Gruber, 2011). This requires

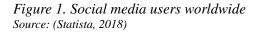
businesses to adapt and ideally contribute to this new reality. With the new Web 2.0 era, new concepts have also occurred such as eWOM and Word-of-Mouse. According to Gelb and Sundaram (2002, p. 22), the biggest difference between face-to-face communication such as traditional WOM and eWOM including Word-of-Mouse is that eWOM is primarily "dominated by those eager to volunteer facts, opinions, warnings, and experiences to strangers". Hence, in the era of Internet and social media, Carl (2006, p. 605) further defines WOM as "informal, evaluative communication (positive or negative) between at least two conversational participants about the characteristics of an organisation and / or a brand, product, or service that could take place online or offline". Thus, while WOM has traditionally occurred between recipients face-to-face, it is now also occurring online over-the-air as eWOM has become the norm.

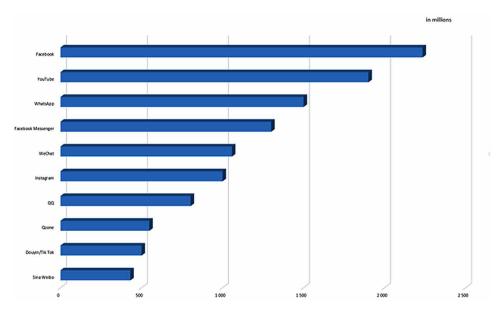
eWOM can bring both challenges and opportunities, including lower costs for accessing and exchanging information (Litvin et al., 2008). However, a challenge may be that it is very easy to be anonymous in conversations, which enables people to communicate statements that can be both misleading and out of context (Litvin et al., 2008). Anonymity can also lead to more customers willing to share all of their negative experiences of companies because they do not have a personal connection with the person who is reading the complaint (Gelb & Sundaram, 2002). Anonymity thus encourages more people to complain and many may choose to share things with others that they would not normally share with someone (Gelb & Sundaram, 2002). However, a negative side of anonymity and eWOM is that customers do not need any experience to write a negative review because no one can actually check if the customers have the basis to write the complaint (Gelb & Sundaram, 2002). Black and Kelley (2009) used in their survey of customer reviews from Yahoo!, and one of the major weaknesses of this survey as pointed out, is that anyone could write these reviews. For instance, there may be an employee or competitor trying to spread negativity about the company. Thus, in the context of social media in general, anonymity can thus be a challenge. Furthermore, another challenge of eWOM is the issue of private versus public. Both positive and negative eWOM including complaints can be public and private. Public eWOM includes customers voicing their views directly to the retailer by posting positive or negative eWOM on the retailer's Facebook page for instance. Private eWOM on the other hand involves customers voicing their opinions to other customers, friends and acquaintances through various social media platforms (Day & Landon, 1977; Harrison-Walker, 2001), and such opinions and subsequent conversations usually remain largely undetected by companies (Balaji, Jha, & Royne, 2015). However, the traditional understanding of private complaint may not be relevant in the era of social media as although customers can voice their opinions privately to friends and acquaintances, the post can be made publicly available to anyone. Hence, making it difficult to maintain a separation of private and public (Tronvoll, 2012).

# eWOM on Facebook

Facebook, which is the most popular social media platform on the Internet worldwide followed by Youtube and Whatsapp (see figure 1), is the main platform explored in this book chapter. Anyone over the years of 13 can create an account on the platform with the exception of few countries such as China (except Hong Kong and Macau), Iran and North Korea where Facebook is fully banned while there may be restricted access in few other countries (Kirkland, 2014). As per October 2018, Facebook has approximately 2.2 million registered active users worldwide (Statista, 2018).

While anonymous eWOM is a recognised challenge on social media in general, such challenge is also dependent on the type of social media platform. In regards to Facebook, a user account is required to post and share information on the platform. Moreover, customers who post genuine complaints on





Facebook often use real accounts to do so as they are concerned with seeking response and understanding from other customers and the company rather than merely spreading negative eWOW (Mei, Bagaas, Relling, 2018). Nevertheless, fake accounts are also commonly found on the platform with an estimated of 116 million fake accounts as per third quarter of 2018 (Nicas, 2019). Fake accounts can be used to share information as well as to comment posts such as to fuel the initial complaints. Hence, although anonymity may not be an issue in regards to genuine complaints on Facebook, other people who join the conversation may be anonymous if fake accounts are used, especially if the posts are public. The following section discusses creative complaints in the context of social media.

# CREATIVE COMPLAINTS AND RESPONSES ON THE SOCIAL MEDIA

# **Complaints Voiced as Storytelling**

Many creative complaints have been found on various social media platforms as social media is a great place to attract attention. There are numerous examples of creative customer complaints and negative eWOM on the Internet such as posting humorous YouTube videos as complaints, creating a Website for visual complaints and publishing e-mail addresses of company executives to get their attentions (Tuggle, 2015) as well as using poem or rhyme as discussed. One common characteristic is that such creative complaints are shared rapidly and then become viral. For instance, a customer complaint presented as a story told through a PowerPoint presentation became spread worldwide on the Internet despite the complaint not being initially intended to be shared in public (Shea, Enghagen, & Khullar, 2004).

One way to create creative complaints is using humour. Humour in complaints as a way to turn something negative into somewhat positive, may not be new phenomenon (McGraw, Warren, & Kan,

2015). However, although humorous complaints are creative, they are not synonymous with storytelling because as discussed, stories need to have some specific elements in order to be categorised as stories. For instance, a complaint can be humorous without featuring a story. Hence, using humour together with a compelling story may provide additional beneficial outcomes for both the complainant and the company dealing with the complaint. Similarly while consumer narrative, WOM and eWOM in general have become common in the era of social media, using storytelling to tell compelling stories together with rhymes or poems in a humorous, fun and even sarcastic manner to voice unfavourable and negative buying experiences may be a less conventical approach. With the jungle of information available on the Internet and social media, customer complaints just like any other information may be lost, easily ignored and buried. Hence, creative complaints are one way to attract the attention of the receiver.

# **Creative Responses by the Company**

With any negative eWOM including customer complaints, companies need to have a proper service recovery system and such process is even more critical due to the speed and impact of the social media. What is interesting in this new reality is that some companies are realising that they need to be at the forefront when dealing with customer complaints by adapt their service recovery process accordingly. Hence, rather than providing standardised replies, apologies and compensation, proactive companies are attempting to recover the service by replying the customers in a similar humorous and fun manner. Hence, while a creative complaint was initiated as storytelling by the customer to voice their opinion regarding an unfavourable experience, many companies have been equally creative to respond to the customers with storytelling. This leads to positive surprises for both parties as well as other customers as the creative, humorous and unique posts or stories can also be shared by other users. The following section further explores the importance of service recovery as well as service recovery strategies in details.

# HANDELING CUSTOMER COMPLAINTS

# Service Recovery

Hart, Heskett, and Sasser (1990) argue that in the delivery of service, mistakes and failures are inevitable as customer complaints cannot be fully avoided. While service may be the core product in some industries such as tourism, banking and transport, customer service is still an important part in other sectors such as retails selling physical goods and products, particularly when a SD-Logic as discussed by Tronvoll (2012) is adapted. Hence, a proper service recovery process should exist in any businesses. Grönroos (1988) believes that service recovery is needed when the customer discovers that something negative occurs or when something unexpected happens and the company has to take immediate corrective action. Tax and Brown (2000, p. 272) define service recovery as "... a process that identifies service failure, effectively resolves customer problems, classifies their root causes and yields data that can be integrated with other measures of performance to assess and improve the service system". Michel, Bowen, and Johnston (2009) have expanded such definition by proposing that service recovery is the integrative action that a company takes to re-establish customer satisfaction and loyalty after a service failure (customer recovery). This is to ensure that failure incidents encourage learning and process improvement (process recovery) and to train and reward employees for this purpose (employee recovery) (Michel et al., 2009).

For new customers, a single error can have larger consequences than existing customers (Stone, 2011). This is because new customers have not had any previous positive experiences with the company that can outweigh an unfavourable experience. Existing customers may also have a good relationship with the company and will therefore be more tolerant if one error should occur. On the other hand, existing customers will have higher expectations for the recovery process because they have a greater commitment to the business than new customers do. Thus, there may be major consequences for the long-term relationship if a proper service recovery system does not exist (Stone, 2011).

# **Recovery Strategies**

According to Dwyer, Schurr, and Oh (1987) and Stone (2011) compensation and listening to the customer are important in a recovery process in order to maintain a good buyer-seller relationship. When companies receive customer complaints, they have both had the opportunity to restore customer confidence and they can find out which service teams have failed (Berry, Wall, & Carbone, 2006). Although service recovery systems can add more costs to the business including staff and communication costs, there are also benefits such as gaining information to improve the practice and products, loyalty and positive WOM (Stone, 2011). Tax and Brown (1998) suggest a four-step service recovery process; identify errors (teach the customer how to complain, communicate the importance of recovery and use technical support), solve customer problems (be fair to the customer and give fair outcomes), communicate and classify errors (for example, use internal complaint forums) and introduce the data and improve service. Key strategies for a good recovery process are, according to Tax and Brown (1998) training the employees in the frontline and empowering them to make good choices to solve customer problems, create guidelines and make solutions readily available and effective.

Although the literature has argued that service recovery is an important process in any businesses to regain loyalty and trust among the customers as in customer recovery, many companies are still hopeless when dealing with unsatisfied customers. This is evident in the numerous customer complaints found on Facebook for instance where the customers turn to the social media in order to vent their frustration (Mei, et al., 2018). Additionally, the focus of service recovery studies has been on customer recovery, and less attention has been devoted to the employees (Johnston & Michel, 2008). Arguably, dealing with customer complaints as well as improper service recovery policies in the organisation may lead to much difficulties and stress not only for the customers but also for the frontline employees dealing with the complaints (Bowen & Johnston, 1999). Consequently, this would lead to employee turnover, negative attitudes and absenteeism (Johnston & Michel, 2008). Hence, organisations that empower their frontline employees to deal with creative and humorous customer complaints with the same creative and humorous responses, may be able to recover their customers as well as their employees leading to loyal customers and less turnover and stress among the employees. The following section explores some of the creative complaints voiced as storytelling, which have been posted on Facebook as well as subsequent creative and humorous responses by the company's representatives. Facebook was chosen due to the popularity of the platform as discussed while cases were chosen due to storytelling being used as an approach to voice complaints and companies that subsequently choose to respond with storytelling. Customers' written consents have been attained prior to publishing their original Facebook post.

Table 1. Case 1

Authors' Own Translation	Customer's Original Facebook Post in Norwegian
A woman from the north decided to bake. Now the old man should have his favourite taste. Ingredients were taken from drawers and cupboards, no time to waste.  The man was sent to Coop Market to trade what she wanted to transform to delicatessen. The chocolate from Freia was a matter of course when the cream on the top would wave.  When the old man returned, Mrs Kauka was at her most frustrated, "you have bought too little chocolate". Then I thought "I'm running to the bathroom". Now I'm behind wondering if I should scream or laugh, the 100 grams bar only weighed 84.  Fortunately, I can safely arrive, but Freia may have to hide. When the lady blows her mind, it can soon be moonlit inside.  But we up in the north are of the calm stroke and do not want to send a complaint in anger. We just want to inform all of you so this does not happen to others. So when you get the machines adjusted, the guy can finally get a cake served.	En kvinne i fra nord bestemte seg for å bake. Nu skulle gubben få favoritten sin smake. Ingredienser ble hentet fra skuffer og skap, her skulle ingen tid gå til tap.  Mannen ble sendt til Coop Marked for å handle, det som hun til en delikatesse skulle forvandle. Selskaps-sjokolade fra Freia var en selvfølge, når kremen på toppen skulle bølge. Når gubben fra butikken returnerte, frua kauka på sitt mest frustrerte "du har jo kjøpt for lite sjokolade". Da tenkte æ "no rømme æ på badet" No sitt æ bak do å lure på om æ skal skrike eller flire, den 100 grams plata den veide bare 84. Heldigvis kan no æ trygt komme frem, men Freia må kanskje gjemme seg dem. Når fruen blåser ut sitt sinne, da kan det fort bli månelyst inne. Men vi opp i fra nord er av det rolige slage, å ønsker ikke å sende i sinne en klage. Vi vil bare informere alle dere, så dette ikke hender med flere. Så når dere maskinene får justert, kan gubben endelig få kake servert.

## CASES AND EXAMPLES

## Case 1 – Freia Chocolate

The first case involves a customer who purchased several chocolate bars. The customer explained that after purchasing the chocolate bars, he believed that they all felt too light, as they should have contained 100 grams each. When the chocolate bars were weighted on the kitchen scale, it only indicated approximately 84 grams each. Believe that voicing his unfavourable experience in a creative way was the way to capture the company's attention; the customer decided to post the unfavourable experience or complaint as a rhyme/poem on the chocolate manufacturer's public Facebook page. Unfortunately, some of the humour and content as well as rhyme are lost when translating the original poem from Norwegian to English.

As the original post has been removed, it is not possible to specify the number of shares. However, the post was picked up by several newspapers as it captured people's attention and interest not only due to the creative and humorous complaint, but also because the response from the chocolate manufacturer Freia was a humorous rhythm as well. Below is the response from the company.

As the result, the customer was satisfied with the reply and outcome of his complaint. The whole episode was turned into a positive experience for both parties.

Table 2. Case 1

Authors' Own Translation	Original Facebook Response From the Company
Once the damage has occurred and the chocolate is sunken. Then we understand that the atmosphere at home gets lukewarm! The product must be replaced - no doubt about it. That way, at home, it will be peace on it!	Når skaden er skjedd og sjokoladen er slunken. Så forstår vi at stemningen hjemme blir lunken! Varen skal erstattes - ingen tvil om det Sånn kan det i hjemmet endelig bli fred!

Table 3. Case 2

Authors' Own Translation	Customer' Original Facebook Post
Dear Mills  Now I hope you take us on our word, For today, our vision is sad.  The Caviar we have on the breakfast table, Enamel was loose (why is uncertain). It's on the food. "So lame", I thought, and tried to remove most of it.  But there was a lot of sprinkle, and I was quickly bored, and that was the worst.  Bread and tube went right in the "bucket", We didn't even get to say goodbye.  So after standing here a little, trampled and cursing, I write to you, hoping for some luck. We've always been faithful to you with remoulade, caviar, mayonnaise, liver pate, dressing and much more, and don't want to give you hassle. But the situation has occurred, we feel depressed.  The impression we have now received, makes us hang with the lips. So please, don't let others struggle like us here at the breakfast table! Fix the tube quickly, it costs so little, So we'll be happy, and take our word. With friendly greeting N.N. Sad family man	Kjære Mills  Nå håper jeg at dere tar oss på ordet, for i dag beskuet vårt syn noe trist.  Kaviaren vi har på frokostbordet, emaljen var løs (hvorfor er uvisst).  Den drysset på maten. "Så kjipt", tenkte jeg, og prøvde å fjerne det meste.  Men det var masse av dryss, og jeg gikk raskt lei, og det var det aller verste.  Skive og tube gikk rett i "spannet", vi fikk ikke engang tatt riktig farvel.  Så etter å stått her litt, trampet og bannet, skriver jeg til dere, i håp om litt hell.  Vi har alltid vært trofast mot dere med remulade, kaviar, majones, leverpostei, dressing og mye mere, og ønsker ikke å gi dere pes.  Men situasjonen har oppstått, vi kjenner oss deppa.  Det inntrykk vi nå har fått, får oss til å henge med leppa.  Så vær så snill, ikke la andre slite slik som oss her ved frokostbordet!  Fiks tuben raskt, det koster så lite, så vi blir fornøyd, og ta oss på ordet.  Med vennlig hilsen  N.N  Trist familiefar

# Case 2 - Mill Caviar on Tube

The second case involves a dissatisfied customer and some caviar that he had purchased. The nature of the complaint involves the poor quality of the packaging. Similar to case 1, the customer posted the

Table 4. Case 2

Authors' Own Translation	Original Facebook Response From the Company
Dear N. N.  It's very unfortunate and we apologise so much, Unfortunately, you're not alone to experience that the tube can peel off. We recently changed the supplier on our tube paint, but it has also created frustration and stomach pain.  We compensate of course for your lost money, and we hope you no longer Mills repress.  For new tubes with better paint is right around the corner, since July 1 we've got new crops in the mayonnaise container.  I also have to mention that the paint that hits your hands, absolutely is not bad for your family or friends but it sucks that this affects you and yours, I'm really sorry and I feel like crying.  I hope we can fix the mistake we've done,  Send me your account number and we'll transfer money reasonably fast. We don't want you to have your lips hanging, it also does us in Mills depressing.	Kjære N. N.  Det er svært uheldig og vi beklager så masse, du er dessverre ikke alene om at tuben kan flasse. Vi har nylig byttet leverandør på tubelakken vår, men det har heller skapt frustrasjon og magesår. Vi kompenserer selvfølgelig for dine tapte penger, og vi håper du ikke lenger Mills fortrenger. For nye tuber med bedre lakk er rett rundt svingen, siden 1. juli har vi fått nye avlinger i majonesbingen.  Jeg må også nevne at lakken som treffer dine hender, absolutt ikke er helsefarlig for hverken din familie eller venner. Men dritkjip er det at dette rammer deg og dine, Jeg blir oppriktig lei meg og føler for å grine.  Jeg håper vi kan rette opp feilen vi har gjort, send meg ditt kontonummer så overfører vi penger rimelig fort. Vi ønsker ikke at dere skal henge med leppa, det gjør også oss i Mills deppa.

Table 5. Case 2

Authors' Own Translation	Complainer's Original Facebook Post
Hey Mills, it's just me.  In 2015, I complained.  When the caviar tube-enamel crumbled?  Do you remember that? The media rumbled  The breakfast table was clear once again, covered with good food and children's song. We sat there and hummed to good music, when I (once again) got a good idea;  "Mills caviar on my bread I'll have!",	Heisann Mills, det er bare meg.  I 2015 så klaget jeg.  Da kaviartube-emaljen smuldret?  Husker dere det? Mediene buldret.  Frokostbordet var klart nok en gang, oppdekket med god mat og barnesang.  Vi satt der og nynnet til god musikk, da jeg (nok engang) en god idé fikk;  "Mills kaviar på min skive skal jeg ha!", og jeg kunne ikke sagt bedre ifra, for min datter var nettopp ferdig med den, og den kunne gå på rundgang igjen.  Men idet jeg klemmer ut 'gullet' på skiven, så får den forstoppelse!?? Kona sier "hiv den".  Men jeg pustet og peste, trykket og klemte.  Så dukket det oppvi ble alle litt skremte;  "Fiskebein!", "Fiskebæsj?", 'Snørr eller noe?".  Barnas forslag var jo rimelig gode, men synet kan ikke bedra denne karen;  "Brusk etter fisken!", sier den fortvilende faren.  Så nok en gang gikk min skive i spannet.  Jeg roper "Er ingenting lenger perfekt her i landet!!??" Jeg satte meg ned, munterheten var vekk.  Ingen ved frokostbordet sa et kvekk.  Nå skriver jeg igjen om min sorg til dere.  Jeg håper at det ikke finnes flere,  som opplever det jeg opplevde i dag.  Ønsker heller ikke at det skal bli en stor sak.  Slike ting kan jo skje, vi kan alle gjør feil.  Hva kan ha skjedd, jeg har ikke peil?  Men neste gang jeg kjenner at tuben er tett,  vil jeg heller la den ligge enn at jeg blir svett.  Med vennlig hilsen  N. N.  Enda tristere familiefar enn før.

complaint through storytelling and poem/rhythm on the company's public Facebook page.

Also, as case 1, an equally humorous poem/rhythm was replied by the company. The response from the caviar company Mills is provided below.

Following the first incident, the service was recovered, and the customer was satisfied with the outcome and continued to be a loyal customer. Nevertheless, another unfavourable incident occurred again after some time involving the same customer and product, the customer once again voiced his complaints on Facebook through storytelling.

Following the successful service recovery at the previous incident, the company also followed up the complaint with a similar response.

At the end, the customer was content because the service was once again recovered and he continues to remain a loyal customer. The posts as well as other newspaper articles that reported on the incidents had more than 3000 shares on Facebook. The caviar company's responses and approaches to service recovery were also well received and appraised by the public. As discussed, while these two examples are industries where "services" are not the core product, by applying a SD-Logic approach, customer complaints in any industries should be considered as a phenomenological and unfavourable service ex-

Table 6. Case 2

Authors' Own Translation	Original Facebook Response From the Company
Hi dear N.N, Of course, we remember you! We have thought about how often it goes with the family father, who was so unlucky with the flaky caviar. Since 2015, much has changed in Mills. Communication in the factory is now happening in rhyme, it is a bit slower, but the atmosphere is fine Your attached picture has been carefully investigated, and our quality manager looks with his well-trained eye that it was a bit of the roe sack that has sneaked in. It is completely harmless, but it should not happen. We understand well that this broke the idyll. It is certainly not fine, and we blame ourselves. We would like to give you a compensation, if you send us your account number, we will transfer money to new caviaration. Thank you N.N. for telling us. The routines are sharpened - the rules are tightened - in the hopes that you will be happy!	Hei kjære N.N, Det klart vi husker deg! Vi har tenkt titt og ofte på hvordan det går med familiefaren, som var så uheldig med den flassende kaviaren. Siden 2015 har nemlig mye endret seg i Mills. Kommunikasjon i fabrikken skjer nå på rim, Det går litt tregere, men stemningen er fin. Ditt vedlagte bilde er undersøkt nøye, og vår kvalitetssjef ser med sitt veltrente øye, at det var en bit av rognsekken som har sneket seg med. Det er helt ufarlig, men det skal ikke skje. Vi forstår godt at dette tok knekken på idyllen. Det er absolutt ikke stas, og vi tar på oss skylden. Vi vil gjerne få lov å gi dere en kompensasjon, om du sender oss ditt kontonummer setter vi over penger til ny kaviarrasjon. Tusen takk N.N., for at du sa ifra. Rutinene skjerpes – reglene terpes – i håp om at du skal bli glad!

perience rather than an after-purchase incident (Tronvoll, 2012). Hence, means to recover the service is equally relevant and important in any industries, particularly in the era of social media when unfavourable experiences can be easily shared with unlimited number of people openly in the public.

# Case 3 – Norwegian Air

Evidently, service recovery in industries where "service" is the core product, is even more crucial due to the characteristics of inseparability, heterogeneity and perishability of services, as well as the interactions between service employees and customer (Koc, 2018). The following example involves a negative

Table 7. Case 3

Customer's Original Facebook Post	Original Facebook Response From the Company
Why can't you be fair Norwegian Air No headphones do you include Nine hours with no free food The stress of a sixty quid bag Would make the plumpest of memories sag. Aviational scandals from Scandinavian vandals. You're a disgrace to the Norwegian flag. And Kiwi.com.you're just as bad. Helping these rogues as there's money to be had. Is it hard to operate with decency? To cooperate and offer leniency? I admit it was wrong to put his first name as Bill William Edward Gabriel, the seat who's bum will fill. One hundred and twenty euros for what? For two minutes of typing that's rather a lot. Why can't you be fair Norwegian Air Just skip that amendment fee And just let us change it for free	We understand all the fuzz We try our best to reduce all the buzz But fear not because' we do not throw anyone under the buss especially not a person like you since diamonds in this world are so few We are sorry for any inconvenience that may have occurred. It can seem like our vision is sometimes blurred. But I can promise you that we try to fly like a bird. We thank you for your rhyme We had a really great time You thank us for being fair We thank you for joining us up in the air We wish you a great trip With us the world is on your finger tip Just be sure to follow the landing strip We wish you an awesome day! Best regards, Mats & Natacha

incident that a customer had experiences with the airline Norwegian Air. Due to an issue with the misspelling of the customer's name, the airline wanted to charge an extra fee. In addition, there were some other issues with the flight, including a delay. Hence, the customer wanted to voice his unfavourable experiences. The complaint which was voiced as a story that rhymes was responded in the same manner by representatives of the airline, with the promise to wave the extra fee.

While the original Facebook post did not generate numerous shares on the platform, the post was picked up by Australian newspapers, Norwegian newspapers as well as American newspapers including Fox news and British newspapers such as BBC news and the Independent in addition to numerous other newspapers. Also similar to the previous cases, the story captured people's attention, turning this to an incident with positive outcomes for both the customer and the company. Moreover, the reason why this particular post generated international attention was because the complaint was posted in English whereas the previous two cases were in Norwegian.

# Other Examples of Creative Complaints

There are two additional examples of customers who have used storytelling as an approach to voice their unfavourable experiences. However, as their posts have since been deleted, it is not possible to include the original posts at this point. One of the complaints involved a typo in the printed chocolate wrapping paper. The concept of the chocolate wrapping paper was fairy tales with packaging containing stories of traditional folk adventure such as plot twists and emotions. Hence, the customer decided to post her complaint on the chocolate company Freia's public Facebook page also formulated as a traditional folk adventure. The post started with "once upon a time" and adjectives were used, along with traditional folk adventure such as plot twists and emotions. The message was that there was a typo in the printed fairy tales chocolate wrapping. When asking the customer about the reason she decided to create such a post, she explained that she wanted an answer from the company but at the same time she did not want to be perceived as a customer who would complain about the smallest matter. She believed that in order for the message to be well received by the company, it should be written in a fun humorous way in order to be receive more positively. This concurs with the studies of (McGraw et al., 2015) as some customers are reluctant to complaint in fear of being labelled as difficult customers. Hence, humour is used to counterweigh a negative incident. As discussed, customer complaints and service failure cannot only create stress and unfavourable situations for the customers, but also for the service employees. By using a humorous and untraditional approach to voice complaints, the complaints may also be more positively received by the frontline employees handling the complaints.

Another example involved a broken washing machine. The complaint was also formulated as a story starting by explaining the situation where the washing machine had broken and the need for a new one. Furthermore, the purchase process was described, from when the customer went to the store until the new washing machine was in the house. Among other things, the values for product selection were explained and that the customer wanted to choose an expensive alternative with the expectation of quality. The seller's attitude and mood were also described in detail. Halfway through the story, the customer came to the point of the story, namely to describe how little help and poor service he had received when the new product was broken and should be repaired. The conclusion was that he had waited for the repairer to come back with the right tool for several months, as well as made a number of inquiries to customer service over the phone. The whole complaint was concluded with a sarcastic suggestion of using the washboard and the nearest river as a washing method, and sarcastic thanks for expensive phone calls

and empty promises from the company. The story thus contained a beginning, middle and end, with a climax and a turning point (Lundquist et al, 2012).

# DISCUSSION

The previous section illustrated five cases in total where the first three are similar in nature and the latter two are alike. Evidently, the first three cases achieved more success. It has been argued that virality on social media is shown by the number of shares. In order for people to share posts and contents on the social media, they have to be something out of the ordinary and fascinating, making it worthwhile to share (Moriuchi, 2016). While the number of shares cannot be determined for all the cases, the fact that the first three cases were all picked by several local, national and international newspapers, does provide a certain confirmation on their virality. Furthermore, sharing on Facebook is not as common compared with other social media platforms, especially among millennials, as although many of them have Facebook accounts, very little is shared on this platform in particular (Dooley, 2017). Hence, the number of shares does not necessarily illustrate the virality.

The first three cases also illustrate the importance of employee empowerment in regards to service recovery as emphasised by Tax and Brown (1998), by training and empowering the frontline employees to make good choices to solve customer problems. The cases showcase that the frontline employees or the employees responsible of responding to customer complaints on Facebook, were empowered to make decisions to recover the service. They were authorised to respond to the complaints in an equally humorous and creative manner through storytelling. This led to positive outcomes and success for the companies. This also suggests that the companies listened to the complainant by acknowledging the error and the importance of recovery, and they were concerned with solving customer problems and improving the service, which are all key recovery strategies (Tax & Brown, 1998). Additionally, how fast the companies manage to solve the issue is also a vital part of successful service recovery as this will determine the level of satisfaction of the complainant (Harris, Grewal, Mohr, & Bernhardt, 2006). In the first three cases, all three companies managed to respond to the customer in timely manner, which is also vital especially when the complaints are posted on social media and Facebook. The cases thus achieve success due to the creative complaints and the timely subsequent unconventional responses by the companies to recover the services.

The main difference between the first three cases and the latter two is that in the latter two, the customers did not receive any story or storytelling as responses by the companies' representatives. Hence, their creative complaints voiced as storytelling on Facebook were not as eagerly shared or they did not manage to capture the attention of the general public as they were not perceived as interesting enough. While the service was recovered, it was nothing out of the ordinary to capture people's attention. Hence, although there may be numerous examples of creative and humorous customer complaints voiced as storytelling on the social media, it is also the companies' unconventional responses that contribute to make the entire incident interesting and worthwhile to capture people's attention and interest by turning the situation into positive experiences and outcomes for both parties involved.

# CONCLUSION AND FUTURE RESEARCH DIRECTIONS

Complaints will exist as long as human beings exist as they are part of the social life, hence it is impossible to avoid them completely (McGraw et al., 2015). In the new era of social media, complaints can also be rapidly shared to a large number of people, causing numerous challenges for companies. While most companies have some sort of systems of service recovery, many are still hopeless in dealing with complaints, as many customers believe that they are not being heard. Hence, using storytelling to voice customer complaints and unfavourable experiences is one way for the customer to capture the company's attention. Arguably, it may take more effort from the customer's side to voice the complaint as a compelling story either through humour, rhyme or poem rather than an ordinary complaint. For managers, they must train and empower their frontline employees or employees dealing with complaints to be on the lookout for creative complaints. Fast respond is also vital especially when dealing with complaints posted on social media. Employees must thus be trained to be confident to respond and recover the service in the same manner. This may serve as a way to prevent the customer from complaining further and before the post garners too much negative attention on the social media. The examples provided in this chapter suggest that by empowering the frontline employees to respond to untraditional customer complaints with untraditional responses, the outcome may be positive for both parties. However, it would be important to note that creative and untraditional responses should merely be used to respond to creative complaints and that serious complaints should not be recovered using untraditional responses as this may be interpreted as mockery or unserious respond from the company's side.

Furthermore, the cases provided in this chapter derived from Northern Europe involving Nordic companies. Customer complaints and approach to service recoveries may be affected by cultural factors (Gordon & Patterson, 2009) as behaviour is influenced by the cultural background since culture is the framework for social interactions in general (Hofstede, 2001; Triandis, 1989). In such sense, customers' behaviour, expectations and perceptions during any service encounters also vary from culture to culture. Hence, the approach to voicing complaints as storytelling in a humorous and creative manner may not be as common or acceptable in a different cultural context. Future scientific studies should investigate the topic of applying storytelling as an approach in complaint behaviour as well as focusing on other countries with different cultural context.

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## **KEY TERMS AND DEFINITIONS**

**Creative Complaints:** Unconventional manners of voicing complaints using humor and other creative ways such as rhymes and poems.

**Customer Complaints:** Customers' way of expressing dissatisfaction of an unfavorable buying or service experience.

**eWOM:** Communication for the purpose of information sharing between individuals through the Internet and electronic media.

**Facebook:** A social media platform and application that enables users to share information including photos, videos, and experiences for the purpose of social networking.

**Service Recovery:** A process to respond to complaints as a way to recover the failed service experiences. **Social Media:** Involves applications and platforms on the Internet that enable sharing of information such as eWOM.

**Storytelling:** Describes the activity of sharing through stories.

**WOM:** Oral communication for the purpose of information sharing between individuals.

# Chapter 5 Understanding e-WOM Evolution in Social Media With Network Analysis

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# **ABSTRACT**

Today's consumer is in constant interaction with the environment thanks to social media and technology. Consumers who communicate more with each other have pushed businesses to take action on this issue. In this study, network analysis will be processed by marketing approach. Previous studies focus on different aspects of network analysis while examining methodological details. There are a few integrated studies regarding to network analysis from marketing perspective. This study aims to fill this research gap with integrated approach combining marketing scenarios with network analysis methods and social media data. Study consists of two main parts: theoretical background and methodology sections. Theoretical background includes electronic word of mouth, social media and customer networks, network analysis parts. Methodology section includes four different cases regarding to network analysis, social media, and web. Businesses corporating network analysis to their marketing decision-making process can improve their marketing knowledge regarding to changing marketing environment.

# INTRODUCTION

Today's business world is witnessing many changes with technological developments and widespread use of the Internet. Internet and social media play an important role in the lives of today's consumers. According to Global Digital Report (We Are Social and Hootsuite, 2019), our world has 7.676 billion people population while penetration rate for internet users is 57% (4.388 billion people) and penetration rate for active social media users is 45% (3.484 billion people). These high rates signal importance of social media for consumers' lives. Today's consumers living in social circles affect each other. Nielsen

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report (Nielsen, 2015) indicates that 83% of respondents completely or somewhat trust recommendations of friends or family. This reflects importance of word of mouth in consumers' lives.

Worf of mouth concept simply means interaction and effect of people to other people in social circles. As people use digital technologies, electronic word of mouth concept becomes popular in marketing research. Network analysis is one of methodologies for social media sensemaking which helps to marketing decision making regarding to electronic word of mouth. It simply refers to evaluation of networks which means multiple structures of actors in mathematically and graphically way.

Previous studies employ network analysis with different contexts for word of mouth concept. Hambrick and Pegoraro (2014) use network analysis for examining the 2014 Olympic Games and related communities. In another study Yan et al. (2018) employs network analysis for sport context, 2017 UEFA Champions League Final. On the other hand, Iacobucci et al. (1996) use network analysis for marketing context, brand switch behaviour. Several studies have used network analysis for different contexts, but there is lack of integrity for business or marketing concept. This study aims to fill this gap by providing integrative network analysis cases for different marketing cases, especially for e-wom concept.

The phenomenon of study refers to network analysis of social structures related to electronic word of mouth markets. Network analysis will be used for examining different scenarios regarding to market and these scenarios will refer to different levels of research questions. The research questions of study include;

- How can network analysis be helpful for marketing management decision making?
- How can network analysis help to micro and macro level examination of markets?
- How can structures related to social networks like community, group of nodes be detected employing network analysis?
- How can time dimension be usedtogetherwith network analysis?

The study mainly uses R programming language (R Core Team, 2013), several R code packages and Gephi Software (Bastian et al., 2009). Network analysis is not limited to R programming language, as there are many alternative programming languages and softwares for network analysis. But then R programming language is a good alternative with different available code packages like sna(Butts, 2010), igraph (Csardi&Nepusz, 2006),influenceR (Simon & Aditya, 2015), keyplayer (An & Liu, 2016) for different network analysis methodologies.

Cheung and Thadani (2012) examine impact of e-wom communication and conclude that majority of e-wom studies they examine are related to online consumer review sites, as the other types of e-wom are related to online discussion forums, blogs, social networking sites and online brand/shopping sites. In addition, the contexts which electronic word of mouth are studied on refer to Twitter (Jansen et al., 2009), movies (Liu, 2006), music albums (Morales-Arroyo & Pandey, 2010), hospitality (Ladhari& Michaud, 2015; Tsao et al., 2015; Viglia et al., 2016). The scope of e-wom concept has a wide range, scope of study is limited to social media context for this study.

The study has a theoretical background which is the center of e-wom. In the study, where social media is determined as the study area within the scope of E-wom, there are two parts as theoretical and application. In the theoretical part, e-wom concept will be mentioned and then social media and consumer networks will be explained. Following these two topics, theoretical knowledge related to the subject of network analysis will be covered. In the second part of the study, the subject of network analysis will be explained in an integrated way with marketing scenarios. Following these two main sections, there will be sections of solutions and recommendations, future research directions and conclusions.

## LITERATURE REVIEW

# **Electronic Word of Mouth**

People live in society and share their opinions and feelings from early times. The roots of word of mouth can go back to ancient times which exchange happens without money. People always tend to share what they like or not related to things. The nature of communication between individuals, groups or societies is always focus of researchers for different science areas including sociology, anthropology and business.

Electronic word of mouth communication refers to any positive or negative statements made by potential, existing or former customers, related to product or company. These statements are available for people and institutions with internet (Hennig-Thurau et al., 2004). Transition from traditional word of mouth to e-wom is mostly related to web 2.0 concept. Cormode (2008) examines difference between web 1.0 and web 2.0 concept and concludes some differences. Author concludes that Web 2.0 sites has users as first class entities in their systems, there is an ability for forming connections between users, there are many forms for posting and other technical details. Web 2.0 popularity empowers consumers to influence other consumers through many platforms (Cheung & Thadani, 2012).

The reason and form of electronic word of mouth is important for marketing decision making. Reason of consumers' expression can signal marketing insights. Hennig-Tharau et al. (2004) conclude primary antecedents of e-wom behaviour as consumers' desire for social interaction, concern for others, desire for economic incentives and potential to enhance their own-self worth. Social interaction and concern for other antecedents are focus of this study as they are related to social network structure of consumers.

People share their ideas, complaints or likings with internet mediums for their networks. The flow of information has several consequences regarding to products or services. Purchase and purchase intention is one of consequences regarding to e-wom. Chevalier and Mayzlin (2006) study Amazon.com and Barnesandnoble.com review data and conclude that improvement of book reviews leads to increase in relative sales at that site. This conclusion reflects the purchase consequence of electronic wom. In addition to main consequence of e-wom, Cheung and Thadani (2012) propose an integrative framework for e-wom communication. This framework includes stimuli variables (argument quality, valence, sidedness and volume), receivers' variables (involvement, prior knowledge), communicatiors' variables (source credibility and attribution), contextual factor (platform) and lastly responses variables (information usefulness, ewom credibility, attitude, ewom adoption, purchase intention and purchase). The variety of variables in framework reflects complex nature of e-wom concept. This study aims to focus on networks related factors and dynamic nature of communication.

Since evaluating consumers recognition regarding to e-wom concept is crucial for marketing decision making and it includes several insights of consumers, there are some questions rising; How people search for information in pre-purchase stage? Which information channels are more effective for different segments of consumers? How the information flow through channels? Next section continues with social media platforms and consumer side of word mouth concept. Social media and consumer networks are related concepts for electronic word of mouth in recent years, therefore it will complete understanding of main concept, before methodology part of this study.

# **Social Media and Customer Networks**

Social network services are defined as individual web page which enables online, human-relationship building as collects useful information and shares it with specific/unspecific people (Kwon & Wen, 2010). On the business side, according to Mangold and Faulds (2009), social media is a hybrid tool of promotion mix which combines traditional integrated marketing communication tools with highly magnified form of word of mouth. The combination includes two segments; first one refers to talking of companies with customers, second one refers to talking of consumers to another. Therefore, marketing decision making must consider both segments for marketing decision making.

Ngai et al. (2015) conclude a framework for social media research and include concepts and variables as antecedents, mediators, moderators and outcomes. Antecedents include social factors (social influence, social capital and others, user attributes (user perception, user experience, user personality and organizational attributes (customer orientation and marketing orientation). On the other hand, outcomes include personal context (user intention and user behavior) and organizational context (brand equity, customer relationship). The scope of this study focuses social factors rather than outcomes of social media applications. Social factors are included as antecedents, mediators and moderators in Ngai et al.(2015)'s model.

Consumer behavior related to social media and electronic word of mouth includes sharing and forwarding information to others. Severity and form of flow is affected by social ties. Brown and Reingen (1987) examine social ties and classic word of mouth with micro and macro levels. They conclude that strong and homophilous ties are more likely to be activated for information flow in micro level. On the other hand, weak ties have important bridging roles for macro level. Wirtz and Chew (2002) study tie strength concept with incentives, deal proneness and satisfaction concepts in electronic word of mouth behavior context. They conclude that tie strength is an important variable for explaining e-wom behavior. Peng et al. (2018) examine content sharing behavior on social media with network overlap context. They conclude that sharing behavior is related to have common followees, followers and mutual followers.

One of the important concepts in social media and consumer networks context is viral marketing which is related to diffusion of content on social media or internet. Viral marketing refers to electronic word-of-mouth by which some forms of marketing messages flows exponentially often through social media applications (Kaplan & Haenlein, 2011). Dobele et al. (2007) study viral marketing concept in terms of emotions. They find that viral messages must contain surprising element in order to be effective, but surprising element does not guarantee success, as it must be combined with other emotions. Concepts like content marketing and inbound marketing focus on content side of viral marketing and have questions including which content types become more popular, which content types are more likely to be shared through networks. This study focuses on network side of viral marketing and examine flow of information and network structure, rather than content element.

Next section of study includes methodological part of research aim which refers to network analysis. Network analysis studies network structure and flow of information regarding to social media or electronic word of mouth. Next section includes details for case part of study.

# **Network Analysis**

Network analysis methodology simply means examining actors in a network structure by mathematically and graphically. Oliviera and Gama (2012) defines social network as set of social entities with patterns

of relationships and interactions between them. The entities can be people, groups or organizations. The scope of network includes nodes as actors in network, ties as connections between actors, medium and large size groups as communities. Therefore it can be summarized as nodes, ties and communities are some of main elements of network structure. The process regarding to network examination is related to social network analysis. Oliveira and Gama (2012) trace back origins of social network analysis to Moreno (1951)'s sociometric approach. This approach includes sociograms, the charts which individuals are represented as nodes and relationships between individuals are represented as lines. This dual structure mostly helps understanding basic structure of networks.

First topic related to network analysis in this study refers to actor side. According to Wasserman (1994), actor refers to *discrete individuals*, *corporates or social collective units*. How actors in networks behave for e-wom is a crucial topic for marketing decision making. Individualist or collectivist people, introvert or extravert nature and many other characteristics affect how people act in networks. Selden and Goodie (2018) review researches regarding to five factor model personality traits and network structure topic. They included many conclusions regarding to personality traits and networks. For example, they conclude that extraverts tend to seek connections more, on the other hand agreeable people receive connections. Marketing decision making can describe or segment customers in their networks, then reevaluate marketing plan for better decision making.

Second topic in network analysis refers to connections between actors. The strength of a social tie is combination of amount of time, the intimacy, the emotional intensity and reciprocal services characterizing tie (Granovetter, 1977). Brown and Reingen (1987) study wom referral behaviour with network analysis, while they specifically emphasize on social ties. They approach wom referral behavior with micro and macro level and demonstrate roles of strong and weak ties. Weak ties are found as bridging function for spreading of information through network in macro level, while strong and homophilous ties are found more activated for flow of information in micro level. This phenomenon must be controlled for electronic word of mouth concept, since it has own characteristics for communication. Steffes and Burgee (2009) study on social ties online word of mouth concepts and collect data from 482 college students. They conclude that students who obtain information regarding to professor from online, use that source equal influential as their own experiences for their decisions. They also conclude that information from e-wom forum is more influential than speaking with friends (wom). Therefore e-wom has own characteristics for traditional network analysis.

Third topic in network analysis refers to density of network. Network density simply refers to mean strength of connections between units in network (Marsden, 1990). Grund (2012) studies network structure in soccer team context with passes data between players. Author concludes that increased time performance is linked to increase in network density and increase in network centralization leads to decrease in team performance.

Fourth topic in network analysis refers to macro scope of networks. Takhteyev et al. (2012) study on social ties on Twitter network and examine influence of geographic distance, national boundaries and frequency of air travel on formation of social ties. They conclude that 39% share of ties is within the same metropolitan region. The best predictor for ties is found as number of flights between parties and for non-local ties, Twitter ties are affected by distance, border and language differences.

Fifth topic in network analysis refers to scope and contexts of methodology. Oliviera and Gama (2012) identify common tasks of social network analysis as;

identification of most influential, central, prestigous actors,

- employing statistical measures,
- detection of hubs and authorities.
- employing link analysis algorithms,
- employing community detection techniques to discover communities.

Business studies related to network analysis contain several contexts including; tourism (Shih, 2006; Leung et al., 2012), e-wom (Vilpponen et al., 2006), leadership (Meuser et al., 2016) and brand associations (Wang &Horng, 2016). On the other hand non-business studies includes network analysis/social network analysis with several contexts like disaster (Kim &Hastak, 2018; Kim et al., 2018), education (Lee & Bonk, 2016) and sport (Clemente et al., 2015). One of the use of network analysis refers to literature review and bibliometric analyses. This usage includes several different research areas including; green supply chain management (Fahimnia et al., 2015), internet of things (Mishra et al., 2016) and supply chain finance (Xu et al., 2018).

Following general structure of network and network analysis, there are some important topics for further evaluation of network analysis. These refer to i) weighting degree of actors, ii) similarities of actors, iii) time dimension and iv) flow of information.

# Weighted Actors or Equal Actors?

Evaluation of two-sided networks mostly rely on equal sized relationships, however some network structures require weighted constructs for better decision making. Examining actors in complex network could lead researcher to consider which actors are more important or influential. This decision makes connections between actors/nodes changed, as the relations are affected the importance degree of source or receiver. Kim et al. (2018) examine this phenomenon with biomedical context while they study topic evolutions with weighed value (citation influence).

# Similarity of Actors in Network

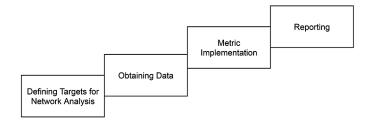
Segmenting actors in networks is important issue in consumer networks as they have useful insights for further marketing decisions. The simple ways of segmenting actors in network refer to evaluation of actor groups regarding to relationships (clusters). However, complex networks can signal about hidden similarities. Alfraidi et al. (2015) examine publications and their similarities regarding to citation/reference relationship, they measure similarity with number of paths and length of each path.

### Dimension of Time for Networks

Changing nature of networks have important insights for marketing decision making when it is employed for strategic decision making. Besides static evaluation of networks, including time dimension to networks can help decision making understanding evolution of networks. For example, Prabhakaran et al. (2018) examine scientific literature of Nanotechnology for Engineering and employ a variable named "Flow Vergence" to evaluate paradigm shifts.

### Understanding e-WOM Evolution in Social Media With Network Analysis

Figure 1. Road Map for Network Analysis



## Flow of Information

Beyond the general structure of networks, for example clusters and influential actors, the flow of information in social network is one of important issues for marketing decision making. Type and speed of information flow can signal about market and guide for other marketing decisions like advertising and promotion. Himelboim et al. (2017) study information flow in Twitter context and identify six structures of information flow. These structures are divided, undivided, clustered, fragmented, clustered, in and out hub-and-spoke networks. Observing information diffusion over time provides identifying important nodes for expanding company's existing network (Church et al., 2015). Therefore flow of information must be examined, in addition to general network structure.

# Network Analysis Methodologic Definitions

Network analysis simply starts with "graphs", which are defined by Freeman (1978) as structures consist of set of points and set of lines/edges which connect points. Points (nodes) and edges (lines between points) are main network elements. Degree of point is another term in network analysis refers to the number of other points which specific point adjacent to (Freeman, 1978). Freeman (1978) concludes that degree-based measure is suggested for concern related to communication activity, while measure-based upon betweenness is suggested for interest in control of communication and measure-based upon closeness is related to concern with independence or efficiency.

Next section of study examines network analysis with cases for better understanding.

## SAMPLE CASES ABOUT EVALUATING WORD OF MOUTH NETWORKS

Theoretical background of network analysis will be supported with real life cases in this section of study. The road map for network analysis methodology is summarized as 4 main steps in Figure 1. This roadmap starts with defining target for network analysis and continues with obtaining data related to target network. Following obtaining of network information, several network metrics can be implemented regarding to company's targets. In this stage companies may focus on; i) general structure of network, ii) communities in network, iii) key/local influencers, iv) trending subjects which network talks about. Results of network analysis is reported at last stage of road map.

Methodology: This study uses GEPHI software (Bastian et al., 2009) for methodology and also employs Twitter API (Twitter, 2019) and plugin named "TwitterStreamingImporter" (Totet, 2019) for

collecting data from Twitter. Graphical representation of network uses Force Atlas 2 algorithm (Jacomy et al., 2014) which is a force-directed layout. As Jacomy et al. (2014) implies regarding to this algorithm;

Nodes repulse each other like charged particles, while edges attract their nodes, like springs. These forces create a movement that converges to a balanced state. This final configuration is expected to help the interpretation of the data.

Next section starts with first case which refers to detection of overall structure of a network. This overall detection signal general information regarding to network and helps to further steps of examination regarding to community detection and influencer evaluation.

# Case 1: Detection of Network Structure of Specific Theme in Social Media

Scenario 1: A tourism company is preparing for sports organizations in London. While the company has past information regarding to customers, marketing decision making team wants to prepare a plan for evaluating market on social media. The outcome of scenario includes insights for advertisement team, these insights can guide targeted advertising studies.

The steps for scenario 1;

Defining actors and relationships (nodes and edges) -> Listing local actors for analysis -> Defining centrality metric for campaign -> Analyzing network for centrality measurement -> Reporting segments and structure

First two steps in workflow refers to preparing stage, as they include defining and obtaining information needed for scenario. In third step, marketing team must decide which centrality metric to use for their campaign. Fourth step processes networks regarding to centrality metrics defined and segmentation of network is finished.

Data Collection: Twitter API (Twitter, 2019) and Gephi plugin "TwitterStreamingImporter" (Totet, 2019) is used for data collection regarding to hashtag "#LondonOlympics" at 28.04.2019. London Olympics event is trend topic at 28<sup>th</sup> April. Data structure in this network refers to directed network which means that each node is connected to other node with a connection.

A network created with 10121 nodes and 15870 edges. Force Atlas 2 algorithm (Jacomy et al., 2014) with 179 iteration is used for graphical representation. Figure 2 shows that there are one cluster of main segments and one additional cluster far away from center. Large and small clusters near center shows that there are users interact with each other and a centered structure. This overall graph can signal; i) main structure of network, ii) clusters near center, iii) niche node areas. The holistic approach in this scenario can guide marketing decision making for evaluating marketing environment better. Density/Cohesion of structure can signal for different marketing insights, therefore marketing decision making must examine overall structure of network firstly.

# Case 2: Detection of Key Influencers in Networks for Markets

Scenario 2: A travel agency wants to identify local influencers and information flow regarding to them. While general structure of network is already examined, the agency wants to examine it further by detecting influencer and information flow structure. The outcomes of this scenario will be used for influencer

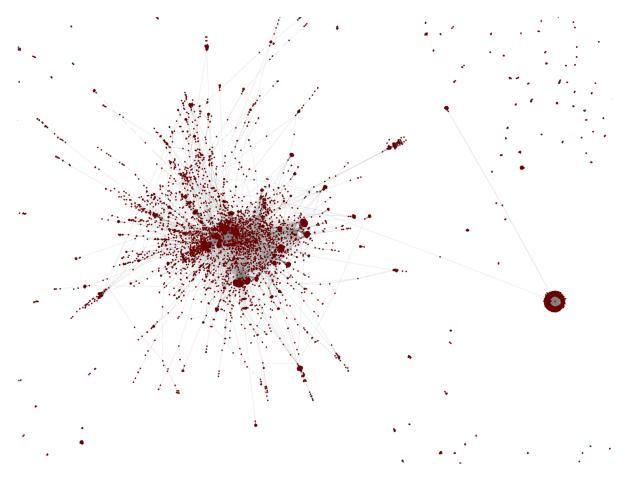


Figure 2. Overal Structure of Network for Case 1

marketing studies. Competitive position of the travel agency refers to challenger position in market, therefore detecting right influencers would lead company to competitive advantage.

The steps for scenario 2;

Detection of communities in network -> Detection of segments -> Decision of centrality measurement -> Detection of local influencers -> Evaluation of connections regarding to influencers -> Evaluation of information flow through connections.

Obtained data from first case is used for this case. Degree metric is implemented in Gephi (Bastian et al., 2009) and the size of nodes are corrected to centrality scores, therefore bigger circles refer to bigger centrality score. Force Atlas 2 algorithm (Jacomy et al., 2014) is implemented with 118 iterations.

Figure 3 shows network for case 2 regarding to degree-based measurement. Bigger circles near center of figure refers to bigger degree actors in this network. It is also a bigger circle far away from center in this network (it is not included in Figure 3). The bigger circles in this case can be helpful for detecting local and macro influencers in network since they have more connections. Marketing decision making can detect influencer in overall network first, then prepare a communication or promotion plan including reaching these influencers before mass communication.

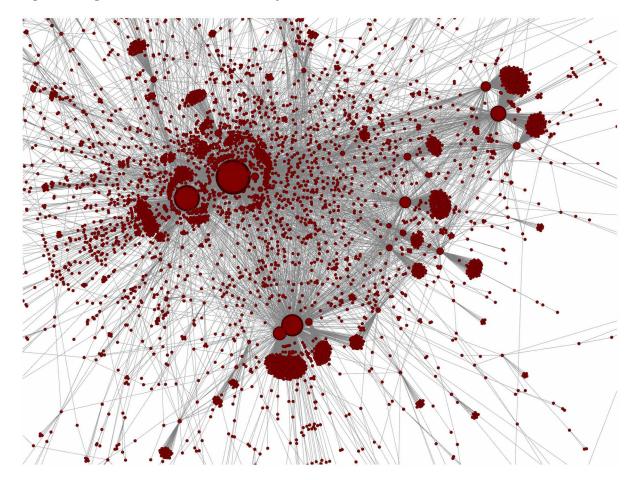


Figure 3. Degree-Based Measured Network for Case 2

Detection of influencer has also insights for macro market conditions. The markets with different segments of communities and local influencers can be complex structures for evaluating. Determination of which influencers have most effect on which groups can be crucial for marketing planning.

# Case 3: Evaluation Hashtags' Network

Third case focuses on market instead of actors while it examines what networks discusses about. A marketing campaign decision maker can start with evaluation of overall network and detecting of influential actors. But it is not a complete solution for holistic network approach. Determination of main topics and related topics regarding to main topics is crucial for marketing message planning. In this case, the network structure of hashtags in Twitter is examined. One main hashtag is selected for data collection and related hashtags are obtained for evaluation.

Steps for Case 3;

Detection of general hashtags related to industry -> Detection of main hashtag -> Obtaining of data -> Implementation of network analysis -> Reporting

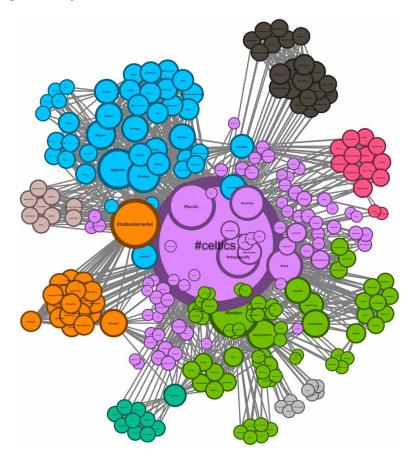


Figure 4. Hashtag Network for Case 3

Data Collection: Twitter Stream API (Twitter, 2019) is used with GEPHI software (Bastian et al., 2009) and its plugin named "TwitterStreamingImporter" (Totet, 2019). Hashtag "#celtics" is selected from Worldwide Trend Topics at 28<sup>th</sup> April 2019. Modularity function of Gephi (Gephi, 2018) is used in software for detecting communities of hashtags. Modularity function uses Blondel et al. (2008)'s algorithm for evaluating of communities. Force Atlas alhorithm (Jacomy et al., 2014) is also implemented for graphical representation.

Hashtags are segmented through different colors in Figure 4 and sizes of nodes are adjusted according to degrees of nodes. For example purple nodes contain some of NBA related hashtags.

This segmentation can advise marketing management about electronic word of mouth environment. Understanding what consumers talks online can be helpful for promotion management. It is also suggested to examine outside clusters since they can signal related or unrelated hashtags. Related hashtags can be used for advertising or promotion campaigns, while unrelated hashtags can be used for spam detection.

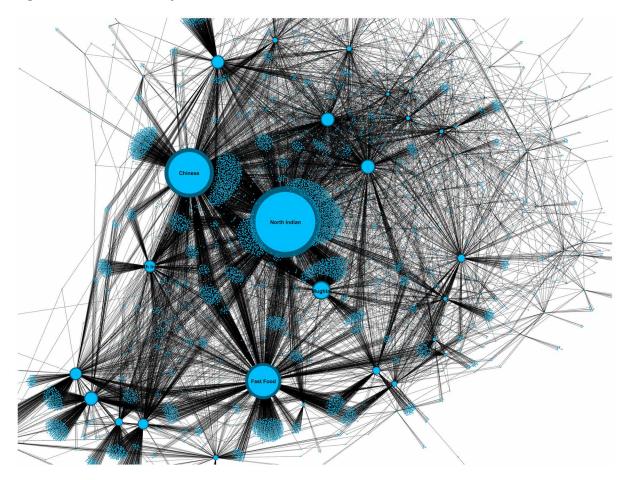


Figure 5. Cuisine Network for Case 4

## Case 4: Network of Restaurant Cuisines

Unlike the traditional node-edge structure, a network analysis will be made on the cuisines in the restaurant. This case may be useful in guiding a company with an idea of entering the market by opening a new restaurant at a specific location.

Steps for Case 4;

Determination of targeted geographic area -> Determination of criteria for selecting restaurants -> Obtaining data -> Implementing network analysis -> Reporting of networks

Data collection: Data in this case study is used from a Kaggle data set named "Zomato Restaurants Data" (Mehta, 2018). The dataset includes information about different restaurants from several cities.

Figure 5 includes that there are several main clusters for cuisines in targeted area. North Indian, Chinese, Fast Food, Mughlai and South Indian are main clusters. This cluster structure signals about most popular cuisine in selected market. Beyond general structure of network, there are some minor nodes/small clusters outside center. These minor nodes can be niche market for new market entry. Therefore both conclusions can be helpful regarding to target of market actor.

This "object" approach has a cluster analysis nature and can be helpful for several marketing targets. For example clustering categories of customer complaints can show most popular and least popular customer complaints, as well as categories with bridging roles.

### SOLUTIONS AND RECOMMENDATIONS

Network analysis is one of ideal statistic methodologies for social science due to its roots for social network theory. People (consumers in our study context) often communicate and exchange ideas through word of mouth or internet-based technologies which refer to electronic word of mouth. The harmony of methodology with theory helps marketing decision making about evaluating social media environment. In addition to e-wom concept, the service industry mostly depends on people factor as people (or personnel) reflect image of company to consumers and the experience of service consumption varies from person to person. Thus, evaluation of person related factors with network analysis approach could be a decision making solution.

Recommendations for business world includes strategic approach for network analysis regarding to customer and market analysis. Considering how network analysis can help to marketing plan of company would be a good starting point. The integration of network analysis with other marketing methodologies including sentiment analysis, digital advertising tools and social media marketing would be next step. Second recommendation about network analysis and its implementation refers to sub-concepts of network analysis including community detection, flow of information. These sub-concepts can be useful for specific marketing cases. Context-based differences make sub-concepts necessary for marketing decision making. Third recommendation refers to evaluation of different social media channels and their potentials for marketing plans. Each social media channel has its own characteristics, therefore it can help to marketing decision making.

### **FUTURE RESEARCH DIRECTIONS**

Social media concept has crucial potential for business. According to Global Digital Report (We Are Social & Hootsuite, 2019) active social media users have increased 9% (+218 million) between January 2018 and January 2019. It is obvious that social media will be focused areas of marketing management in following years.

Future research directions of this study consist of three parts; context and industry-based researches, detail researches, researches with time dimension. First part refers examining network analysis with different contexts and industries since the variety of contexts and industries affect network structures. The community detection cases are example for this part. Hospitality industry would have a large network but small communities, on the other hand training/education industry would have large network with large communities. The industry focused approach can be more accurate for marketing researches. Second part refers to extending network analysis concepts for further research. Continuing to general network structure examination with community detection could be next research. Community detection can continue with flow of information research. Thus, next steps for further researches can refer to details. Last part refers to time dimension for researches. Networks have dynamic nature, thus adding time dimension can be helpful for marketing decision making. For example, a network structure of hospitality industry can

evolve differently from launch of new branch to holiday season. Therefore, marketing decision making must examine how network structure over time. Existence of new communities, spreading of e-wom messages can signal about market environment. These three directions can be employed as one by one or integrated together for further cases.

## CONCLUSION

Traditional word of mouth concept still has crucial role for marketing management decision making, in form of electronic word of mouth, social media and review websites. As people live in groups and society, digital "social" worlds would still continue in similar forms regarding to social structures. People exchange, consume and transfer ideas to each other and companies can make use of these insights. Forms of people's communication have been changed in recent years and will continue to change in future but need of observation of market and consumers will still exist. Therefore, strategic planning must be employed regardless of variety of communication.

Second conclusion regarding to e-wom concept refers to network analysis methodology and its potential for marketing decision making. Social media applications and two-way communications type makes network analysis useful for marketing management. Several methodology options including community detection, key influencer detection, time-based change evaluation, anomaly detection (Savage et al., 2014) can help for different marketing scenarios.

Third conclusion refers to degree of markets which network analysis evaluate for marketing. Micro and macro levels differ and offer different types of insights for e-wom management. Types of social ties (strong or weak), groups of nodes and flow of information have different insights for micro and macro level. Evaluation of levels and transitions with time would be useful for marketing. Dynamic nature of networks makes it necessary to take time dimension into consideration, therefore detailed approach can be useful.

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## **KEY TERMS AND DEFINITIONS**

**Electronic Word of Mouth:** Using technological channels forf word of mouth activities.

**Network Analysis:** The statistical and graphical analysis of network structures.

Social Media: Web platform which users exchange ideas, expressions, feelings to each other.

Word of Mouth: The activity of exchanging ideas of people through groups or networks.

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## **ABSTRACT**

Electronic word-of-mouth (e-WOM) is a very important way for firms to measure the pulse of its online reputation. Today, consumers use e-WOM as a way to interact with companies and share not only their satisfaction with the experience, but also their discontent. E-WOM is even a good way for companies to co-create better experiences that meet consumer needs. However, not many companies are using such unstructured information as a valuable resource to help in decision making: first, because e-WOM is mainly textual information that needs special data treatment and second, because it is spread in many different platforms and occurs in near-real-time, which makes it hard to handle. The current chapter revises the main methodologies used successfully to unravel hidden patterns in e-WOM in order to help decision makers to use such information to better align their companies with the consumer's needs.

## INTRODUCTION

Today, e-WOM is an extremely important source for Marketing due to its impact on the online reputation of the firms. Consumers are no longer passive bystanders. Following consumer satisfaction expressed through online interactions on Facebook, Twitter, Instagram and other user generated content sites is paramount for effectively implementation of corrective measures that may increase satisfaction and consumer engagement with the brands (Bilro, Loureiro & Guerreiro, 2018).

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However, although companies have been digitalizing themselves and upgrading their infrastructure to accommodate such Big Data with technology that grabs all the interactions with the consumer in real-time (written or verbal), there is still a long work to do regarding the effective use of such information to unravel hidden patterns of behavior. However, there are some successful examples of using such information to help decision-making. In Tourism, companies such as ReviewPro and Revinate offer complete solutions for firms to grasp the unstructured information written in sites such as TripAdvisor and Booking about their brands and their competitors. Using such information, companies may understand how their online reputation is changing over time and improve guest experience according to their feedback (Nave, Rita & Guerreiro, 2018). However, such information is often offered as a silo of information and not integrated with the company's remaining key performance indicators (KPIs). To do so, companies must integrate analytical skills and develop internal decision support systems that may able them to integrate both structured (e.g. Financial KPIs, Human Resources KPIs), and unstructured information (e.g. reviews, online posts on the company's Facebook page, verbal complains).

The current chapter analyzes the characteristics of e-WOM and presents a theoretical approach to the most relevant methods used to handle unstructured data. Such information may allow managers to treat e-WOM data in order to uncover hidden patterns of behavior.

## **BACKGROUND**

The emergence of the Web 2.0 has brought a new era of consumer-brand interaction through the spread of electronic word-of-mouth. E-WOM may be defined as "all informal communications directed at consumers through Internet-based technology related to the usage or characteristics of particular goods and services, or their sellers." (Litvin, Goldsmith & Pan, 2008, pp.461).

While in the early days of the Internet, companies had mainly a one way communication with their consumers through institutional web sites, today users interact with companies in a two-way communication. The consumer today is both the listener and the originator of information and such change echoed for the entire decision-making process. Not only in the awareness of need stage, where consumers may interact with viral communication videos and write their opinion or share such communication with their network of friends, but also while searching for alternatives online, where consumers read and form an opinion about the experiences or products in the market, or in the purchase and post-purchase stage, where some consumers are even driven to express their own opinion about the experience. Motivations of such behavior vary from (1) a need to have a platform to spread a message for an assistance, (2) to share negative feelings, (3) by a genuine concern toward other users, (4) for extraversion and self-enhancement, (5) for social and economic benefits, (6) to help the brand or (7) to seek for advices (Hennig-Thurau et al., 2004). Some of them are positive drivers and may help the companies to achieve a better reputation online, but some are negative drivers that may harm the company if not properly addressed.

Companies have been trying to keep up with such progress by (1) setting specialized teams of digital marketers responsible for handling such interaction and (2) investing on Big Data infrastructure that captures all this information in near-real-time for later analysis. E-WOM is usually posted online in the form of textual messages either in social media or in recommendation sites. However, today bloggers also share e-WOM through video, and that information may also have valuable information for brands to understand how are they being viewed and discussed online. Therefore, all public information spread online (text, audio, video) should be captured in Big Data systems (usually also transformed into a single

type of media such as text) for helping brands to better align their positioning with the expectations of their consumers.

Despite the recent technological evolution in Big Data infrastructure, allowing information with such volume, variety and velocity to be captured and stored efficiently, there is still a need to analyze information and transform it into useful patterns that may be helpful for decision-making. Text Mining (TM) has been used (along with Natural Language Processing techniques and Sentiment Analysis) to successfully grasp the hidden patterns in data and present the most relevant drivers of behavior stemming from e-WOM data.

## **TEXT MINING**

Sanchez et al. (2008) define text mining as the discovery of non-trivial, previously unknown and potentially useful information from text. TM is a form of semi-structured analysis of unstructured data that dates back to the work of Hearst (1999). Although unstructured data has been around since companies started to keep textual documents in their database systems, only recently, technology allowed the huge amount of information stored in such systems to be thoroughly analyzed. Today, Big Data infrastructures allow companies to gather not only documents but also real-time textual information such as tweets, posts, complains over the call-center or any other type of interaction with the consumer. There are generally two types of textual analysis. The first is a deductive approach which uses a top-down approach following pre-determined associations and relations between words. Such words are included in an ontology or dictionary that determines much of the process of knowledge discovery on data (Hristovski, Peterlin, Mitchel and Humphrey, 2005). The alternative type is a bottom-up approach, were unstructured data is structured into a set of terms that are then used to uncover latent relationships in text or classify specific events (such as for example the event of a fake news or a reputational issue) using machine learning algorithms. Therefore, the second approach combines the use of text mining as a way to structure data and then uses traditional data mining techniques to uncover patterns in the data (Sanchez et al., 2008).

Regarding the use of TM in e-WOM, usually both approaches are combined, particularly because consumers may write anything that comes to their mind and sometimes a formal dictionary may help the analysis on a big collection of data to focus on the most important elements for a specific sector.

In the inductive approach the work starts by extracting the data to a workable set of documents or *corpus*. Usually in e-WOM analysis, each review, tweet or post defines the *corpus* that together sets up the *corpora* (Feinerer, Hornik & Meyer, 2008). After the initial stage of data collection a preparation stage follows. In some cases, e-WOM may be extracted in real-time to feed the next stages.

The preparation stage converts the *corpus* into a set of bag-of-words (a group of relevant terms) for analysis. However, in order to structure the text into relevant terms, its semantic context has to be taken into consideration.

## **Natural Language Processing**

Natural Language Processing (NLP) are a set of techniques that capture the semantic characteristics of text so that later analysis may take such context into consideration. NLP tasks include tokenization, part-of-speech tagging or named entity recognition (Collobert et al., 2011).

Tokenization breaks the text into small tokens that may be single terms or n-terms depending on common relations and context. For example, depending on the semantic context of a review, the expression "alarm clock" may have different meaning if they are assumed to be a single token or two separate tokens "alarm" and "clock". A proper tokenization is then an extremely important part of the deductive analysis of text (Hassler & Fliedl, 2006). Another NLP technique that helps on defining contextual meaning is the part-of-speech (POS) task. POS classifies text tokens according to its syntactic role (noun, verb, adverb). Depending on the context of a review, the same word may have different syntactic roles. For example, the bi-term "fast" expressed in a review may be used as an adjective: "This mobile phone is fast" or as an adverb: "The mobile phone is loosing battery fast". Therefore, a POS transformation technique ensures that when grouping text, only those tokens that are common are grouped to form a relationship between tokens (e.g. words) and documents (e.g. reviews). A final preparation step usually rips text from its stopwords (the set of auxiliary terms that are not relevant for analysis after semantic classification is performed). Punctuations and words such as "a", "he", "she", "for" may be removed from text for building the document-term-matrix. In many situations, some techniques to reduce complexity may also be applied such as stemming and lemmatization. Stemming is a heuristic method that reduces each term to its radical term (stem) so that words with the same radical term may be analyzed together (Porter, 1980). For example, words such as "run" and "running" may be analyzed together after a stemming procedure. On the other hand, a lemmatization approach takes into consideration vocabulary and morphology and is therefore a more advanced technique.

## **Document-Term-Matrix and Wordclouds**

A first exploratory analysis of text after transformation may be done using the document-term-matrix (DTM) analysis. As the name implies, the DTM is a cross-relation between each document (e.g. a review) and each token. Although a sum approach may be used to fill such matrix (term frequency), the term-frequency-inverse document frequency (TF-IDF) is usually the best approach to reduce the sparsity of the matrix (composed of many zero values on the crossing between reviews and terms) (Grün & Hornik, 2011). The TF-IDF approach weights differently the terms in each document so that the terms that occur more often in a single document but not often in all the documents are more relevant (Delen & Crossland, 2008).

The DTM may be explored using a *wordcloud*, a graphical representation of the weight of each term either by using the absolute frequency or by using the TF-IDF.

## Clustering of e-WOM

After an exploratory analysis, the text may be grouped into clusters of words. Although traditional clustering techniques such as k-Means may be used to group text into different groups, a more appropriate approach is the use of mixed-membership clustering techniques such as topic models. Topic models are "probabilistic models for uncovering the underlying semantic structure of a document collection based on a hierarchical Bayesian analysis of the original texts" (Blei & Lafferty, 2007, p. 1). They can be represented as a relationship between an observable N number of words in a D document and a latent set of K variables. A topic (t) is modelled as a multinomial probability distribution over a set of words (w) in a given document, such as p(w|t), for  $t \in 1:K$  (Blei, Ng, & Jordan, 2003).

Each latent topic is a distribution over words in the document where each term has a different probability to belong to that underlying topic. Also, they are mixed-membership models, given that each document can belong simultaneous to multiple topics at the same time (Grün & Hornik, 2011). Topics are hidden entities that can be inferred from observable words using posterior inference. By analyzing topics instead of a bag-of-words, text mining can find useful structure in the *corpus* collection of e-WOM information (Blei & Lafferty, 2007). Two of the most commonly used topic model algorithms are Latent Dirichlet Allocation (LDA) (Blei, Ng, & Jordan, 2003) and Correlated Topic Models (CTM) (Blei & Lafferty, 2007).

## **Latent Dirichlet Allocation**

In Latent Dirichlet Allocation, the assumptions relies in a generative process that it is believed to have been used to produce the *corpus* (Blei, Ng, & Jordan, 2003). The algorithm is based on Latent Semantic Indexing and probabilistic Latent Semantic Indexing (Deerwester, Dumais, Landauer, Furnas, & Harshman, 1990; Hofmann, 1999), and assumes that *corpora* are written as follows (see Table 1).

Figure 1 shows an example using the abstract of a paper from Strahilevitz & Myers (1998), in which, the histogram to the right represents the topic distribution over the documents that the generative process infers from the text.

Although this generative process only generates a meaningless bag-of-words, it is useful for the LDA algorithm purposes, which is, to generate a stochastic process that represents the hidden model and then to reverse it using posterior probabilities.

Figure 2 shows the graphical model representation of LDA generation procedure which is described by Blei & Lafferty (2009) as shown in Table 2.

V is the size of the vocabulary of the corpus document,  $\vec{\alpha}$  a positive K-vector and  $\eta$  a scalar.

As the name implies, LDA algorithm uses Dirichlet distribution to design the generative process. While  $Dir_y(\vec{\alpha})$  is a V-dimensional Dirichlet,  $Dir_y(\eta)$  is the distribution of the distributions using a dimensional symmetric Dirichlet (Blei & Lafferty, 2009). A Dirichlet distribution is used because their

## Table 1. Corpora written

a) First, a decision is made about the number of topics the document will have;
b) A second step defines the proportions of each topic in the document, i.e. for example in a review about the service in a restaurant,
80% may be related to staff and 20% may be related to the price;
c) Afterward, words are given proportions according to their importance for each topic;
d) A word is taken according to its importance in the topic, and according to the topic distribution.

Figure 1. Topic models generative process

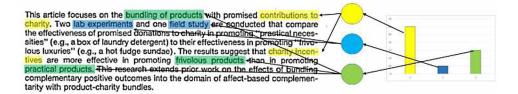
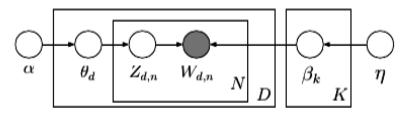


Figure 2. LDA generation procedure (Blei and Lafferty, 2009)



properties ensure that the distribution of a Dirichlet distribution is still a Dirichlet distribution with the same characteristics, which is useful for computational purposes. However, the inference over the stochastic process of LDA has some shortcomings. The posterior distribution of the hidden variables is computationally intractable. The effort needed to compute the integral in the normalized distribution used in LDA is NP-hard and must be approximated using an approximate inference technique (Blei & Lafferty, 2009). Multiple techniques have been used to optimize this equation, such as collapsed variational inference (Teh et al., 2006), expectation propagation (Minka & Lafferty, 2002), and Gibbs sampling (Griffiths & Steyvers, 2007).

## **Correlated Topic Models**

Although LDA has been successfully applied to model latent topics in documents, they lack an important characteristic. The Dirichlet distribution assumes that its vector points are nearly independent, which means that when topics are modelled using the Dirichlet distribution, they are assumed to be independent (Blei & Lafferty, 2009). However, in a real-word review, topics are usually correlated. Correlated Topic Models (CTM) builds on LDA but modifies the distribution used to model the topic proportions. Instead of using the Dirichlet distribution, CTM uses a logistic normal distribution (Atchison & Shen, 1980). The logistic normal distribution incorporates the covariance among the topics.

*Table 2. Table 2. LDA generation procedure (Blei & Lafferty, 2009)* 

```
(1) \text{ For each topic } K, a. Draw a distribution over words, \overrightarrow{\beta}_k Dir_y\left(\eta\right). (2) \text{ For each document } D, a. Draw a vector of topic proportions, \overrightarrow{\theta}_d \sim Dir_y(\overrightarrow{\alpha}). b. For each word, i. Draw a topic assignment Z_{d,n} \sim Mult\left(\overrightarrow{\theta}_d\right), Z_{d,n} \in \left\{1....K\right\}. ii. Draw a word W_{d,n} \sim Mult\left(\overrightarrow{\beta}z_{d,n}\right), W_{d,n} \in \left\{1....V\right\}.
```

## SENTIMENT ANALYSIS

Sentiment analysis goes a step further than identifying the more relevant terms or grouping text into topics. The main purpose of such task is to identify the polarity (or a sentiment scale) of the corpus, the sentences of the corpus or even individual n-grams. Sentiment analysis is a crucial step to extract relevant patterns in eWOM. Other than just knowing what consumers are discussing, managers want to know if they are discussing it in a more positive or negative tone. Such information allows managers to focus on corrective measures to address the problems identified and therefore to increase customer satisfaction.

Sentiment analysis may be developed using a machine learning approach or a lexicon based approach (Medhat, Hassan, & Korashy, 2014). The machine learning approach is usually used to identify polarities (or emotions such as anger, disgust, fear, interest, surprise, etc.) in entire reviews or sentences. Using a training dataset with reviews or sentences already classified with the different emotions, machine learning algorithms such as Artificial Neural Networks (ANN) or Support Vector Machines (SVM) create a model that may be used to predict emotions on a validation dataset. If the model is accurate enough it can be used to predict emotions on a new set of reviews. The second approach (lexicon based) is based on a list of words (a seed list) that contains the word polarity. Such seed lists may be created using a dictionary based approach or a corpus based approach (Feldman, 2013). The dictionary based approach is a top down method that is usually created using a set of starting words and their polarities, which are then expanded through the use of synonyms and antonyms. Wordnet is an example of a lexical database that contains more than 117,000 words and its synonym relations and is often used to expand initial seed of words in sentiment analysis (Fellbaum, Christiane, 2005). Although a bottom-up approach may be used successfully to uncover sentiments in text, it often lacks the specific terms of the different business domains. For example the word "short" may have different sentiment polarities if we are discussing the time spent to serve a customer on a restaurant – positive sentiment, or if it is referring to the size of a shirt – negative sentiment. Therefore, the dictionary based approach is often coupled with the *corpus* based approach that uses the text itself to identify word polarities. The corpus based approach also depends on seed lists but then uses them with natural language processing (NLP) techniques to classify the text (Caro & Grella, 2013; Liu & Zhang, 2012). There are several lexicons that are available online to be used for sentiment analysis purposes such as Hamilton, Clark, Leskovec & Jurafsky (2016) domainspecific sentiment lexicon and the AFFIN (Nielsen, 2019), BING (Bing, 2019) and NRC (Mohammad, 2019) lexicons available on the *tidytext* package on R (a statistical tool often used for text mining and sentiment analysis). While BING has a binary classification of positive and negative words, AFFIN has a set of words with sentiments classified between -5 (more negative) to 5 (more positive), and NRC classifies a set of words with ten categories (positive, negative, anger, anticipation, disgust, fear, joy, sadness, surprise and trust).

## Issues, Controversies, Problems

Despite the innumerous advantages of using semi-automatic techniques to extract patterns from text, there are still some challenges to overcome in text mining and sentiment analysis. Although there are multiple standard lexicons that may be used in most situations, there are several specific industries were the same word may have a different meaning or a different polarity. As highlighted above, for example, the word "fast" may be a positive thing if the consumer is talking about the waiting time in a restaurant, but a negative thing if the consumer is discussing "fast" food. Also, although NLP has evolved tremendously

in the last decade (especially in handling the English language) there are still several issues regarding the understanding of morphologically rich languages (e.g. Arabian, Hebrew) (Kincl, Novák & Přibil, 2019). The identification of irony, sarcasm and humour also still presents a big challenge for scholars in the field (Katyayan & Joshi, 2019; Farias & Rosso, 2017).

## SOLUTIONS AND RECOMMENDATIONS

Solutions for the problems presented above include word sense disambiguation, in which machine learning techniques are used to classify terms depending on their context (Vechtomova, 2017). In fact, machine learning techniques have also been used to detect irony and sarcasm. Using pre-classified expressions of irony or sarcasm it is possible to predict new sentences by using algorithms such as support vector machines (SVM), artificial neural networks (ANN) and others. For example, Bharti et al., (2017) used SVM and Naïve Bayes classifiers, while Mukherjee and Bala (2017) used Naïve Bayes and fuzzy clustering to address such issues.

## **FUTURE RESEARCH DIRECTIONS**

The current paper addresses the main methods that have been used to highlight behavior patterns in e-WOM messages. However, there are new approaches that have been recently suggested by scholars and that complement the vision here presented, such as the use of the network relations between the several consumers that share e-WOM messages. The connections between consumers in a network (called a graph) may be important to determine if for example a negative opinion may spread through relations and at what speed. To study such problem, graph mining techniques have been employed recently to detect consumer communities, opinion leaders and to study network dynamic. A good review may be found on the work of Bamakan, Nurgaliev and Qu, 2019, where the authors describe a methodological review of the use of graph mining to handle consumer interactions and how some consumers may lead others in their opinion, making them important actors in the network. A positive opinion leader may become an evangelist of the brand and should therefore be incentivized to share its motivation with its peers, while a negative opinion leader may harm the company's' reputation and firms should be particularly careful when addressing its needs (Bamakan, Nurgaliev & Qu, 2019; Arrami, Oueslati & Akaichi, 2017; Bilici & Saygın, 2017; Chen et al., 2017).

Another new promising direction to handle e-WOM is to use adaptive techniques such as deep learning algorithms to handle unstructured data (Arora & Kansal, 2019). Deep learning algorithms have recently gained traction to support self-driving cars and adapt easily to new variables in the environment (in this case, new words and expressions in e-WOM). Therefore, it is a promising direction to increase e-WOM classification accuracy in the future.

## CONCLUSION

e-WOM text starts as a set of unstructured review, comment, post, in the form of free text. However, the value in using such information for understanding consumer behavior lies in trying to make sense on

the patterns of data that rely latent in the comments of multiple consumers at the same time. To perform such task, scholars have developed a set of techniques based on natural language processing (NLP) that analyses the semantic relations of the text and structures the most important terms discussed by consumers. A second step aggregates the relevant terms into latent topics using techniques such topic models. Finally, sentiment analysis classifies such information regarding sentiment polarities or emotions that may be used to help managers understand the main drivers of satisfaction or dissatisfaction discussed by consumers.

The current chapter explores the methodologies used to handle the large amounts of unstructured data such as those expressed in e-WOM comments. Although many techniques have been used to treat such data, the current chapter summarizes the techniques that have been used to successfully transform e-WOM into a set of structured patterns. Such patterns may then be used to help decision makers in devising strategies to better meet consumer needs.

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## **KEY TERMS AND DEFINITIONS**

**e-WOM:** All communication that is shared with peers through Internet-based technologies about the users opinion of goods, services, brands, or experiences.

**Graph Mining:** A set of techniques to extract and discover non-trivial, previously unknown and useful patterns from graph structures such as online social networks.

**Natural Language Processing:** A set of techniques based on many different disciplines such as computer science, artificial intelligence and linguistics, that allows computers to understand the human language.

**Sentiment Analysis:** The use of semi-automated techniques such as text mining, natural language processing and semantic rules to classify text according to its sentiment polarities or according to a sentiment scale.

**Text Mining:** The discovery of non-trivial, previously unknown and potentially useful information from text.

**Topic Models:** Topic models are a set of algorithms that uncover the semantic structure of a collection of documents based on a Bayesian analysis.

# Chapter 7 Using Sentiment Analysis for Evaluating e-WOM: A Data Mining Approach for Marketing Decision Making

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## **ABSTRACT**

Electronic word of mouth is one of the keys elements for marketing decision making. e-WOM has been focus of marketing research as technology and social media become larger part of consumers' lives. This study set out to examine e-wom concept with sentiment analysis methodology in service industry context. The structure of study is twofold including theoretical backgound of related concepts and application section. Theoretical background section contains electronic word of mouth, new consumer and sentiment analysis concepts, and included selected studies for sentiment analysis. The application section which this study has focus on includes a three-stage plan for sentiment analysis practices. Each stage has three different scenarios. One algorithm and one real-life application for each stage are included. Nine scenarios for different service organizations imply that sentiment analysis supported with other methodologies can contribute to understanding of electronic word of mouth.

## INTRODUCTION

Communication is the key element of the social being for humankind from the beginning. Exchanging ideas, goods or services, helping to others are always parts of people's lives for ages. As roots of marketing and sales are based on the social exchange theory, communication is still affecting people even the forms

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of communication changes with increasing technology and communication mediums. A pre-historic age man could exchange goods for the needs before the invention of money. This man and his society lived in a village and they talked to each other about goods/services like the other things they live. Appearing of some "good" sellers in that village is ineviatable. Therefore, this could be a basic form of word of mouth in a historical view. People lives in societies, interacts with each other, no matter communication mediums or exchanging ways change.

Digitalization is a crucial part of people in last of the 20<sup>th</sup> and 21st century, as habits and behaviors are transferred to digital norms and time passed on online increases. According to We Are Social (2018) 7.593 billion of world population has 53% internet user rate (4.021 billion) and 42% active social media user rate (3.196 billion). That pre-historic man is telling experiences to his neighbor with the messenger on a mobile phone, writes reviews about the treadmill he buys online from another seller which is from another part of the country, chooses the restaurant he wants to go out with his girlfriend by examining the rating scores of local restaurants online. In sum digitalization and communication have strong relationships for people.

Next part of change is taking place for the business side. Thousands of "pre-historic man with digital technology" live online and affect each other for purchasing decisions, in terms of "action and reaction" approach, there must be some reaction on the business side. Marketing and communication plans include not the only company to the customer (one way) communication, but also the customer to the company and customer-to-customer communications, as the nature of communication has changed with web 2.0 technologies. According to Mangold and Faulds (2009), social media has two promotional roles in the marketplace. First one relates to the company to customer communication, while the second role includes communication of consumers to each other. Companies have to take actions regarding changes for the business side.

Word of mouth, a sub-concept of communication is also affected by changes from technology. Ewom concept has a growing interest in marketing and communication contexts, regarding social media and web 2.0 mediums. Review sites, pages of places online are popular for decision making of people. Negative or positive comments written by previous buyers can affect people's decision. According to Nielsen (2015) survey, 83% of participants completely or somewhat trust recommendations of friends or family. It is obvious that successful brands are conscious of digitalization and creates their plans regarding new customers. For e-wom concept, there are three elements to take into for understanding communication. The first element is related to "What" question which refers to the content of the communication. What customers write about your service? What they emphasize, what they do not mind? are the starting questions. The second element is related to "How" question which refers to style or form of communication. How do customers respond to your new service launch? How they do like or do not like your service? How is the mood of customers; happy, angry, excited or hateful? are the questions. The third element is related to "When?" question which refers to the time period of e-wom communication. How long do your customers' reviews take for your new service? Is there any seasonality for your brand? are the starting questions. Beyond these elements there are also customers and communication mediums to consider which are part of the main marketing plan. This study focuses on communication elements of e-wom concept for the brand side.

Previous studies for sentiment analysis concept cover several contexts including emphasizing methodology (Wilson et al., 2005; Pak &Paroubek, 2010; Liu, 2010, Taboada et al., 2011; Dragoni et al., 2018) or contexts (Kucuktunc et al., 2012; Ghiassi et al., 2013; Wen et al., 2014).

Approaches from previous studies mostly refer to technical only studies or limited context marketing studies. The lack of integrated studies in literature will be addressed by this study, as integrated research including both theory and cases is implemented. On the other hand, context-based studies like case researches are helpful for understanding phenomenons. Easton (2010) defines case research as a research method which includes i) investigating one or a small number of social entities/situations, ii) collecting data with using multiple sources of data, iii) developing holistic description by the iterative research process. Thus, example cases and applications will be used for this study.

This study has two-fold aims for evaluating the e-wom concept. The first aim includes theoretical background of e-wom concept and service context, while the second aim has real business cases regarding service industry for managerial side. These aims are integrated into this study as they contribute to a comprehensive approach.

Consistent with aims of the study, this study consists of three parts mainly. First part includes electronic word of mouth, new consumer and sentiment analysis concepts regarding theoretical background. The second part consists of two main sections. The first section includes a three-step pyramid for using sentiment analysis in marketing decision making, these steps are anomaly detection, sentiment analysis and text mining. The second section includes technical steps for sentiment analysis and real-life application. Algorithms for three step-plan are presented and an example case with a dataset is included.

## LITERATURE REVIEW

## **Electronic Word of Mouth**

Word of mouth refers to the act of consumers providing information related to goods, services, brands, companies to other consumers (Babić Rosario et al., 2016). e-Wom refers to any positive or negative statement which is available to multiple consumers/companies with the internet. These statements can be made by actual, former or potential consumers (Hennig-Thruau et al., 2004). Comparing word of mouth concept with electronic word of mouth is important since the medium for communication affects significantly. Berger and Iyenyar (2013) conclude that written and oral communication have significant differences as they affect product and brands which consumers discuss. Written communication leads people to write about more interesting products and brands.

One main topic in word of mouth context is related to the motivation side. Sundaral et al (1998) imply that motivations related to engagement about positive wom are product involvement, altruistic and self-enhancement, while motivations for engaging negative wom to include anxiety reduction, altruistic, advice seeking and vengeance. The emotions which play role in word of mouth need to be examined carefully for marketing defcision making. On the other side Hennig-Thurau et al. (2004) study motivations for an electronic word of mouth context and concluded the motivations for e-wom. These motivations include consumers' desire for social interaction, desire for economic incentives, potential to enhance their own self-worth and their concern for others. Yang (2017) examine word of mouth concept in terms of e-wom and finds that an individual's altruistic needs affect positive e-wom and perceived usefulness of website is related to e-wom intentions.

Following motivation side of e-wom, the effect of e-wom also matters. De Langhe et al. (2015) find that customers heavily weight average ratings, rather than a quality like price and number of ratings, even average user ratings have problems with objectivity issues including; inconsistency with Consumer

Reports scores, insufficient sample sizes etc. This subjective phenomenon related to online consumer behavior causes new research questions including; How can e-wom be measured? Which contexts e-wom has more effective at? Which content elements have advantages or disadvantages? How e-wom content spread at different platforms?

Recent studies on electronic word of mouth covers different contexts and themes including; hospitality/ tourism (Fine et al., 2017; Liang et al., 2018; Yan et al., 2018; Zhang et al., 2019), ephemeral social media (Wakefield & Bennett, 2018), social networking sites (Aghakhani et al., 2018; Fang et al., 2018) and brand image (Krishnamurty and Kumar, 2018).

This study will follow a technical approach as sentiment analysis and text mining for better measurement of contents related to e-wom. Next section continues with "new" consumer concept and recent communication mediums as they are in relation with the e-wom concept.

## "New" Consumer and Communication Mediums

Several changes and advancements effect of today's consumer worldwide for many years. Consumers have different options of communication channels, different ways of purchase actions and most importantly have changing behaviour patterns. Belk (2013) updates the extended-self concept regarding digital world and concludes that the digital world opens new means for self-extension. He summarizes modifications of extended self regarding digital world with five topics including; dematerialization, reembodiment, sharing, co-construction of self and distributed memory. As all changes offer different types of advancements, sharing is related to word of mouth concept. New consumers have several mediums to share their ideas, feelings etc.

In addition to the "new consumer" concept, technological advancements are worth to consider. Changing of web from "read-only" to "read-write" created enthusiastic users who interact/share through web mediums, followingly collective knowledge spread through web (Cambria et al. 2013). Consistent to this, Web 2.0 technologies including user reviews, comments and reports about travel experiences have crucial role as an information source, as they do not include marketing considerations by companies and reflect real experiences (Kasper & Vela, 2011). This "reality" concept contains the potential for marketing researches includes questions about actuality, volume, sentiment. On the other handservice industry is influenced by new communication mediums. Levy et al. (2012) study hospitality context and concluded that social media makes using reviews necessary for hotels. Kim et al. (2015) find that managing process related to reviews on social media is a crucial part of hotel marketing, they also conclude that overall rating and response to negative comments are related to hotel performance. In another study Xie et al. (2014) conclude that hotel performance has a correlation relationship with several factors including overall rating, attribute ratings of purchase value, variation and volume of consumer reviews, location and cleanliness and number of management responses. Therefore, in addition to "new" consumer concept, new mediums for communication are important parts of e-wom concept.

Increasing data posted online and new communication methods makes new researches possible by providing mass information related to consumers and brands. Unlike traditional methods, new research methodologies emerge due to new research possibilities. Latent Dirichlet Allocation for detecting topics (Brody &Elhadad, 2010), text mining for social media competitive analysis (He et al., 2013), eye tracking methodology (Maughan et al., 2007) are some of new methodologies for marketing research.

Sentiment analysis is one of the new methodologies contributing to sensemaking of consumer on web. As more data consumers produce, the need for speed is increasing, thus it makes technical methodologies necessary for better marketing decision making. Next section contains information related to sentiment analysis and sample cases related to sentiment analysis are included followingly.

## **Sentiment Analysis**

Content generated by consumers is increasing day by day with the help of technology and social media. From this fact, it is important for decision makers to discover meanings from the content. Sentiment analysis (opinion mining) is a computational study which examines opinions, attitudes, emotions and appraisals related to individuals, events, issues, topics and their attributes (Liu & Zhang, 2012). On the other hand, Vinodhini and Chandrasekaran (2012) define sentiment analysis as a type of natural language processing which is used to track mood of public related to specific product or topic. It can be a powerful marketing decision making tool for the people-oriented service industry since insights about consumers matter. Pang and Lee (2008) emphasize on the 2001 year regarding history of sentiment analysis and concluded factors related to showing up of sentiment analysis studies. These factors include; the availability of datasets and development of review-aggregation websites, rising of machine learning methods for natural language processing and information retrieval, recognition of intellectual challenges, commercial and intelligence applications. This study uses a public dataset for sample cases in next section.

Sentiment analysis has two approaches for detecting sentiments; first one refers to lexicon-based approach, second one refers to the classification approach (Taboada et al., 2011). Lexicon based approach can be used for document, sentence or entity level, while it can be inefficient since it depends on presence of certain words and can miss sentiments which are not clearly expressed (Zhang et al., 2011). The second approach starts with previously labeled data (positive, negative or neutral), extracts features which model differences between classes and finally infer a function to predict/classify new examples (Kolchyna et al., 2015). It is also useful to integrate approaches for improving accuracy rates. Melville et al. (2009) use lexical knowledge with classification for blogs, Ortigosa et al. (2014) use both lexicon-based, machine learning and hybrid approach for Facebook content, Zhang et al. (2011) combine lexicon based and learning based approach for Twitter. It is important to decide appropriate methodology for contexts.

Contextual differences are crucial for sentiment analysis as it is mainly affected by content. Different languages and different contexts are studied in sentiment analysis context. Tan and Zhang (2008) studied Chinese documents with sentiment analysis and concluded that sentiment classifiers are heavily related to topics or domains. In another study, Duwairi and El-Orfali (2014) examine the Arabic language in sentiment analysis methodology, they investigate different methods and conclude that preprocessing strategies contribute to performance of classifiers. Thus, it is important to investigate further contexts beyond English language and most preferred social media channels. This study includes different scenarios related to different contexts to meet the requirements of different industries.

The combination of sentiment analysis technique with other technique is another research section. Sentiment analysis is studied with different methodologies like bass model for predicting product sales (Fan et al., 2017), with VIKOR approach for measuring customer satisfaction (Kang and Park, 2014). Sentimental analysis can be useful when it is employed alone, but it can be also used as complementary technique. This study included text mining approach as complementary technique to sentiment analysis in next section.

As the history of sentiment analysis includes many significant studies, there are six studies included in Table 1. regarding sentiment analysis context.

Table 1. Selected studies for sentiment analysis context

Author	Subject	Scope	Conclusion
Prabowo and Thelwall (2009)	Combined Method	Movie Reviews, Product Reviews, Myspace Comments	This study combined rule-based classification, machine learning and supervised learning in order to improve classification.
Shi and Li (2011)	Supervised Learning	Hotel Reviews	Online hotel reviews examined with unigram feature with two types of information; frequency and TF-IDF. It is concluded that TF-IDF has better results than frequency information in a supervised learning approach.
Greaves et al. (2013)	Patient Experience	Free-Text Comments	Machine learning is employed to evaluate patient experiences through comments. It is concluded that there is a correlation with results of patient survey and machine learning predictions.
Wen et al. (2014)	Opinions Related to Online Courses	Discussion Forum Posts	Sentiment analysis is employed to evaluate student's opinions regarding online courses. Correlation between sentiment ratio of daily forum posts and a number of drop out students is concluded.
Liu et al. (2017)	Product Ranking	Online Review	The sentiment analysis technique is used with a fuzzy set theory for product ranking system, while identified sentiments are converted to fuzzy numbers.Intuitionistic fuzzy set theory based ranking approach is included.
Mäntylä et al. (2018)	Sentiment Analysis Concept	Literature Review	6996 papers from Scopus related to sentiment analysis are examined.  Details about sentiment analysis like historical roots, publication venues and research topics are included.

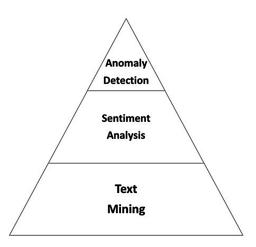
Overall, these studies show that sentiment analysis has variety in terms of context and subjects. As there are lots of web platforms and content, different algorithms and methodologies have different true detection rates for contexts. For example, recent studies related to sentiment analysis includes differen contexts like; tourism (Alaei et al., 2019), finance (Sohangir et al., 2018; Chiong et al., 2018; Batra &Daudpota, 2018) and sales forecasting (Lau et al., 2018). The second part of this study will continue with real life applications of sentiment analysis.

## SAMPLE CASES AND REAL-LIFE APPLICATIONSABOUT EVALUATING WORD OF MOUTH

Sentiment analysis has a wide range of applications for different contexts like website comments, social media pages and blog posts. This makes including sample cases necessary for this study. Three stageplan for evaluating e-wom is included in this section regarding different phases of examination. The deductive approach is employed in this plan for sensemaking e-wom related interactions.

The application section of this study has three cases. Consistent to deductive approach, the first case starts with a general/top-view for evaluating peaks about e-wom content. This process would be a starting point as it includes breakouts about consumer interactions in marketing decision making. The second case starts with either finding of the first case or general e-wom content. The second case includes detecting polarity first and several sentiment types. The third case refers to complementary side of sentiment analysis and it supports with text mining approach. This deductive approach makes each step complete each other to improve sentiment analysis.

Figure 1. Three step plan for sentiment analysis



Three scenarios will be included in each case. Each scenario has a specific industry, company size, marketing decision making organization, marketing strategies and marketing goals. The selected industries are consistent with Global Industry Forecasts report (Statista, 2016) and top 10 global industries by revenue in 2015. According to this report, financial and insurance activities have 3.609 billion USD revenue, professional, scientific and technical activities have 3.214 billion USD revenue, transportation and storage have 2.486 billion USD revenue, human health and social work activities have 2.002 billion USD revenue, information and communication have 1.771 billion USD revenue. These scenarios contribute to the understanding of sentiment analysis by supporting different examples. In addition to three different marketing scenarios, one algorithm for each stage will be included. This integrative approach would contribute to sentiment analysis concept with real life applications. At the end of this section, nine e-wom scenarios, three algorithms and three examples will integrate for three steps of plan.

## Case 1: Detection of Sentiment Anomalies in Social Media for Brands

Markets and web platforms are similiar in terms of action flow, interactions take place moment to moment. Actors of continous events can be also objects of these events and it is important to understand marginal changes for sensemaking process. Due to increase in amount of data in social media and website platforms, sensemaking of data becomes important.

This case refers to a macro view of e-wom content and interactions. Detecting any possible increases or decreases contributes to marketing decision making and findings in this stage are related to Opportunities and Threats topics in SWOT analysis. Detecting periodic changes and correlations in market is crucial for marketing decision making, as there are interesting correlations in market. For example, Bollen et al. (2011) concluded that public mood states are correlated with daily changes in stock market.

The technical aspect of the first case starts with identifying communication mediums and metrics which are related to marketing decision making. These metrics can include interactions on social media, review volume on websites, e-mail communication to company mail and it can be controlled hourly, daily or weekly. Following identification of metrics, possible breakouts must be determined and matched to metrics. For example, communication crisis can be related to increasing negative interactions, new

service launch of a competitor can be related to total reviews on website. The third step in first case includes decision of action related to breakout detected in second step. Service companies either have active communication/marketing strategy or passive strategy. The question in this step is related to whether the breakout will be used for further actions or not.

In Table 2, three different scenarios from different company sizes included for first case. Each company has different strategies and goals for first case, therefore demands from first case differ.

These scenarios have their own parameters and goals for steps in the first case. In first step of first case which mediums and metrics are set, "A Dendistry" can set local review websites and health-theme community forums as mediums and review volume weekly as metrics. "B Training" can set social media groups on Linkedin and business theme news websites as mediums, while group interactions and news and comments volume are set as metrics. Lastly "C Hotels" can set Instagram location pages and Twitter hashtags as mediums, total instagram photos and tweets as metrics.

The second step includes anomalies and breakouts for each company. "A Dentistry" can set weekly 40 reviews on review websites and 100 forum posts as standart metrics. "B Training" can set 10 posts on Linkedin groups and 4 news and 40 comments for a news website as standart metrics. "C Hotels" can set 140 new photos for Instagram location page and 100 tweets for related hashtag as standart metrics.

The third step contains action plan for second step findings, "A Dendistry" can reach users personally, while "B Training" post statuses about related business trends, "C Hotels" can demand advertisement briefs from agency related to uprising consumer concerns.

## Case 2: Determination of Sentiments Related to Consumer Reactions Social Media

Understanding e-wom content requires more than quantity, details are also important for marketing decision making. Positive-negative polarities are the first step for sentiment analysis since it reflects main attitude of consumer related to service or product. Specific sentiments including anger, hate, anticipate, joy also crucial for decision making as they are related to specific marketing mix elements.

Table 2.	Scenarios	tor case	1

	A Dentistry	B Training	C Hotels
Industry	Health	Business Education	Tourism
Company Size	Small	SME	Large
Marketing Decision Making Organization	Boss plans marketing	Small marketing department.	Outsourcing marketing to agency
Marketing Strategy	Finding opportunities about challenges competitors face.	Detecting potential consumer needs and potential market gaps.	Maintaining top position in market.
Marketing Goals for Case	Evaluating local demand increases on the web.  Detecting seasonality about sector.	Evaluating any increase in problems competitors face. Discovering salient seasons related to the education sector.	Examining consumers' problems in macro perspective. Listing industry based seasonalities for marketing campaigns. Controlling possible public relation crisis.

## Using Sentiment Analysis for Evaluating e-WOM

Table 3. Scenarios for case 2

	DRestaurant	EAirlines	F Telecom
Industry	Restaurant	Travel	Telecommunication
Company Size	Middle Size	Large	Large
Marketing Decision Making Organization	In-house marketing team	Marketing Agency manages	Marketing Team
Marketing Strategy	Detecting consumer reactions to existing and potential venues	Evaluating consumer sentiements related to seasonal campaign periodically.	Integrating consumer complaint service with sentiment analysis approach.
Marketing Goals for Case	Discovering existing consumer reactions.  Creating a reaction database for potential venues.	Examining different consumer sentiments related to campaigns and take actions.	Assigning negative consumer reactions to complaint service quicker.

For example, positive e-wom reaction could be an indicator for new consumers but joy and trust have different consequences for consumers.

The technical side of case two starts with deciding sentiment analysis approach since each approach has different features. Lexicon based approach could be useful for general topics, classification-based approach for novelty research and finally hybrid approach can be developed for specific cases. The second step of sentiment analysis includes programming language for analysis. Many programming languages offer sentiment analysis related tools. The third step contains an implementation of sentiment analysis either with polarities or specific sentiments.

These three scenarios from different industries included as sentiment analysis offers different types of sentiments to brands. Since each service industry has its own characteristics, it is useful to use detail sentiments beyond main polarities (positive/negative) for marketing decision making.

The first stage in second case refers to detecting polarities for e-wom content. Positivity and negativty are important starting points for evaluating consumer feedbacks and e-wom. This step could be implemented with the help of main sentiment analysis tools, since it is easier to detect main polarities than detail sentiments. "D Restaurant" can use sentiment polarities for evaluating existing consumer reactions as it is important to monitor different venues periodically. Discovering new venues can be implemented by using location pages on Instagram. In addition to the amount of content shared for location pages, it is also important to consider sentiments in content. Polarities toward positivity at these locations can guide service brands. "E airlines" can use polarities for marketing campaign performance, since it reflects the main reactions of consumer to service company. Launching of a new flight venue can be an example of sentiment analysis which examines consumers' reactions as positive and negative polarities. "F Telecom" can use sentiment analysis for fast feedback consumer complaint service. A helpdesk account on social media can be used for consumer complaint management and reactions toward this account can be examined.

Second stage in second case includes process of detecting different sentiments. This is the next step for sentiment analysis beyond polarities since it contains more consumer insights. "D Restaurant" can measure specific positive sentiments including; joy and suprise. "E Airlines" can use this step for measuring exciteness for specific campaigns. Finally, "F Telecom" can use it for detailing consumer complaints. For example, the ratio of angerness in complaints, the ratio of hate sentiment in complaints have different

insights for service marketing, thus managing feedback process requires different approaches. Sentiment analysis with specific sentiments makes these approaches possible.

## Case 3: Identifying Word Patterns / N-Gram Detecting for Sentiment Analysis

Although sentiment analysis contributes to marketing decision making by detecting polarity or emotions generally, there are some areas need to be improved. As the content of e-wom includes linguistic elements, it is important to consider the meaning and use of these elements. For example, Agarwal et al. (2008) uses conjunctions for linguistic approach, Subrahmanian et al. (2008) use an integrated approach which combines adjective-verb-adverb combinations for sentiment analysis. These studies confirm the potential of using linguistic approach for sentiment analysis for better results. Therefore, case three focuses on linguistic approach with text mining methodology. As the technical advancements and approaches mostly refers to technical side of sentiment analysis, this study uses more generic methodology consistent with its "marketing" focus. N-gram methodology can contribute to the consumer side of sentiment analysis.

Technical aspect of this case starts with pre-processing raw data from stage 2, as they contain a different type of linguistic elements. Punctations, two spaces, numbers and emojis are removed in the pre-processing stage, thus second stepe there is plain text content to process. Second step starts with finding frequencies for each word for most used words representation. Pre-processing step can be implemented backward due to any meaningless words for marketing appears. These words could be "the", "and", "or" etc. Third step refers to the n-gram analysis process. Different from most used words representation it refers to using words together with "n" couple words. 2-grams refer to two words used together in expressions, 3-grams refer to three words used together in expressions.

In Table 4, there are three scenarios included targeting to get insight from text mining approach. Since this process is an advanced process, all three brands have advanced marketing decision making already.

Implementation side of case three starts with setting the content for text mining. This content could be the same as case two or extracted from other marketing sources. "G Agency" can use reviews of hotel websites for their customers, "H Bank" can use the Twitter hashtag for their bank #ilovebanknamedh and lastly "K Website" can use reviews and comments from competitors' websites.

Second step inclures pre-processing of text data for mining. "Noises" in texts including punctations, numbers, emojis and stopwords can mislead methodology, thus this step applies to all three scenarios.

Third step includes calculating frequencies for processed text content. Each word has a frequency number indicating how many times the word used in content. It needs to be checked words before proceeding, as some of the words can still mislead methodology. Finally, most used words in e-wom content are reported. Last step includes examining n-grams from text content. Similiar to third step, words are calculated but with an exception, this time word pairs are considered. Two-word pairs for 2-grams, three words for 3-grams are evaluated. At the end of step, n-grams are reported.

## APPLICATIONS OF SENTIMENT ANALYSIS

## **Anomaly Detection Application**

Anomaly detection application consists of two parts including algorithm and coding implementation. As there are many coding languages available for marketing decision makers, it is useful to include an

Table 4. Scenarios for case 3

	G Agency	HBank	K Website
Industry	Marketing Consultancy	Finance	Movie Stream
Company Size	Middle Size	Large	Large
Marketing Decision Making Organization	In-house marketing team	Large marketing department	Large marketing department
Marketing Strategy	Detecting gaps which consumer adressunconciously.	Long-term consumer satisfaction	Service segmentation with the help of text mining and sentiment analysis.
Marketing Goals for Case	Evaulating consumers of parttners expectations with text mining.	Setting an alert system connected to specific n-grams from VIP consumers.	Segment consumers and services with help of descriptive expressions from web.

algorithm for anomaly detection stage. Therefore, any coding language could be implemented through an algorithm, regardless of language choice. Algorithm for application one is indicated in Figure 2.

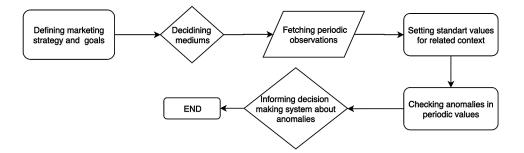
Implementation of first case can be done easily by web technologies. We choose the R programming language for this study and related R packages could be useful for implementation. R code package named "Anomalize" (Dancho & Vaughan, 2018) is used for methodology to detect anomalize and graph them. The methodology also uses two additional R packages for technical background, including tidyverse (Wickham, 2017) and tibbletime (Vaughan & Dancho, 2019).

Data collection: Google Trends (2019) statistics of search query is used for this application. Since Google Trend statistics signal popularity of specific keywords, it would be a good opportunity for service companies to examine online insights for their marketing decision making. "barcelona hotels" search query is examined with following parameters; area is worldwide, while web search filter is active and last 12 months are examined. Data starts from April 2018 to April 2019.

Analysis: Anomalize package has three main functions for analyzing time series data regarding to anomaly detection. These functions are; time decompose (), anomalize () and time recompose().

First function decompose time series for preparing anomaly detection, it has two methods for decomposing, first one is STL and the other one is the Twitter method. According to Dancho and Vaughan (2018), Stl method from "stats" package (R Core Team, 2018) seperates season and trends components from observed component, thus it finds remainder component for anomaly. On the other hand twitter method from Anomaly Detection package (Owen et al., 2014) uses seperating seasonal component, then

Figure 2. Algorithm for case 1



removes median data. Second function, anomalize(), implements the anomalization process by using two methods, iqr and gesd. According to Dancho and Vaughan (2018) IQR method from foreceast package (Hyndman & Khandakar, 2008; Hyndman et al., 2019) uses innerquartile range of 25 the median, while GESD method from Anomaly Detection package (Owen et al., 2014) eliminates outliers using Student's T-Test which compares teset statistic to a critical value. Last function, time\_recompose() uses remainder fields produced at anomalize () function and season, trend/median spans values produced at time\_decompose() function for reconstructing band around normal values (Dancho and Vaughan, 2018)

Figure 3 includes anomaly detection results with, stl decomposing method and gesd anomalize method. Red point implies the anomaly section of search query, there is anormal decrease for that point.

Marketing decision making can use findings of case one as signals for marketing campaigns. Markets have dynamic nature which contains consumer trends and behavior changes. It is crucial for service marketing decision makers to understand changes in consumer attitudes and opinions. Second application will continue with sentiment analysis processes.

## **Sentiment Analysis Application**

Sentiment analysis application consists of two parts, similiar to previous application, one part is algorithm and other part is coding implementation. Algorithm for application two is indicated in Figure 4.

One of the common tasks of sentiment analysis is polarity classification which refers to classification of content between two opposite sentiments (Cambria et al. 2013). Consistent to deductive approach, detection of polarities follows anomaly detection. Case two examines polarities of content firstly, detection of several sentiments follows it. For the methodology this study uses R programming language (R Core Team, 2018), RStudio (RStudio Team, 2016) software for sample cases and specifically uses Syuzhet package (Jockers ML, 2015) for detecting polarity and sentiments.

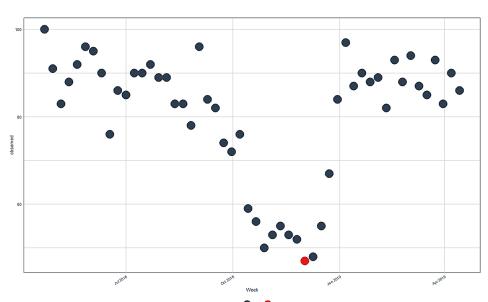
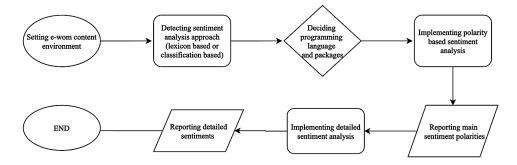


Figure 3. Anomaly detection results

Figure 4. Algorithm for case 2



Data collection: A public domain license data set from Kaggle, named "Women's E-Commerce Clothing Reviews" (Brooks, 2018) which consists of e-commerce website reviews is examined. First, 500 reviews of data set are selected for memory issues.

Analysis: Analysis of sentiment starts with cleaning text data of reviews. Tm package (Feinerer et al., 2008) is used for a methodology for main text cleaning tasks including;

- Punctation removing
- Number removing,
- White space removing,
- Stop words removing

get\_sentiment() function from Syuzhet package (Jockers ML, 2015) calculates sentiment values, while get\_nrc\_sentiment() function from Syuzhet package (Jockers ML, 2015) employs NRC sentiment dictionary for calculating eight emotions. Sentiment analysis in this study starts with main polarities regarding reviews, since they signall overall attitude of consumers. Main polarity results are included in Figure 5.

Figure 5 generated by Syuzhet package implies that most of the reviews refer to positive polarity. This could be an indicator for overall positivity and consumer satisfaction performance. As the information is general, it is important to go further to examine which sentiments regarding to polarities exist. Figure 6 implies different sentiments regarding to reviews.

Figure 6 generated by Syuzhet package implies that the majority of sentiment from review process refers to trust, joy and anticipation categories. The least sentiments from review process refer to disgust, fear and anger sentiments. These findings can be used as signal for consumer sentiment details.

Marketing decision making can use sentiment analysis for managing customer relationships online. It helps decision makers by providing/helping accurate decisions and fast interactions. It can be also implemented to integrate with other steps in marketing decision makings like customer complaint management or advertising campaigns.

## Text Mining Application

Text mining application has two parts including algorithm and coding implementation. Algorithm for application is indicated in Figure 7.

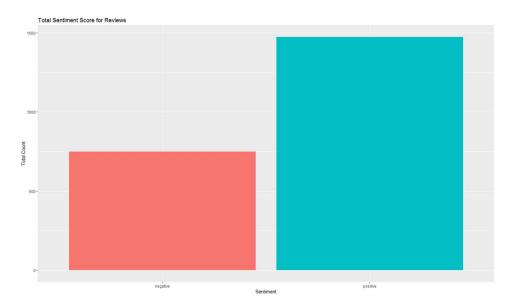


Figure 5. Polarity results of sentiment analysis

For the real application of third case, we continue with the same content from application 2, "Women's E-Commerce Clothing Reviews" data set is used. Dplyr package (Wickham et al., 2019) is used for filtering sentiment values, thus positive and negative reviews are selected. The KNIME program was used to extract n-grams from the comments (Berthold et al., 2009). Bi-grams (two words) and tri-grams (three words) signal expression of consumers which can be helpful for marketing decision making. Bi-grams related to positive and negative reviews are included in Table 5.

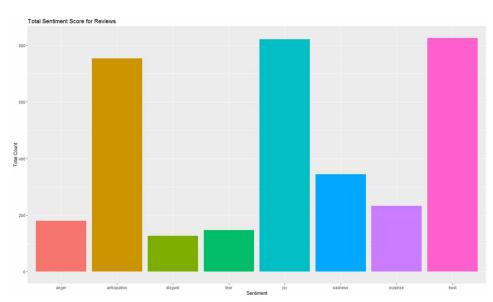
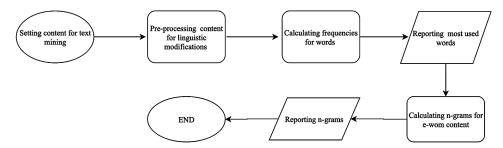


Figure 6. Different sentiment results for case 2

Figure 7. Algorithm for case 3



Bi-grams related to negative reviews are included in Table 6. Tri-grams for negative reviews is not included, as they have all equal values. Table 6 shows that zipper part of product is important for consumers.

Marketing decision making can use stage three for advanced consumer insights. Conclusions are related to expression styles of consumers, therefore many consumer insights can be extracted for different targets. Advertisement taglines, product descriptions, even product slogans can start from consumers' expression. It is a complementary methodology for sentiment analysis and it supports other marketing efforts by providing linguistic conclusions.

## **SOLUTIONS AND RECOMMENDATIONS**

Solutions regarding sentiment analysis for e-wom contains an integrative 3-step plan for marketing decision making. The first step implies observing amount of interactions regardless of polarity or sentiments. This step refers to top-view, most general tracking system for marketing. The determination of possible important events can guide marketing management for reactions. These events can be either brand-related or market-related. For example, competitor of brand can have negative peak moments, this could be a competitive opportunity. Second step which relates to sentimental details of market moments/ consumers' interactions includes sentiment analysis processes about polarity and emotions. Sentiment

Table 5. Bigrams and tri-grams of positive reviews

Bi-Gram	Frequency	Tri-Gram	Frequency
I love	78	runs true size	16
true size	62	fit true size	16
size small	30	every time wear	10
This top	28	I love top	10
well made	28	cant wait wear	10
This dress	26	fits true size	10
im usually	26	I really wanted	8
I really	26	usually wear small	8
im lbs	26	runs true size	16
ordered size	26	fit true size	16

Table 6. Bi-Grams for negative reviews

Bi-Gram	Frequency
side zipper	6
needless say	4
Dress runs	2
runs small	2
small esp	2
esp zipper	2
zipper area	2
area runs	2
runs ordered	2
ordered sp	2

analysis in this step mostly includes positive/negative and neutral polarity, but with help of technology and linguistic approach specific emotions can be examined. This step clarifies previous step by supporting details and helps marketing team sensemaking of market. The final step of the 3-step plan employs text mining methodology for evaluating e-wom content with linguistic approach. This step includes improvements for second step, as sentiment analysis has some accuracy problems regarding context and language specific expressions. In summary 3-step plan from top-view to specific details can help marketing decision making for sensemaking and evaluating e-wom for service industry.

Applications about industries can benefit from this 3-step plan and sentiment analysis. The first step of plan can be implemented of social media tracking tools. These tools can notify when different peaks take place about brand or market. The second and third step requires brand specific efforts regarding differences about markets. Employing human resource for data mining, digital marketing and related departments could be cost-effective in long term. Sentiment analysis and sensemaking of e-wom has long-term nature, therefore decisions related to sentiment analysis mostly refers to strategic decision making. Marketing decision makers must employ strategic planning and long-term goals to maintain and integrate sentiment analysis into their holistic marketing strategy.

## **FUTURE RESEARCH DIRECTIONS**

Future research directions about this study consist of three points which reflects characteristics of sentiment analysis process. These are dynamic nature of electronic word-of-mouth, scope of sentiments in word of mouth and lastly technical advancements of sentiment analysis.

The first research point in sentiment analysis is related to dynamic of electronic word-of-mouth. It would be useful to research increase/decrease periods of consumers's communication. The crisis moments for brands or the positive peaks related to consumers' perceptions contain insights for marketing decision making. Therefore, new research questions can arise from specific events like launching product/store or general events like the Super Bowl.

The second point in sentiment analysis is related to scope of emotions which has different aspects beyond positive/negative/neutral polarities. Specific sentiments like joy, anger, excitement can guide marketing decision makers through e-wom campaign processes. Therefore, characteristics of particular feelings would be next topics.

Third point in sentiment analysis includes technical aspects of research. As sentiment analysis methods include lexicon/dictionary-based techniques, advanced techniques like machine learning could be next point. Regarding usefulness of dictionary-based sentiment analysis, context-based differences could matter. Same word can mean different concepts in different contexts as the tone and theme of communication differs for each context. Therefore developing different dictionaries regarding to different contexts would be next research topics.

## CONCLUSION

The study includes e-wom concept in service context in first part and gives information regarding to conceptual structure of related topics. It is concluded that technological advancements and social media change word of mouth concept in terms of electronic word of mouth. New findings related to digital habits and behaviors create new research topics for consumer context. The volume of content related to e-wom, spreading speed, platforms for e-wom, the effects of e-wom are some of the research areas related to e-wom concept.

Second part of study is mostly related to industrial applications regarding to e-wom concept. Three case studies, one algorithm for each and three scenarios for each are included. This three step-plan contributes to an integrated approach which examines and evaluate e-wom comprehensively. Brands from both service and good industies can use e-wom related actions regarding different stages of e-wom process. Three step-plan for e-wom makes strategic planning necessary for integrating e-wom actions into marketing strategy and plan. The channels/mediums used for e-wom must be selected carefully, examining period, reaction plan and strategy are also important for long-term marketing decision making. The first case is the starting stage of e-wom evaluation which contains anomaly detection. Since each brand and industry has its own standarts for interaction amounts, it is important to detect standarts. Second case is related to main sentiment analysis which includes detecting polarity of content and type of sentiments. This sentiment analysis is mostly descriptive. Last case is supportive of second case in terms of details regarding content of sentiments. Text expressions and related statistics regarding content contributes to better understanding of e-wom. Since the service industry mostly relies on people, it is important to know how people feel with how they express it. The expressions findings can guide to consumer insights and can be used for marketing campaigns like advertisement slogans.

Another part of conclusion refers to technological side of sentiment analysis as it contains different types of methodologies and approaches. Right methodology for sentiment analysis can differ between industries or brands. For global brands methodological differences can take place for local languages. Adapting actions for local languages for sentiment analysis will contribute to accuracy of sentiment analysis.

Another technological issue refers to machine learning and artificial intelligence concepts. Sentiment analysis is mainly based on created dictionaries, but researchers can teach context-based sentiments to machines with machine learning techniques. Health related industry and patient reviews have different vocabulary structure and meanings comparing to hotel industry and tourist reviews. Big data power of

social media can guide machine learning for better accuracy. For example, when a specific context like anger expression on social media is choosen for research, hashtags related to consumers' anger expression can be starting points. Collection of thousands of tweets containing anger expressions contributes to detecting and predicting of anger sentiment for further e-wom contents.

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#### **KEY TERMS AND DEFINITIONS**

**Electronic Word-of-Mouth:** The communication action of consumers which uses technological channels as mediums.

**Sentiment Analysis:** Methodology for detecting emotions in content.

Social Media: The communication platform which makes people connected on web.

Word-of-Mouth: The activity of communication regarding goods and services.

# Chapter 8

# When Consumers' Complaints Fall Into Public Domain: Negative e-WOM on Social Media

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# **ABSTRACT**

Despite previous studies having revealed that the content created by users in social media is predominantly positive, recent studies have challenged this understanding revealing by means of sentiment analysis the predominance of negative and neutral brand related content. The current chapter focuses on the new hybrid form of negative e-WOM in which individual's complaints are directed at firms, which were originally limited to the domain of offline customer care teams. Thus, previous studies are reviewed from the area of crisis management and service recovery strategies with the intent to offer a relevant scope of theoretical propositions that may be considered by managers and researchers while preparing response strategies to deal with this new hybrid form of negative e-WOM. In total, eight theoretical propositions are presented and organized in three groups of guidelines associated to responses' format, content, and context with fait-holders and hate-holders being considered as part of the negative e-WOM rhetoric.

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#### INTRODUCTION

Although previous studies having revealed that the content created by users in social media is predominantly positive, with users advocating in favor of brands (Chevalier & Mayzlin, 2006; Smith et. al., 2012), recent studies have challenged this understanding (Liu, Burns, & Huu, 2017) revealing by means of sentiment analysis the predominance of negative and neutral brand related content. As described by the authors (Liu, Burns, & Huu, 2017, p. 245) `unhappy customers are almost three times more likely to tweet about their grievances than happy customers are to compliment the strengths and merits of the brands (...).` These new findings bring to the spotlight the increasing use of social media as a communication channel to vent one's bad experience with a product or service.

Differently from traditional contexts -where customers react to unpleasant consumption experiences by means of complaining directly to the organization that caused the dissatisfaction (Hirschman, 1970), in social media the complaints are socialized with others in firms' brand pages. As such, while posting consumers are not only complaining to the organization and voicing their intentions, but also sharing their negative experiences with other members of the community and potentially initiating a reputation crisis (Coombs & Holladay, 2012; Van Laer & De Ruyter, 2010; Van Noort & Willemsen, 2012).

This new hybrid form of negative eWOM combines characteristics from the area of customer satisfaction with others that are typically dealt with in the context of reputation management (Van Noort et al., 2014) and challenges firms to develop adapted strategies. Despite the relevance of the topic, studies conciliating this hybrid views are not yet available. The current book chapter addresses this opportunity envisioning to aggregate guidelines and orienting principles from previous studies in the area of service recovery and crisis management. The main contribution of the current study is to offer a broad scope of theoretical propositions that may be considered by managers and researchers while preparing adequate response strategies. In order to address this objective, the authors have compiled a relevant scope of studies focused on exploring the perspective of service recovery and crisis management regarding recommended response strategies.

#### BACKGROUND

## Negative Electronic Word-Of-Mouth (Negative e-WOM) in Brief

Word-of-mouth consists on an oral, informal, person-to-person non-commercially intended communication established between a sender and a receiver, regarding a brand, a product, an organization, or a service. (Higie, Feick, & Price, 1987; Katz & Lazarsfeld, 1995; Arntd, 1967).

With the development of social media, WOM has evolved with the electronic word-of-mouth (eWOM) gaining magnitude as consumers started using the internet to create brand related information and share with others. (eWOM) (Coombs, 2015; Blazevic et al., 2013; Hennig-Thurau et al, 2004). EWOM affects brands in many different metrics such as, product sales, brand evaluations, purchase intentions and firm value (Chevalier & Mayzlin, 2006; Trusov et al., 2009; Sridhar & Srinivasan, 2012; Jalivand et al., 2011). Various characteristics are responsible for driving these results, namely *i) the enhanced volume of conversations* which are able to reach more consumers in a short period of time; *ii) the higher coverage of effect* as eWOM may be distributed across multiple platforms; *iii) its persistence and observability* as after being upload in the web, it usually stays there accessible to everyone; iv) *its anonymity*, with

strangers influencing each other; *v*) its *easiness* for consumers to engage and share their views, and finally *v*) the *salience and valence* of impressions (*positive or negative*) which are organized for an instant interpretation (King et al., 2014; Kozinets et al., 2010).

Together, these characteristics set the context for the fast propagation of eWOM in social media. This is of particular importance for negative valence eWOM, with dissatisfied consumers engaging in higher word of mouth (WOM) than satisfied ones (Sundaram, et al., 1998) and while doing so, being able to influence a broad audience across various platforms, who are exposed to the comments and able to easily evaluate their valence and salience, reacting accordingly by means of showing support and sharing with others (Pfeffer, Zorbachb, & Carley, 2014). Due to its potential damage for businesses, it is generally accepted that organizations should dedicate efforts to manage the effects of negative eWOM and avoid its occurrence (Keller, 2003).

# The Perspective of Crisis Management on Dealing with the Hybrid Form of Negative EWOM

Along the years, a key focus of researchers in crisis communications has been on the negative effects a crisis can have on organizations, affecting their operations (Mitroff & Pearson, 1993), reputation (Benoit, 2004; Coombs, 2007) and financial performance (Carroll & McCombs, 2003; Cornelissen, 2011; Kerkhof et al., 2011). In view of that, companies have got equipped with strategies on how to deal with the threats that may trigger communication crisis.

The perspective we adopt in the current book chapter is that negative comments posted online are not as such a crisis, but as they threat firms 'reputation, they may lead to one and should be dealt with in an appropriate manner. An example provided in the literature involves Mcdonalds who in 2012 implemented a brand activation campaign by challenging its customers to share their heart-warming stories about Happy Meals in twitter, using the hashtag #McDStories. After only a couple of hours McDonald's had to stop the campaign, because consumers were using the hashtag to share their past negative experiences with McDonald's, thus generating high amounts of public NWOM, threatening the company's reputation (Pfeffer et al., 2014).

In reaction to these threats, monitoring social media conversations, engaging with users (Grégoire, Salle, & Tripp, 2015) and developing response strategies for crisis containment (Coombs, 1995) has become a regular practice for companies. Concerning that, in the current book chapter, the focus lays on exploring response strategies, with three aspects being considered for their influences in crisis containment, namely: the content of responses, its tone of voice and the nature of participants integrating the rhetoric.

# **Exploring the Content of Responses**

Previous studies have proposed that not all crises are equal and in order to effectively respond to a crisis, communication messages need to be adapted according to the type of crisis the organization is dealing with (Coombs, 1995; Cornelissen, 2011). Regarding that, one of the first authors to classify crisis into different clusters was Coombs (1995) who distinguished four types, namely: *accidents, transgression, "faux pas"* and *terrorism*.

The two first ones are considered as involving high level of firms' responsibility, being internally initiated. *Accidents* are defined as unintentional events occurring during the course of firms' operations (e.g., product defects, employee injuries and natural disasters). *Transgression* is defined as intentional

and occurring when organizations violate the law or ethical principles on purpose (e.g., tampering with products in order to bypass governmental tests, or by incurring creative accounting practices). The two other types are considered involving a low level of firms' responsibility. In this context, "faux pas" usually begins with an external agent who challenges the organizations actions regarding the violation of social rules and stakeholders' expectations (e.g., a group of stakeholders who start a movement for boycotting beauty products of a cosmetics company, because the organization tests on animals). Finally, terrorism refers to intentional acts that are executed by external agents in order to purposefully harm the organization (e.g., product tampering or sabotage) (Coombs, 1995).

Depending on the level of firms' responsibility the authors recommend different response strategies. For situation where firms' level of responsibility is considered to be low, the alternative response strategies are; i) non-existence strategy; ii) a distancing strategy; iii) association strategy or iv) suffering strategy. The first one implies that the crisis is reframed in an attempt to indicate that there is no crisis. The second one implies that companies tends to downplay their role and redirect the responsibility to others. The third one also implies reframing by means of association the loss arising from the crisis with a higher order organization intent. Finally, the last one implies that the company positions itself as a victim. On the other hand, when firms' high level of responsibility is present, both strategies recommended in the literature imply that responsibility is acknowledged. The first, acceptance strategy, involves alternatives like apologizing, remediating, offering compensation and asking for forgiveness. The second, accommodative strategy, implies rectification in the sense of taking corrective action to prevent the event in the future.

Despite that there is not clear guidance yet on how companies could adapt these general guidelines to the specific context of social media, the following guidelines are proposed for consideration, based on above mentioned.

**Proposition 1:** In situations when high level of firm's responsibility is present (accident and transgression), companies who implement social media response strategies that evoke acceptance and rectification will more likely reduce the risks of negative effects on complainants and audiences' exposed to complaints.

**Proposition 2:** In situations when low level of firm's responsibility is present (faux pas and terrorism), companies who implement social media response strategies that evoke non-existence strategies, distance strategies, associations strategies or suffering strategies will more likely reduce the risks of negative effects on complainants and audiences' exposed to complaints.

# **Exploring the Tone of Voice of Responses**

In online communications, there are two-tone of voices organizations can adopt when engaging in conversations with users. Organizations can adopt either a *corporate tone of voice* (CV), in which organizations speak as one voice and demonstrate a single identity, or alternatively they can adopt a *conversational human voice* (CHV), in which institutions use a more humanized voice (Locke et al., 2001). Conversational human voice is defined as "an engaging and natural style of organizational communication as perceived by an organization's public, based on interactions between individuals in the organization and individuals in public" (Kelleher, 2009, p. 177).

According to Einwiller and Steilen (2015) during a crisis, humanized responses are an effective strategy for handling complaints as it allows companies to engage in a more personal way with complain-

ants and other users that may visualize the response. These positive results are extended to the context of social media, where personal tone of voice tend to be more effective than corporate ones (Solis & Breakenridge, 2009; Dijkmans et al., 2015; Crijns et al., 2017). These effects are associated to consumers' increased relational commitment with the brand, which is perceived as more open and honest when CHV is present (Kerkhof et al., 2011; Crijns et al., 2017).

Globally, organizations can demonstrate high levels of CHV if they use a welcoming tone, provide quick feedback to users, address criticism directly and constructively, use sense of humour, admit mistakes and engage with users as a human being (Kelleher, 2009). Else, some other communication cues also help to evoke a humanized voice, among them are: name personalization (Dijkstra, 2008; Crijns et al. (2017), the use of personal pronouns (Kwon & Sung, 2011) and employee identification (Rybalko & Seltzer, 2010).

The following proposition addresses the findings above mentioned.

**Proposition 3:** Companies who implement social media response strategies that evoke conversational humanized tone of voice will more likely reduce the risks of negative effects on complainants and audiences' exposed to complaints.

# **Exploring the Nature of Participants**

Coombs and Holladay (2014) suggest that scholars tend to study crisis communications from two separate and different perspectives: the sender's (e.g. the firm's) and the receiver's (e.g. the consumer). Different from that, Frandsen and Johansen (2017) propose that in social media the crisis dynamics evolve with participants (firms and consumers) co-creating a joined rhetoric while developing response strategies - the Rhetorical Arena Theory (RAT). RAT rather than focusing exclusively on the perspective of firms being the only sender, it considers the multiple voices that participate in crisis communications (Johansen and Frandsen, 2007). Frandsen and Johansen (2017) have chosen to brand this theory with the keyword "arena" because the purposed theory posits that a social space opens up during a crisis, in which a diversity of voices starts communicating, taking different sides and forcing the company to interact with enemies and friends. The Rhetorical Arena is very similar to an actual gladiator arena in which different individuals and groups might fight in support to one another, against one another, using word-of-mouth (Frandsen & Johansen, 2010; Johansen et al., 2016).

Coombs and Holladay (2014) argue that the rhetorical arena is composed of several sub-arenas, where people discuss the crisis. Sub-arenas are described as "a limited space where a message is heard and potentially responded to by a restricted set of actors" (Coombs & Holladay, 2014, p. 44). One method of distinguishing sub-arenas is by considering different social media channels (Coombs et al., 2013). As such, both a company's blog and the company's social media page can be considered sub-arenas as long as a reasonable number of responses and interactions concerning the crisis are generated (Coombs & Holladay, 2014).

Within a sub-arena, the community members can be classified according to the valence of their interactions (Luoma-aho, 2009; 2015). Johansen et al. (2016) provided evidence that within the sub-arena, both faith-holders and hate-holders engage in crisis communication using different crisis response strategies that can either weaken or strengthen the organization crisis response. From this perspective, faith-holders can be described as customers who voice their support to a company and protect a product or brand. As describes by Luoma-Aho (2015, p. 9) faith-holders are: "stakeholders who trust the organi-

zation and have frequent personal experiences and contact with the organization." Hate-holders, on the other hand, are described as "stakeholders that feel strong distrust or even hate towards the organization" (Luoma-Aho, 2009, p. 5).

During crisis communication, firms should support the faith-holders and engage with the hate-holders (Luoma-Aho, 2015) for containment. These different participants are considered for their potential impact in response strategies, as captured in the following propositions:

**Proposition 4**: Companies who implement social media response strategies that support faith-holders will be more likely to reduce the risks of negative effects on complainants and audiences' exposed to complaints.

**Proposition 5:** Companies who implement social media response strategies for hate-holders contention will be more likely to reduce the risks of negative effects on complainants and audiences' exposed to complaints.

# The Perspective of Customer Recovery on Dealing with the Hybrid form of Negative EWOM

Customer encounters with firms' services and products may result in disappointing experiences, due to episodes related to aspects like failures in service availability, inefficiency, and problems of product quality (Kelley et al., 1993). Customers' complaints emerge as these experiences are voiced to firms'. As such, complaints are part of the daily business reality and need to be managed accordingly, with efforts being addressed towards the causes that motivate the complaints and customers affected. Handling these aspects is considered of crucial relevance as when complaints are ignored or are not adequately addressed, consumers may perceive firm's actions as insults to their value as customers, with negative impact for businesses (Ward & Ostrom, 2006).

In order to handle the consequences of complaints, companies initiate service recovery efforts. In social media, these efforts are complex as they need to contemplate for the triadic communication flow, involving the firm, the complainant and the audience (Van Noort et al., 2014). For addressing context, companies have established web care teams to monitor and intervene in online discussions with complaining consumers and audiences (Van Noort & Willemsen, 2012). The desired outcome of web care teams is that complainants are retained as customers, stop posting complaints in social media and even start sharing their positive experience regarding the service recovery (Willemsen, Neijens, & Bronner, 2013; Van Noort et al., 2014).

Thus, a satisfactory web care response is vital not only as a way to ensure customer retention, but also to protect corporate reputation (Breitsohl, Khammash & Griffiths, 2010). In the current book chapter, focus lays on exploring response strategies from their content perspective, as they have relevant impact for a successful web care intervention (Kerkhof et al., 2011).

One of the most pivotal studies in customer service literature was a meta-analysis of 87 empirical studies on complaint handling conducted by Gelbrich and Roschk (2011), with the authors identifying three key aspects that influence the success of organizational responses to customer complaints, namely: adequate compensation, favorable employee behavior and efficient organizational procedures. These findings are proposed as guidelines to be followed by web care teams as well (Van Noort et al., 2014) with organizations responding to complainants by: 1) Using appropriate compensations involving corrective

action and apologies in cases which are justified; 2) Being attentive and empathic in their messages; 3) Responding promptly and facilitating the complaint handling.

Estelami (2000) initially described *compensation* as a monetary prize that is attributed to complainants in the form of refunds, product replacements and discounts. Davidow, (2003) expanded this concept by incorporating corrective actions and apologies. In social media, apologizing in public for others to see is recommended as a positive sign that firms are committed to treating the complainant in a fairly manner (Balaji et al., 2016).

Previous studies suggest that *favorable employee behavior* is the set of interpersonal behaviors employees have when resolving complaints, suggesting that the positive valence of this variable can be signaled by employees showing an empathic, friendly, informative and credible (e.g., explaining the problem) style of communication. (Estelami, 2000). In social media, favorable employee behavior can be signaled by showing the complainant and the audience that the organization is listening carefully and empathetically to the complaints (Gelbrich & Roschk, 2011).

Regarding *organizational processes*, in the online context firms need to provide a timely response to complainants, in order to recover their satisfaction and contain negative eWOM (Hong & Lee, 2005; Balaji et al., 2016). Reinforcing that idea, Istanbulluoglu (2017) indicate that online complainants expect organizations to respond to their negative comments within 1-3 h on Twitter and within 3-6 h on Facebook.

The aspects above mentioned were considered while proposing the following guidelines:

- **Proposition 6:** Companies who implement social media response strategies that signal appropriate compensations involving corrective action and apologies are likely to reduce the risks of negative effects on complainants and audiences' exposed to complaints.
- **Proposition 7:** Companies who implement social media response strategies that signal favorable employee behavior, being attentive and empathic in their messages are likely to reduce the risks of negative effects complainants and the audiences' exposed to complaints.
- **Proposition 8:** Companies who implement social media response strategies that signal adequate organizational procedures, responding promptly and facilitating the complaint handling are likely to reduce the risks of negative effects on the audiences' exposed to these complaints.

#### DISCUSSION OF THEORETICAL PROPOSITIONS

Based on a review of previous studies from the area of crisis management and service recovery, the authors elaborated eight theoretical propositions for guiding web care teams on developing response strategies to deal with this new hybrid form of negative eWOM, in which complaints are voiced to firms and simultaneously socialized.

The eight theoretical propositions are consolidated in three complementary groups. The first group of propositions (P3, P7 and P8) relate to the format of responses, with guidelines highlighting the relevance of triggering humanized communications (e.g. using personalized cues), deployed promptly by employees who show attentiveness and empathy while addressing and solving the complaints posted in social media.

The second group of propositions (P4 and P5) relate to the Rhetoric Arena Theory and acknowledges that faith-holders and hate-holders integrate the communication flow, setting the context within which response strategies are articulated. As such, while dealing with these groups, web care teams face the

challenge of motivating fait-holders to articulate their support and simultaneously assure that hate-holders are contained.

In the third group of propositions (P1, P2 and P6), the aspects related to the content used in response strategies are explored. Regarding that, while comparing previous studies from the area of crisis management and service recovery, different perspectives are apprehended. Studies from the area of crisis management approach the negative comments as a threat for a potential crisis and therefore, focus on accessing responsibility and based on that choosing for the strategy that best safeguards companies' reputation. In this approach, the perspective is mainly protective of the firm and the complainant assumes the role of an opponent. On the other hand, studies from the area of service recovery approach the negative comments from the perspective of customer retention, focusing on developing responses that are oriented for compensating customers and assuming companies' responsibilities.

None of these approaches are ideal as such, and the implementation of related guidelines need careful detailing. While detailing them it is important to distinguish the domain within which the complaint handling takes place – private or public. The private domain takes place between the complainant and firm and represents the part of response which is not shared in public. This domain is of crucial importance as it is responsible to drive resolution and avoid that complainants return to voice their dissatisfaction or evolve into hate-holders. The public domain, on the other hand, represents what is visible to the audience and as such may impact their brand perceptions and intentions, with impact on companies´ reputation. The base understanding is that resolutions may differ between the public and private domains, with their objectives also differing. In the public domain it would make sense to privilege brand protection, meantime in the private domain relevance falls towards customer retention.

#### **FUTURE RESEARCH DIRECTIONS**

In the future, the propositions formulated should be tested using a mix-approach, that is, it will be important to combine interviews with employees who directly deal with social platforms, with interviews with customers in different situations and having different experiences with organizations (failure/recovery situations), combined with the analysis of customers' reviews on social platforms. Private and public domains of responses should be considered.

Second, as an evolvement of previous one, a scale could be proposed and validated for measuring the level of satisfaction depending on the way companies behave in situations of service failure and recovery. Third, repeated studies could be used to create a typology of failures combined with recovery strategies. Finally, future studies could focus on understanding whether or not the negative eWOM cause less damage in the corporate image and reputation if the company use the appropriate strategy to communicate with customers in social media.

#### CONCLUSION

The current book chapter focuses on exploring the nuances of a new hybrid form of negative eWOM occurring in social media, in which dissatisfied consumers voice their complaints to firms by means of posting on social media brand pages. As such, complaints are extended beyond customer care teams, becoming visible to audiences and threatening brand reputation. This phenomenon combines aspects

Table 1. Propositions for responding to the new hybrid form EWOM

#### Related to Format

**Proposition 3:** Companies who implement social media response strategies that evoke conversational humanized tone of voice will more likely reduce the risks of negative effects on complainants and audiences' exposed to complaints.

**Proposition 7:** Companies who implement social media response strategies that signal favorable employee behavior, being attentive and empathic in their messages are likely to reduce the risks of negative effects complainants and the audiences' exposed to complaints.

**Proposition 8:** Companies who implement social media response strategies that signal adequate organizational procedures, responding promptly and facilitating the complaint handling are likely to reduce the risks of negative effects on the audiences' exposed to these complaints.

#### Related to Context

**Proposition 4**: Companies who implement social media response strategies that support faith-holders will be more likely to reduce the risks of negative effects on complainants and audiences' exposed to complaints.

**Proposition 5:** Companies who implement social media response strategies for hate-holders contention will be more likely to reduce the risks of negative effects on complainants and audiences' exposed to complaints.

#### **Related to Content**

Proposition 1: In situations when high level of firm's responsibility is present (accident and transgression), companies who implement social media response strategies that evoke acceptance and rectification will more likely reduce the risks of negative effects on complainants and audiences' exposed to complaints.

**Proposition 2:** In situations when low level of firm's responsibility is present (faux pas and terrorism), companies who implement social media response strategies that evoke non-existence strategies, distance strategies, associations strategies or suffering strategies will more likely reduce the risks of negative effects on complainants and audiences' exposed to complaints.

**Proposition 6:** Companies who implement social media response strategies that signal appropriate compensations involving corrective action and apologies are likely to reduce the risks of negative effects on complainants and audiences' exposed to complaints.

from the area of customer satisfaction with others that are typically dealt with in the context of reputation management (Van Noort et al., 2014).

While exploring the topic, literature from crisis management and service recovery are combined and articulated into eight theoretical propositions. These are intended for offering to companies guidelines to consider while designing their response strategies and establishing best practices. The eight theoretical propositions are complementary and as such are organized in three groups regarding aspects related to the format, content and context of response strategies.

Regarding format, guidelines highlight the relevance of triggering humanized communications, deployed by employees who show attentiveness and empathy and by processes that facilitate complaints 'handling and allow prompt responses. The prompt response and facilitated handling of complaints challenges that web care teams are available 24/24 x 7 and are well integrated in companies' operations. Regarding the context, the guidelines propose that both faith-holders and hate-holders are considered while addressing response strategies, as they can resonate their opinions for the audience exposed to the complaints. Finally, regarding the content strategy different and complementary views co-exist, with previous studies from crisis management privileging the brand reputation and studies from service recovery privileging customer retention. While detailing response strategies, the public and private domains where it takes place are important to be considered, with brand protection being privileged in the public domain and customer retention in the private.

In order to escalade the findings, limitations regarding the methodology need to be acknowledged, as the propositions were conceived based exclusively on literature review. Future studies could address that as above suggested.

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# **KEY TERMS AND DEFINITIONS**

**Crisis Management:** The process by which an organization deals with unexpected or even disruptive events that may cause problems harming the organization or its stakeholders.

**Customer Satisfaction:** According to the disconfirmation paradigm, if the expectations of a customer about a service/brand is fulfilled when they experience such service/brand, then he/she will be satisfied.

**Electronic Word-of-Mouth:** The information is communicated between partner through online platforms (e.g., e-mail, social media). This form of communication may create buzz marketing.

**Public Relations:** It is a tool that organizations use to spread corporate information from themselves to the public.

**Service Recovery:** When a company commit a failure, the customer complaints and the company is able to repair the failure somehow.

**Word-of-Mouth:** The oral information communicated from one person to another. For, instance, storytelling could be a form of word-of-mouth, where one person tells other a story about an event.

# Chapter 9 e-WOM Analysis Methods

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#### **ABSTRACT**

Electronic word of mouth (e-WOM) is rapidly becoming an empowering tool for consumers to express their experiences on services or products, on social media or other platforms. Beyond the obvious implications of such content to potential consumers, interest is also high among researchers, industry players, and other stakeholders who strive to analyze before-and-after sales expectations, emotions, and perceptions of customers. The need to find efficient ways of extracting and then analyzing online content rendered the reuse of tools and methodologies initially applied in other fields as well as the development of new approaches. In this chapter, the authors identify high-impact scientific work related to e-WOM and point out the analytical methods for analyzing e-WOM content. Furthermore, this chapter refers to the most relevant studies employing such methods and their findings. More specifically, it discusses clustering, sentiment analysis, supervised and unsupervised machine learning, lexicon-based approaches, corpus-based approach, summarization and predicting, and regression analysis.

#### INTRODUCTION

Extensive use of social media (SM), defined as "a group of Internet-based applications that exist on the Web 2.0 platform and enable the Internet users from all over the world to interact, communicate, and share ideas, content, thoughts, experiences, perspectives, information, and relationships" (Perez-Aranda et al. 2017, pp. 53), lead to phenomenal increase of user-generated, online content. According to Munar and Jacobsen (2014), online content is mainly generated through wikis, blogs, microblogs, media-sharing sites, review and voting sites, and social media platforms.

A special subcategory of online content is the electronic word of mouth (eWOM), which can be traced to various channels as mention in Bickart (2005) and summarized below:

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- 1. Posted reviews, which are consumer opinions uploaded in public or private view by merchant websites, consumer review portals, or personal webpages like blogs
- 2. Mailbags, which include comments posted online by customers and readers on news and magazines websites, and manufacturers and service providers pages.
- 3. Discussion forums, which consist of bulletin, message and discussion boards or Usenet groups.
- 4. Listservs, which consist of consumer opinions shared through group member email lists.
- 5. Personal emails. These are shared opinions directly from one person to one or more other, through electronic mail.
- 6. Chat rooms, which are areas on the internet or other computer networks where people and groups have real-time conversations.
- 7. Instant messaging, where people converse online in real-time, usually one-to-one.

The first three communicating forms (posted reviews, mailbags, and discussion forums) are maintained online for longer periods of time; as a result, they are accessible by a potentially higher number of readers (Bickart 2005). Listservs, personal emails, chat rooms and instant messaging, are not publically available and therefore are accessible by far fewer users (Bickart 2005). The period a message is online and the number of readers who access it are two of factors that contribute to the impact of the message onto its readers. Other factors may also affect this process. Understanding, influencing or predicting human behavior through SM and eWOM analysis, is based on handling structured or unstructured usergenerated content and derive value through its transformation into meaningful knowledge.

The focus of this chapter is to identify and discuss the main methods for analyzing eWOM content. To achieve this goal, we must systematically derive all relevant literature, as described in the following section.

#### **EWOM: SYSTEMATIC LITERATURE REVIEW**

In this section, we discuss the systematic literature review on impactful resources published up until October 2018. The systematic literature review focuses on regarding analysis methods of eWOM data. Based primarily on the methodology of Shaikh and Karjaluoto (2015) and the review approach of Sarma and Choudhury (2015), this endeavor start with identification of the keywords that will be used in our base search queries. The search terms include eWOM, online reviews, electronic word of mouth, online word of mouth, online consumer reviews. Then, we establish the inclusion criteria of our literature: we focus on resources published in English, peer-reviewed journals that are Scopus indexed. Based on the aforementioned criteria, the following search query has been formulated; it resulted in 1876 articles.

TITLE (((ewom) OR (word-of-mouth) OR (online AND reviews) OR ("online word of mouth") OR ("online consumer reviews"))) AND (LIMIT-TO (SRCTYPE, "j")) AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (LANGUAGE, "English"))

Each article was examined individually with regards to the Field-weighted Citation Impact (FWCI), which compares the article's citation count vs one of similar articles in the same field and timeframe in the Scopus database. An excel file was created with all publications, including their total citations. After eliminating redundancies, we selected the top hundred most cited articles. To reduce the risk of leaving out important literature we also included all impactful publications (i.e. those with FWCI index with a score of 10 or more). Every article was read and checked for exclusion criteria, that is, thematic and data

relevancy. As the focus of our attention was very narrow, we ended up with 27 publications. Next, we clustered these publications into five core research areas as suggested by Schmäh et al. (2017), namely:

- Participation in eWOM;
- Typification of participants;
- Impact on user behavior;
- Used media;
- Used content.

Table 1 presents the 27 publications together with their authors, the articles' titles and the category they belong. The publications are listed by their corresponding category, based on the aforementioned five core research areas (Schmäh et al., 2017).

In the following subsections, we refer to each of the five eWOM categories and present and discuss the relevant articles in each category.

Table 1. Summary of reviewed papers sorted by category and method

Authors	Title	Year	Category	Methods
Singh, J.P., Irani, S., Rana, N.P., (), Saumya, S., Kumar Roy, P.	Predicting the "helpfulness" of online consumer reviews	2017	Participation in eWOM	Ensemble Learning Model
Cao, Q., Duan, W., Gan, Q.	Exploring determinants of voting for the "helpfulness" of online user reviews: A text mining approach	2011	Participation in eWOM	Latent Symantec Analysis Factor Analysis Ordinal Logistic Regression models
Park, S., Nicolau, J.L.	Asymmetric effects of online consumer reviews	2015	Participation in eWOM	Negative Binomial Regression
Decker, R., Trusov, M.	Estimating aggregate consumer preferences from online product reviews	2010	Participation in eWOM	Negative Binomial Regression
Willemsen, L.M., Neijens, P.C., Bronner, F., de Ridder, J.A.	"Highly recommended!" The content characteristics and perceived usefulness of online consumer reviews Open Access	2011	Participation in eWOM	Systematic Content Analysis
Liu, Z., Park, S.	What makes a useful online review? Implication for travel product websites	2015	Participation in eWOM	TOBIT regression
Korfiatis, N., García-Bariocanal, E., Sánchez-Alonso, S.	Evaluating content quality and helpfulness of online product reviews: The interplay of review helpfulness vs. review content	2012	Participation in eWOM	TOBIT regression
Fang, B., Ye, Q., Kucukusta, D., Law, R.	Analysis of the perceived value of online tourism reviews: Influence of readability and reviewer characteristics	2016	Participation in eWOM	TOBIT regression Binomial Regression
Salehan, M., Kim, D.J.	Predicting the performance of online consumer reviews: A sentiment mining approach to big data analytics	2016	Participation in eWOM Used Content	Sentiment Analysis Negative binomial regression Monomial regression

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# e-WOM Analysis Methods

Table 1. Continued

Authors	Title	Year	Category	Methods
Guo, Y., Barnes, S.J., Jia, Q.	Mining meaning from online ratings and reviews: Tourist satisfaction analysis using latent dirichlet allocation	2017	Typification of Participants	Latend Dirichlet Analysis
Ye, Q., Law, R., Gu, B.	The impact of online user reviews on hotel room sales	2009	Impact on User Behaviour	Fixed Effect Log Linear Regression Model
Cui, G., Lui, HK., Guo, X.	The effect of online consumer reviews on new product sales	2012	Impact on User Behaviour	Fixed Effect Model using lagged variables
Zhang, Z., Ye, Q., Law, R., Li, Y.	The impact of e-word-of-mouth on the online popularity of restaurants: A comparison of consumer reviews and editor reviews	2010	Impact on User Behaviour	Linear Regression
Gu, B., Park, J., Konana, P.	The impact of external word-of-mouth sources on retailer sales of high-involvement products	2012	Impact on User Behaviour	Log Linear Regression
Duan, W., Gu, B., Whinston, A.B.	The dynamics of online word-of- mouth and product sales-An empirical investigation of the movie industry	2008	Impact on User Behaviour	OLS Regression Analysis
Hennig-Thurau, T., Wiertz, C., Feldhaus, F.	Does Twitter matter? The impact of microblogging word of mouth on consumers' adoption of new movies	2015	Impact on User Behaviour	Ordinary Least Squares
Sotiriadis, M.D., van Zyl, C.	Electronic word-of-mouth and online reviews in tourism services: The use of twitter by tourists	2013	Impact on User Behaviour	Regression analysis Multivariate analysis Axis exploratory factor analysis with Promax rotation
Duan, W., Gu, B., Whinston, A.B.	Do online reviews matter? - An empirical investigation of panel data	2008	Impact on User Behaviour	Three Stage Least Squares
Luo, X.	Quantifying the long-term impact of negative word of mouth on cash flows and stock prices	2009	Impact on User Behaviour	VAR and IRF time series models
Berezina, K., Bilgihan, A., Cobanoglu, C., Okumus, F.	Understanding Satisfied and Dissatisfied Hotel Customers: Text Mining of Online Hotel Reviews	2016	Used Content	CATPAC word frequencies PASW text mining PASW text link analysis
Hu, YH., Chen, YL., Chou, HL.	Opinion mining from online hotel reviews – A text summarization approach	2017	Used Content	Clustering K-memmoids algorithm for summarization
Ye, Q., Zhang, Z., Law, R.	Sentiment classification of online reviews to travel destinations by supervised machine learning approaches	2009	Used Content	Comparison of three supervised machine learning methods, Naïve Bayes, SVM and N-gram model
Ye, Q., Law, R., Gu, B., Chen, W.	The influence of user-generated content on traveler behavior: An empirical investigation on the effects of e-word-of-mouth to hotel online bookings	2011	Used Content	Log Linear Regression
Chintagunta, P.K., Gopinath, S., Venkataraman, S.	The effects of online user reviews on movie box office performance: Accounting for sequential rollout and aggregation across local markets	2010	Used Content	Regression Model to estimate Generalized Method of Moments (GMM)

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Table 1. Continued

Authors	Title	Year	Category	Methods
Chen, Y., Fay, S., Wang, Q.	The Role of Marketing in Social Media: How Online Consumer Reviews Evolve	2011	Used Media	Negative Binomial Regression
Amblee, N., Bui, T.	Harnessing the influence of social proof in online shopping: The effect of electronic word of mouth on sales of digital microproducts	2011	Used Media	Regression Analysis
Jansen, B.J., Zhang, M., Sobel, K., Chowdury, A.	Twitter power: Tweets as electronic word of mouth	2009	Used Media Used Content	Linear Regression

# Participation in eWOM Communication

This category is centered on users' decision to share or read content. The motives can be related to external, economic, social or personal factors, trustworthiness, helpfulness, etc. In this context, there are many studies dealing with online reviews readership and helpfulness and approaching them by utilizing different analytical methodologies (Schmäh et al. 2017). Salehan and Kim (2016) for instance, use sentiment analysis to research the predictors related to readership and helpfulness of eWOM. Beforehand, they had checked descriptive statistics to specify the proper analysis for their data. They extracted reviews from Amazon and mined the sentiment from both title and review text, to use them for prediction purposes (Salehan and Kim 2016). Park and Nicolau (2015) use negative binomial regression to investigate the restaurant eWOM star ratings and expressed enjoyment as extracted from Yelp. They show that extreme ratings are perceived as more useful and enjoyable that moderate ones (Park and Nicolau 2015). Liu and Park (2015) use TOBIT regression analysis to study the factors affecting the perceived usefulness of online consumer reviews. They conclude that both message characteristics and messenger's identity have an effect on perceived usefulness of reviews (Liu and Park 2015). The most influential factors related to reviews usefulness are the qualitative aspects of reviews (Liu and Park 2015). Korfiatis et al. (2012) also applied TOBIT regression on Amazon reviews to research the relationship that exists between readership and review helpfulness and review text. Their results reveal that helpfulness has a greater effect on readability than text length (Korfiatis et al. 2012). Cao et al. (2011) examine how various features of online reviews (stylistic, semantic and basic) relate to helpfulness. Their process involves a Latent Semantic Analysis approach, followed by factor analysis and OLS regression models. This analysis posits that stylistic characteristics have a significant influence on perceived helpfulness (Cao et al. 2011). Singh et al. (2017) used the ensembles learning technique, which is a collection of techniques to predict the helpfulness of Amazon customer reviews. Their model incorporates many features such as polarity, subjectivity, entropy, and Flesch reading ease (Singh et al. 2017). Finally, Willemsen et al. (2011) use systematic content analysis to study the online review content characteristics of both search and experience products in relation to usefulness perception.

# **Typification of Participants**

In this category, we can find studies related to characteristics that distinguish eWOM participants. These can be demographic and tripographic aspects. In this category, we can find research related to self-presentation, age, gender, family status, income, geography, culture and other characteristics of the

participants (Schmäh et al. 2017). In this category, we find Guo et al. (2017) who study the dimensions of customers' satisfaction. They clustered the main dimensions by using Latend Dirichlet Analysis followed by applying regression analysis and finally by using position mapping to visualize the results. Perceptional or positional mapping are tools that are usually applied to visualize consumer evaluations related to competitor's products presented in a two-dimensional map. The found that Room experience and service quality are the most important dimensions in their analysis (Guo et al. 2017).

# Impact on User Behavior

This category is related to publications focusing on the factors that influence decision-making processes. These effects might be related to reputation, product selection, intention to skip certain products, reviews, trust, purchase intentions and decisions and customer relations (Schmäh et al. 2017). Hennig-Thurau et al.(2015) use two auxiliary regressions to study the relationship between advertising spending for movies and movie producer's expectations regarding the success of the film. The second auxiliary regression researched the influence of movie's pre-release buzz on the eWOM volume during the release day. Studying four million eWOM Twitter messages on movies' release weekends, the authors reported evidence of a negativity bias (Hennig-Thurau et al. 2015). Duan et al. (2008b) use OLS regression analysis to study the persuasive and awareness effect of online user reviews on movies' box office. They found that the ratings of user reviews do not have a significant effect on revenues. Duan et al. (2008a) use a three-stage least square procedure to estimate a system of equations regarding eWOM volume. They show that both eWOM valence and box office revenues affect eWOM volume (Duan et al. 2008a). Gu et al. (2012) use a log-linear regression model to analyze the impact of WOM on retailer sales, using reviews for 148 digital cameras from Amazon and three other eWOM websites (Cnet, DPReview, and Epinions) over a four months period. Their findings suggest that although external eWOM has a significant impact on retailers sales, internal eWOM has limited influence on sales (Gu et al. 2012). Zhang et al. (2010), using a linear regression model, researched the effects that professional and amateur reviewers have on the reader's intention to visit a restaurant. Through this research, they realized that online consumer reviews have a positive impact on the intentions of readers, whereas professional reviews have a negative impact on the intentions of readers (Zhang et al. 2010). Moreover, fixed effects log-linear regression model was applied by Ye, Zhang et al. (2009) to study the impact of online reviews on hotel room sales, and they find that there is a significant relationship between eWOM and hotel room sales (Ye, Zhang et al. 2009). Cui et al. (2012) use time series analysis to investigate the changes of eWOM over time. Their fixed effect model uses lagged variables (one-week lag) instead of the original variables in regression models. Their findings reveal that the valence of eWOM and volume of page views have a significant effect on search products and that the volume of reviews is more important for experience products (Cui et al. 2012). Decker and Trusov (2010) propose a model based on binomial regression to estimate the aggregate consumer preferences based on online reviews. Binomial regression is also applied by Fang et al. (2016) to research the helpfulness of online comments. Next, they use Tobit regression model at the reviewer level to research the effects of reviewer characteristics inferred from properties of historical rating distribution. Their findings reveal that the perceived value of reviews is affected by both text readability and reviewer characteristics (Fang et al. 2016). Luo (2009) study the effects of long-term negative eWOM on sales using VAR and IRF time series models. Among others, his findings offer insights for buzz management and a method to quantify the financial impact of electronic word of mouth. Sotiriadis and van Zyl (2013) propose a conceptual model of eWOM and explore how tourists use Twitter. Their findings also reveal components that can be utilized to work with the Twitter marketing channel. The methodologies utilized are Regression analysis, multivariate analyses and a principal axis exploratory factor analysis with Promax rotation (Sotiriadis and van Zyl 2013).

#### **Used Media**

This classification focuses on eWOM media. EWOM communication is mainly found in various portals, online shops, music, and video streaming web sites, virtual reality, online video games, travel portals, forums and social networks (Schmäh et al. 2017). Within this context, Jansen et al. (2009) study eWOMS in Twitter in relation to brands. Amblee and Bui (2011) study the effect of eWOM on a closed community of book readers (Amazon Shorts e-books), using regression analysis, and find that eWOM can help in conveying the reputation of a product, brand and complementary goods (Amblee and Bui 2011). Chen et al. (2011) use negative binomial regression with automobile-model data from a variety of online consumer review sources to study the effect of consumer posting behavior with marketing variables such as product price and quality.

#### **Used Content**

Under this classification, emphasis is given to the type of content and we study characteristics, approaches, and effects of specific eWOM content. In this category, we can find themes related to different perceptions of content, content polarity, emotions, content type, and characteristics, as well as fake content (Schmäh et al. 2017). Ye, Zhang et al. (2009), classify eWOM polarity based on different destinations using three different supervised learning methods, Naïve Bayes, SVM, and N-gram model. They conclude that SVM and N-gram produced more precise results as opposed to Naïve Bayes approach, although all methods returned at least 80% accuracy (Ye, Zhang, et al. 2009). Hennig-Thurau et al. (2015) proposed a novel multi-text summarization technique for hotel reviews using k-memoids algorithm. Berezina et al. (2016) utilized PASW software capabilities to classify hotel online reviews' text in categories according to customers' positive or negative recommendations. In their study, they used also CATPC software, which produced a more detailed word categorization. Their findings indicate that satisfied customers refer more often to intangible aspects of their hotel accommodations, whereas dissatisfied customers mention more the tangible aspects of their stay (Berezina et al. 2016). Ye et al. (2011) used a log-linear regression model to study the effects that online reviews have on hotel bookings. Their analysis revealed that user-generated content has a significant impact on bookings and sales. Chintagunta et al. (2009) use regression analysis to estimate generalized methods of moments (GMM). In their research, they study the geographical area of movie box office sales data in relation to responsiveness to advertisement and eWOM (Chintagunta et al. 2009). In the same wavelength, the studies by Jansen et al. (2009) and Salehan and Kim (2016) also use sentiment analysis on eWOMs.

## AN OVERVIEW OF EWOM ANALYSIS METHODS

The main aim of this section is to introduce the main methods for eWOM analysis. We discuss methodologies encountered in the most highly ranked journals and most cited articles included in Scopus.

The section starts with a presentation of a variety of data prepossessing techniques that are usually applied before the analysis takes place.

# **Processing of Electronic Word of Mouth**

Processing of electronic word of mouth can be examined with regards to descriptive or predictive methodological approaches. Descriptive methods involve Summarization, Clustering or Association Rules, whereas predictive methodologies, on the other hand, involve Classification and Regression.

We may also classify eWOM processing based on the learning technique employed, namely Supervised or Unsupervised Learning. Usually, Supervised Learning is used for classification and regression purposes. In Supervised Learning techniques, we include Naïve Bayes models and Support Vector Machine, Binominal Regression. Unsupervised Learning is usually applied when clustering or tasks related to association rules are sought to be addressed. In unsupervised models, we find k-means algorithm, expectation-maximization, unlabeled samples, Rule Mining, Market Basket Analysis, Collaborative Filtering, Link Analysis, and others. Sentiment analysis can be employed with unsupervised, supervised or even semi-supervised models.

The process of extracting meaningful analytics from eWOM requires the transformation of downloaded data into clean data units or features so that they can be easily processed. Depending on the researcher's ultimate goal, features can be a range of textual data: from documents all the way down to sentences, words or characters. This process is usually called tokenization and the distinct units of text are called types. The types counts' can be encoded and collected in vectors (Wiedemann 2016). The process from the extraction of data to the final point of getting meaningful results consists of many steps that are based mainly on the goals and nature of data. For example, Guo et al. (2017) during the text pre-processing phase, eliminated non-English characters and words, used word text tokenization, part-of-speech tagging, replaced common negative words, stemming and removed low-frequency words, using Natural Language Toolkit (www.nltk.org) in Python. Hennig-Thurau et al. (2015) for their proposed summarization technique at their suggested pre-processing tasks, include part-of-speech tagging, stop word elimination, POS filtering, and sentence selection, which results in sentences with at least one noun and one adjective. For their study, they utilize the Stanford Loglinear POS Tagger software (Hennig-Thurau et al. 2015).

# **Downloading**

Web crawling and web scraping or harvesting, are some of the popular ways of creating semi-automated or automated agents which scan the web, gathering relevant content (Magnien et al. 2012). Salehan and Kim (2016) and Guo et al. (2017) employ crawlers. Guo et al. (2017) developed a crawler that first collected in a list, all relevant URLs (also known as seeds) and then defined the data to be extracted from each link. Hennig-Thurau et al. (2015) extracted movie-related tweets using WEKA software. Ye, Zhang et al. (2009) and Ye, Law, et al. (2009a) developed a crawler with Ruby software to download eWOM from Ctrip website and stored the results in a database. Another way of extracting information from the web is by using Application Programming Interfaces (APIs). APIs are usually provided by the website-owners in an effort to limit the crawling activity in their portals as well as to control and constraint possible activities. APIs assist and speed up the extraction of content, but their limitations on the type of content that can be extracted renders them rather indifferent to use (Ismagilova et al. 2017; Olmedilla et al. 2016).

## **Sanitization**

Extracted data needs to be cleaned and transformed into forms that enable analysis. Therefore, during the sanitization phase, any nontextual information tags i.e. HTML tags are deleted from the database.

In some cases, there might be a need to remove outliers because they distort results. For example, in a study that considers feedback provided by individual customers, fake reviews need to be isolated and removed. Moreover, there might be other cases where fake reviews need to be included in the study in order to get reliable results.

Dealing with missing values is another important issue. This issue can be addressed by either removing the observations that have missing values or by ignoring the missing values when running the data mining algorithms. In some cases, researchers might choose to replace the missing value with an estimated value. There are a few different methods of estimating missing values; approximate Bayesian bootstrap and regression can be used to replace the missing value with the most common value in the data set.

Finally, duplicates are another concern when collecting eWOM information. Reasons that might lead to duplicated data might be running the algorithm in many different computers or a few different instances of the program in parallel, or just duplicated entries in the website(s) from which data were collected, The researcher should decide whether the duplication of information is useful for the research and should be kept or instead it should be rejected.

#### **Feature Identification**

Downloaded data can be associated with features (properties). Data may be processed differently depending on their features. The categories of features are Nominal/Categorical, Ordinal, Interval and Ration (ZAFARANI et al. 2014). Nominal or Categorical are the data that are used as "labels". For instance, male/female, brown/blonde/white etc. and for that they are mutually exclusive. Chi-square, Fisher's test and Kappa Measure of Agreement are statistics that can be used with categorical variables. Ordinal data exhibit an embedded ordering progression; for instance, low/medium/high income or elementary/high school/university educational level. Interval data are similar to ordinal data in the sense that they have an inherent order, moreover though the intervals between the values are equally spaced. Also, adding and subtracting interval data is also meaningful. Temperature, distance and a scale of salaries (i.e. €5.000, €10.000, €15.000) are examples of interval scales. Ratio has all the characteristics of the previous categories, plus ratios have a clear definition of zero, which means that when the variable's value is zero there is none of the specific data available.

# **Sentence Segmentation**

Sentence segmentation is applied in cases where there is a need to identify single sentences. Usually, this process takes place by identifying punctuation marks and full stops. In case of false separations due to abbreviations and data and time formats, then probabilistic models utilizing context observation can be applied to determine the sentence boundaries between words. (Zafarani et al. 2014).

#### **Tokenization**

The process of tokenization breaks up the text in a sequence of characters by identifying word boundaries. Tokens may be characters, punctuation marks, single words, multi-word units or sequences of other tokens. Frequently, white space characters are used for the identification of words. In cases of false separations due to punctuation marks or other problems, probabilistic models or human intervention can be utilized to provide solutions and a higher degree of accuracy.

# Cleaning

During the cleaning phase, stop words -that is, words that occur with increased frequency without contributing to a better understanding- are usually omitted. Examples of such words include the following: "the", "is", "at", "which", "on", etc. In some other cases, punctuation and numbers may be considered stop words. Stop words removal focus the analysis on the meaningful part of the language.

#### Unification

Unification is the process of transforming variants of the same words to a basic single form. More specifically through unification nouns (in singular or plural form), verb conjugation, variants i.e. synonyms are transformed upon a preselected form. Other applications of unification are switch characters to lowercase, lemmatization and stemming. Stemming and lemmatization both are used to deflate wordings. Stemming applications mostly work by cutting the end and in some cases the beginning of words. Stemming is usually used to cut suffixes like -es or -ing. For instance, the word "studies" would return "studi" and "replying" may return "reply". Lemmatization, on the other hand, works by reducing the inflated or occasionally derivational form of words to a dictionary's basic form (lemma), without omitting the initial meaning of the work. This means that the word "travelers" must not be reduced to "travel" since this would introduce disruptions in the meaning. Also, derivations of the verb "to be" like "is", "are" etc. would be changed to "be".

# Part of Speech (POS) Tagging

Part of Speech (POS) tagging is the process of labeling words (or tokens) in a text (corpus), based on definition and/or context. For instance, POS-tagging is used to mark-up relations between words and phrases or just parts of speech like nouns, verbs, adjectives, etc. POS tags can later be used either for filtering (i.e. choose all nouns among reviews) or for defining homonym words (i.e. to decide when words like aim, doubt, love, address, etc. are used as nouns or verbs).

## **Pruning**

In certain cases, pruning the most and least frequent terms in a text can result in more meaningful corpus. Pruning can be applied by either removing a set of words that appear with high or low frequency in a text or omitting words based on the percentage of appearance in the text.

The aforementioned pre-processing techniques aid in transforming and filtering the extracted text in preparation for the analysis process. There is no predefined best practice, but rather a choice of tools that enable researchers study the eWOM corpus in order to obtain the desired results.

# **Vectorising Text**

Vectorization is the process of transforming the instructed information of features in vectors. Especially when working with text, vectorizing data can result in dramatically faster processes. There are a few different approaches for vectorizing text, including: bag of words (BoW); vector space model (VSM); term frequency-inverse document frequency (Tf-Idf); word2vec; doc2vec and FastTrack. BoW is the simplest of the aforementioned methods, where unigram words are extracted and represented based on their frequency of occurrence in a document. Vector Space Model takes into account all the documents in the study as features that correspond to terms (words) with values based on the assigned term's weight. The weight might be a binary value of word occurrence in the document, a term frequency value in the document or even a Tf-Idf value. Tf-Idf is a variation of BoW because it assigns weights to each word based on its frequency of occurrence and inverse frequency of occurrence, so that words like "the" do not appear as more important as other less frequent but meaningful words in a text. Word2vec, doc2vec, and FastTrack are more advanced models that take into account the context of each word.

#### **TEXT MINING APPLICATIONS**

# Lexicometrics, Regression and Machine Learning

Following the stage of extraction and the stage of pre-processing, information analysis takes place. Data analysis is closely related to the focus of the study. For example, researchers have been studying the antecedents and incentives of eWOM, the impact of eWOM, its role in consumer purchase decision and ways to measure eWOM impact (Mishra and Satish 2016). Scholars have been using/developing a variety of methods from multiple disciplines in order to understand the aforementioned phenomena. Sarma and Choudhury (2015) presented a structured literature review of how SM influence consumers and included papers from multidisciplinary approaches.

#### **Counting Based Analyses**

Lexicometric analysis has been utilized since the early years of computational text processing and is widely used in corpus linguistics.

# Frequency Analysis

Frequency analysis provides counts of words which can then be compared across different dimensions i.e. time. Although it is one of the simplest methods of analysis, it can provide a quick and insightful view of the corpus and lead to the next stages of the analysis. Frequency analysis can be applied in groups of words or phrases or configured to count the occurrences within a specific context. It may also be useful to compare frequencies of two products comments side by side and reveal advantages/weaknesses.

# **Co-Occurrence Analysis**

Co-occurrence analysis aids in identifying terms that tend to occur together, by counting the instances of paired occurrence in the corpus (Buzydlowski 2015). For instance, the appearance of the term brush and shampoo in the text are instances of co-occurrence. The occurrence of pairs of words reveals associations in text. These associations are stronger when the pairing instances occur frequently in the corpus (Buzydlowski 2015).

# **Regression Techniques**

Regression models are usually applied in predictive text mining approaches. They are used in order to create a model that will aid in representing the interactions among studied variables. There are many different regression techniques. Identifying the most suitable depends on the characteristics of the available data in relation to the types of dependent and independent variables. In this subsection, we present three common regression methods used in eWOM literature. These are Linear Regression, Logistic Regression, and Probit Model. Salehan and Kim (2016) apply binomial and monomial regression with logit transformation to investigate the relation of readership and helpfulness of a review related to the amount of sentiment expressed.

Salehan and Kim (2016) used sentiment mining with the aid of SentiStrenght software previously validated in research software. They gathered 35000 reviews of 20 different products from Amazon.com using a crawler. They checked the descriptive statistics to identify the proper analysis of the extracted data. Based on their results they applied log-transformation in order to adjust data for over-dispersion. In order to identify the number of people expressing emotions in reviews, they checked the distribution of the sentiment measures. They found that Title sentiment follows a negative binomial distribution (number of failures before achieving a number of successes). Consequently, they used negative binomial regression for their first model and monomial regression with logit transformation for their second model. They continued with a model analysis, finding that negative binomial regression was a good fit for the first model and their findings show that positive sentiment is related to more readership and neutral sentiment to readership and helpfulness.

Fang et al. (2016), study how reviews helpfulness affects readership. According to their results, both text readability and the characteristics of the reviewers affect the perceived helpfulness of reviews. To investigate the comment helpfulness, they run a negative binomial regression at review level. They also applied a type II TOBIT regression model at reviewer level studying the historical rating distribution on the perceived helpfulness of users' reviews. Guo et al. (2017) use stepwise rank regression analysis to identify which satisfaction dimensions have the greatest influence on consumers. Hennig-Thurau et al. (2015) applied auxiliary to study the effects of advertising and movie pre-release buzz in relation to film's success. They developed an ordinary least squares regression model to use in their study. Duan et al. (2008a) also use OLS regression analysis to study the persuasive and awareness effects of online reviews for movies on box office revenues. In another study related to eWOM and movie revenues, Duan et al. (2008b) utilize the three-stage least square regression. Gu et al. (2012) use a log-linear regression model to analyze the impact of eWOM on retailer sales. Ye, Zhang et al. (2009) use a fixed effect log-linear regression model to study the impact of online reviews on hotel room sales. Cui et al. (2012) use time series analysis to investigate the changes of eWOM over time. Their fixed effect model uses lagged variables (one week lag) instead of the original variables in regression models (Cui et al.

2012). Park and Nicolau (2015) use also negative binomial regression to study restaurant eWOM ratings in relation to helpfulness and enjoyability. Ye et al. (2011) use a log-linear regression model to study the effects of user-generated content on hotel online bookings. Ye, Zhang et al. (2009), employ a linear regression model, to study the effects of professionals' and amateurs' reviews on readers' intention to visit a restaurant. Chintagunta et al. (2009) use regression analysis to estimate the generalized method of moments (GMM). Decker and Trusov (2010) propose a model based on binomial regression to estimate the aggregate consumer preferences on online reviews. Amblee and Bui (2011) study the effect of eWOM on a closed community of book readers (Amazon Shorts e-books), using regression analysis. Chen et al. (2011) use negative binomial regression with automobile-model data from a variety of online consumer review sources to study the effect of consumer posting behavior with marketing variables such as product price and quality.

# Linear Regression

Linear regression is a model widely applied. It is used to present the linear relation that exists between the dependent and independent variables of the model. Linear regression is mostly used in equation form and when the range of the dependent variable is unlimited. In cases of discrete or qualitative variables, other regression models can be applied, such as probit and logistic regression. These models are used to present and predict the choices among different alternatives.

# Logistic Regression

Logistic regression is used to explain the relationship between one or more independent variables that are categorical, ordinal, interval or ratio types and a dependent binary variable. It returns the probability of success or failure (i.e. win/lose, good/bad, pass/fail) and despite the fact that is not a classifier it can still be used in classification problems, that is in binary classifications.

#### The Probit Model

Probit model is a type of regression that is used to describe dichotomous or binary outcome dependent variables (i.e. sold/not sold, recommended/not recommended, 0/1). It returns the likelihood that a certain observation will return one or another value. Tobit regression has been applied by Liu and Park (2015) to analyze the extracted data on Yelp reviews in relation to the usefulness of votes. Regression was selected because there was a need to estimate the relationship between a non-negative dependent variable and a group of independent variables (Liu and Park 2015). They result in TOBIT regression because the distribution of useful votes data are skewed to the left side (Liu and Park 2015).

#### Machine Learning

Unsupervised methods support inductive approaches of analysis because they aid in exploring structures in vast amounts of unknown data, whereas supervised analysis supports deductive approaches since they utilize external theory-driven knowledge.

# Supervised - Unsupervised

In machine learning, besides supervised method and unsupervised methods, there is also the option to have semi-supervised approaches utilizing techniques from the supervised/unsupervised pool of methods.

Unsupervised learning algorithms are used to uncover previously unknown patterns and structures from data. They are used when we have no idea what the output values might be, so no other techniques like regression or classification can be applied. Unsupervised learning data-driven approaches return data in clusters that satisfy certain similarity criteria. Applications of unsupervised learning techniques include clustering, anomaly detection, association mining, and latent variable models. Unsupervised applications include clustering, topic models and dimensional scaling.

# **Cluster Analysis**

Cluster analysis is the process through which context units (i.e. sentences, phrases, words) are divided into groups (clusters) in ways that context units in each group are more similar than any other objects at the other groups. There is a variety of clustering algorithms such as hierarchical, partitioning and fuzzy clustering methods. In some methods, the number of clusters is identified by the algorithm automatically while in others the number of clusters must be entered. Hennig-Thurau et al. (2014) proposed a multi-text summarization technique for hotel reviews using k-memoids algorithm (based on the k-means algorithm). They calculate the importance of each sentence based on the author's comments, comment usefulness, comment time and comment sentence, then they evaluate the similarity between sentences based on content and sentiment similarity, in order to result in the top-k selected sentences.

#### **Dimension Reduction**

High dimensionality results from a plethora of unique words in the corpus that needs to be analyzed. This is a frequent problem when analyzing eWOM content, and it gets more intense when classifying techniques like n-gram are utilized (Zhu 2017). Co-occurrence analysis can be used to identify latent structures of high dimensionality and stemming and lemmatization techniques to contain the problem respectively. Nonetheless using unification usually does not reduce dimensionality considerably. There are specific techniques like Principal Component Analysis, Multidimensional Scaling, Correspondence Analysis that can be used to identify and consequently reduce dimensionality (Zhu 2017).

# **Topic Models**

Topic models are statistical models that identify the main abstract themes (topics) present in text (Guo et al. 2017) and discover hidden patterns contained in the corpus. Latent Semantic Analysis, Latent Dirichlet analysis, Probabilistic Latent Semantic Analysis are some of the modeling techniques.

Topic modeling may be also applied to identify readers' interests. Topic Modeling utilizing Latent Semantic Analysis (Wiedemann 2016) and Latent Dirichlet Allocation (Blei et al. 2003) has also been applied to identify and reduce dimensionality. The underlying assumption in topic modeling is that every corpus contains a variety of topics, and each topic is associated with a group of words. Identification of latent topics leads to diminishing dimensionality. A limitation of topic modeling practices is that they neglect the order of word occurrence in the text.

# Supervised

In supervised learning methods, the model can be trained based on an existing dataset which contains known values for the target variable. Consequently, the algorithm uses this prior knowledge to infer answers or predictions for the corpus that we want to research. Unlike unsupervised models, in supervised learning we can train the algorithm and they can be applied directly to problems utilizing regression or classification. Supervised learning techniques include Classification, Information Extraction and Sentiment Analysis

#### Classification

Classification analysis is the supervised process of assigning units to categories/classes. The goal of classification is to predict with precision the target category for each case in the data. In contrast to unsupervised clustering where the groups are built based on the emergent structure within the data, in supervised classification, the categories are usually based on external information given from pre-trained data.

# **Named Entity Recognition**

Named entity recognition is a technique applied to identify and classify unstructured data in pre-specified categories. Named entity recognition, it is used to identify person names, organizations, locations, etc.

# **Sentiment Mining**

Sentiment Mining or Opinion Mining is the process of identifying, extracting and analyzing the inclination of peoples' opinions from text. Hearst and Wieber (Hearst 1992) first proposed the idea of extracting direction based information from text (Sharef et al. 2016). Sentiment mining utilizes the power of Natural Language Processing, Machine Learning, and Statistics. The method chosen is based on the available information. In many instances, the approach that is followed is a combination of the available methods so that a more reliable and precise result is reached. The classification can be either at the level of document or message, sentence, phrase, and word level. Researchers have been studying opinion mining in order to specify if a message is subjective or carries a form of opinion. Others have been researching whether the sentiment of the message is positive or negative. Several studies try to classify and label the emotions expressed through a message, phrase or sentence (i.e. happiness, anger, sadness, etc.). One needs to identify the source and/or target of the sentiment followed by the level of classification (entity, sentence, word, character) before they define if the text is objective or subjective and in case of subjective text identify its positive or negative polarity. Next, we present an outline of a few of the features and techniques related to sentiment analysis.

## Sentiment Classification Techniques

According to Medhat et. al. (2014) sentiment classification techniques may employ machine learning or Lexicon based approaches. Lexicon-based approaches may use a corpus-based or dictionary-based

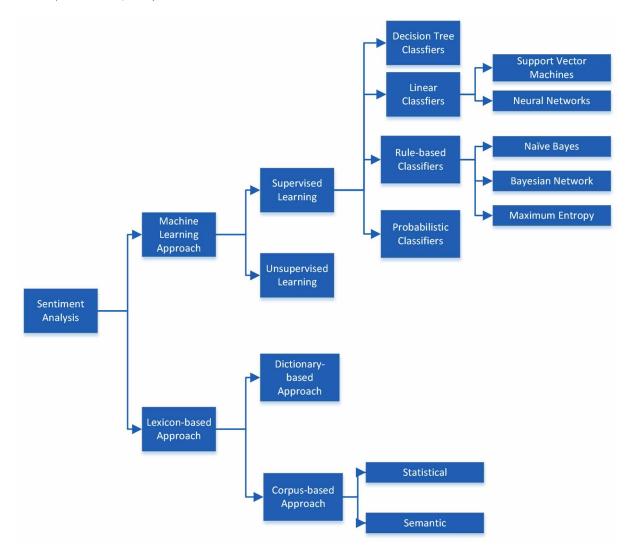


Figure 1. Sentiment Classification Techniques Source: (Medhat et al., 2014)

technique. In either case, the algorithm uses a collection of pre-specified sentiment terms. There is a third hybrid solution that utilizes both dictionary and corpus techniques to analyze sentiment.

The dictionary-based approach is applied by finding seed words with a specific orientation. Then this group of words is augmented with synonyms and antonyms (through WordNet or SentiNet). The process is repeated until no new words can be established. The next step is to check the list for errors. The main disadvantage of this method is that it is difficult to find opinion words with domain and context orientation (Medhat et al. 2014).

The corpus-based approach is applied by using a seed list of opinion words, and then identifies new opinion words in the researched corpus. Next, using statistical or semantic methods, the context-specific orientations are identified. The corpus-based approach has the disadvantage that it is difficult to find in the corpus all the words that are provided in a dictionary. This technique has been applied though to

specify domain specific opinion words and their orientations. Semantic orientation and Latent Semantic analysis are statistical methods that are used in this approach. Semantic methods can be combined with Statistic methods to perform sentiment analysis.

The unsupervised machine learning techniques are used, when there is difficulty in using pre-trained information. The supervised machine learning techniques utilize a great number of labeled training documents. A few Supervised Learning classifiers are Probabilistic Classifier (Naïve Bayes Classifier, Bayesian Network, Maximum Entropy), Linear Classifiers (Support Vector, Neural Network) and Decision Tree classifiers (Medhat et al. 2014).

# **Ensembles Learning Technique**

Ensemble Learning Technique is a machine learning technique that combines different algorithms in order to produce an optimized predictive model. It is credited with decreasing variance (through bagging), bias (through boosting) and as a result, improving predictions (through stacking). Bagging, boosting and stacking are different types of techniques that collectively form the predictive ensemble meta-model. There can be a lot of different approaches to ensemble technique. For instance, Singh et al. (2017) use an ensemble learning technique employing multiple base learners, dividing a large data stream into small data blocks. The smaller classifiers were trained on each block individually. Next, they combine all classified results produced by the smaller classifiers to one ensemble classifier. It is reported that the smaller size of the classifiers reduced the costs and the power processing needs of the study (Singh et al. 2017).

# **DISCUSSION AND CONCLUSIONS**

In this chapter, we identified scientific work with high-impact on eWOM and the analytical methods employed for analyzing eWOM content. The main contribution of this chapter is to provide a comprehensive overview of relevant techniques and implementations. Therefore, we firstly provide readers with a classification based on theme researched and afterwards presented the tools that can be utilized to analyze eWOM. The classification is based on Schmäh et al. (2017) and includes Participation, Typification of participants, Impact on user behavior, media and content employed in accordance with (Schmäh et al. 2017).

Since acquiring and cleaning the extracted data is an important step that should not been overseen, we provided to the readers the recommended stepwise approach that needs to be followed in order to gather eWOM information as well as the pre-processing techniques that are implicated. Furthermore, we introduced the main methodological approached followed in modern research. We outlined a variety of techniques from Clustering, Supervised and Unsupervised Machine Learning, Lexicon Based Approaches, Corpus Based Approach to Summarization Prediction, Regression Analysis, Sentiment Classification and Ensemble learning techniques.

In conclusion, this chapter can offer an overview of eWOM analysis approaches based on both intended outcome (theme of research) and on methods used to analyze the information. In this chapter we have identified that a methodology may be employed in different contexts; moreover multiple methodologies may be applied in a complementary way to better serve a research goal.

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#### **KEY TERMS AND DEFINITIONS**

**Classification Analysis:** Classification analysis is the supervised process of assigning items to categories/classes in order improve the accuracy of our analysis.

**Cluster Analysis:** Cluster analysis is the process of dividing data into groups (clusters), each object in a group has more similarities than the objects in other groups.

**Ensembles Learning Technique:** Ensemble learning technique is a machine learning technique that combines different algorithms in order to obtain improved predictive performance.

**High Dimensionality:** High dimensionality is the phenomenon where the available information has so many dimensions that analysis becomes extremely difficult.

# e-WOM Analysis Methods

**Machine learning:** Machine learning is the application of algorithms and statistical models in order to perform a specific task automatically using artificial intelligence instead of explicitly providing instructions to the algorithm or model.

**Sentiment Mining:** Sentiment mining or opinion mining is the process of identifying, extracting and analyzing text in order to identify emotional tone in the information gathered.

**Topic Models:** Topic models are statistical models that identify the main abstract themes (topics) that occur in corpus and discover hidden patterns in text.

# Chapter 10 Going Crazy for Reviewing: The Drivers Spreading e-WOM

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# **ABSTRACT**

Word-of-mouth (WoM) has always exerted a great effect on consumers' behaviors and intentions. With the advent of internet, this influence has grown both in terms of potential audience reachable and of potential effect led to firms' sales and reputation. Hence, the marketing literature has recently started to investigate motivations and drivers able to foster/hinder electronic-WOM (e-WOM). Therefore, this research aims to explore the effect on the propensity to share comments and reviews online (active WOM) of the following three drivers: (1) propensity to rely on passive WOM; (2) expected service quality; (3) propensity to spend. The authors tested their hypotheses on the fashion industry, collecting 1454 usable answers from Italian consumers. The results indicate that both passive WOM and propensity to spend are drivers able to foster the spread of e-WOM. On the other hand, expected service quality shows a significant negative direct effect and a significant positive indirect effect on active e-WOM: these two effects compensate each other. Thus, the total effect is negligible.

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# INTRODUCTION

Recent studies have highlighted the astonishing influence of reviews and comments on consumers' intentions to purchase and repurchase (Eisingerich et al., 2014; Bigne et al., 2018). Indeed, 92% of consumers rely on recommendations from people they know more than any other form of advertising (Nielsen, 2012), thus crowning WoM the most valuable form of marketing (Whitler, 2014). WoM can be defined as "the communication between consumers about a product, service, or a company in which the sources are considered independent of commercial influence" (Litvin et al., 2008, p.459). It is the perceived independence that makes WoM more credible than any other traditional marketing leverage (Trusov et al., 2009). Additionally, 70% of consumers completely trust "opinions posted online", more than newspapers, brand websites and so forth (Nielsen, 2012). Indeed, consumers trust online information exchanges because they perceived the information offered as timely, reliable and non-biased (Bigne et al., 2018). Therefore, given the astonishing potentiality the Internet and Social Media offers to organizations (Sogari et al., 2017; Dixit et al., 2019), the focus of the marketing literature has shifted towards eWoM 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" (Henning-Thurau et al., 2004, p. 39). Compared to traditional WoM, eWoM show a peculiar feature: they can be accessed for an indefinite period of time (Khern-am-nuai et al., 2018). Additionally, eWoM are expected to have a larger effect than traditional WoM (Jeong and Jang, 2011), and to affect not only purchase intention (Yusuf et al., 2018), but also future consumers evaluation (Reimer and Benkenstein, 2016). For these reasons, both academicians and practitioners need to understand not only "ways to intervene in the generation of eWoM" (Dixit et al., 2019, p.112), but also the reason people share reviews and comments (see among the other: Litvin et al., 2008; Wu et al., 2016; Dixit et al., 2019). Indeed, previous research has highlighted self-enhancement (De Angelis et al., 2012), consumer power (Wu et al., 2016), problem-solving support and relaxation (Labsomboonsiri et al., 2017), the necessity to balance inequitable relationships (Belarmino and Koh, 2018), monetary incentives (Khern-am-nuai et al., 2018), and taking vengeance (Dixit et al., 2019) as possible underlying motivations. Although vast attention has been dedicated to understanding motivation behind consumers' engagement with eWoM, much more research is still needed to deepen knowledge on drivers able to foster or hinder participation in online platforms (Labsomboonsiri et al., 2017). That is why, this research stream is still attracting many scholars (among which: Bigne et al., 2018; Khern-am-nuai et al., 2018; Saleem et al., 2018; Anastasiei and Dospinescu, 2019; Wang et al., 2019), requiring further investigation combining both functional/ non-functional and offline/online drivers. Briefly, our research aims to investigate: (i) the relationship between passive WoM (read or heard) and active eWoM (propensity to write a review); (ii) the influence consumers' expectations concerning service quality have on active eWoM; (iii) the influence the propensity to spend on a single purchase has on active eWoM. The research questions and hypotheses have been tested on a sample of 1454 Italian consumers in the fashion industry. Fashion and luxury are considered pillars of the Italian economy, generating a trade surplus of 18.4 billion dollars in 2012 (Fortis, 2016). In 2016, the Italian fashion industry produced a turnover of 66.1 billion euro, 4% of the national GDP (Micheli, 2018).

The chapter is structured as follows: section 2 discusses the theoretical background and hypotheses; section 3 concerns the methodology employed; section 4 presents results; section 5 provides results discussion and conclusion.

# THEORETICAL BACKGROUND AND HYPOTHESES

Prior to the research contributions by Henning-Thurau and Walsh (2003) and Henning-Thurau et al. (2004), the literature has extensively studied eWoM drivers. This chapter focuses on motivational drivers guiding consumer engagement, while leaving aside effects of both product and brand features as well as consumers' comments and evaluations characteristics. Among the possible classifications, motivations for engaging in eWoM can be distinguished into intrinsic and extrinsic (Khern-am-nuai et al., 2018) or into social, functional, and emotional drivers (Lovet et al., 2013; Pasternak, 2017). Intrinsically motivated consumers are more prone to share valuable reviews, but their participation may decline when extrinsic rewards (e.g. monetary incentives) are introduced (Khern-am-nuai et al., 2018). Additionally, Henning-Thurau et al. (2004) highlighted that consumers may engage with eWoM to interact with others (social driver), to enhance their self (emotional driver) or out of altruism (functional driver). Dellarocas and Narayan (2006) added that consumers tend to engage in eWoM due to extreme feelings, while some more recent research tends to disagree on that point (e.g. Tang et al., 2018). Other studies show that consumers strategically engage with the eWoM generation to gain uniqueness (Cheema and Kaikati, 2010), reputation, and attention (Shen et al., 2015). Also, the impact of eWoM on attitude (Picazo-Vela et al. 2010), subjective norms, and perceived behavioral control (Dixit et al., 2019) has been proved. Without aiming at providing the reader with a comprehensive literature review, this chapter will focus on two individual drivers (namely, propensity to spend and expected service quality) and a relational driver (influence of peer WoM).

# Propensity to Spend and Active eWoM

Little research has focused on deepening the relationship between expenditure behavior and WoM. For example, some authors investigated drivers able to nurture both eWoM and willingness to pay (Sucku et al., 2018), or examined the ability of eWoM to foster willingness to pay both directly (Lis and Horst, 2013) as well as mediated by consumers behaviors and attitudes (Augusto and Torres, 2018). However, no study until now has tried to grasp the impact of willingness to pay a premium price on the propensity to share comments or reviews online. Broadly speaking, research regarding the impact of the propensity to spend on a single purchase (not referred to a brand, but to a product category) has on the willingness to share reviews and comments online is scant even though the propensity to spend serves as a proxy for the consumers involvement in purchasing decisions (Lockshin et al., 2006; Sogari et al., 2018). Thus, our first hypothesis can be summarized as follows:

**Hypothesis 1**: The Propensity to Spend positively effects Active eWoM.

# **Expected Service Quality, Propensity to Spend, and Active WoM**

A current topic of inquiry concerns the impact of service quality on both WoM (Ifie et al., 2018; Saleem et al., 2018) and eWoM (Fine et al., 2017; Alsaggaf and Althonayan, 2018). The service quality literature is a core element of the customer experience literature, thus focusing on "(1) the context in which experiences develop and (2) the journey mapping and measurement/assessment aspects of customer experience" (Lemon and Verhoef, 2016, p.72). Therefore, service quality can be considered an antecedent of customer experience (Lemon and Verhoef, 2016) that takes into account several experiential activities

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on which firms may exert moderate control, e.g. customer-employee relationships (c.f. Ife et al., 2018). Moreover, service quality is a customer assessment based on differences between what was offered and what was expected. It has been confirmed that service quality positively affects WoM intention, both directly and indirectly (Saleem et al., 2018). However, in contrast to the assessment of the service quality ex-post (Jeong and Jang, 2011; Fine et al., 2017; Ife et al., 2018; Saleem et al., 2018), we will consider the service quality as expected by consumers, therefore before the service has been provided. Thus:

# **Hypothesis 2**: Expected Service Quality positively effects Active eWoM.

The relationship between service quality and behavioral intentions has been extensively investigated in literature (Zeithaml et al., 1996; Alexandris et al., 2002; Kuo et al., 2009). Indeed, service quality was found to positively affect favorable behavioral intentions such as willingness to pay a premium price, purchasing intentions (Zeithaml et al., 1996), and post purchase intentions (Kuo et al., 2009). Moreover, price sensitivity depends on service reliability, responsiveness, and assurance, thus higher service quality corresponds to a lower sensitivity to price changes (Bolton and Myers, 2003). Therefore, from an ex-ante assessment of service quality standpoint, we aim to test the following hypotheses:

Hypothesis 3a: Expected Service Quality positively impacts Propensity to Spend;Hypothesis 3b: Propensity to Spend is able to positively mediate the impact of Expected Service Quality on Active eWoM.

# Passive WoM, Expected Service Quality, Propensity to Spend, and Active WoM

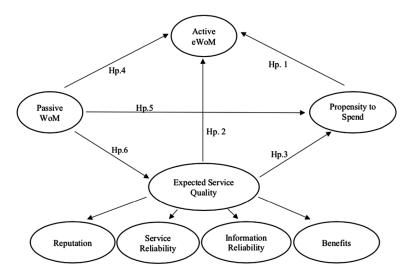
Bhattacherjee (2000) revised the theory of planned behavior in the context of e-commerce services, thus stating that "potential adopters may form opinions of an innovation based on information from two alternative sources: external and interpersonal" (ibid, p. 413). While external refers to mass media or expert opinions, interpersonal influence concerns "word-of-mouth influence by friends, colleagues, superiors, and other prior adopters known to the potential adopters" (ibid, p. 413). Both external and interpersonal influences determine the subjective norms of consumers, thus influencing their intentions. Consequently, the impact of interpersonal influences has been tested on intention to accept e-commerce service (Bhattacherjee, 2000), on satisfaction (Hsu and Chiu, 2004; Roca et al., 2006), on consumer repurchase intentions and on willingness to engage in positive WoM (Bigne et al., 2018). On the basis of these findings, this research aims to explore the impact of the propensity to rely on WoM heard by other peers (Passive WoM) on consumers' intention to share reviews and comments online (Active WoM), thus:

# **Hypothesis 4**: Passive WoM positively effect Active eWoM.

Moreover, Bigne et al. (2018) corroborated the positive impact interpersonal influences have on expenditure behavior, namely repurchase decisions. Similarly, we aim to test both the direct impact of Passive WoM on propensity to spend as well as the indirect impact of Passive WoM on Active WoM mediated by the propensity to spend. Therefore, we hypothesized that:

**Hypothesis 5a**: Passive WoM positively impacts the Propensity to Spend;

Figure 1. Conceptual model



**Hypothesis 5b**: The Propensity to Spend is able to positively mediate the impact of Passive WoM on Active eWoM.

Furthermore, other consumers' opinions are able to affect not only consumers' intentions and choices (Bhattacherjee, 2000; Nosi et al., 2017; Bigne et al., 2018), but also consumer opinions and engagement (Karakaya and Barnes, 2010). Indeed, as both WoM and eWoM are sources of independent information, we believe that consumers relying extensively on Passive WoM will be more knowledgeable, thus modifying not only their opinions but also their expectations. Therefore, a higher propensity to rely on comments or reviews will correspond to higher expectation for service quality. Moreover, we believe that high propensity to rely on comments and reviews will have an additional indirect effect on both the propensity to share comments and reviews as well as on the propensity to spend, due to a change in the expectations concerning service quality. As a result, our hypotheses can be formulated as follows:

**Hypothesis 6a**: Passive WoM positively impacts Expected Service Quality;

**Hypothesis 6b**: Expected Service Quality is able to positively mediate the impact of Passive WoM on Active eWoM;

**Hypothesis 6c**: Expected Service Quality is able to positively mediate the impact of Passive WoM on The Propensity to Spend.

### **METHODOLOGY**

# Sample and Data Collection

Data were collected between February 2017 and September 2018 through a structured survey composed by 33 questions divided into five sections: (a) general online purchase behavior, (b) process of online

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purchase and trust factors, (c) respondent's past experience and knowledge of the fashion industry, (d) specific purchasing behavior regarding fashion products, and (e) personal information. The survey was introduced through a short description of the general aim of the study. To lower response bias we guaranteed anonymity and we avoided use of ambiguous and unfamiliar terms, complicated syntax, and bipolar numerical scale values (Annuziata et al., 2018). We obtained 1454 complete and usable answers.

Table 1 shows some descriptive statistics regarding our sample. Sample units are on average 28/29 years old and mainly female (63,1%). More than half of them hold a higher education qualification equal to or higher than a bachelor's degree. Additionally, 43% of our sample has a yearly income lower than 5000 euros a year, while the 42,3% range from 5001 to 28000.

#### Measurement

Dependent Variable. Active eWoM is a three-item construct and it was measured by asking consumers to evaluate, on a five-point Likert scale, where 1 = "not at all" and 5= "fully", their agreement with the following statements: (i) I usually review fashion products on e-commerce websites; (ii) I usually share information of fashion products and brands on social medias (Facebook, twitter, etc.); (iii) I usually share online reviews of fashion products with my peers. The first two items of this construct are developed starting from the construct proposed by Yen and Tang (2015), while the third from the idea of "forwarding" by Sun et al. (2006).

Independent Variables. Propensity to Spend has been operationalized as a categorical variable, thus asking respondents how much they usually spend online for a single purchase: 0; less than 25 euros; 26-50 euros; 51-100 euros; 101-300 euros; 301-500; more than 500. Passive WoM is a four-item construct developed on the basis of De Bruyn and Lilien (2008), Muller et al. (2011), Nadeem et al. (2015), and Hajili (2014). Respondents were asked to state, on a five-point Likert scale, where 1 = "no influence" and 5 = "high influence", how much the following information influenced their choice of the online/ offline channel used to purchase fashion products: (i) I heard that you can find the best products in that store; (ii) I heard that you can make a purchase in a few seconds; (iii) If you look for this specific product, that store is the best; (iv) you won't regret it. Reputation is a four-item construct developed on the basis of Doney and Cannon (1997), Jarvenpaa et al. (2000), and Huang and Benyoucef (2013). Respondents were asked to evaluate, on a five-point Likert scale, where 1= "no effect" and 5 = "high effect", how much the following items effect their perceived reputation of an online/offline store: (i) the store is well-known and it has a familiar name; (ii) the store delivers purchased products on time; (iii) the store guarantees a safe purchasing process; (iv) the store displays products as they really are. Service Reliability is a four-item construct developed on the basis of Jarvenpaa et al. (2000), Thorbjørnsen and Supphellen (2004), and Huang and Benyoucef (2013). Respondents were asked to evaluate, on a fivepoint Likert scale, where 1= "no effect" and 5 = "high effect", how much the following items effect their perception of service reliability of an online store: (i) the e-commerce website shows positive and negative feedback; (ii) the e-commerce website connects with reliable vendors; (iii) the e-commerce website guarantees timely assistance; (iv) the e-commerce website listens to customers' complains. Benefits is a four-item construct developed on the basis of Casaló et al. (2008) and Huang and Benyoucef (2013). Respondents were asked to evaluate, on a five-point Likert scale, where 1= "no effect" and 5 = "high effect", how much the following items effect their benefits perception of an online store: (i) I can easily compare several products; (ii) there are various product options; (iii) I can save time; (iv) I can buy products/services at lower prices. Information Reliability is a four-item construct developed on

Table 1. Sample descriptive statistics

Variable	Mean
Age	28.8
Variable	%
Gender	
Male	36.9%
Female	63.1%
Education Level	
High School	47.3%
Bachelor's degree	46.8%
Master's degree or PhD	5.9%
Income Level	
Less than 5000	43.0%
5001-15000	19.6%
15001-28000	22.7%
28001-55000	9.6%
55001-75000	3.2%
More than 75000	2.0%
N=1454	

the basis of Huang and Benyoucef (2013). Respondents were asked to evaluate, on a five-point Likert scale, where 1= "no effect" and 5 = "high effect", how much the following items effect their perception of information reliability of an online store: (i) well-detailed product information; (ii) the availability of product images; (iii) the availability of an explanatory video; (iv) the availability of many reviews. Expected Service Quality is a second order construct obtained through Reputation, Service Reliability, Benefits, and Information Reliability.

Control Variables. To lower endogeneity, we controlled the impact of the following variables: Age, Gender, Income, Education Level on Active eWoM.

To test our hypothesis, we employed CB-SEM computed through Stata 14.2.

## **RESULTS**

# **Results of the Measurement Model**

Table 2 provides descriptive statistics and correlation coefficients of the variables employed. High correlations among Reputation, Service Reliability, Benefits, and Information Reliability are rather normal as they contribute to the development of the second order construct Expected Service Quality. Moreover, no multicollinearity problems can be detected as VIF scores show values lower than 2.1, thus largely below the 10-threshold indicated in the literature (e.g. Kutner et al., 2004; Fahrmeir et al., 2013).

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Table 2. Descriptive statistics and correlation

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) Active eWoM	1										
(2) Propensity to Spend	0.3985	1									
(3) Reputation	0.3466	0.3779	1								
(4) Service Reliability	0.3899	0.3418	0.8126	1							
(5) Benefits	0.4139	0.4137	0.7793	0.7671	1						
(6) Information Reliability	0.4008	0.3918	0.7477	0.7491	0.7837	1					
(7) Passive WoM	0.5842	0.3421	0.5285	0.5296	0.6112	0.6212	1				
(8) Age	0.0724	0.1337	0.0059	0.0388	0.0352	0.0230	0.0039	1			
(9) Gender	0.0311	-0.0033	-0.0946	-0.0783	-0.0727	-0.0712	-0.0172	-0.0289	1		
(10) Income	0.1446	0.2919	0.1822	0.1982	0.1520	0.1676	0.1211	0.2942	0.0084	1	
(11) Educational Level	0.0858	0.1531	0.1645	0.1497	0.1722	0.1521	0.1125	0.2156	0.0183	0.1816	1
Mean	2.4906	2.1307	3.5698	3.4515	3.5669	3.6547	3.1449	28.7627	0.3693	2.1630	1.5853
SD	1.2460	1.3775	1.1567	1.2187	1.1162	1.1187	1.1464	9.6090	0.4828	1.2718	0.5999
Min	1	0	1	1	1	1	1	13	0	1	1
Max	5	6	5	5	5	5	5	89	1	6	3
Note	Notes: N = 1454. Correlation coefficients greater than 0.1 in absolute value are statistically significant at 99 percent										

As underlined in the previous section, the constructs employed in this research are adapted from the existing literature, therefore we checked for internal reliability, discriminant validity and convergent validity through a confirmatory factor analysis. Construct description, Cronbach's α, composite reliability (CR), and average variance extracted (AVE) are shown in Table 3. Internal Reliability is guaranteed by values of Cronbach's α higher than 0.8 and values of CR higher than 0.9, well above the 0.7 threshold indicated in the literature (Bagozzi and Yi, 1988). Additionally, standardized factor loadings show values largely above the 0.5 threshold suggested by the literature (Chin, 1988). Discriminant Validity has been assessed comparing the values of AVE square root with correlation coefficients between constructs (Fornell and Larcker, 1981). All AVE square roots were higher than correlation coefficients, thus showing a good discriminant ability of our constructs. Convergent Validity is assured by high values for AVE, all higher than 0.5 (Fornell and Larcker, 1981). Therefore, we can conclude that the constructs employed in this research show satisfactory levels of reliability and validity.

### **Results of the Structural Model**

The hypotheses have been tested employing structural equation modelling (SEM) through Stata 14.2. Table 4 and Figure 2 show SEM results, while Table 5 highlights goodness-of-Fit (GoF) test statistics. Considering the number of observed variables and the number of observations, the GoF statistics are in line with the statistical requirements present in the literature (Hair et al., 2009). Additionally, the R-squared for Active eWoM is 0.471, while for the overall model is 0.923.

Table 3. Measures description and properties

Measure and Source	Item Description	Factor Loadings		
A .' 337.34	To what extent do you agree with the following statements?			
Active eWoM $\alpha$ =0.88	I usually leave reviews or assessments of fashion products on e-commerce websites			
CR=0.92 AVE=0.80	I usually share information of fashion products and/or brands on social media			
AVE=0.80	I usually share reviews of fashion products found online with my peers			
	How much did the following information shared by other consumers influence your choice of the online/offline channel employed to purchase fashion products?			
Passive WoM $\alpha$ =0.91	I heard that you can find the best products in that store	0.88		
CR=0.94	I heard that you can make a purchase in few seconds			
AVE=0.79	If you look for this specific product, that store is the best			
	You won't regret it	0.89		
	How much did the following information influence your perception of an online/offline store reputation?			
Reputation $\alpha$ =0.89	The store is well-known, and it has a familiar name	0.76		
CR=0.93	The store delivers purchased products on time	0.90		
AVE=0.76	The store guarantees a safe purchasing process	0.91		
	The store displays products as they really are	0.91		
	How much do the following items effect your perception of service reliability of an online store?			
Service Reliability $\alpha$ =0.91	The e-commerce website shows positive and negative feedback	0.86		
CR=0.94 AVE=0.80	The e-commerce website connects with reliable vendors	0.90		
	The e-commerce website guarantees timely assistance	0.90		
	The e-commerce website listens to customers complaints	0.91		
	How much do the following items effect your benefits perception of an online store?			
Benefits	I can easily compare several products	0.84		
α=0.90 CR=0.93	There are various products options	0.90		
AVE=0.77	I can save time	0.88		
	I can buy products/services at lower prices	0.88		
	How much do the following items effect your perception of information reliability of an online store?			
Information Reliability $\alpha$ =0.89	Well-detailed product information	0.89		
CR=0.92	The availability of product images	0.91		
AVE=0.75	The availability of an explanatory video	0.81		
	The availability of many reviews	0.87		
	2 <sup>nd</sup> Order Construct			
Expected Service Quality	Reputation	0.92		
α=0.93 CR=0.95	Service Reliability	0.91		
AVE=0.83	Benefits	0.91		
	Information Reliability	0.90		

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Table 4. Structural model results

Path		Overall Model		
		Std. Coef.	S.E.	
i	Expected Service Quality			
<-	Passive WoM	0.664***	0.017	
	Propensity to Spend			
<-	Expected Service Quality	0.345***	0.034	
<-	Passive WoM	0.129***	0.035	
<-	_cons	1.547***	0.039	
Active eWoM				
<-	Age	0.053**	0.023	
<-	Gender	0.05**	0.022	
<-	Income	0.007	0.024	
<-	Education	-0.021	0.023	
<-	Propensity to Spend	0.231***	0.025	
<-	Expected Service Quality	-0.085**	0.035	
<-	Passive WoM	0.624***	0.03	
	N=1454. *p < 0.100; **p < 0.050;	***p < 0.001.	•	

The propensity to rely on Passive WoM positively influences Expected Service Quality, thus a higher propensity to look for reviews and comments corresponds to a high demand for service quality. So, Hp.6a is confirmed. Moreover, both Passive WoM and Expected Service Quality positively affect the Propensity to Spend, but the effect is more considerable for Expected Service Quality. Therefore, consumers that take into account reviews and look for high service quality are willing to spend more money on a single purchase. As a result, Hp.3a and Hp.5a are confirmed. For what concerns the dependent variable, both Passive WoM and Propensity to Spend have a positive and significant influence on Active eWoM. Thus, those consumers that read reviews and spend more per single purchase are more likely to leave comments or reviews on websites or social media. Consequently, Hp.1 and Hp.4 are confirmed. On the other hand, Expected Service Quality negatively influences the propensity to share Active eWoM, this effect is significant at 5%. Consequently, consumers seeking high quality standards are less likely to leave comments or reviews. So, Hp. 2 is rejected.

Table 5. Goodness of fit

Goodness of Fit			
RMSEA	0.06		
CFI	0.94		
SRMR	0.069		

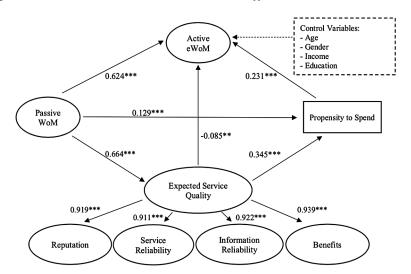


Figure 2. Conceptual Model with standardized Structural Effects

For what concerns control variables, while Age and Gender have a positive and significant effect on Active eWoM, Income and Education do not have a significant effect.

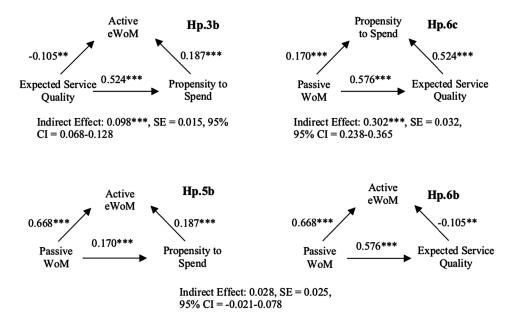
Figure 3 shows direct and indirect effects. Propensity to Spend is able to positively mediate the impact of Expected Service Quality on Active eWoM. In this case, while the direct effect of Expected Service quality on Active eWoM is negative, the effect mediated by Propensity to Spend is positive. Therefore, Hp.3b is confirmed. Additionally, Expected Service Quality is able to positively mediate the impact of Passive WoM and Propensity to Spend. Therefore, Passive WoM has not only a direct effect on Propensity to Spend, but also an indirect one because it enhances the pursuit for higher service quality. So, Hp. 6c is confirmed. Lastly, both Expected Service Quality and Propensity to Spend are not able to mediate the effect of Passive WoM on Active eWoM, thus Hp. 5b and 6b are rejected.

In terms of total effects, while the effect of Propensity to Spend and Passive WoM on Active WoM remain significant after controlling for indirect effects, Expected Service Quality displays a not significant coefficient: this is due to a compensation effect between the direct negative effect and the indirect positive effect.

### DISCUSSION AND CONCLUSION

The results of this research show the ability of Propensity to Spend and Passive WoM to act as drivers of Active WoM. Firstly, a high propensity to spend on a single purchase is a positive predictor of the willingness to share comments and reviews online. This is in line with the idea that higher propensity to spend corresponds to high emotional involvement that pushes consumers to share post-purchase reviews or comments. Secondly, the propensity to rely on online/offline reviews or comments from other consumers forecasts the propensity to share reviews or comments online. This is in line with those researches stating that interpersonal influences are able to affect intentions (Bhattacherjee, 2000; Hsu and Chiu, 2004; Roca et al., 2006). In particular, while Bigne et al. (2018) found that interpersonal influences effects only WoM and not eWoM, our results show strong positive and significant influence of Passive

Figure 3. Standardized Direct and Indirect Effects



WoM on Active eWoM. Furthermore, while Saleem et al. (2018) found service quality to positively effect WoM intention, our results paint a different picture. Indeed, even if both direct and indirect effects of Expected Service Quality on Active WoM are significant, the total effect is not significant. We can conclude that Expected Service Quality has an insignificant impact on Active WoM.

Table 6. Sum up of research results

Hypothesis		Notes
Hp. 1: The Propensity to Spend positively effects Active eWoM	Verified	-
Hp. 2: Expected Service Quality positively effects Active eWoM	Rejected	The direct negative effect and the indirect positive effect compensate each other; hence, the total effect is not significant.
Hp. 3a: Expected Service Quality positively impacts Propensity to Spend.	Verified	-
Hp. 3b: Propensity to Spend is able to positively mediate the impact of Expected Service Quality on Active eWoM.	Verified	-
Hp. 4: Passive WoM positively effect Active eWoM	Verified	-
Hp. 5a: Passive WoM positively impact Propensity to Spend.	Verified	-
Hp. 5b: Propensity to Spend is able to positively mediate the impact of Passive WoM on Active eWoM.	Rejected	Not significant indirect effect
Hp. 6a: Passive WoM positively impact Expected Service Quality.	Verified	-
Hp. 6b: Expected Service Quality is able to positively mediate the impact of Passive WoM on Active eWoM.	Rejected	Not significant indirect effect
Hp. 6c: Expected Service Quality is able to positively mediate the impact of Passive WoM on Propensity to Spend.	Verified	-

This research examined relationships among the three drivers. Firstly, we found that consumers with higher expectations towards service quality are more likely to have a high propensity to spend on a single purchase. This is in line with the positive impact of service quality on both willingness to pay and purchasing intentions highlighted by Zeithaml et al. (1996), and with the relationship between price sensitivity and service quality underlined by Bolton and Myers (2003). Secondly, consumers showing higher propensity to rely on comments and reviews from other consumers are likely to have higher propensity to spend. This finding confirms the ability of interpersonal influences to affect intentions and expenditure behaviors (Bhattacherjee, 2000; Bigne et al., 2018). Thirdly, a consumer with a high propensity to look for comments and reviews is likely to have higher expectations towards service quality. This result confirms the influence exerted by interpersonal exchanges on intentions and opinions (Bhattacherjee, 2000; Karakaya and Barnes, 2010). Additionally, the propensity to rely on comments or reviews was found to have an indirect effect on the propensity to spend mediated by the expected service quality.

From a theoretical perspective, the results of this study contribute to a current literature branch (Bigne et al., 2018; Saleem et al., 2018) that looks into the identification and role definition of drivers able to foster eWoM. Moreover, we contribute to the service quality literature by investigating expectation regarding service quality (ex-ante) and its impact not only on eWoM but also on the propensity to spend.

From a managerial perspective, our research contributes to resolving uncertainties regarding the usefulness of social media research. Indeed, studies are fundamental in order to monitor passive WoM that are able to enhance the spread of active WoM (full of useful information for potential consumers) and increase the propensity to spend. Moreover, this study offers a taxonomy able to guide the identification of those consumers that are more likely to share reviews and comments online. This will enable managers to better monitor and intervene, when necessary, to avoid the spread of negative eWoM or to foster sharing positive eWoM. Indeed, consumers willing to share comments or reviews (i) pay careful attention to other consumers' comments or reviews, and (ii) have a higher propensity to spend on a single purchase that is predicted by both high expectations for service quality and high propensity to rely on comments and reviews from other consumers. Lastly, our results show that some socio-demographic variables (age and gender) are better able to identify distinct behaviors in the fashion industry than others (education and income). Hence, some variables typically employed to segment customers in the luxury sector, are no longer able to distinguish between online interaction attitudes and behaviors, such as the propensity to rely on or to share eWoM. This fact calls for deep reconsideration of the segmentation criteria.

This research has some limitations. Indeed, we did not distinguish between positive or negative WoM or eWoM, but we focused only on the propensity to share reviews or comments. Further research may deepen this aspect and look into the different impact the highlighted drivers might have. Moreover, we performed our research on a sample of Italian consumers. As a result, our results may not take into account behaviors and attitudes of consumers from other countries. Additionally, our sample is mainly composed of young female consumers with a low income. Even though this fact lowers the generalizability of our study, it has two positive aspects: (i) it provides an overview of behaviors of not only current but also of potential consumers; (ii) as Income is a not significant control variable, it shows that the behaviors described by our findings occur regardless of wage determinants. Lastly, this research investigated eWoM drivers in the fashion industry, therefore further research would extend our findings to other sectors. Indeed, purchasing behaviors and attitudes in the fashion industry can be compared to other high-engagement sectors (such as wine), but not with low-engagement ones.

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# **KEY TERMS AND DEFINITIONS**

**CB-SEM:** A structural equation modeling based on the covariance matrix.

**Convergent Validity:** It concerns the extent to which the items of a construct share variance.

**Discriminant Validity:** It is the ability of a construct to differentiate from the others.

Fashion Industry: The fashion industry includes both apparel and accessories.

**High-Engagement:** Refers to those products whose choice requires a high effort in terms of time and emotions for each phase of the purchase process.

Internal Reliability: It denotes the items' ability to represent a latent construct.

**Structural Equation Modeling (SEM):** It is a multivariate technique allowing to study relationships between variables and latent constructs, and between latent constructs.

# Chapter 11 Electronic Word-of-Mouth in the Service Industry: An Empirical Analysis on Sharing Economy Services

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#### ABSTRACT

Word-of-mouth is today considered among the most effective marketing communication tools. Indeed, consumers trust more their friends or other consumers than companies, advertisements, and brands. Moreover, due to the digital revolution, the electronic word-of-mouth plays a central role in consumers' purchasing decisions. In particular, electronic word-of-mouth may be central in the context of services, where the perceived risk of the intangible offering triggers consumers' need to find preliminary support from other consumers. This chapter focuses on comments and reviews regarding tourist products and other services shared by customers on different types of online platforms. The empirical analysis sheds light on the role that key motivational drivers, such as customer satisfaction, altruism, and self-esteem, may have in affecting consumers' decision to share comments about traditional versus sharing economy businesses. Findings demonstrate that the observed motivational drivers significantly and differently affect consumers' decision to engage in electronic word-of-mouth.

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# INTRODUCTION

Word-of-mouth (hereafter, WOM), defined as the array of informal conversations that occur among consumers about products, service and brands (Westbrook, 1987), has significantly grown in fairly recent times in its diffusion and impact from both a theoretical and a practical point of view. Indeed, consumers' purchasing decisions are often significantly affected by what other people suggest (e.g., Babic Rosario et al., 2016; Chen, 2017; De Angelis et al., 2012). Moreover, due to the digital revolution, WOM occurs nowadays mainly in the form of electronic WOM (hereafter eWOM; e.g., Boerman et al., 2017), whereby users share online reviews that often play a crucial role in influencing other consumers' decisions about whether to buy or not a product or a service either online or online. The importance of WOM and eWOM is due to the fact that information shared by peers is typically considered as more credible and trustworthy than that shared by companies; indeed WOM sharers generally do not have any vested interest in the product or service they talk about (e.g., Berger, 2013; Berger and Iyengar, 2014), as they typically do not receive incentives of any sort to talk about it (unlike advertising, in which the communicator typically has an interest in the product or service it provides information about). Interestingly, marketing literature has focused on key aspects of WOM, such as the content of conversations (Burnkrant & Cosineau, 1975; Cheung et al., 2008; De Angelis et al. 2017; Schellekens et al. 2010; Sussman & Siegal, 2003), the effect of WOM on recipients' judgments and behaviors (see De Matos & Rossi, 2008 for a review), the diffusion of positive versus negative WOM (De Angelis et al. 2012) and the motives behind the sharing the WOM and eWOM (e.g., Berger, 2014; Hennig-Thurau et al., 2014).

In this chapter, we focus on the eWOM and investigate it in the context of service business. Indeed, due to the experiential and intangible nature of services, WOM can be considered particularly crucial in the service contexts, as it may reduce the inherent risk associated with service purchasing (e.g., De Angelis et al., 2017). In our analysis, we specifically refer to comments and reviews about tourist products or services shared by customers on different types of online platforms. More specifically, this chapter analyses the differential effectiveness of comments shared about a company operating in the traditional online service business versus comments shared about a company operating in a sharing economy business. The role that key motivational drivers, such as customer satisfaction, altruism and self-esteem, may have in determining consumers' intention to share comments regarding traditional versus sharing economy businesses is investigated. Findings demonstrate that the abovementioned motivational drivers influence consumers' decision to engage in eWOM activities both in the traditional and in sharing economy business. Specifically, results suggest that respondents' level of altruism is more central in the sharing economy business than in the traditional business. Moreover, results underline that customer satisfaction is the main motivational driver in the traditional business.

Overall, this chapter fills a relevant gap in the literature. Indeed, while previous studies have widely shed light on the importance of WOM in service contexts (e.g., Bansal & Voyer 2000; De Angelis et al., 2017; Money et al., 1998) and even in tourism (e.g., Amatulli et al., 2019; Del Chiappa et al., 2018; Litvin et al., 2008), under investigated to date has remained the issue of detecting differences in terms of the role played by eWOM drivers in traditional online services versus sharing economy services. This issue appears quite important to tackle in the light of the fact that digitalization has significantly increased the importance of service in the economy and the society at large. In such a scenario, two are the types of innovation brought about by digital revolution in the tousim and hospitality sector: one is given by the rise of online travel agencies (OTAs) that not only give users the chance to book online but also offer them reviews posted by previous users; the other is given by the rise of sharing economy

platforms, which give individuals the possibility to share and rent room and apartments with other users. More specifically, this chapter tries to answer to the following three research questions: a) Are eWOM drivers identified by the classical literature also applicable to the context of sharing economy?; b) Have such drivers the same relevance into the two reference contexts?; c)What is the most relevant driver in the context of sharing economy?

# **BACKGROUND**

# Traditional WOM, Positive WOM and Negative WOM

WOM has been widely studied and defined by the economic literature, as it is considered capable of changing the attitude and behaviour of consumers (Brown & Reingen, 1987). Furthermore, consisting in an informal conversations, WOM seems to give companies a chance to communicate in a simple and genuine way, especially nowadays when they are facing an ever-increasing mistrust by customers towards institutional communication. Since customers became increasingly intolerant to repetitiveness and intrusiveness of institutional advertising, some scholars started regarding WOM as a more influential communication tool than advertising and institutional communications (Bickart & Schindler, 2001; Smith et al., 2005; Trusov et al., 2009). Long time ago, Arndt (1967) defined WOM as an informal communication among consumers and about a product or a service. In recent times, Ismagilova et al. (2017) emphasized the peculiarities of WOM receiver and the communicator. According to the authors it is essential that, in order to be effective, the receiver perceives the message as a non-commercial one, thus as not aimed at promoting a brand, a product, a service or an organization. Importantly, WOM plays an even greater importance for customers when the perceived risk of the purchase is greater, leading individuals to increase their efforts to search for information through WOM (Kirby & Marsden, 2006), in an attempt to reduce the perceived risk and to make better decisions (Berger, 1988; Jolson & Bushman, 1978). Indeed, WOM carries a further advantage, from the consumers' point of view, which lies in the opportunity to collect negative information about a product/service (Katz & Lazarsfeld, 1955), that is information that would not be accessible through the typical institutional communication.

An important distinction that literature on WOM makes is about positive WOM (hereafter, PWOM) versus negative WOM (hereafter, NWOM). Past studies have correlated positive WOM to a satisfactory consumer experience, which leads consumers to share good things about a specific brand, product or service, thus supporting that brand, product or service. However, as highlighted in the next sections of this chapter, satisfaction is not the only driver that lead consumers to engage in PWOM. For instance, another important element is loyalty as a consumer with a relatively strong loyalty to a product or a brand is typically more likely to comment in a positive way his/her experience with the product or brand (Sirdeshmukh, 2002). On the other hand, those who share negative comments oftentimes have a low degree of loyalty to the product, the brand or the company selling them. Interestingly, a study by Sweeney (2005) has shown that PWOM comments are typically more functional in nature as they are often about the quality of a product or a brand they have purchased, while NWOM comments are typically more emotional in nature, as they are often about the overall experience the sharer had with a product or a brand.

Importantly, negative WOM, defined as an interpersonal communication concerning a commercial organization or a product, through which the organization/product is denigrated (Richins, 1984), is believed to have a stronger impact on consumer purchase decisions. This belief relates to the more general

issue of whether PWOM NWOM has greater influence on consumers' behaviour. In this regard, Fiske (1980) hypothesized a difference between the value of PWOM and NWOM, reasoning on the idea that negative information is usually more rare than positive information. The rarity of negative comments, therefore, would make it more useful. The author underlined that if the positive comments on a brand or product are many, even the presence of a few negative comments can strongly influence the receiver; therefore, negative comments have a greater effect on the judgment of consumers than positive comments. Ahluwalia (2002), on the other hand, considered familiarity with the brand as a fundamental variable for evaluating the different effect of PWOM and NWOM. For example, taking into consideration a customer who is well informed about a brand or a product, we may suppose that he/she is less influenced by both PWOM and NWOM compared to a less informed customer. Importantly, Mangold et al. (1999) highlighted the need to consider the contexts in which consumers generate WOM. More specifically, the authors highlighted that there are cases in which consumers generate PWOM versus NWOM according to the specific needs of their receiver. Probably, an individual can share positive things regarding a brand, even if he/she has had negative experiences with that brand, due to a specific interest or need of the WOM receiver in a specific moment. This implies, therefore, that individuals who have had positive experiences do not always generate P WOM and, conversely, those who have had negative experiences not always generate NWOM.

### **eWOM**

With the advent of new technologies in the IT field and the development of the Web 2.0, traditional WOM has gone from being an exclusive offline phenomenon to an extremely important online phenomenon. Importantly, Hennig-Thurau et al. (2004, p. 39) analysed eWOM defining it 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". Indeed, the Internet has introduced new means of communication among individuals, who do not necessarily have to be in the same place to communicate, while, on the other, it has made available an ever-increasing amount of information sources (Neßler & Bettina, 2013). The new media are represented, for example, by e-mails, blogs, chats, websites, but above all social networks through which consumers have the opportunity to share their experiences and freely express their opinions on brand, products or services. The result of such phenomena is a general decrease in the relevance of advertising transmitted through traditional media and a relative increase in the importance of online communication, often in the form of comments and reviews, about goods or services shared by consumers on digital platforms accessed by many other consumers (Smith et al., 2007).

An important difference between offline and online WOM consists in the form of communication, as eWOM often takes place in the form of written comments, while traditional, offline WOM often takes form in the form of oral communications. The messages shared on social networks typically spread at a greater speed than the traditional offline messages. Moreover, online, senders may keep their identity anonymous, which is not a point of secondary importance. At the same time, eWOM messages can be saved on the social networks and, thus, accessed by an unlimited number of people at different moments (Hennin-Thurau, 2004). In other words, while offline WOM may affect the behavior of the relatively small cohort of people located in a physical context who have received a WOM communication, eWOM reaches a typically much wider group of people (Smith et al., 2007). Moreover, as for its offline version, eWOM can be both positive and negative, and it may strongly influence other subjects' behaviors as

well as the economic performance of a company (Neßler & Bettina, 2013). Overall, therefore, eWOM is not much different in nature than offline WOM, but its potential effects are stronger in the light of the possibility that online message have to reach a wider audience.

# Drivers of WOM and eWOM

In the previous sections we have discussed the theoretical issues raised by literature on WOM and eWOM. In this section, we focus on the antecedents and drivers of WOM, that is on what motivates people to share their opinions about a product or a service with other people, both known (as typically happens in offline WOM) or unknown (as often happens in eWOM). Here as follows, we offer an overview of the literature on those topics. In particular, we review the literature that has categorized WOM drivers into "brand-related drivers" and "social-related drivers". The first category is related to individuals' relationship and experience whit brands or products, while the second category is related to individuals' relationship with other people and social issues.

# **Brand-Related Drivers**

A good starting point to analyse brand-related drivers is the study of De Matos and Rossi (2008). These authors have developed and tested a conceptual framework that includes all the brand-related drivers analysed by the literature. Their work, indeed, analyzed WOM drivers considering that all variables have a significant effect on willingness to engage in WOM and with the aim to assess their relevance. Here below, we summarize the main characteristics of the brand-related drivers investigated by De Matos and Rossi (2008).

Satisfaction. The first variable/driver they considered is customer satisfaction. According to the "expectancy disconfirmation theory", consumers evaluate the level of satisfaction by considering the benefits and the value of a product or service based on expectations prior to the purchase/consumption (Oliver, 1980). Another perspective to the definition of customer satisfaction is that presented by Bolton and Drew (1991), according to which satisfaction is the result of multiple evaluations of the consumer regarding the same product or service over time. This theory has also been defined as "the accumulated satisfaction" by Westbrook and Oliver (1991) who argued that the customer satisfaction has not only a cognitive dimension, but also an emotional dimensions. Importantly, many authors have defined satisfaction as one of the most relevant drivers of WOM (Bearden & Teel, 1983; Maxham & Netemeyer, 2002; Ranaweera & Prabhu, 2003; De Matos & Rossi 2008). Literature has also confirmed that satisfaction may influence the generation of WOM in two diametrically opposite ways: positively or negatively. In the first case, the excess of the performance compared to the expectations motivates the subjects to produce PWOM about the product or service; in the second case, failure to achieve the minimum expectations on the product or service will motivate the subject to share NWOM about the product or service.

Loyalty. Defined by literature as the behavior of customers who spend most of their budget for purchasing and re-purchasing the same brands and who generate PWOM about those purchases (Sirdeshmukh et al., 2002). Moreover, De Matos and Rossi (2008) considered loyalty as an antecedent of WOM rather than considering WOM as one of the dimensions of loyalty as a multidimensional construct. Indeed, they underlined that the more individuals are loyal the more they are willing to generate PWOM about a brand, a product or a service. In addition, as mentioned by Wangenheim (2005), it should be noted

that when loyal consumers decide to change providers they particularly likely to share NWOM about the previous provider which might have disappointed them at a certain point.

Quality. Building on previous literature (Bloemer et al., 1999; Boulding et al., 1993; Harrison-Walker 2001; Zeithaml et al., 1996), De Matos and Rossi (2008) considered perceived quality as an important WOM driver. Indeed the propensity of individuals to share positive things about a product or service increases when their perception of the quality of that product or service level is relatively high. Likewise, when individuals perceive low product or service quality, they are likely to engage in NWOM.

Commitment. Commitment refers to the relationship existing between a buyer and a seller and, particularly, to consumers' efforts to maintain a good relationship with a brand. When the relationship with a seller is positive, consumers are more likely to generate positive WOM, while when it is a negative, consumers might share NWOM about that seller. Moreover, this variable plays the role of a moderator in the relationship between customer satisfaction and WOM behaviour, whereby individuals with a higher level of commitment to a brand tend to consider their satisfaction with a product or service marketed by that brand as less important in their decision to engage in WOM, while individuals with a lower level of commitment to a brand tend to consider their satisfaction with a product or service marketed by that brand as more important in their decision to engage in WOM (Brown et al., 2005).

Trust. Trust toward a brand stems from confidence and reliability (Moorman et al., 1993; Morgan & Hunt, 1994). De Matos and Rossi (2008) argued that a direct relationship between trust and WOM exists, whereby individuals who have high trust in a brand, stemming from previous experiences with that brand, will be more willing to generate either PWOM or NWOM (depending on the valence of the experience they had) compared to individuals with no previous experiences with the same brand.

*Perceived Value*. Perceived value is based on consumers' perceptions regarding the value received by a product/service, in terms of quality, costs incurred and time spent to get it. The rationale, indeed, is that individuals who perceive a high value towards a product tend to have a high level of "commitment" that then turns into a willingness to share information within their personal network (McKee et al., 2006).

# Social-Related Drivers

In terms of social-related drivers, an interesting and exhaustive study is that developed by Alexandrov, Lilly and Babakus (2013), which is quite different than the study of De Matos and Rossi (2008), as the authors aimed at examining the WOM drivers considering social and personal motivations. In particular, the variables examined in their study and that seem to play a central role in consumers' decision to engage in WOM are the following ones:

- 1. "Need for social comparison", according to which consumers engage in WOM driven by their need to compare their opinions and skills with those of others;
- 2. "Need for social belonging", according to which individuals need to bind themselves to others and keep their relationships alive, and thought to typically drive PWOM rather than NWOM;
- 3. "Need to share social information", which can take the form of gossip or social learning. Indeed, through gossip, individuals are able to strengthen their social ties. Social learning, on the other hand, refers to as the ability of individuals to learn by listening to the opinions of others or by observing their behavior;
- 4. "Intention to help others", that is related to altruism and is defined as the desire to generate WOM that might be able to help others evaluate a product or a service;

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- 5. "Self enhancement", according to which individuals need to feel good through positive evaluations received from other subjects. In other words, individuals are more likely to generate WOM when they believe that sharing WOM may improve their social position;
- 6. "Self affirmation", achieved through the projection of an image that is integral to oneself and is often used as a defensive weapon.

# MAIN FOCUS OF THIS CHAPTER

# **Digital Revolution and Tourism 2.0**

Talking about WOM today is emblematic especially because of the revolution introduced by the Internet and the digital platforms. Moreover, such a revolution has particularly affected the tourism sector, which represents a variety of offerings within the service area. The World Wilde Web is undoubtedly one of the greatest revolutions in history, a totally new phenomenon able to bring large numbers of people closer to technology and companies too. This great revolution has changed traditional paradigms at a social, cultural and economic level, even modifying entire sectors, such as the tourism sector. Importantly, from the point of view of the offer, the Internet has facilitated the growth of tourism businesses due to the optimization of cost management, the redefinition of the organizational structures and the increase in the ability to create value for customers. On the other hand, from the point of view of the demand, consumers who decide to buy online tourism-related services, such a as a trip, have the opportunity to independently manage all phases of the traveling plan. Indeed, they no longer need to go to a travel agency to get information and to book flights or hotel rooms. Through the new online booking systems and their relatively high ease of use, people may freely and conveniently collect the information they need, thus booking everything very quickly and paying online. Perhaps as a consequence of the digital revolution, the economic value of the tourism sector has been significantly growing on a worldwide basis. Indeed, the estimated worldwide value of the revenue from online booking is about 238 million dollars (https://www.statista.com/statistics/499694/forecast-of-online-travel-sales-worldwide/) with a growth forecast of 8% up to 2022, when the value will be of approximately 324 million dollars. In this new context, the web accompanies each stage of the user's travel experience, starting from the choice of destination, influenced by a multitude of factors and actors, who can operate both offline (e.g., friends, relatives) and online (e.g., blog, digital advertising, eWOM). Once the destination has been chosen, the process continues online with the reservations regarding transportation and accommodation. In this regard, in the next sections we discuss how 2.0 technologies have been able to revolutionize the accommodation system by creating new models. Importantly, indeed, even after the stay, the consumer experience continues through social networks and mobile devices, with the sharing of photos, videos and above all reviews about the places visited.

#### WOM and eWOM in Tourism 2.0

One of the major changes that the technological revolution has brought in the tourism section is represented by the enhanced ability of consumers to gather information about different pillars of an experience, such as the choice of a destination, the booking of hotels or the choice of restaurants. Within this context, WOM, and more specifically eWOM, has inevitably assumed a fundamental role. Indeed, literature on

the tourism market has highlighted the importance of WOM for tourist products and services, especially when it takes the form of comments and reviews shared by users through the Internet. This form of WOM, that can easily take place on digital platforms such as social networks, has radically changed the tourism industry, both from the offer and the demand point of view. More specifically, from the point of view of companies, today's managers need to be able to stimulate customers to share positive comments; from the point of view of travellers, they are easily influenced by information shared online, throughout their decision journey (Ayeh et al. 2013).

Being the goal of this section to explore if in the tourism market there are other drivers of WOM in addition to those previously analyzed, it seems useful to mention the work of Gretzel and Yoo (2008), who have studied the motivations leading tourists to share reviews online and have identified three macro categories of eWOM drivers: a) helping the service provider; b) informing other travellers; c) enhancing their "self-esteem". In addition, another interesting insight from Gretzel and Yoo (2008) is that economic incentives given by a company to individuals may not have a relevant influence on their decision to engage in WOM. A study conducted by Bronner and Hoog (2011), instead, classifies the drivers of eWOM in the tourism sector in two categories. The first category consists of "self-related" drivers, that is drivers about the improvement of consumers' personal conditions. The second category consists of "other-related" drivers, that is those drivers oriented to others rather than the sharer (i.e., altruism). Importantly, Liang et al. (2013) identified a relationship between the perception of utility and ease of eWOM and the attitude of individuals to share their experience. In other words, the more a person believes that WOM is useful and easy to be generated, the more he/she will be inclined to engage in it, while those who perceive WOM as useless and difficult will probably be less inclined to engage in it. Even Liang et al. (2013) emphasize "altruism" as an important driver in the tourism market and, in particular, in the online communities' context, by underlying that individuals are more likely to generate eWOM when they perceive it as something that may effectively help the decision-making process of other people within the community. Another analysis on online communities is offered by Casalo et al. (2011), who define the perceived utility of a community as deriving from the degree to which the membership of that community may bring benefits to other members. In other words, given that being part of a community also means being active participants, individuals generate eWOM in an attempt to increase their sense of belonging and the benefits they may get from their membership. More recently, to conclude, Amatulli et al. (2019) have studied reviewers' expertise and quality of the hotel as possible predictors of the negativity of TripAdvisor reviews in the hospitality sector. These authors have found that the content on reviews is more intensively negative when reviewers are lowly rather than highly expert, but this effect is manifested only when the hotel is of high quality. This result might be interpreted arguing that expert reviewers do not want share their own negative experience with high-quality hotels in order to somehow maintain their status as "good choosers".

# **Sharing Economy Services**

The sharing economy is undoubtedly an innovative and revolutionary phenomenon that has taken place at the beginning of the 21st century and involves a large number of actors, including investors, researchers, companies and policy-makers. The relevance of the phenomenon was emphasized by the Time in 2011, when the sharing economy (named "collaborative consumption") was mentioned among "the 10 ideas that will change the world". Even scholars started discussing sharing economy and considering it as a revolutionary phenomenon potentially able to revolutionize sectors and markets when it was still

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almost an unknown phenomenon (Botsman & Roger, 2010). Sharing economy companies are heavily modifying some aspects of our daily life and our consumption habits. While it is true that many companies whose business models are grounded on sharing economy employ thousands of people and generate huge profits, it is also true that companies may fail when they are not able to manage sharing economy business models effectively. The multitude of stakeholders involved in sharing economy makes it difficult to come up with an objectively positive or a negative opinion about it. Indeed, while on the one hand there are a multitude of users satisfied by sharing economy innovations, because they see they can access new services or pay lower prices, on the other hand there are companies that may suffer lower sales and declining markets due to their inability to make consumers perceive value in their offerings.

# Overview and Definition of Sharing Economy

The term sharing economy highlights only one of the main aspects of the phenomenon: the sharing of goods or services among between individuals. Importantly, sharing a product typically refers to a mutual exchange between individuals who have a connection, such as neighbours, family members or friends. In the case of sharing economy, however, the concept of sharing has evolved, referring to a profitable business model. In order to understand the difference between the two types of sharing, it is necessary to underline a difference: The first form of sharing often involves a change in terms of ownership referred to the object of the sharing, even when there is no money involved (e.g., a gift), while the second form of sharing refer to an individual who has temporary access to a product or service. In the latter case, the presence of a monetary exchange is also considered, but there is no change in ownership of the asset (Bardhi & Eckhardt, 2012). Sharing economy refers to the second concept of sharing, which is based on the theory of access. Indeed, according to this theory, there are a series of economic processes that enable a subject to use a product without involving changes in terms of property rights (Ribot & Peluso, 2003). In other words, access is based on the opportunity that a person may have to receive benefits from a product or service, while possession refers to the right that a person may have to use something or to benefit from it. These theoretical clarifications allow us to draw boundaries around the sharing economy phenomenon. We are not just talking about a voluntary and free practice that takes place between individuals but also about an economic mechanism that involves the sharing of a product, typically with the payment of a fee involved.

A general and complete picture of the socio-economic drivers that led to the emergence of the sharing economy, and to its global acknowledgement, is given by Böckmann (2013) who has divided the drivers into two macro categories:

- 1. **Social Drivers:** a) Increasing population density: the high rate of population density has increased the level of sharing between subjects. The areas in which there is a greater population density are those where there is a higher level of supply and demand and where, consequently, it is easier to find a match between the two (Kriston et al. 2010); b) Greater interest in sustainability: greater awareness of the environmental impact of our consumption has led to a greater sense of responsibility towards the environment (Porter & Kramer, 2011); c) Generational altruism The sharing economy works due to a new social norm, the one according to which the communities work together to ensure sustainable development.
- 2. **Economic Drivers:** a) Monetization of unused excesses or objects: unused resources can be shared and may generate money (Botsman & Rogers, 2011); b) Greater financial flexibility: globalization

and new forms of communication have allowed people to understand the synergy between earning private properties and the independence of non-ownership. In other words, those who own can earn from their assets while those who do not own may have certain flexibility and can invest money differently, in different products (Chui et al., 2012); c) Access to property: premium or luxury goods become accessible for new segments of consumers.

Nowadays, while most scholars agree on the drivers behind the sharing economy, there is still disagreement and confusion about the name and the definition of this phenomenon. A common definition is "peer economy", that underlines dynamics among "equal" individuals, without the presence of intermediaries; a person-to-person market, in which there is a sort of facilitation of sharing and the direct trade of assets based on trust among individuals. This definition is important because it underlines the centrality of trust among users and the facilitation of asset sharing, carried out by the peer economy platforms. Although the definition of peer economy emphasizes the importance of the phenomenon, literature also uses the term "collaborative consumption". Indeed, Möhlmann (2015), based on previous definitions, tries to offer a general idea of the phenomenon by defining collaborative consumption considering its relationship with the concept of peer economy; collaborative consumption, therefore, takes place within an organized system or a network, in which participants (peers) are involved into sharing activities in the form of rent, credit, transaction, barter or exchange of goods and services.

# Sharing Economy and Tourism 2.0

Among the sectors that have been most strongly pervaded by the sharing economy business model, tourism is certainly one of these. This sector, indeed, has been influenced by the sharing economy in different ways; for instance, on the basis of the access theory, it has triggered a change of the paradigms regarding the supply side of tourism, with the birth of new forms of receptive structures, managed by "peers" rather than entrepreneurs.

Interestingly, considering that the main fields of the sharing economy can be traced back to four macro-categories (i.e., recirculation of assets, greater exploitation of durable assets, exchange of services and sharing of productive assets) (Schor, 2014), the relationship between Tourism 2.0 and sharing economy is mainly shaped in the context of one of such macro-categories, that is the greater exploitation of durable assets. Indeed, there are many assets that are not exploited to their full capacity by individuals who own them, because of lack of opportunities or lack of time (Botsman & Roger, 2010). Such assets are, therefore, underexploited and the sharing economy model offers the possibility to maximize their use through their sharing. In most of the cases, from the owner's point of view, the sharing economy represents a chance to reassess investments, while, from the demand point of view, the sharing economy makes customers more satisfied because of the easy access and the low costs. As a consequence, most of the companies working in the tourism sector belong to this category. The Airbnb platform, for instance, may represent the "best in class", as it allows individuals who own a property (a home, an apartment or a room) to rent it to other peers at prices that are usually more competitive than those of traditional hotels.

# **EMPIRICAL STUDY**

The objective of our empirical analysis was to shed light on the drivers behind comments shared online regarding a traditional online service business versus the drivers behind comments shared online regarding a company operating in a sharing economy business. Specifically, we conducted an experimental study in the hospitality context. In the case of traditional online service the test company considered is Booking.com while in the case of sharing economy business the test company considered is Airbnb. In particular, we have empirically investigated the role of key motivational drivers affecting consumers' decision to share comments about the two types of businesses tested, such as customer satisfaction, altruism and self-esteem.

More in detail, as regards the choice of the drivers we decided to focus on, among all the possible drivers, those that have been analysed have been chosen on the basis of two criteria: the general importance in the relevant literature and the relative importance in the tourism sector. The first criterion is based, therefore, on the amount of scholars who have, in general, investigated the drivers, while the second criterion is based on the specific literature on tourism. According to such criteria, the selected and analysed drivers are: *satisfaction*, *altruism* and *self-esteem*. Therefore, a descriptive research model was used to investigate the relationships between those drivers (which, therefore, acted as independent variables) and the intention to generate WOM (which acted as dependent variable). The type of business (traditional vs. sharing economy) represented our moderator.

Data were collected through a questionnaire (made up of 14 questions in total) where the sharing economy model and the classic model where manipulated and randomized between subjects. In other words, each respondent was randomly exposed to a scenario describing either a traditional or a sharing economy business. Specifically, the sharing economy model was manipulated considering the Airbnb platform while the classic model was manipulated considering the Booking.com platform. In particular, in both cases after an overview of the brand, each respondent was asked to think about an experience he or she had (or an experience he or she had been told by family or friends) booking on AirBnb or on Booking.com., and then to answer the questions that followed. The questionnaire was completed by a sample of 210 participants (52% females and 48% males) recruited online. More specifically, 105 respondents were randomly exposed to the traditional economy experimental condition (52 males and 48 females) and 105 respondents were randomly exposed to the sharing economy experimental condition (49 male and 51 female). For both cases there were no respondents younger than 18, while the majority of respondents was aged between 26 and 35. Participants' satisfaction, altruism and self-esteem have been measures through three-item Likert scales(1 = strongly agree, 5 = strongly disagree) ad hoc generated... Since Cronbach α values for all the three focal variables resulted greater .70, we averaged responses to form indices of each of the such three variables. Finally, respondents reported their willingness to share with others information regarding the company and the experience they had, through a Likert scale question (1 = not willing at all, 5 = very willing).

In order to evaluate whether the variables "satisfaction", "altruism" and "self-esteem" significantly influences eWOM in the sharing economy context, a linear regression analysis was conducted (p < .001, R-squared = .45). In the sharing economy condition, results revealed a significant effect of altruism (b = .43, p < .001) and satisfaction (b = .40, p < .001) on eWOM, but a non-significant effect of self-esteem (b = .08, p = .15). Thus, in the case of sharing economy, when the level of "altruism" and "satisfaction" increases also individuals' intention to generate eWOM increases. The same was found in classic economy condition; results of the linear regression (p < .001, R-squared = .44). revealed a significant effect of

altruism (b = .51, p < 0.001) and satisfaction (b = .30, p < 0.01) on eWOM, but a non-significant effect of self-esteem (b = .19, p = 0.78). Thus, findings underline that "altruism" and "satisfaction" can be considered relevant drivers of eWOM in both cases, that is both when the online tourism-related service platform is represented by a company based on sharing economy (i.e., Airbnb) and when the online tourism-based service platform is represented by a company based on classic economy (i.e., Booking. com). However, we conducted other analyses in order to investigate whether the two relevant drivers (i.e., altruism and satisfaction) were differentially influential in the two experimental contexts. Thus, some t-tests were performed revealing a significant (p < 0.01) difference between the level of altruism as a driver in the context of classic economy. Thus, the influence of altruism on eWOM in the case of sharing economy is significantly greater than in the case of classic economy. Differently, non-significant differences were found for satisfaction across the two scenarios (p = 0.08).

# **CONCLUSIONS**

The first part of the chapter underlined the theoretical background of this research by emphasizing the main academic studies related to the relevant topics. Specifically, the main literature on the relevance of WOM, on PWOM and NWOM, on the drivers of WOM, on the role of eWOM in general and in the context of tourism as a consequence of the digital revolution, has been discussed. Importantly, the literature background has underlined the role of the sharing economy and the role of eWOM in the context of the Tourism 2.0.

The present chapter outlines how the modern evolution due to the Internet and the digital platforms has emphasized the role of WOM and, therefore of eWOM, in the context of services. In particular, the chapter focuses on the disruptive changes generated by the sharing economy and underlines how such a business model differs from the traditional ones. The main drivers of WOM are discussed and their potential role in the context of online WOM and sharing economy is investigated. Thus, after offering an overview of the literature the chapter focuses on a specific research issue, that is understanding the role of such drivers by considering two different contexts: companies based on the sharing economy and companies based on the traditional economy. An experimental study has been designed and conducted in order to investigate the role of altruism, satisfaction and self-esteem as potential drivers of eWOM regarding traditional and sharing economy companies.

Results of our experiment revealed that altruisms and satisfaction represent important drivers for eWOM in the context of tourism while self-esteem does not play any role in determining eWOM. The fact that self-esteem has proved not to have a significant effect on eWOM might seem surprising in the light of the fact that previous research on traditional, offline WOM had shown a positive effect of it (e.g., De Angelis et al., 2012). One possible explanation for the non-significance of self-esteem on eWOM might be that the identity of eWOM sharers (especially of people sharing information on the specific platforms we tested), unlike WOM sharers, is not clear, and so there is not a clear motivation to use information sharing as a social currency tool aimed at enhancing one's self (De Angelis et al. 2012). Moreover, results emphasize that such evidence is true for both business models, the one based on the sharing economy paradigm and the one based on the traditional economy paradigm. In sum, therefore, in the case of sharing economy, when the level of "altruism" and "satisfaction" increases also individuals' intention to generate eWOM does. The same happens in classic economy condition; altruism and

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satisfaction significantly affect eWOM. In addition, findings show that altruism, compared to satisfaction, is much more important, as a driver of eWOM, in the context of sharing economy.

Such results offer theoretical contribution to the literature on WOM, eWOM, tourism and sharing economy. Important managerial implications may also be identified. For instance, findings suggest that companies involved into the service business should pay more attention to consumers' altruism and satisfaction than on consumers' self-esteem, in order to improve their digital performance in terms of eWOM. Moreover, results underline that such an implication is of value for all companies, that is for companies which belong to the sharing economy model and for companies which belong to the traditional economic model. Importantly, results also suggest companies that belong to the sharing economy model to focus much more on consumers' altruism than on their satisfaction as a potential driver to consider in order to develop strategies aimed at improving eWOM.

This research is certainly affected by some limitations, which may represent relevant stimuli for future research. For instance, this chapter does not consider cultural orientation of consumers, that may influence the role of the observed drivers. Moreover, we operationalized the type of business model (sharing economy vs. traditional economy) through Booking.com and Airbnb, but we did not control for consumers familiarity with such brands and we did not replicated our design with alternative platforms.

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#### **KEY TERMS AND DEFINITIONS**

**Altruism:** Individual's desire to help others, for instance by sharing a comment about a personal experience about a product, service or brand that might be of interest of those others.

**Customer Satisfaction:** A general consumers' assessment about their experience with a product, service or brand that typically encompasses different dimensions of the experience itself.

**Self-Esteem:** An individual's own perception about his or her self-worth.

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**Sharing Economy:** An economic system, enabled by the Web 2.0, based on assets' sharing among peers.

**Tourism 2.0:** a new ecosystem of digital players in the tourism industry built on the real-time exchange of information among users.

**User-Generated Content:** any type of content created and shared by users on digital and social media platforms.

**Word-of-Mouth:** Informal communications about products, brands or services that occur between two or more persons who have no vested interested in those products, brands, or services.

# Chapter 12 Are Online Reviews Helpful for Consumers? Big Data Evidence From Services Industry

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#### **ABSTRACT**

This chapter explores the elements influencing online reviews' usefulness by focusing on the language that consumers use when writing online reviews and on reviewers' attributes. By using text mining tools, the authors investigate how reviews' language affects their usefulness perception (i.e., the number of times readers have marked them as useful). The dataset consists of more than 54,000 online reviews from the most frequently used e-WOM source currently available and covers the period 2005-2017. The results suggest that word count and some of reviews' linguistic features (e.g., the subjectivity score, authenticity score) influence their usefulness perception. Reviewers' attributes (i.e., their number of reviews, age, class, and gender) also affect their reviews' perceived usefulness. The chapter concludes by describing the study results' implications for theory development, for empirical research, and for managerial practice.

#### INTRODUCTION

The advent of online communication channels, such as web-based opinion platforms, has led to marketers increasingly focusing their attention on electronic word of mouth (eWOM) (e.g. Liu et al. 2018, Roy et al. 2018, Chevalier & Mayzlin, 2006; Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004). eWOM has been defined as "any positive or negative statement made by potential, actual or former customers about

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a product or company [...] made available to a multitude of people and institutions via the internet" (Hennig-Thurau et al., 2004, p. 39). Filieri and McLaey (2014) suggested that, given that reviews consist of "comments published by travelers on the tourism products, services and brands they experience" (p. 1), online reviews are an example of eWOM.

It is difficult to evaluate the products and services within the tourism and hospitality domain, because they are mainly intangible goods. Consequently, consumers' online reviews play a critical role (Del Chiappa et al., 2018, Schuckert et al., 2015; Liu and Park, 2015) and have important consequences from a managerial viewpoint. When communicating the company's products and services, customers become "objective voices" (Vermeulen and Seegers, 2009), with more than 75% of consumers taking peer reviews into account when planning a holiday (Xie et al., 2014). Peers' feedbacks are, in fact, perceived as more trustworthy and credible than company-generated information (Filieri et al., 2015; Park, Lee and Han, 2007), which is one of the major reasons why potential customers read online reviews to inform their decision-making processes (Zhu & Zhang, 2010).

Reviews' usefulness can facilitate consumers' decision-making and is therefore important (Lee, 2013). This metric, which is available on the majority of online platforms such as Tripadvisor, suggests how many times others have marked a review as useful. Previous research has investigated the determinants of usefulness by focusing, for instance, on the score rating, the reviewer's background, and the service providers' response (Filieri et al., 2018).

Nevertheless, which of reviews' linguistic attributes stimulate consumers to mark them as useful? And, is there a connection between the language used in the reviews and their usefulness perception?

We analyze a sample of Tripadvisor reviews by means of automated text analysis and linguistic analysis to answer these questions. Identifying the factors affecting perceived usefulness – measured as the number of helpful votes that a review received – is indeed crucial in the tourism and hospitality domain, as well as in marketing. These votes allow online platforms to provide travelers and consumers with greater value and to assist their decision-making processes (Sussman & Siegal, 2003).

#### THEORETICAL BACKGROUND

## Online Reviews' Usefulness in the Hospitality Industry

Previous research has pointed out that online reviews' effective management improves room occupancy (De Pelsmacker et al., 2018), online booking transactions' average value (Torres et al., 2015), and consumers' willingness to pay (Nieto-Garcia et al., 2017). Interestingly, Anderson (2012) maintains that a mere 1% increase in a hotel's online reputation score could lead to a 0.89% increase in its prices, 0.54% increase in its room occupancy, and 1.42% in its revenue per available room (RevPar).

However, although online reviews are considered more useful overall than company-generated contents (Filieri et al., 2015), not all reviews are deemed useful. Previous research has noted that useful reviews increase e-retailers' sales (Ghose and Ipeirotis 2011), drive consumers' purchase intentions (Filieri, 2015), and their willingness to book a hotel room (Zhao et al., 2015). Consequently, several tourism scholars focused on the factors affecting reviews' usefulness (Filieri, 2015; Fang et al., 2016; Kwok and Xie, 2016; Liu and Park, 2015; Park and Nicolau, 2015). Researchers have specifically investigated the determinants of usefulness, focusing on i) the review attributes (Fang et al., 2016; Liu and Park, 2015), ii) the score rating (Filieri, 2015; Fang et al., 2016), iii) the reviewer's background (Gretzel and Yoo,

2008; Kwok and Xie, 2016; Racherla and Friske, 2012), and on iv) the service providers' response (Kwok and Xie, 2016).

Beside the reviews' attributes, the source's trustworthiness (Ayeh et al., 2013) and credibility (Filieri, 2015) have also been considered as important factors. Where user-generated contents are posted affects their credibility (Yoo et al., 2009). According to Munar and Jobsen (2013), review sites such as TripAdvisor achieve the highest level of trust, followed by social networks.

Scholars have maintained that reviews' score rating is one of the main features affecting their perceived usefulness (Filieri et al., 2018; Filieri, 2015; Fang et al., 2016). Negative reviews convey more informative value for tourists (Xie et al., 2011; Bronner and De Hoog, 2011), with extremely negative reviews reported to be more diagnostic and influential for future consumers' decisions (Filieri et al., 2018), despite these reviews' significant differences across product categories (Mudambi and Schuff, 2010) and services (Park and Nicolau, 2015). In addition, consumers perceive extremely negative reviews as more useful, mainly due to online review platforms being mostly positively biased (Fradkin et al., 2018; Resnick et al., 2006) and showing a J-shaped distribution (Hu, et al., 2009; Feng et al., 2012; Zervas et al., 2017).

In respect of reviewers' background, the identity disclosure concept emerged in the literature, showing that a reviewer's identity can lead to confidence developing in a specific reviewer's information. Racherla and Friske (2012), for instance, find that a reviewer's reputation and expertise significantly affect the usefulness of this reviewer's reviews.

Hotel managers too play an important role in determining reviews' usefulness level. Kwok and Xie (2016) found that managers' responses to online reviews affect their perceived usefulness positively. Consequently, answering a review strategically increases its usefulness (Liu and Park, 2015) and leads to higher booking intentions (Zhao et al., 2015).

While online reviews' quantitative characteristics (i.e. the score) may partially explain their effectiveness, a mixed approach that also combined their qualitative/textual elements is better for assessing their usefulness (Mudambi and Schuff, 2010; Van der Heijden, 2003). This combined approach is better, because consumers concentrate on different review attributes and dimensions, depending on the stage of their decision-making process. According to Baek et al. (2012) consumers focus on reviews' peripheral cues (i.e. the score, ranking) during their first information seeking, and shift to central information processing (i.e. the review length, review content) when comparing alternatives.

# **Linguistic Analysis of Online Reviews**

Online reviews' content reflects customers' consumption experience and perceptions in more detail than customer ratings do (Xu and Li, 2016). The text-based analysis of consumer reviews has therefore attracted considerable attention in the recent marketing literature (e.g. Berger et al., 2010, Ludwig et al., 2013; Villarroel et al., 2017, van Laer et al. 2018). Specifically, beside the actual review content (i.e. the topics), the subconscious choices regarding the grammar use will reveal more than the content can (Crilly et al., 2016; Ludwig et al., 2013; Tenbrink & Freksa, 2009). In particular, actors cannot consciously manipulate the way they express the content of reviews, which means a cognitive-linguistic perspective helps better identify the relationships between writers' adopted the language style and their mental representations (Hart, 2014). Consequence, although actors may control the communication content, from a linguistic point of view, the differences in how they write may—more subtly—manifest their distinct cognitive processes (Crilly et al., 2016; Ireland & Pennebaker, 2010).

Previous research has, for instance, emphasized that customers tend to use more words to express their dissatisfaction with and anger about a product or service (Berezina et al. 2016). In addition, researchers have investigated certain linguistic attributes to understand how they influence customer ratings. For instance, in their study, Zhao et al. (2019) find that reviews' textual diversity and sentiment polarity affect ratings positively, while their subjectivity, readability, and length influence them negatively.

#### DESIGN/METHODOLOGY/APPROACH

#### **Data**

Using data crawling, we collected data from one of the main review platforms. Our overall dataset consists of 196,813 TripAdvisor<sup>1</sup> reviews of Amsterdam hotels from 2005 to 2017. We chose Amsterdam, because it is one of the top European destinations (GDCI, 2017). This study considers the total number of Amsterdam hotels available on the TripAdvisor platform. We then excluded records with incomplete information, yielding a final Amsterdam hotel sample of 54,848 online reviews.

The dataset includes three groups of variables, i) the hotel details (hotel name, hotel chain), ii) the reviewer details (name, age, gender, country, travelled for business or leisure), as well as iii) the review indicators (score, number of helpful votes) and the review's entire text content.

# Methodology

We analyzed the consumers' reviews by means of two software packages: 1) the Linguistic Inquiry Word Count software (Pennebaker et al., 2007), which several scholars in academic fields ranging from psychology (e.g. Bazarova et al., 2013, Boyd and Pennebaker, 2017) to marketing (e.g. Cruz et al., 2017; Hewett et al., 2016) and consumer behavior (e.g. Humphreys & Thomson, 2014; Humphreys & Wang, 2017) have used; and 2) R, which performs a sentiment analysis of textual contents. First, we analyzed the reviews content by using four LIWC 'summary variables' that reflect the psychological constructs (i.e. the analytical thinking, clout, authenticity, and emotional tone) already used in previous studies (Akpinar et al. 2018, Hwong et al. 2017, Yoon et al. 2018, Margolin and Markowitz 2018, Parkinson et al. 2017):

- Authenticity. A high score for this variable means that the writers reveal themselves as authentic or honest and that they are more personal, humble, and vulnerable, while a low score means they are "distanced from discourse." Newman et al. (2003) suggest that "three language dimensions should be associated with deception: a) fewer self-references; b) more negative emotion words; c) fewer markers of cognitive complexity."
- Analytical thinking (Analytic). The analytical thinking variable captures the degree to which
  people use words that suggest formal, logical, and hierarchical thinking patterns. People low in
  analytical thinking tend use a more narrative and informal language when writing and thinking,
  focusing on the here-and-now and personal experiences (Pennebaker, Chung, Frazee, Lavergne,
  & Beaver, 2014).

Second, we used R software to compute the following variables for each review:

- The **subjectivity score** ranges from 0 to 1, with a higher value indicating a more subjective text. A lower subjectivity value indicates that writers use more objective words to describe the products and services, instead of revealing their emotions when evaluating these (Giatsoglou et al., 2017; Saif et al., 2016).
- The **polarity score** is a continuous variable ranging from −1 to 1. A larger polarity score indicates a more positive text sentiment (emotion), with 1 showing extremely positive sentiment, such as excitement and delight, and −1 showing extremely negative sentiment, such as frustration and anger. Researchers introduced and discussed both subjectivity and polarity measurements as part of sentiment analysis in previous studies (e.g., Cho et al., 2014; Deng et al., 2017; Giatsoglou et al., 2017; Saif et al., 2016).
- **Diversity** refers to a review's lexical diversity and ranges from 0 to 1, based on a linguistic metrics measurement calculated as the ratio of unique words to the total number of words in the text (Lahuerta-Otero and Cordero-Gutiérrez, 2016; Zhang et al., 2016a). A higher value suggests fewer redundant words and more lexical diversity in a review.

#### **FINDINGS**

The sample comprises 54,848 reviews, ranging from 1 to 5 in terms of rating and an average score of 4.06. Table 1 provides the reviews' distribution according to each score class.

More than 77% of online reviewers rated their travel experience as "excellent" or "very good" (a rating of respectively 5 and 4). As the table shows, and in line with the literature on positively biased platforms (e.g. Zervas et al., 2017; Feng et al., 2012), the distribution of our sample reviews presents the characteristic J-shape trend.

The number of helpful votes a review received was used to measure our dependent variable (usefulness). This measure reflects the cumulative number of times other community members marked each review as helpful. We subsequently weighted it according to the review's age (the number of votes / number of years the review had been available online). This was required to compare the usefulness of reviews published in different years. Table 2 presents our sample reviewers' descriptive statistics (age, gender, trip purpose, origin, and whether an English native speaker) and the reviews' usefulness, the reviewer's characteristics influence. Regarding age, the most useful reviews are the ones that older travelers wrote — the older the reviewer, the greater the review's perceived usefulness. In terms of gender, the perceived usefulness of women's reviews is significantly lower than those of the men (10.92 vs. 16.19).

Table 1. Amsterdam TripAdvisor online reviews

Rating	N° of Reviews	%
1	1717	3.10%
2	2444	4.50%
3	8214	15.00%
4	20876	38.10%
5	21597	39.40%
Total	54848	100.00%

#### Are Online Reviews Helpful for Consumers?

Table 2. Reviewers' attributes and reviews' usefulness

			Usefulness (Mean)			
		N	HV	Std. Dev	Anova	
	-24	3452	6.02	11.99	F = 261.544	
	25-34	14644	9.38	18.15	p < 0.001	
	35-39	19299	13.84	26.22		
Age	50-64	14062	18.77	44.19		
	65+	3391	19.55	34.16		
	Total	54848	13.78	30.48		
	Man	29707	16.19	36.94	F = 411.10	
Gender	Woman	25141	10.92	19.98	p < 0.001	
	Total	54848	13.78	30.48		
	As a couple	26127	13.17	25.89	F=76.64	
	On business	8472	18.31	48.04	p < 0.001	
T-:	Solo	4085	15.50	32.20		
Trip purpose	With family	6209	13.74	27.57		
	With friends	9955	10.82	21.62		
	Total	54848	13.78	30.48		
	Africa	620	11.24	28.20	F = 16.39	
	Asia	4262	13.46	26.05	p < 0.001	
	Europe	34181	13.07	31.41		
Reviewer's origin	Cen/South America	913	12.79	19.47		
g	North America	11770	15.81	30.25		
	Oceania	3102	15.07	29.31		
	Total	54848	13.78	30.48		
	No	15056	14.39	39.19	F = 8.47	
English native speaker	Yes	39792	13.54	26.44	p < 0.001	
speaker	Total	54848	13.78	30.48		

Significant differences are also evident in terms of the reasons for travel. The most useful reviews are those that business travelers (18.31) or those traveling alone (15.50) post. Conversely, the general perceived usefulness of reviews posted after the writers had traveled with friends is the lowest (10.82).

When examining reviewer's place of origin, the most useful reviews are those by North American travelers (15.81), followed by travelers from Oceania (15.07). Reviews posted by African travelers are perceived as less useful (11.24). We subsequently controlled for reviewers' native language, as we had only chosen reviews written in English. The difference between the perceived usefulness of native and non-native English speakers' reviews is significant, but small.

We then analyzed the distribution of online reviews in terms of helpful votes per score-rating class (Figure 1).

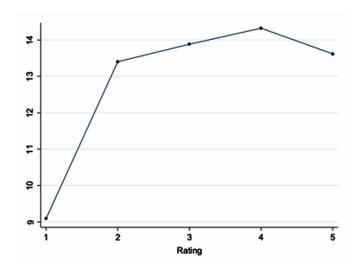


Figure 1. Helpful votes per score rating

According to our results, the perceived usefulness (yearly average helpful votes) shifts from lower ratings to higher ones, and decreases from a rating of 4 to one of 5. Part of the field's literature that considers extremely negative reviews the most influential and diagnostic does not support this contradictory finding (Filieri et al., 2018).

In order to check for differences between independent hotels and hotels belonging to international chains, we aggregated our data by selecting the top international global hotel chains according to Forbes's (2018) ranking of the World's Largest Public Companies. Table 3 shows the results.

We find significant differences in terms of reviews' perceived usefulness when comparing top hotel chains with independent (no-chain) hotels. According to TripAdvisor members, hotel chain reviews are, on average, specifically perceived as more useful (17.28) than those of independent hotels (12.28).

We thereafter focused our attention on the linguistic analysis of reviews' content by running LIWC. Table 4 shows the results in terms of each considered dimension's distribution.

It is interesting to observe that the word count, analytical content, and the authentic content move across the different reviewers' age clusters. As shown in Table 4, on average, younger reviewers (-24) tend to write more when posting a review. Overall, the relationship between reviewers' age and the reviews' length (i.e. word count) shows a negative trend, meaning that the younger the reviewer, the longer the

*Box 1.* 

F = 12.087 (p < 0.001)		Post-hoc Tests (LSD)				
		1	2	3	4	5
	1					
	2	*				
	3	*				
	4	*				
	5	*			*	

# Are Online Reviews Helpful for Consumers?

Table 3. Helpful votes per independent and chain hotels

Chain	N	HV	Std. Dev.
No-chain	38493	12.28	27.66
Chain	16355	17.28	36.00
Total	54848	13.77	30.48

F = 310.92; p < 0.001

Table 4. Text summary dimensions by means of LIWC: Descriptive statistics

			Mean Values			Anova			
		N	Word Count	Analytic	Authentic	Word Count	Analytic	Authentic	
	-24	3452	163.700	68.083	58.330	F = 43.340	F = 342.766	F = 97.250	
	25-34	14644	154.089	71.509	59.291	p < 0.001	p < 0.001	p < 0.001	
Age	35-39	19299	146.494	74.724	57.747				
	50-64	14062	142.068	77.030	54.735				
	65+	3391	135.928	80.146	52.068				
	Total	54848	147.817	74.374	57.073				
	Man	29707	140.600	76.573	58.005	F = 241.61	F = 903.78	F = 87.87	
Gender	Woman	25141	156.343	71.776	55.971	p < 0.001	p < 0.001	p < 0.001	
	Total	54848	147.817	74.374	57.073				
	As a couple	26127	155.484	74.457	55.103	F = 99.37	F = 44.26	F = 272.49	
	On business	8472	127.706	75.734	60.775	p < 0.001	p < 0.001	p < 0.001	
Trip purpose	Solo	4085	155.173	73.944	66.844				
	With family	6209	147.707	75.548	53.520				
	With friends	9955	141.859	72.445	57.299				
	Total	54848	147.817	74.374	57.073				
	Africa	620	117.037	75.236	56.473	F = 84.12	F = 18.48	F = 10.69	
	Asia	4262	127.389	74.860	57.853	p < 0.001	p < 0.001	p < 0.001	
	Europe	34181	149.768	73.868	56.760				
Reviewer's origin	Cen/Sou America	913	105.670	72.385	52.566				
origin	North America	11770	157.911	75.558	57.920				
	Oceania	3102	134.635	75.205	57.679				
	Total	54848	147.817	74.374	57.073				
	No	15056	123.037	74.650	57.148	F = 923.55	F = 4.47	F = 0.18	
English native speaker	Yes	39792	157.192	74.270	57.044	p < 0.001	p = 0.0345	p = 0.6677	
	Total	54848	147.817	74.374	57.073				

review's text. The literature has shown that the review length has a positive impact on its usefulness (Baek et al., 2012; Mudambi and Schuff, 2010; Pan and Zhang, 2011), although lengthy reviews may not be perceived as useful (Filieri et al., 2018). As shown in our previous section, we find that the reviewer age is nevertheless positively related to the number of helpful votes (see Table 2). This controversial finding should be further investigated to find a possible explanation by examining the semantic text content. According to Filieri (2015), consumers may indeed perceive longer reviews as more trustworthy, but only when they provide more information and more details about the service.

Furthermore, the review length differs significantly between the reviews of consumers with different travel purposes. Those traveling alone and couples post the longest reviews, while, on average, business travelers write the most concise reviews. This is also partially in contrast with the literature, as we find that travelers who are "on business" write the most useful reviews (see Table 2).

When examining the analytical thinking and authentic content, we find that they follow different trends when aggregated according to the reviewer age class. Specifically, while the analytical content is positively related to the age, the authentic content is not, showing a negatively trend (with the exception of the 25-34 age class). When aggregated according to the travel purposes, the reviews of those traveling alone are revealed as being the most authentic (66.84), while those of business travelers are the most analytic (75.73).

We subsequently analyzed the sentiment textual content by means of R software. Table 5 shows the considered dimensions' descriptive statistics.

The polarity score indicates that reviewers from 35 to 49 (0.426) and those who travel with their family (0.424) tend to embed more positive sentiment in their reviews' text content. The subjectivity score distribution reflects a reverse U-shape when plotted against the age classes, with the 35-49 class achieving the highest value (0.113). Business travelers use the highest level of subjective words in their text (0.117). The diversity score distribution per age class shows a positive relation, meaning that the older reviewers tend to use few redundant words and show more lexical diversity than younger ones. With regard to subjectivity, business travelers again achieve the highest level (0.671).

Thereafter we analyzed how the reviews' attributes and profiles affect their perception of usefulness by using a multiple linear regression model. The results are presented in Table 6.

Despite a low R-squared value (0.381), this exploratory study's regression results provide several interesting points.

First, the number of reviews that a reviewer has written ( $\beta$  = .583, p<.001) is the main element that affects their usefulness. This finding shows that the perceived usefulness of online reviews first depends on the reviewer's background and particularly on his/her expertise and reputation, which is also in line with Racherla and Friske (2012). Other reviewer attributes that affect a review's perceived usefulness positively are the reviewers' age class ( $\beta$  = .079, p<.001) and gender ( $\beta$  = .027, p<.001). Older reviewers' contributions tend to be perceived as more useful, as well as those written by men. However, if the writer is an English native speaker, this affect the review's usefulness negatively ( $\beta$  = -.010, p<.001), which the sample's numerosity of non-native English Europeans and South American travelers might explain.

When examining the review attributes used in the model as independent variables, the findings show that these have an overall lower effect on reviews' usefulness than the reviewers' attributes. However, a review's length (i.e. word count) has the most important effect, affecting its usefulness positively ( $\beta = .083$ , p<.001). Longer reviews are perceived as more useful, which is in line with Baek et al. (2012), Mudambi and Schuff (2010), and Pan and Zhang (2011). On the other hand, when examining reviews'

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Table 5. Sentiment dimensions by means of R: Descriptive statistics

		<b>.</b> Y	Mean Values			Anova			
		N	Polarity	Subjectivity	Diversity	Polarity	Subjectivity	Diversity	
	18-24	3452	0.398	0.111	0.642	ns	F = 72.255	F = 59.445	
	25-34	14644	0.412	0.112	0.649		p < 0.001	p < 0.001	
	35-39	19299	0.426	0.113	0.657				
Age	50-64	14062	0.415	0.108	0.662				
	65+	3391	0.410	0.101	0.667				
	Total	54848	0.413	0.110	0.656				
	Man	29707	0.416	0.113	0.664	F = 4.44	F = 165.31	F = 418.80	
Gender	Woman	25141	0.410	0.108	0.646	p = 0.0351	p < 0.001	p < 0.001	
	Total	54848	0.413	0.110	0.656				
	As a couple	26127	0.416	0.108	0.651	F = 4.83	F = 86.16	F = 83.39	
	On business	8472	0.410	0.117	0.671	p < 0.001	p < 0.001	p < 0.001	
Ti	Solo	4085	0.398	0.112	0.649				
Trip purpose	With family	6209	0.424	0.106	0.654				
	With friends	9955	0.408	0.113	0.661				
	Total	54848	0.413	0.110	0.656				
	Africa	620	0.463	0.110	0.681	F = 14.92	F = 35.80	F = 105.01	
	Asia	4262	0.447	0.114	0.667	p < 0.001	p < 0.001	p < 0.001	
	Europe	34181	0.407	0.111	0.658				
Reviewer's origin	Cen/Sou America	913	0.441	0.122	0.673				
	North America	11770	0.413	0.107	0.640				
	Oceania	3102	0.417	0.107	0.670				
	Total	54848	0.413	0.110	0.656				
	No	15056	0.444	0.116	0.668	F = 165.84	F = 365.98	F = 339.68	
English native speaker	Yes	39792	0.401	0.108	0.651	p < 0.001	p < 0.001	p < 0.001	
~F	Total	54848	0.413	0.110	0.656				

rating, the findings also show that this has a slightly positive effect on their usefulness ( $\beta = .041$ , p<.001), despite this finding being contrary to what the literature field would expect.

Sentiment dimensions related to the review text show different impacts on the review's usefulness. The diversity score ( $\beta = -.011$ , p<.001) and the polarity score ( $\beta = -.011$ , p<.001) show a negative effect. This suggests that reviews with more redundant and similar words, as in the example below, affect consumers negatively when they evaluate these:

Staff very helpful with our baby (baby crib, baby chair, warming the food, ...); Nice garden; Too little room; Too noisy; Nice situation (near museumplein), pretty area

Table 6. Regression

	В	Dev. Std.	Beta	t	P
Constant	484	,050		-9,663	.000
	Reviewe	r			
Number of reviews	.009	.000	.583	165.908	.000
Age class	.110	.005	.079	21.673	.000
Gender (0=female, 1=male)	.076	.010	.027	7.495	.000
English native (0=non-native, 1=native)	032	.011	010	-2,819	.005
	Review	,			
Word count	.170	.008	.083	22.378	.000
Rating	.059	.005	.041	11.442	.000
Subjectivity score (R)	.018	.005	.013	3.594	.000
Diversity score (R)	017	.005	011	-3.359	.001
Polarity score (R)	016	.005	011	-3.100	.002
Authenticity score (LIWC)	.012	.005	.009	2.523	.012

Dependent variable: Annual helpful votes Excluded variables: Analytic score (LIWC)  $R=0.617; R2=0.381; adj \ R2=0.381; dev \ std=1.110$  F=2986.102, P<0.001

Moreover, consumers prefer reviews revealing emotions and that are more subjective regarding the experience ( $\beta = .013$ , p<.001) instead of objective descriptions as in the following example:

Good location, clean & nice room, xxx Hotel is an excellent hotel to me. The staff are very nice and take very good care to me, make me feel like staying at home. I will definitely stay here again!

The authenticity score ( $\beta$  =.009, p<.005) too affect reviews' usefulness positively, even if to a lesser extent. Reviews that provide more self-references and use a more vulnerable and personal language are appreciated. For instance, in the following example, the reviewer provides a very detailed description of his/her experience with a high number of self-references (e.g. I, me, my), therefore providing a more authentic description rather than a deceptive one.

So their room was quite spacious and unique. I had never been in a room designed in such a way. To be quite honest I did not like the color scheme of my room which was red and black but there where no real complaints regarding the room. The service was top-notch at check in and out but unexpected. They checked me in giving me a map of the city (not even normal hotel chains where doing this for me on my European trip) and on the way out they offered to store my bag until I was finished exploring the city. Both very nice gestures and unexpected. They are located just behind China town and less than 5 minutes walk from everything in the core like the Red-Light District, Dam Square and Central Rail Station.

#### DISCUSSION AND FUTURE RESEARCH

This chapter aims to offer theoretical and practical contributions for managers and review platforms. From a theoretical point of view, this chapter is an example of applying a text mining tool to eWOM in the tourism industry; it aims to provide more insights into online reviews' linguistic attributes and into how the latter contribute to their usefulness.

Our study provides businesses with insights into how to manage consumers' reviews effectively. In particular, businesses should not take only ratings into account, but focus their attention on the other factors predicting consumers' eWOM behaviors. One of the most important elements is a review's perceived usefulness – measured as the weighted number of positive votes— which helps a company's decision processes regarding maintaining or developing a new product and its service development. Understanding the factors that influence the evaluation of a review as helpful is an important, but relatively understudied, marketing topic.

From a managerial standpoint, this research offers managers the following actionable levers:

First, the number of reviews is a main indicator affecting the travel community members' perception of a review's usefulness. Consequently, hotels and review platforms should encourage travelers to post reviews, as this would increase their general usefulness. Moreover, marketers should categorize reviewers according to their probability of generating useful reviews and should focus on the crucial categories of reviewers. According to other travelers, older reviewers' (over 50) contributions are more helpful than those of younger ones, although the former are much lower in term of numerosity.

Second, our study has confirmed that word count is another crucial aspect positively related to reviews' perceived usefulness. Hotels should therefore encourage customers to increase the level of details they provide in their reviews. However, a review's optimal length needs to be further investigated, as consumers may perceive reviews that are too long as being less useful (Filieri et al., 2018). This point will be considered in our future research.

Third, the subjective and authentic content of reviews' text has a positive impact on their perceived usefulness. Marketers should therefore educate reviewers by instructing them on how to provide travelers with more helpful reviews by, for instance, highlighting examples of authentic and subjective reviews on their website.

Fourth, both reviews' polarity and diversity scores affect their usefulness slightly and negatively. Review platforms should take this affect into consideration, in order to increase reviews' overall usefulness for travelers. Marketers could enhance their control of the language that reviewers use by, for example, discouraging them from using terms that are too negative and repetitive. In this sense, a reviews' content certification process should be considered.

The association between reviews' rating and their usefulness is more controversial. While the main-stream literature tends to indicate that negative reviews are the most useful, our model shows that ratings have a positive impact — but a very slight one — on reviews' perceived usefulness. Our future research will also investigate this point in more detail by controlling for other elements that could possibly moderate this relationship.

Despite this exploratory study's theoretical and managerial contributions, it has some limitations. The main limitations are our single data source (TripAdvisor) and our single analysis context (Amsterdam). Our future studies will examine data from different review platforms and analyze different contexts. Future studies could also test for causal relationships, examining the attributes that affect reviews' usefulness to test whether marketers could use them as predictors of usefulness.

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#### **KEY TERMS AND DEFINITIONS**

**Automated Text Analysis:** Research method that analyses texts by means of software (e.g., LIWC). **eWOM:** Electronic version of traditional word of mouth.

**Linguistic-Cognitive Analysis:** Analysis of grammar choices in texts which can reveal something about the author than the content itself.

**Online Reviews:** A review of a product or service made by a consumer who has experienced a service or purchased a product.

**Online Reviews Platforms:** Website which collects online reviews. The most famous in the hospitality industry is Tripadvisor.

**Sentiment Analysis:** Process of categorizing opinions expressed in text in order to understand consumers' attitudes toward a topic.

**Usefulness:** Number of helpful votes of a review.

#### **ENDNOTE**

According to Ma et al. (2018) and Mkono & Tribe (2017) TripAdvisor is the most used eWOM source currently available.

# Chapter 13 The Role of the Electronic Word-of-Mouth in the Hotel Industry

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#### **ABSTRACT**

In the digital age, electronic word-of-mouth plays a role extremely important for the hospitality industry. Due to the intangibility of the tourism product, travelers need to seek information in order to reduce the perceived risk. They usually compare different options and search for accurate and reliable information to make choices, such as user-generated contents. Moreover, tourists pay much more attention to digital platforms that foster interaction and information exchange between users. This study aims to investigate, through an online questionnaire, the managerial behavior of 103 hotels of the province of Rimini towards the electronic word-of-mouth phenomenon. The findings highlight the proactive attitude of hotels towards the phenomenon, to increase the booking and to improve the service quality. The study conducted provides hints of originality because it filled some gaps emerging in the literature regarding the dealing with responses, the stimulation of generating comments, and the impact of online reviews on hotel performance.

#### INTRODUCTION

With the spread of internet communications and the emergence of web 2.0, there has been a new revolution in the tourism sector, especially in the hotel sector. Today more than ever, the attractiveness and competitiveness of accommodation facilities depend on their presence and visibility on the internet, as well as the communication and management of bookings depend on the use of tools that are always up-to-date.

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E-Tourism<sup>1</sup> has introduced new ways of planning and organizing travels, starting from the very first phase of searching for information, modifying the process of purchasing tourist services and resulting in the opportunity offered to travellers to significantly increase the "tourism to make you". The changes have concerned both the supply side and the demand side, the latter ever more eager to live tourist experiences, giving rise to new scenarios and perspectives.

Digital travelers primarily go online to search for information because most of them believe that it is where they will find the best prices (Law et al., 2014). People find reviews and opinions posted by other users, as well as content generated on social media platforms, to be especially useful. Travelers consider this information to be reliable and helpful to them in the process of choosing a product with a good quality-to-price ratio and to avoid making a poor decision.

The EWOM<sup>2</sup> represent another facet of the increasing virtual presence of hospitality which has seen developments in areas such as network hospitality (Molz, 2012) and virtual tourism (Tavakoli & Mura, 2015).

The electronic word-of-mouth (EWOM) has attracted significant attention as an important influencer of consumer behaviour and is 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 (Henning et al., 2004).

This study aims to investigate the hotels managerial behavior towards the electronic word-of-mouth. Based on this objective, we ask the following research question:

**RQ1:** What is the value assigned to EWOM by hoteliers?

**RQ2:** How hotels manage online reviews?

To answer these research questions, we carried out the analysis of the literature of the EWOM and the online reviews (paragraph 2).

The paragraph 3 shows the empirical survey conducted sending of a questionnaire addressed to 900 hotels in the province of Rimini. The sample surveyed consists of 103 hotels, statistical analyses were necessary to meet the research objective. The findings are discussed in paragraph 4 and finally the paragraph 5 shows theoretical and managerial implications, limits and future directions.

#### THE ELECTRONIC WORD-OF-MOUTH: A SYNTHETIC LITERATURE REVIEW

The last twenty years has been extremely important for the evolution of the tourism sector, going hand in hand with technological evolution. New business models, types of offers, distribution channels and a whole new way of communicating are just some of the changes that the tourism industry has experienced with the rise of the 21st century. In particular, it has allowed to reach a high level of interaction between website and user, resting on three pillars: interaction, sharing and participation. Hence the possibility on the part of those that we could define users-tourists to share their own experiences and to assist, at the same time, those of others.

Customers might choose a hotel based on its location (for instance, close to an airport, tourist location, or downtown), brand name, various facilities (such as swimming pool, golf course, spa and fitness center), service quality, price, loyalty program, and quality ratings by past guests. Any or all of these would enter into the customer choice mix (Verma, 2010). Other factors evaluated in the consumer

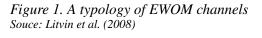
decision-making process are the atmosphere, the design and the word-of-mouth (WOM). As a matter of fact, the Internet has transformed the way we search for information, how we interact with each other and, more importantly, the way we shop. Consequently, traditional word-of-mouth (WOM) behaviour now has an electronic element resulting in a substantial research stream electronic WOM (EWOM). Previously, when consumers needed information, they turned to marketer-generated sources, looked at third-party certifications, or sought advice from friends and/or relatives in conversations "over the back-yard fence". EWOM has since subsumed these methods and become more common—in some instances, it has become the preferred method of communication.

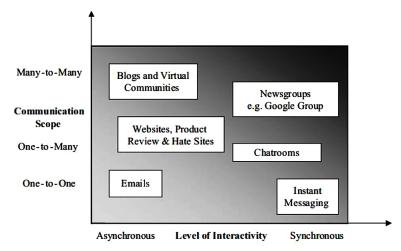
Thus, EWOM allows consumers to socially interact with one another, exchange product-related information, and make informed purchase decisions via computer-mediated conversations (Blazevic et al., 2013; Hoffman & Novak 1996).

Several types of electronic media have an impact upon interpersonal relationships (Litvin et al., 2008) each with its own characteristics (Figure 1). Some are synchronous, such as Instant Messaging, while others are asynchronous, such as email and blogs. Some communications link one consumer with another, such as email, while others connect a single consumer with many others (web pages).

EWOM is 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)

The EWOM has been defined by Harrison-Wallker (2001) as "informal, person-to-person communication between a perceived non commercial communicator and a receiver regarding a brand, a product, an organization, or a service." Dickinger and Basu (1994) define WOM as "a volitional post-purchase communication by consumers." Yoon and Uysal (2005) consider that WOM "is one of the most often sought sources of information for people interested in traveling. Electronic word-of-mouth (EWOM), also often referred to as online reviews, online recommendations, or online opinions, has gained importance with the emergence of new technology tools. Litvin et al. (2008) define EWOM as "all informal communications directed at consumers through Internet-based technology related to the usage or characteristics of particular goods and services, or their sellers.





The main differences between WOM and EWOM can be identified in the reach of the reviews' impact (number of people who can be influenced) and the speed of interaction.

With regard to this comparison, Sun et al. (2006) conclude that "compared to traditional WOM, online WOM is more influential due to its speed, convenience, one-to-many reach, and its absence of face-to-face human pressure."

The tourism industry is strongly affected by EWOM and, within the tourism industry, hotels are probably the most affected. Based on the growing importance of online reputation derived from reviews (denoted in this article as EWOM) for hotels and other members of the tourism sector, this study proposes a synthetic review of the research on EWOM.

In literature there are some studies that tried to review the works carried out regarding the EWOM in the tourism sector (Cantallops & Salvi, 2014; Bore et al., 2017; Hlee & Koo, 2018).

Cantallops and Salvi (2014) provide a review of articles published between 2008 and 2011. Their synthesis of the literature presents two main lines of study, namely review-generating factors and the impact of EWOM from consumer and company perspectives. In particular, studies have identified factors related to company-generated content, quality control, possibility of generating price premium, specific marketing strategies, corporate reputation, providing recommendations for tourism marketers and community managers. However, Bore et al. (2017), considering the period 2000-2015, indicate 8 research themes: 1) Motivations for contributing EWOM, 2) Motivations for reading EWOM, 3) Platforms used to facilitate EWOM, 4) 'Big data' analytics of EWOM, 5) Impact of EWOM on consumer behaviour, 6) Impact on hotel performance, 7) Hotel responses to EWOM, 8) Consumer cultural differences.

Consumers use EWOM and online review sites as a reference group in order to reduce uncertainty in their purchasing decisions. Liang et al. (2013) claim that online reviews can be considered a signal that determines the success or failure of a service, depending on whether the reviews are positive or negative. Nevertheless, it is also found that online reviews generally have a positive effect; the reviews make consumers aware of the existence of the hotel, and the enhanced awareness compensates for possible negative reviews posted. However, EWOM reviews themselves are not the entirety of purchase decision, the platform of EWOM (Xie et al., 2014) and how hoteliers manage and respond to EWOM (Liu et al., 2013) are also of influence.

Hoteliers, therefore, seek evidence to justify the increasing cost of social media marketing and guidance on how to manage and respond to EWOM. For Nieto et al. (2014) and Kim et al. (2015) there is limited research on the impact of online reviews on firm performance in the hotel sector. Most studies, as discussed above, explore the impact of EWOM on consumer behaviour and purchase intention, but rarely the impact on hotel performance. As we might expect, Ye et al. (2009) found that positive online reviews increase the number of hotel rooms booked, thereby increasing hotel revenue.

To encourage customers to write reviews, Nieto et al (2014) suggest that hotel owners might emphasise the importance of customer participation. The authors also recommend that owners monitor the presence of negative reviews and respond by resolving service failures and communicating service improvements. Regarding the hotel responses to EWOM, Xie et al. (2014) and Mauri and Minazzi (2013) both find that hotel replies to negative comments have a negative impact on the consumers' purchase intention, and in the case of the latter, have a negative impact on consumer expectations. Avant (2013) finds that management response to negative online reviews can affect perceived hotel image, intent to stay and intent to return. Weiet al. (2013) find that consumers will create different perceptions and evaluations of hotels based on the types of managerial response in their experimental study.

#### The Role of the Electronic Word-of-Mouth in the Hotel Industry

Studies by Ye et al. (2009), Kim et al. (2015) and Nieto et al. (2014) however, suggest that hotel replies to negative comments online have a positive effect on purchase intention. Wei et al. (2013) suggest that responses to negative reviews that directly address the reviewer's specific issue are perceived more favourably by potential customers than generic responses. Specific responses are also argued to instil a degree of trust. Ultimately hoteliers need to be better informed about when, how and where they should respond to negative online reviews. Thus, it is strategically important for managers to understand how managerial response would potentially affect consumer eWOM while moderating or intervening the

influence of consumer eWOM on business performance. Wei et al. (2013) stress the importance of developing a culture of 'interactive' customer engagement and recommend that managers frequently track and respond to on-line comments directly addressing specific issues raised in customer reviews.

From the literature review it emerges some gaps (Cantallops & Salvi, 2014; Schuckert et al., 2015; Bore et al., 2017):

- How to stimulate the generation of comments?
- What are the motivations for contributing to EWOM and consumer differences?
- How the veracity and credibility of published reviews can be identified?
- What would be the best way to manage review impact and measure the results?
- How do companies evaluate their actions and measure their performance in terms of results?

Responses to EWOM have been largely limited to the dealing with negative EWOM (Levy et al., 2013; Lee & Cranage,2012). However, little has been discussed about how critical the management of negative EWOM to the hotel and hospitality sector is. Most of researches has been done about EWOM and its influence on consumer purchase decisions and the decision-making process. Less focus has been given to the ability of exploit the benefits of good EWOM and mitigating bad EWOM by organizations. More research in this area can provide practical knowledge for hoteliers.

In addition, there are research approaches that have yet be used in regard to EWOM and hotels such as the use of interviews, observations, and questionnaires to hoteliers which could improve the knowledge about how hoteliers deal with EWOM responses.

These studies could be useful not only for a greater understanding of consumer behaviour but also for companies to establish and develop appropriate marketing strategies.

Our research aims to highlight some of the aspects EWOM which have not been thoroughly investigated in the literature background.

To fill the literature gap, our goal is to deepen the managerial behaviour of a sample of hospitality firms in Italy, particularly in the province of Rimini, which is on the Italian territory with high level of hospitality. The main findings are shown below.

# THE MANAGEMENT OF THE ONLINE REVIEWS BY HOTELS OF THE PROVINCE OF RIMINI

### Objectives, Framework and Research Methodology

The tourist offering of the province of Rimini is today one of the most sought after thanks to the combination of well-equipped beaches, cultural, gastronomic and sporting events, which every year involve

both the seaside and the agricultural/rural areas, and the conference offer. In fact, the province of Rimini offers the possibility to cope with both leisure and business needs.

The events organized by the various municipalities makes possible to have a large number of tourists, in fact, according to the Emilia-Romagna region, the first half of 2018 recorded 19 million admissions, 6.9% more than the previous year.

This study aims to investigate the managerial behaviour of the hotels towards electronic word-of-mouth. Based on the review of the literature showed above, the survey of the managerial behaviour of hotels adopts the research framework of Figure 2.

From the research framework it emerges that the goal of the study is deepened through the following research questions:

**RQ1:** What is the value assigned to EWOM by hoteliers?

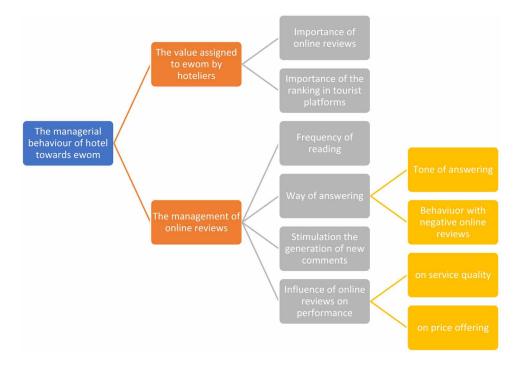
**RQ2:** How hotels manage on line reviews?

To answer the first question, the importance given to online reviews and the importance of the ranking in tourism platforms (measured with the 5-steps Likert scale) are investigated.

To answer the second question, the aspects investigated are:

- The frequency of reading online reviews;
- The way of answering to online reviews in terms of the tone used and the behaviour with negative reviews;

Figure 2. Research framework Source: our elaboration



- The methods adopted by hoteliers to stimulate the generation of new comments;
- The influence of online reviews on hotel performance in terms of improving service quality and price offering.

For the analysis a semi-structured questionnaire was created and sent to hoteliers.

The choice of using the online questionnaire tool allows hospitality firms to respond in anonymity, in a user-friendly environment that, not involving an excessive waste of time, encourages respondents to respond more compared to other traditional channels such as telephone or mail (Molteni & Troilo, 2007).

The sample was selected by carrying out a research on Tripadvisor for each of the municipalities of the province of Rimini, 900 hotels were then extracted.

Unlike previous empirical studies on the hotel online reviews, this work is a novelty because tries to fill some gaps emerging in the literature such as the dealing with hotel EWOM responses, the stimulation of generating comments and the impact of online reviews on hotel performance.

#### Results

The results are shown following the framework described above.

#### The Profile of Hotels

The online questionnaire launched in the period of August-September 2018, directed to a sample of 900 hotels located in the province of Rimini, collected a total of 103 replies (11.4% response rate). Hotels that contributed to the study mainly featured by 3-star category (48.5%) followed by 22.3% of 4-star hotels (Figure 1).

Although the hotels belong to different categories, with the prevalence of the 3-star category, the location of the same appears a common factor, since the area in which the hotels are located is limited to the coastal area. There are very few hotels in the hinterland. Moreover, the motivation underlying the booking at the accommodations of the province of Rimini is linked for the most part to leisure.

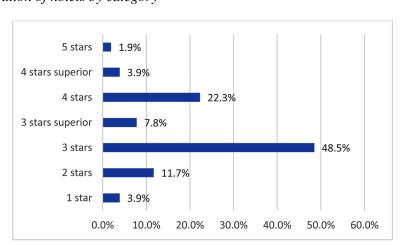


Figure 3. Distribution of hotels by category

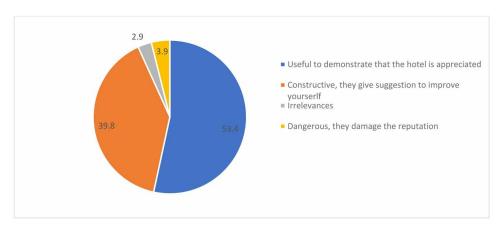


Figure 4. Importance of online reviews

Other aspects in common are the family management, which characterizes more than half of the sample, and the stay with full board or all inclusive. The beach service is also highly requested by customers. The all-inclusive holiday represents a "typical" offer of hotels in the Romagna Riviera, as it contains a series of services that complete the tourist offer, usually with entrance to theme parks, access to wellness areas and organized excursions.

Regarding the presence online of the hotels, the survey shows that almost all hotels have the website, except for one, confirming that it is considered important for visibility on the market and that it is considered extremely necessary to differentiate itself from competitors.

Concerning the social networks, 94% have a Facebook page, of which almost the whole manages it internally while the 57% of respondent has an Instagram channel primarily internally managed.

# The Value Assigned to EWOM

Regarding the value that hoteliers assign to EWOM, it was asked to hoteliers what importance they give to online reviews.

The 53.4% of hotels indicates that reviews are useful to demonstrate to new potential customers that are willing to book a room that the services offered are appreciated from clients. 39.8% agree that reviews play an important role as they are considered constructive; 2,9% of respondent thinks that reviews are irrelevant while the last 3,9% declare that online reviews are dangerous for the hotel because they damage the brand reputation.

Through the electronic word-of-mouth it is possible to highlights the quality of the service offered, sometimes underlining the negative aspects. Therefore, recognizing the disservice that has been pointed out by the customer or admitting the mistake is a step forward to be able to improve and to let it become a growth factor.

In order to grasp the importance that hoteliers attribute to the position of their hotels in tourist platforms classifications (Figure 4), the study shows that 34% of hoteliers consider fundamental their position in the ranking. This means that they monitor, try to increase it or keep it stable in order not to lose the status achieved.

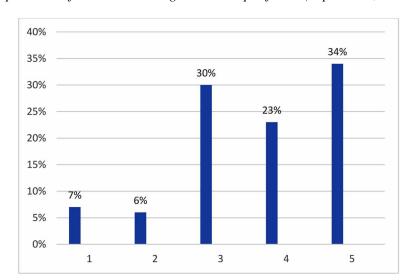


Figure 5. The importance of the hotel ranking in tourism platforms (tripadvisor, booking)

23% of the respondents attribute a still very important value to the ranking of the hotel, while 30% of hoteliers maintain an intermediate point, ie consider the position in the relevant ranking, but do not take action at full speed to adopt measures in this regard.

6% of the interviewed say they are not interested, while 7% of them clarifies that the position of the hotel on review sites does not play a relevant role.

# The Management of Online Reviews

Perfectly in line with the value that hoteliers attribute to reviews is the frequency with which they are read and considered. 53% of the interviewed said they read them every day, 23% examine them one or more times a week, while 19% check them one or more times a month (Figure 6).

It emerges that all the hoteliers read mainly the reviews every day, with the exception of the 2-star hotels that control the comments in longer time periods.

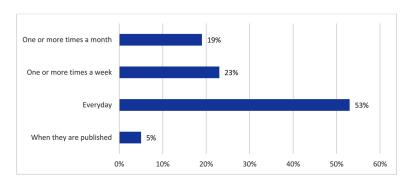


Figure 6. Frequency of reading online reviews

It is also interesting to understand the responding behaviour to online reviews, that is to what kind of reviews the hotels in the province of Rimini prefer to answer (Figure 7)

52% of hoteliers have revealed that they are involved in answering all the reviews, an attitude that requires a lot of time and dedication, especially if the hotel is registered with various portals in which it is possible to leave a review. Nevertheless, a good part of the sample, 20%, is not particularly interested in responding to reviews. A small part, 1%, only responds to positive reviews, while 5% is concerned only with negatives, trying to give an answer to complaints and critical aspects detected by guests. 18% decided to focus more on the negative ones, but without neglecting the positive ones, which are generally answered by thanking the user for having expressed a positive opinion. Finally, 4% consider it more important to show their gratitude to those who have appreciated the service and is less active in countering the negative feedback.

Responding to both types of online reviews is essential to demonstrate the total commitment of the hotel. However, it should be noted that sometimes negative reviews require greater consideration and, as suggested by the various authors, a careful response.

In this case, the attitude and the tone of hoteliers towards negative reviews is very important and crucial (Figure 8).

63% of the hoteliers say they respond politely, regardless of the user's behaviour and the tones used in the text of the review trying to avoid being too rushed and rude. In addition, some hoteliers have added that sometimes the best answer to certain reviews is to publish a photo rather than an explanation, to remove any doubt to future users interested in the hotel. 14% of the interviewed, however, is fully convinced that the right way to respond to a negative online review is keeping the user's tone, or responding in a heated, ironic, annoyed, dry or distant whenever the messages reflect these behaviours. Although the negative comments affect the reputation, 15% decide to ignore them completely.

Finally, 2% of respondents explained that the response to negative reviews varies depending on the veracity of the review for example answering to them that give false information or answering in a constructive way.

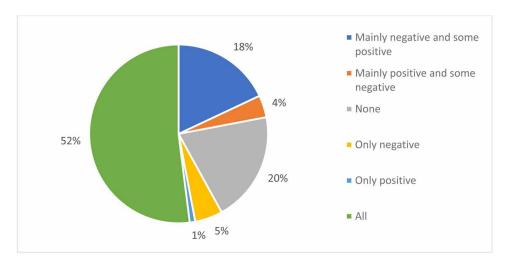


Figure 7. Responding behaviour to online reviews

#### The Role of the Electronic Word-of-Mouth in the Hotel Industry

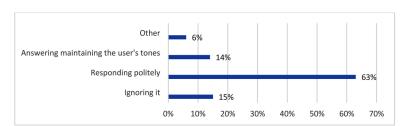


Figure 8. How to respond to negative reviews according to hoteliers

In the online review context, it could happen the curious phenomenon of the disappearance of negative reviews: often, browsing through the various hotel sites happens to run into facilities with very few negative reviews, if not nearly absent, and sometimes there is a doubt that the hotel has taken steps to eliminate them.

It should be noted that trying to silence a client in the era of digitization does not always work. That is, the act of deleting a negative comment on a platform cannot in any case prevent the user from expressing his dissent on other sites and in other ways. Also, since information travels fast and reach many people today, eliminating negative reviews can turn out to be a move that could bring only short-term benefits.

This concept seems to be clear to the hoteliers in the Rimini area, given that 62% have never removed negative comments. 34%, on the other hand, have revealed that sometimes they are actively engaged to make an uncomfortable review disappear, while 4% said they wanted to hide all the negative reviews that come from the comments related to their hotel.

Although in the literature it has been stressed several times that, as the number of reviews present online increases, the perceived risk of the client decreases, 40% of hoteliers are not interested in increasing reviews.

The remaining 60% of the hoteliers invite guests to leave reviews and comments with the following procedures:

- 17% of the respondents by leaving a satisfaction questionnaire in the guest room. Usually the customer is asked to put the questionnaire in a special container keeping to ensure anonymity. In this case, the comments will surely help the managers to realize the quality of their services, but they will not increase the web feedback list.
- for 27% of cases sending an e-mail with a questionnaire at the end of the stay. In doing so, hoteliers take advantage of the possibility to send the link to the questionnaire that can be linked both to their own official website and to the platform where the booking was made. Instead of sending a questionnaire, some hoteliers prefer to provide the direct link to Tripadvisor by e-mail, to make the assessment known and to increase the reviews of their hotel;
- 9% of the hoteliers make available to customers a mobile device at the moment of check-out, inviting them to take a few minutes to answer the closed questions in the questionnaire. Also in this case it is a very useful feedback for the management, but not public;
- the remaining 7% prefers to talk directly with the customer, considering it appropriate to ask in person generally during the checking out. Some have pointed out that it is good to do it without insisting, carefully evaluating the customer's predisposition.

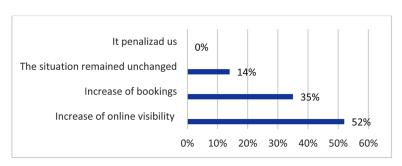


Figure 9. The effect of the presence in review websites according to the hoteliers

The managers and the entrepreneurs of the hotel sector in the province of Rimini have well understood that the reviews are not only suitable for satisfying the information needs of the final consumer, but they are also useful for the hotel performance, that is monitoring the perception of the quality of the service. In fact, 77% of respondents recognize the added value of the reviews and try to grasp the suggestions and, when possible, improve their offering.

It is not always possible to achieve an increase in service quality; in fact, 18% of hoteliers is aware of this and considers it very difficult to intervene to make changes. Sometimes small measures are not enough, considering that often the achievement of a high level of quality implies huge investments. Only 6% say they are not interested in improving the service. The hotels classified 3S-stars, 4S-stars and 5 stars are completely agree that online reviews are important grasp the suggestions and improve the service.

As it has also emerged in the literature, a good ranking can justify a change in the prices charged.

Regarding the hoteliers of the province of Rimini, 54% consider legitimate to increase prices according to the increase in the rating. A good part of them, 27%, has already tested it, while the other 27% said that this increase is still justifiable, but evidently has not yet reached a score that can increase rates.

Only 1-star and 5-star hotels have not increased prices due to a rating increase.

Regarding the reduction of prices, on the other hand, 8% of the hoteliers in the province of Rimini decided to lower prices due to the loss of position on these sites while the 92% hasn't changed the prices.

The hotels with 1-star, 4s-stars and 5-stars have never lowered prices due to a loss of positions.

The presence of the hotels in the booking and review sites has undoubtedly brought advantages and benefits as no hotel has selected the option "penalized us", asserting that there were no negative implications that negatively impacted hotel performance.

For 14% the situation remained unchanged, while for the majority of hotels, 52%, a step forward was taken, as the increase in online visibility. On the other hand, 35% increase bookings and revenue thanks to the presence on review platforms.

Regarding the tools used to deal with on line reviews, it emerges that 87% of hoteliers do not own a dedicated software and personally take care of checking online word of mouth. Only 12% is supported by software that captures the reviews and identifies them as positive, negative or neutral (mainly 2-stars, 3-stars, 3S-stars and 4-stars). In this case, given the need to verify what is said on their behalf and to intervene if necessary, the hotel owners decided to invest in software to optimize the management of bookings.

#### DISCUSSION

In a virtual space the customer can manage, from home, the different phases of trip planning (Neuhofer et al., 2014; Pencarelli et al., 2011; Cioppi, 2009), thus transforming itself from simple consumption a consumption-author of his own tourist experience.

In particular, the tools of web 2.0 (Ex. Blog, Chat, Social Network) allow to realize what has always been considered the mission of the Internet: to be the network of networks, created by users for users (Xiang & Gretzel, 2009; O' Reilly, 2007; Sigala, 2007; O' Reilly, 2005).

The web 2.0, platform of democratic dialogue and complains for everyone (Forlani, 2009), does not allow to anyone in the tourism industry to hide (Fortezza & Pencarelli, 2015; Leung et al., 2013): every structure, hotel service, restaurant dish and any lack of assistance is now evaluated and reviewed in real time by customers (Berezina et al., 2015; Kim et al., 2015; Leung et al., 2015; Taylor et al., 2015; Aureli et al., 2013; Bauer & Sobhani, 2013; Phelan et al., 2013).

The survey carried out on the sample of hotels in the province of Rimini offers insight into the managerial behaviour of hotels towards the electronic word-of-mouth phenomenon.

The analysis shows that the potential of the Electronic Word of Mouth is recognized by most respondents, but they are not fully exploited. The sample underlined the importance of the reviews in demonstrating to the users that their hotel is appreciated, and they understand the usefulness to increase the bookings.

Nevertheless, 19% of the hoteliers respond only once a month or a week; this behaviour does not fit in the digital economy where the speed as well as the quality of the interaction are factors of competitive success. It also emerges that there is a low propensity to feed the phenomenon, given that 40% of hoteliers have expressed their disagreement with the invitation to guests to leave reviews, while 20% of the respondents said they did not pay attention to complaints made on the own account. Needless to say, response to consumers' comments online should be authentic and immediate, with each complaint or appreciation from consumers receiving a response (Zheng et al., 2009). Wei et al. (2013) urges hospitality businesses to actively respond to consumer comments. Schmallegger and Carson (2008) indicate that responding to negative comments immediately can tackle the problem in its initial stages. In addition, successful service recovery can turn service failure into a great opportunity to enhance the effectiveness of online customer management (Yoo, 2018). Evidence exists which shows that revising negative EWOM to positive EWOM increases the EWOM ratings (or appeal of the service quality) to potential customers who might read EWOM. Hence, it can increase the credibility of the seller (Kim et al., 2009), and potentially leverage the revenue. This imply that sellers can convert complaining customers into customers with repurchase intention. Through EWOM management, results suggest that existing, complaining customers can have a positive effect on future, potential customers.

The study highlights that hoteliers should take better care of online reputation, participating actively to customer comments and monitoring them This behaviour, that is the hoteliers are aware of the importance of the EWOM but they don't spend too much time on it, could depend on the reduced size of the hotel or on the family management of the business.

Managerial response serves as a tool in support of customer relationship, reputation and brand management (Van Noort & Willemsen, 2012). The practice of providing managerial response centers on the aim to enhance consumer satisfaction and limit the potential damage of the negative eWOM (Willemsen et al., 2013). Most industry practitioners agree that through communications with consumers, hotels can be informed of what needs to be changed to improve consumer satisfaction (Zheng et al., 2009).

20% of respondents showed little interest in monitoring and response to online reviews, although they are useful for the traveller to reduce the risk associated with booking. Not responding to feedback, especially negative, significantly affects the web reputation and, since "the negative reviews remove you from the basket of choice", it becomes essential for hoteliers to intervene and try to safeguard their own reputation.

In fact, effective managerial response can potentially result in a more than 20 per cent increase of consumers' positive loyalty behaviours (e.g. return intention and likeliness to recommend) (Barsky & Frame, 2009). In contrast, being unresponsive to consumer comments may lead to a lost in future business (Chan & Guillet, 2011).

Furthermore, while increasing the number and quality of reviews increases purchasing intentions, on the other hand the results of the analysis reveal that 40% of respondents do not activate to encourage guests to leave a review online.

It emerges that it is necessary to adopt strategies that aim to both increase the number of reviews and monitor them considering that consumers are influenced to purchase a product or service by reading

incentivized EWOM (Mayzlin et al., 2014). For example, intangible aspects, such as the "team" and "friendliness," are crucial for a high level of satisfactory experience during the stay and to promote positive EWOM (Martins et al., 2018).

Through EWOM management, results suggest that existing, complaining customers can have a positive effect on future, potential customers.

The hoteliers of the province of Rimini, in fact, attribute to the EWOM the merit for increasing the online visibility and number of bookings confirming prior studies that have provided evidence that volume of consumer EWOM improves purchase rate by improving hotels' popularity and brand awareness (Zhu & Zhang, 2010).

# MANAGERIAL AND THEORETICAL IMPLICATION, LIMITATIONS AND FUTURE RESEARCHES

Based on what emerged from the quantitative analysis, we propose a series of practical implications that could be useful for the management of hotels.

The online reputation management is a series of actions aimed at safeguarding the image of the hotel starting from booking sites monitoring.

The first managerial implication is to monitor and to keep under review comments, especially if these are based on unsatisfactory experiences. Kim et al. (2015) indicate that managerial response to negative comments is one of the most salient predictors of hotel performance, that's why all the negative feedback requires justification or explanation and it is absolutely necessary to maintain a certain level of professionalism in giving the answer. Hotels that would like to thrive not just survive in the social media world should proactively respond to consumer reviews in an effort to stimulate and manage EWOM activity (Xie et al., 2016). Because EWOM is now spontaneously generated on social media platforms and its impact is far-reaching, hotel managers need to actively operate managerial response to intervene in the online conversations with consumers in a timely fashion.

However, it would be very expensive for a hotelier whose hotel is registered with numerous portals to manually check all the reviews, as it would require a lot of time and attention. Beyond that, it would be good to speak in real time not only to repair complaints, but also to anticipate them. For this reason,

# The Role of the Electronic Word-of-Mouth in the Hotel Industry

hoteliers could use specific and dedicated software for online reputation management and online reviews, these are "intelligent" monitoring tools that captures comments and mentions on the hotel and allows immediate response (ReviewPRo) or tools to manage and monitor reviews as well as social profiles such as Hootsuite. The user who wants to book needs to feel reassured, to reduce the uncertainty related to the final decision and finally to feel satisfied with his reservation. If, for example, the rate of a room is very low compared to the average of the same category of hotel, his instinct will lead him to inquire as to why that structure can get a lower price, trying to figure out if there are negative aspects to it connected. For this reason, regardless of the channel they choose for booking, in the search for information, travellers tend to include OTAs because they can check alternative offers and determine which is the most convenient and, above all, read the reviews.

A second managerial implication is linked to taking into account of the importance of the relationship with the customer as the development of the EWOM is influenced by the quality of the relationship (Chung & Shin, 2010; Sarmiento et al. 2018). In fact, the dimensions of satisfaction and trust in travel websites are the most determinant, mainly because users are looking for an interpersonal communication process that satisfies their need and that the source is reliable. Liao et al. (2019) argued that purchase intention and word-of-mouth are indirectly affected by interactivity and engagement respectively in the hospitality industry, via the mediation of trust. Besides, the indirect effect of interactivity on purchase intention and engagement on word-of-mouth through trust will be stronger with higher brand loyalty than for those with lower brand loyalty.

For all these aspects, hoteliers and managers need to invest in customer relationship management in order to improve and create positive EWOM.

Moreover, another managerial implication is that hoteliers should develop a systematic management of EWOM and online reviews; they could overcome the spontaneous and not very systematic approach that sometimes translates into reactive settings or conducts that are not able to fully grasp the opportunities that social media and the sharing economy make available to businesses. Service companies should realize the strategic importance of online review management. Previous research has recommended that hotel managers should regularly monitor the online reviews from consumers and solve all relevant problems (Lee & Hu, 2004). But beyond simply reading consumer postings, Xie et al. (2016) suggests that managers should be actively responding to consumer reviews and constantly engaging consumers on social media. Doing so opens a new line of communication with potential customers and demonstrates that the manager is dedicated to pleasing them. In addition, through EWOM management, existing, complaining customers can have a positive effect on future, potential customers (Yoo, 2018).

In a strategic planning logic, hoteliers could correct the defects and limits of the value offer and understand the customer behaviour and needs. In this way, hoteliers could provide more targeted value services.

Moreover, as stated by Leong et al. (2019), the hotel websites could be improved, offering a corner for travelers to share their experiences and post their photos so that they may gain personal touch towards the website. Travelers could also be involved in participation on online activities such as games and contests. Besides, hoteliers may also offer some special packages that are more relevant to the needs and wants of the travelers. This can be done by conducting online survey, opinion mail boxes or feedback forms.

In choosing the method to increase reviews, there are some ethical aspect to consider. Stantona et al. (2019) found that the different methods to incentivize EWOM yielded significantly different moral judgments, which then predicted consumers' attitudes toward the resort and the resort's image. Additionally, different levels of corporate social responsibility (CSR) and consumers' perception of industry

practice norms also had effects on consumers' moral judgments. The challenge in choosing an ideal method is that resort's perception of what is and is not an ethical/moral method may be incongruous to the consumer's perception of that method (Brunk, 2010). If a method to incentivize EWOM is viewed as uncommon in an industry practice, their judgment regarding the method may be less favorable. For example, a resort may think that "social currency" is an ethical/moral way to generate EWOM. However, consumers may view it as the resort attempting to lie and manipulate for self-interest, and negatively influence the image of the resort.

Litvin et al. (2008) argue that it is not hard to envision marketers easily overstepping their ethical boundaries. For example, even the most benign strategy, email, presents several ethical concerns. Ease of use and the virtual cost free nature of emails can lead to abundant abuse as most can attest from the amount of junk emails received daily. It is thus important that hospitality and tourism organizations treat the medium as a form of 'permission-granted' marketing, such that all mailings are requested, respectful, and relevant (Osenton, 2002). Further, when sending emails, one's source should be clearly designated and never disguised; unnecessary mailings should be avoided, mailing addresses should not be sold without permission, and 'opt-out' requests should be handled promptly and courteously. When considering other electronic media, potential abuses are more ominous. Many of these can be classified under the banner of stealth marketing. The practice of stealth marketing is defined as "employing tactics that engage the prospect without them knowing they are being marketed" (Neisser, 2004).

Online 'stealth marketing' tactics that could tempt hospitality and tourism marketers to promote EWOM and 'buzz' are easily envisioned. The most obvious of these is the use of employees to pose online as consumers in order to post positive comments on behalf of the company. Such postings could be on the company's website forum or on public bulletin boards and newsgroups. To make effective, employees could be provided with scripted postings to provide a stream of product reviews and comments. As their postings would appear to be from knowledgeable users, the employees would assume the role of e-opinion leaders, generating enhanced visitorship from opinion seekers who rely upon their expertise. Equally as easy to implement, and just as hard to detect, would be having employees post negative comments regarding the competition. Abuse of online communities would similarly take little effort or imagination. An employee could be encouraged or specifically charged with infiltrating his/her avatar into an e-community. Once an accepted net citizen, he would be in a position to interject or initiate positive comments into conversations regarding his/her employer, and negative comments regarding the competition. If recognized as a knowledge able traveler and trusted voice within the community, the EWOM disseminated could have significant influence on other members' hospitality and tourism purchase decisions. The serendipitous use of blogs has similar issues. Nobody licenses blogs and their intellectual freedom is one of the medium's principal attractions. However, this same lack of control is an open door for abuse. Clearly, the issue of ethics and EWOM calls for well-defined boundary between the ethical practice of managing EWOM, and its abuse.

From our study, some theoretical implications emerge. First of all, word of mouth increases brand awareness and online reputation (Cioppi et al., 2016). In the hotel sector, various authors have analyzed the benefits of web 2.0 and ICT. Among these, Lim et al. (2011) underline how web 2.0 allows to increase notoriety and reputation, to facilitate work processes making them leaner and faster, to obtain real-time feedback on existing products, to generate new product ideas enhancing the collective intelligence of the network, to build community among consumers, take advantage of the customer's self-service to innovate the offer.

Moreover, EWOM is an important investment to increase customer engagement and to improve the analysis of the customer profile in order to propose innovations and customization in value offers. In this way hoteliers can increase customer trust, customer satisfaction, expanding customer portfolio.

The study conducted provides hints of originality, as unlike previous empirical studies on the subject of hotel online reviews, this work is a novelty because it filled some gaps emerging in the literature regarding the dealing with hotel EWOM responses, the stimulation of generating comments and the impact of online reviews on hotel performance in terms of service quality and price offering.

Like any research, this study also presents some limits. First of all, the sample used in this study is focused only to a touristic area of Italy; moreover the methodologic approach needs more analysis both qualitative and quantitative. Future researches could expand the sample to other touristic areas and make comparison both nationally and internationally.

Another way to expand the study could investigate what would be the best way to measure the hotel performance, the EWOM platforms used by tourists, and big data analytics. In addition, one could investigate the marketing strategy and activities addressed by managers and hoteliers towards the measurement and evaluation of the EWOM.

Further suggestions could be the cross-cultural comparison between hotels of different countries or to understand how to integrate organic communication with that of third parties as well as new approaches to include EWOM within marketing strategies

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# **KEY TERMS AND DEFINITIONS**

**Brand Awareness:** The likelihood as to how aware a customer is about a brand, product, or service. It is how much a customer or prospect recalls or recollects about a particular company and its goods.

**Customer Engagement:** The means by which a company creates a relationship with its customer base to foster brand loyalty and awareness. is a connection you make with your customers to produce an effect or a reaction.

**Electronic Word-of-Mouth:** All informal communications directed at consumers through Internet-based technology related to the usage or characteristics of particular goods and services, or their sellers.

**Online Reputation:** The reputation of a company, person, product, service or any other element on the Internet and digital platforms.

**Online Review:** Reviews written online by consumers who have experience to comment on the product or service delivers on its promises.

**Online Visibility:** The overall presence of a brand or its products in the general consumer online environment.

**Social Media Marketing:** A form of Internet marketing that utilizes social networking websites as a marketing tool. The goal of SMM is to produce contents that users will share with their social network to help a company increase brand exposure and broaden customer reach.

# The Role of the Electronic Word-of-Mouth in the Hotel Industry

# **ENDNOTES**

- E-tourism refers to a phenomenon and research area in which the adoption of information and communication technology (ICT) by tourists and businesses transforms the processes and the value chains in the tourism industry (Buhalis 2003). E- tourism involves for the final consumer the following aspects: e-information, e-booking (hotels, transportation, etc) and electronic payment (Beatrice, Mihãlcescu, 2013).
- Litvin et al. (2008) define EWOM as "all informal communications directed at consumers through Internet-based technology related to the usage or characteristics of particular goods and services, or their sellers."

# Chapter 14 Analyzing the Impact of e-WOM Text on Overall Hotel Performances: A Text Analytics Approach

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# **ABSTRACT**

A flourishing of the importance of customer reviews has been observed in this digital era. This is especially true in hotel sector, which allows guests to express their satisfaction towards the service in the form of open-structured online reviews and overall ratings over travel agency websites. Using reviews data of 2001 hotels from Tripadvisor.com, the chapter analyzes the overall hotel performances through linguistic features of e-WOM such as its length, readability, sentiment, and volume. The chapter develops a regression model for evaluating guest satisfaction by using overall ratings as its measure, validated through hotel review data. Data analysis result shows that review volume, sentiment index, and readability have significant positive affect over guest satisfaction whereas length shows the negative influence. This chapter discusses beneficial implications for researchers and practitioners working in this field.

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# INTRODUCTION

In the times of emerging technologies, digitalization has perforated every field. To survive in present marketing environment, practitioners need to have an edge over their competitors at all times. Businesses have the tendency to easily adapt to the environment like a malleable alloy, which is also a need of the hour. Majority of the customer base is turning tech-savvy, which in turn creates a necessity for the companies to keep up with their dynamic customer landscape. Market practitioners are now realigning their businesses to online domain in order to streamline their everyday operations. Automation of operations comes with its own set of benefits. Besides indulging digital customer at all touch points during customer experience lifecycle, it effectively leads to increased efficiency, reduced related cost, enables better analysis and downsizes humanly error.

Recreation and tourism is a major sector of consideration for a majority of economies around the world. It contributes in innumerable ways to social, economic and other intangible benefits to them (Wood, Guerry, Silver, & Lacayo, 2013). Information on tourist trends and behavior in this realm is collected using user generated content on social platforms. With the emergence of cybernated environment, service industry has ventured into online marketing in full bloom. In the Online Travel Agencies, provision of hotel booking and other services through online mode has given rise to an ever-increasing amount of online textual data in the form of feedbacks and reviews (Tandon, Sharma, & Aggarwal, 2019). With the technological advancements, Word of Mouth (WOM) has taken the electronic form (EWOM) with an additional benefit on businesses in the form of wide reach among audience beyond the geographical and time constraints (Yen & Tang, 2019). EWOM can be described as a form of casual information exchange with other consumers through online technological platforms talking about usage and characteristics of a product or service or their seller (De Pelsmacker, van Tilburg, & Holthof, 2018).

User Generated Content (UGC) on the websites provides travelers with non-commercial information and travel experiences shared by fellow travelers. These uncensored, straight from the reviewers, expressions of experience are considered to be more reliable and current (Gretzel & Yoo, 2008). Customers perceive the information provided by the members of travel fraternity to be more trustworthy and influential as compared to that provided by the service providers (Fotis, Buhalis, & Rossides, 2012). A recent survey report by Nielsen states that 63% of the travel services and product customers, did a prior online investigation before the purchase of product or service (McKenzie & Adams, 2018). These results bespeak of the emerging trend of traveler's reliance on content available online as a part of decision making process. Today, these websites have become an important source of information for the travel destinations as well as the choice of activities to be conducted there (Xiang & Gretzel, 2010). A number of researchers have shown that EWOM axiomatically affect the product sales like books (Hong, Xu, Xu, Wang, & Fan, 2017), cars (Fan, Che, & Chen, 2017), movies (Duan, Gu, & Whinston, 2008), and cameras (Gu, Park, & Konana, 2012).

Since the nature of hospitality industry matches that of experiential goods, these studies strongly suggest that EWOM holds particular importance for experiential products as their quality level is obscured before consumption (Klein, 1998). Online reviews have notable effect in hotel sector when compared to other tourism segments as these are overwhelmingly referred by majority of users for "where to stay" decisions (Gretzel & Yoo, 2008). This customer-generated data is a rich source of information for the marketers as these reviews can be analyzed in depth to understand the customer psychology and their satisfaction level. To evaluate the role of travel reviews in decision making procedure, we need to find out the interpretation derived by users from the available EWOM. Existing research has shown that it's a

human tendency to solicit viewpoint of peers in order to reduce the probability of making a bad decision (Goldsmith & Horowitz, 2006). Considering the abundant increase in the volume of EWOM available, conducting a deep analysis of text has become a pivotal task of data mining.

A recent report revealed that guest review websites are another most commonly used information source (first being the online search engines) for the travelers planning a trip. Service providers have therefore started utilizing EWOM as a advertising tool by encouraging consumers to share their feedback online (Yang, Park, & Hu, 2018). In this chapter, we are utilizing EWOM in the form of reviews. Few studies in the past have applied different methods to understand the factors affecting hotel ratings and in turn affecting the guest satisfaction level. Study of guests' opinions, rationales, details, and feelings, personalization or projection were taken up using Stance-shift analysis (Crotts, Mason, & Davis, 2009). Another study took into account average EWOM ratings, variation of ratings among EWOMs, price, city rank, official star rating category of the hotel as the factors affecting hotel sales (Ye, Law, & Gu, 2009). They considered review volume as a proxy of online bookings. Another approach in understanding these trivial issues was adopted which assessed the effect of deals, amenities, family friendliness, core product, staff and a hybrid of other factors on guest experience and satisfaction (Stringam & Gerdes Jr, 2010). Number of expert reviews and reviewing expertise level were studied to find out their effect on traveler's rating (Zhang, Zhang, & Yang, 2016). In this chapter, we propose to understand the impact of review volume, length, sentiment index and readability on hotel ratings, which is basically an indicator of guest experience.

Guest satisfaction is the main aim of the hotel industry. It is the evaluation of how many of the customers' expectation parameters are fulfilled by the service provider. Satisfaction is a feeling which is hard to express. OTA websites provide its users with the facility to rate the hotel and share their experience in the form of reviews. These overall ratings and textual reviews are the empirical representation of guest experience which are referred by people from travel community as well as the hotel industry to make informed decisions. Guest experience hold the ability to affect broadly all the factors of hotel business. Reviews in themselves influence the purchase decisions of other customers (Guo, Barnes, & Jia, 2017). Satisfaction of the guest affects the sales, revisit intension, positive EWOM probability and market reputation to name a few.

Consumer textual review analysis draws its strength from its ability to exhibit guest consumption experience, highlight key features of product and services people are talking about, and providing customers' mindset, notion, demand and inclination (Chau & Xu, 2012). Personnel from research community as well as the hotel industry want to know about (a) minutiae of guest experience in order to enhance product as well as service quality and (b) assessment of guest experience to get the idea of overall performance of the hotels. This can be utilized to make improved promotion strategies (Cantallops & Salvi, 2014). Review volume talks about the number of reviews posted on the OTA websites by the guests. Volume of EWOM have been found to have a direct relationship with awareness, hotel performance and hotel popularity (Viglia, Minazzi, & Buhalis, 2016; Zhao, Wang, Guo, & Law, 2015). The review volume of a product/service is considered to be one of the most crucial review facets. Reviews posted online, whether positive or negative are the indicator of hotel popularity and thus attract curious travelers, and serves to keep the product longer in limelight. It depicts the market reach of the product, reduces the uncertainty associated with it and motivates peer behavior ("Go with the flow") (De Pelsmacker et al., 2018).

One of the key features allied with EWOM is the review length. It is typically the measurement of number of characters contained in a EWOM posted about a specific product or service. Since EWOM is an unfiltered expression by the experience holder himself, it tends to be the most raw form of guests'

feelings about the service or product availed by him. Thus, these reviews are often found to be a concoction of neutral, positive and negative words resulting in a lengthy review (Bradley, Sparks, & Weber, 2015). Moreover, a meticulous review containing considerable number of arguments is expected to provide a better picture of the product reviewed. Also, the length of review is an indicator of reviewers' involvement in writing it, and thus depicts his dedication to the travel community.

A focal objective of Lodging sector being experience based strives hard to capture customer experiences. Hotels have always employed the concept of customer feedbacks (earlier in the form of comment cards, feedback forms or market survey) and utilized it as a basis for amendments in hotels' operational framework. Guest experience is an intangible characteristic which is a challenge in itself to capture. To understand the mindset of the customer and get an insight into their sentiments associated with the hotel experience is the current field of interest. A sentiment is a thought, view, attitude or opinions which are rooted in feelings. Unlike physical goods, which comprise of characteristics that can be objectified, hotel experience is an experience good that contains the dimensions "good" or "bad". These are often difficult to quantify and extract empirical values from. Therefore, the subjective opinions of uses that are embedded in their review is a critical source of information. These can be mined extensively for sentiment analysis and draw implementable insights (Mankad, Han, Goh, & Gavirneni, 2016).

The effectiveness of a review is highly affected by its ability to be meaningful to the reader. This in literature is termed as review readability which refers to the ease of understanding and ability to fathom the judgment related to a review posted online (M. Smith & Taffler, 1992). Readability of a review is viably defined as 'how easy is to read and comprehend a textual content that carry the judgements related to the product/service being analyzed' (Calderón, Morales, Liu, & Hays, 2006). The linguistic style of a review clearly portrays the education level of the reviewer (Geetha, Singha, & Sinha, 2017). The highly educated peoples are more accurate in their expression of opinions. A well-written review can be considered more reliable and influential.

The chapter attempts to study a conceptual relationship between the overall hotel ratings and EWOM measures namely number of reviews, review length, sentiment index and readability through econometric modelling. This modelling enables the marketer to understand the impact of each independent variable onto the dependent variable. These models are applied on secondary data collected from an online travel agency (OTA). We have developed a python program to process the data for the hypotheses testing.

The remaining chapter is organized as follows: next section provides a comprehensive literature review related to EWOM in e-services and hotel guest satisfaction. Then development of the hypotheses are provided, next we present the methodology of the study. The data analysis results are provided in subsequent section. Then discussion related to the results and their managerial implication is provided. Final section comprises of the limitations and the future scope of the study.

# LITERATURE REVIEW

# EWOM in E-Service

Due to the innate uncertainty associated with an untried product or service, consumer often bank upon WOM for making related decisions (Laroche, McDougall, Bergeron, & Yang, 2004). Before the advancement of technology and emergence of Web 2.0, there was a notion of traditional marketing, but with the spread of internet communication, EWOM has gained significant importance. EWOM is defined

"any positive/negative sentiments expressed by potential/actual/former customers related to the product or overall firm, which is online available for multitude of peoples and institutions" (Vermeulen & Seegers, 2009). The anomalousness of EWOM lies in its reach of the reviewers' impact i.e. number of people that can be influenced and the speed of interaction (Cantallops & Salvi, 2014). This evolution of customers' decision-making cycle (information sharing, acquiring of knowledge, decision making) has presented the market professionals with an opportunity to augment their communication effectiveness and thus target a broader market than ever before. However, in this new age electronically interactive world, where communication of individuals' opinions knows no bounds, the 'customer turned reviewers' have dethroned the hoteliers from the role of travel opinion leaders (Litvin, Goldsmith, & Pan, 2008).

From marketers' viewpoint, utilization of customer reviews to make buying decisions is a two way opportunity. Firstly, a positive review highlights their good services. Secondly, though a negative review may stake the hotels' reputation but it provides them with the problem areas which can be worked upon to improve the satisfaction level. Prior studies have focused on this problem along with additional variables like ego, vengeance and help to decipher the customers' intention to write a review (Dixit, Badgaiyan, & Khare, 2019). Purchase involvement and service experience have also been identified as momentous antecedents of review providing motivation (E. E. K. Kim, 2017). Further, studies have been able to identify information and e- service quality to be the driving measures of guest satisfaction. A satisfied customer is more inclined towards providing EWOM to the hotel (Rizal, Yussof, Amin, & Chen-Jung, 2018). The language in which a review is written has also been established as an influential factor on service rating provided by the guest These studies clearly depict the importance of customer feedback in the hotel sector. Also, impact of EWOM in e-services can be clearly identified from the previous literature.

# **Hotel Guest Experience and Satisfaction**

A travel trip whether for the recreational purpose or for the work purpose is always followed by an experience which the traveler felt or encountered. These guest experiences are the major source of information for the service provider. It can provide a snapshot of hotel performance, which can be evaluated and analyzed for various managerial purposes. Understanding of customer experience involves various intricate factors majorly because of its personal nature. Due to the competitive nature of hospitality industry, it is vital for the hoteliers to understand guest experience and improve their satisfaction level. High guest satisfaction level has been associated with positive hotel image, willingness to make recommendation and revisit intention (Hu, Kandampully, & Juwaheer, 2009; Velázquez, Blasco, & Gil Saura, 2015). The amount of distance travelled by a tourist to reach the hotel has been studied to understand how it shapes their experience and thus their satisfaction at a destination (Park, Yang, & Wang, 2019). Hotel property's accessibility to various attraction points, airports, public transportation and local businesses was found to be a significant determinant of guest satisfaction (Yang, Mao, & Tang, 2018). Tourist satisfaction has also been studied in combination with hotels' event experience. This delivered a clear understanding about guest experience in a gust driven environment (Boo & Busser, 2018). Linguistic knowledge of the traveler has been found to influence their key satisfaction factor. It was found that customers who spoke diverse languages, emphasized on different hotel attributes in forming their overall satisfaction rating (Y. Liu, Teichert, Rossi, Li, & Hu, 2017). Prior studies have also proved guest satisfaction to be an antecedent of guest return intention (Susskind, Kacmar, & Borchgrevink, 2018). Further, guests' demographic profile and hotel class has been found to affect the satisfaction level (Fernandes & Fer-

Table 1. Shows the relevant literature comprising the techniques used for review text analysis.

S. No.	Author	Antecedent	Technique Used	Endogenous Variable	
1	(Anu G. Aggarwal & Aakash, 2018)	Sentiment index, product rating, review volume, length and price	Econometric modelling and text analytics	Sales rank	
2.	(Rizal et al., 2018)	Information, e-service, system quality	Partial least squares – structural equation modeling	EWOM intention	
3	(Y. Liu et al., 2017)	User language and hotel attributes	Regression Analysis	Hotel star rating	
4	(Xu & Li, 2016)	Hotel attributes	LSA	Guest satisfaction and dissatisfaction	
5	(Z. Liu & Park, 2015)	Messenger and message factors	TOBIT regression model	Review helpfulness	
6	(Marinkovic, Senic, Ivkov, Dimitrovski, & Bjelic, 2014)	Hotel atmosphere, quality, price	Structural Equation Modeling (SEM)	Customer satisfaction and revisit intention	
7	(Qi & Qiang, 2013)	Review volume and overall hotel ratings	Econometric modelling	Hotel sales	
8	(Öğüt & Onur Taş, 2012)	Customer rating and star rating	Linear regression	Hotel sales and Price	
9	(Nam, Ekinci, & Whyatt, 2011)	Hotel brand equity	SEM	Hotel brand loyalty	
10	(Chand, 2010)	Human resource management (HRM) practices	SEM	Customer satisfaction and Hotel Performance	
11	(Wu & Liang, 2009)	Environment, interaction with employees and fellow customers	Regression analysis	Customer satisfaction with luxury hotels.	
12	(Jeong & Mindy Jeon, 2008)	Hotel characteristics	Descriptive analysis and ANOVA	Return intention	

nandes, 2018). Also, in another study, he determinants of customer satisfaction or dissatisfaction were found to be unique and for different variety of hotels, namely full-service hotels, limited service hotels, suite hotels with and without food and beverages (Xu & Li, 2016). So it won't be incorrect to say that guest satisfaction is the key element of study for the all the aspects of hotel industry. As the customer satisfaction directly controls a hotels' market position.

# **EWOM, Text and Statistical Analysis for Guest Satisfaction**

Guest satisfaction is the key factor in hospitality industry. The sole purpose of marketers and practitioners in lodging sector is related to the psychological, emotional and physical satisfaction of their guests. Customers' intention to post EWOMs has been worked upon in the past and it was observed that quality of the information provided, e-service and system quality have significant impact on intention to provide EWOM (Rizal et al., 2018). Impact of EWOM on the sale of product is a hot topic in this industry (Anu G. Aggarwal & Aakash, 2018). Sales rank along with the price factor has also been studied. Higher customer rating was observed to result in higher sales and high pricing of hotels result (Öğüt & Onur Taş, 2012). People in research community have studied the effect of difference in spoken language of the customers on the hotel rating provided by them using regression analysis(Y. Liu et al., 2017). Study of the determinants of guest satisfaction has received considerable limelight. A study of luxury hotels was done and its results indicated that restaurant environment directly and positively affects the customer

satisfaction where as interaction with staff and other customers had an indirect and positive impact on satisfaction level (Wu & Liang, 2009) Satisfaction and dissatisfaction determinants have been found to be different for different types of hotels by employing LSA text mining technique (Xu & Li, 2016). Another area which has been worked on is the customer satisfaction and the subsequent revisit intention associated with it. They took into account various factors namely atmosphere, quality of interaction and pricing to understand satisfaction(Marinkovic et al., 2014).

The effect of various reviewer characteristics (messenger factors) and both qualitative and quantitative review attributes (message factors) on the helpfulness of a review has also been studied(Z. Liu & Park, 2015). They used TOBIT regression model to find that a combination of reviewer and review content factors positively influence the said reviews' helpfulness(Z. Liu & Park, 2015). Another study found that overall hotel ratings positively influence the hotel sales (Qi & Qiang, 2013). Further, a path model was proposed to study the effect of brand equity on brand loyalty in hospitality industry. Customer satisfaction was taken as mediating factor between hotel brand equity and hotel brand loyalty for the study conducted(Nam et al., 2011). Human resource management practices have been concluded to improve service quality, thus in turn enhancing hotel customer satisfaction and organizational performance (Chand, 2010). Another study engaged descriptive analysis and ANOVA technique to study the effect of hotel characteristics on guest satisfaction which in turn had an impact on return intention of the customer (Jeong & Mindy Jeon, 2008). Hence, it could be significant to analyze the impact of review (EWOM) characteristics on hotel guest satisfaction.

# HYPOTHESES DEVELOPMENT

One significant feature of electronic-word-of-mouth (EWOM) is the way in which it has shown to the users. Electronic service marketplace such as TripAdvisor had more than 460 million reviews (EWOM) of activities, hotels, and restaurants which help them to see progress in enhancing unique visitors as well as reviews each quarter (ComScore, 2017). The EWOM interface contains four significant information: (1) The hotel's meta characteristics such as: address, hotel-ID, hotel-URL, imgURL, name, price. (2) The overall ratings to the hotel on a 1-5 Likert scale given by the reviewer. (3) The EWOM characteristics such as EWOM text, reviewer, reviewer's location, date, star-ratings (value, location, service, rooms, cleanliness, sleep quality), EWOM-ID, EWOM-title. Figure 1, shows an example of EWOM at TripAdvisor.in.

The guest satisfaction is a tedious task within the hotel industry. The concept of guest satisfaction was introduced in the late 1970s. The guest satisfaction is the evaluation on which customers feel that service is as excellent as supposed to be (Hunt, 1975). The emotional response after using a service is known as guest satisfaction (Oliver, 1981). According to Yoon and Uysal (2005), the tourist satisfaction involves the views (i.e. equity and norms), expectation towards service, and also the perceived overall performance. Hence, there is a growing need to understand the antecedents of hotel guest satisfaction. Many services provided by hotels are intangible this indicates an information disparity amog customers and hotels related to the hotels' service quality. Customers give their feedback in terms of electronic word of mouth (EWOM) after staying in the hotel. The linguistic characteristics of EWOM text help future customers as well as hotel managers to analyze the perception of guests towards that hotel (Geetha et al., 2017). Therefore, not only customers' writing style, but also the linguistic features of EWOM signals the perception of customers towards that hotel services. The sentiment and emotional expression of EWOM help to evaluate the customer satisfaction (Mady, 2011). In this chapter, we considered readability and

Figure 1. Example of EWOM at TripAdvisor



EWOM length as key attributes of linguistic features of EWOMs. We use Naïve Bayes (NB) sentiment analysis technique to calculate the sentiment index of each EWOM text. Additionally, Ye et al. (2009) examined that the number of online reviews influence the hotel room sales. Thus, number of EWOMs is also a significant measure for analyzing the customers' perception towards the hotel services. As an indirect interaction with previous and prospect customers, EWOM powerfully improve the impact of information asymmetry and intensely stimulus hotel sales.

According to W. G. Kim, Lim, and Brymer (2015), overall ratings is associated with hotel performance. Therefore, overall ratings represent the customers' past experience or satisfaction with that hotel. If perceived performance is higher than their evaluation, then the customer will satisfied otherwise dissatisfied (Berezina, Bilgihan, Cobanoglu, & Okumus, 2016). In EWOMs, customer disscuss the perceived hotel performance, their pre-assessment, or both to highlight why they are pleased or frustrated.

# Volume of Electronic-Word-Of-Mouth (EWOM Volume) and Overall Hotel Ratings

The EWOM Volume refers to the number of reviews posted online by different users over time. With the enhancement of social media, EWOMs act as an important source to gain knowledge about any product/service for customers. Hyan Yoo and Gretzel (2008) highlighted that 75% customers read user generated content (EWOM) for collecting the information before they travel. As EWOMs increase, customers get more and more knowledge about the product/service quality as well as its actual performance. Although customers can get product/service related specification from other variety of sources but the information generated by EWOMs is considered to be more reliable as compared to the information given by seller (Anu G Aggarwal & Aakash, 2018; Cantallops & Salvi, 2014).

According to Ye, Law, Gu, and Chen (2011), as the volume of EWOMs increases they become trustworthy indicator of hotel performance and reduce the uncertainty related to hotel services which in turn positively affects the hotel online bookings. Mauri and Minazzi (2013) proposed that the volume of EWOMs is significantly correlated with the buying intention of potential hotel customers. Brandes and Nolte (2011) examined that EWOM volume positively influence the hotel demand. The volume of

EWOMs is shown to enhance customer awareness about service/product and produce higher sales (Öğüt & Onur Taş, 2012; Qi & Qiang, 2013). Therefore, the higher number of EWOMs towards any hotel impact customer buying decisions by affecting both their awareness of the hotel and the perception of its services. Hence, we posit the following hypothesis.

**H<sub>1</sub>:** WOM volume has a significant impact on overall hotel ratings.

# **EWOM Length and Overall Hotel Ratings**

The EWOM length refers to the number of characters included in the review text. Customers write more elaborated EWOMs with extensive information about hotels by comparing their positive aspects with negative aspects of hotels' product and services (Ngo-Ye & Sinha, 2014). Shelat and Egger (2002) examined that EWOM length positively influence the buying intention. Mudambi and Schuff (2010) highlighted that lengthy EWOMs provide detailed information about product/service, but usually happens when a customer feel negative about product/service is offered to him (Verhagen, Nauta, & Feldberg, 2013). Customers put extra efforts to explain their disappointment, temper, and dissatisfaction when they highlight the negative aspects of products/services (Cantallops & Salvi, 2014). Customer with nasty feelings tend to post lengthy EWOMs to endeavor recognition and help from the tourism society and label their EWOM more helpful (Hong, Xu, Wang, & Fan, 2017). Thus:

H<sub>2</sub>: WOM length has a significant impact on overall hotel ratings.

# **EWOM Sentiment and Overall Hotel Ratings**

EWOM sentiment basically refers to the reviewer's emotions expressed through words and other verbal cues. EWOM contains substantial amount of information which influence the customer in his 'to buy' or 'not to buy' decisions (Geetha et al., 2017). In e-service sector, it is important to understand the sentiment of the EWOMs using mining of EWOM text and NPL (natural language processing) techniques, not only from marketing point of view but also to take strategies decisions.

The EWOM sentiment is the level of satisfaction in terms of positive, negative or neutral sentiments that customers showed at the time of posting EWOMs. Good experience about product/service can increase the perception towards product/service quality, which is the antecedents for guest satisfaction, while bad experience is an antecedent of guest dissatisfaction (Dai, Luo, Liao, & Cao, 2015). Customers can judge their experience towards product/service clearly when they are in satisfied sentimental phase as compared to the dissatisfied emotional state (Isen, 1987).

Using NPL techniques, the EWOM text may be classified as positive, negative or on n-point scale as very good, good, average, bad, very bad. Higher percentage of sentiment shows more positive EWOMs. Through sentiment analysis, e-service industry may frame their key marketing decisions with respect to the hoteliers, delivery/payment mechanism, hotel's service quality, future hotel bookings, hotel recommendation etc. Therefore, we set:

H<sub>3</sub>: WOM sentiment has a significant impact on overall hotel ratings.

# **Extraction of EWOM Sentiment**

Sentiment analysis is the process of recognizing and classifying emotions expressed through a piece of text or *emoji*. It is a method for understanding the reviewers' attitude towards a product/service and classifying it as positive, negative, or neutral.

Numeric values which we get after performing sentiment analysis are known as "Sentiment Index". Sentiment Index represents how pessimist or optimist a reviewer is with respect to the quality of a hotel. The sentiment of a review goes a long way in forming the customer perception towards a hotel as customer tend to trust the information provided by the fellow users more as compared to the information provided by the seller.

In this chapter, we use the Naïve Bayes (NB) classifier through Natural Language Toolkit (NLTK) for calculating the sentiment index of each hotel review (EWOM) because NLTK is an efficient way to understand the human language such as hotel EWOMs. This method is based upon Bayes theorem which states that

$$P\left(E_{\scriptscriptstyle 2}|E_{\scriptscriptstyle 1}\right)\!=\!\frac{P\left(E_{\scriptscriptstyle 1}|E_{\scriptscriptstyle 2}\right)\!*P\left(E_{\scriptscriptstyle 2}\right)}{P\left(E_{\scriptscriptstyle 1}\right)}\,.$$

The Naïve Bayes (NB) algorithm is applied for polarity classification and calculating the sentiment index for each electronic-word-of-mouth (EWOM). Here, the EWOMs have been classified as positive  $(S_+)$  and negative  $(S_-)$  and belongs either to the set of two classes as  $S_j$ , where  $j \in \{-, +\}$ .

Let E represent set of emotive words;  $E \in R^{\eta}$  where  $\eta$  represents number of emotive words. Let  $n_k$  be the number of emotive words in the  $k^{\text{th}}$ . EWOM of each hotel. Let  $N_k \in R^{\eta_k}$  (k = 1, 2, ...., n) be the set of emotive word for  $k^{\text{th}}$  EWOM, where n is total number of EWOMs. Let  $w_{ik}$  represent  $i^{\text{th}}$  emotive word in  $N_k$ .

The likelihood of  $N_k$  is in the class  $S_j$  where  $j \in \{-, +\}$  is calculated using NB method as follows:

$$argmax_{s_{j}}\left(P\left(S_{j}|N_{k}\right)\right) = argmax_{s_{j}}\left(\frac{P(N_{k}\mid S_{j})\times P\left(S_{j}\right)}{P\left(N_{k}\right)}\right),\tag{1}$$

Here  $P\left(S_{+}\right)$  and  $P\left(S_{-}\right)$  represents the chances of positive & negative class. These probabilities may be obtained from the number of words belonging to positive & negative class in the training set.  $P\left(N_{k}\right)$  represents the likelihood of a particular set of emotive words in a class,  $P\left(N_{k}|S_{j}\right)$  represents the likelihood that  $N_{k}$  comes under the class  $S_{j}$ . Here,  $P\left(N_{k}|S_{j}\right)$  is calculated as follows:

$$P(N_{k}|S_{j}) = P(w_{1k}, w_{2k}, \dots, w_{nk}|S_{j}),$$
(2)

can be written as

$$P(N_k|S_j) = P(w_{1k}|S_j) \times P(w_{2k}|S_j) \dots \times P(w_{ik}|S_j),$$
(3)

(It has been assumed that emotive words are independent of each other)

Here  $P(w_{ik} \mid S_j)$  is the likelihood that the word  $w_{ik}$  appears in the class  $S_j$ . It is calculated by dividing the number of times word  $w_{ik}$  occurs in class  $S_j$  by the total number of words in that class. Hence,  $P(w_{ik} \mid S_j)$  is calculated as:

$$P\left(w_{ik}|S_{j}\right) = \frac{t_{ij} + 1}{\sum_{w'_{i} \in V} t_{i'j} + K},\tag{4}$$

where  $t_{ij}$  be the number of times  $w_{ik}$  occurs in training set belonging to class  $S_j$ .  $t_{i'j}$  is the number of times  $w_{i'k}$  occurs in the training set related to class  $S_j$  and K is the number of words in the sentiment wordlist.

After obtaining  $P(S_j|N_k)$  using Naïve Bayes technique, the sentiment index for time t, $SI_t$ , calculated as follows:

$$SI_{t} = \sum_{Rev} \left( P\left(S_{j} | N_{k}\right) \times s \right) = \sum_{Rev} \left( SI_{tk} \times s \right)$$

$$(5)$$

where *Rev* represents the volume of EWOMs within time t and the constant (s) is either -1 or 1 its value based on the class of  $SI_{tk}$ . If it lies in positive category then s=1 otherwise s will be -1 for negative category. Hence, the sentiment index for each hotel can be calculated with the help of Eq. (1) to (5).

# Readability and Overall Hotel Ratings

The level of education and effort needed to understand a piece of text defines the concept of readability (Zakaluk & Samuels, 1988). The objective of readability measures is to provide a scale-based signal of how hard a piece of textual content is for readers to interpret on the basis of linguistic features of that content. Therefore, a readability score can only give a signal of how much easy or difficult a piece of text is for readers on the basis of its style and syntactical elements. In addition, the readability measures have also been used in that case when a reader wants to read a particular text for making decisions or to comprehend the reason behind that text. For example, financial statements (M. Smith & Taffler, 1992).

Readability measures have been used to analyze the qualitative features of different types of text and there are many readability formulas have been proposed in the past studies (Paasche-Orlow, Taylor, & Brancati, 2003). In this chapter, we choose four key readability measures which have been applied widely to estimate the text readability by individuals with different educational standards. One specific reason for choosing readability measures an ideal tool for analyzing the customers' performance towards the hotels on the basis of overall ratings stems from theoretical basis provide in the previous sections. According to the Calderón et al. (2006), an easily readable text gives better comprehensible to readers, thus those who understand a textual content better will create a better justified attitude towards it.

Table 2 gives the readability measures used in this chapter, these include the Dale Chall Readability Score (DCRS), the Flesch Kincaid Grade Level (FKGL), the Smog Index (SMOG) and the Gunning Fog index (GFI). All four measures calculate the readability of a review text by dividing the review text into basic structural features, which are then integrated through an empirical regression technique. However, it is significant to understand that all the indexes calculate the same characteristics.

# **Gunning Fog Index (Gfi)**

GFI represents a level of the extent to which a reader with a mean educational grade level (i.e. 10th standard) would be able to understand a textual content (Gunning, 1969). The formula for calculating the GFI score is as follows:

$$\text{GFI} = 0.4 \left( \frac{words}{sentences} + 100 * \left( \frac{difficult \, words}{words} \right) \right).$$

The tedious task in calculating the GFI score is to find difficult words in a given piece of text. In this study, we form a word as difficult whenever it has greater than three syllables.

# Smog Index (Smog)

The Smog Index (Mc Laughlin, 1969) combines various mainly two aspects of text such as number of pollysyllables and sentences to estimate the comprehensibility with respect to each EWOM text. In precise, the SMOG index of EWOM text is estimated through the formula given by Contreras, Garcia-Alonso, Echenique, and Daye-Contreras (1999):

$$SMOG = 1.0430\sqrt{\frac{30*(pollysyllables)}{sentence}} + 3.1291.$$

Table 2. Readability measures

Readability Index	Description		
Gunning Fog Index	e gunning fog index is indirectly proportional to the readability level. The lower the value of gunning fog index, the more readable the text.		
Smog Index	The SMOG index is based on polysyllable word in the text. Therefore, the total polysyllable word count directly related to the educational grade level.		
Flesch Kincaid Grade Level	The Flesch Kincaid Grade level is directly correlated with the educational grade level required to read the given textual content.		
Dale Chall Readability Score	The Dale Chall Readability score directly proportional to the educational grade level.		

Furthermore, the calculation of SMOG index with less than thirty sentences for a piece of text are statistically insignificant because SMOG measure was normed on thirty-sentence samples (Contreras et al., 1999).

# Flesch-Kincaid Grade Level (Fkgl)

The Flesch-Kincaid Grade Level (Kincaid, Fishburne Jr, Rogers, & Chissom, 1975) combines various aspects of text such as number of words, sentences, and syllables to estimate the comprehensibility with respect to each EWOM text. In precise, the grade level of EWOM text is estimated through the formula given by Kincaid et al. (1975).

$$\text{FKGL} = 0.39 \left( \frac{words}{sentences} \right) + 11.8 \left( \frac{syllables}{words} \right) - 15.59 \ .$$

FKGL is frequently used readability measure due to their calculation speed and past support for their reliable results (Kincaid et al., 1975). We also used this readability measure because FKGL weights are calibrated with the U.S. grade levels.

# Dale Chall Readability Score (Dcrs)

The Dale Chall Readability Score (Dale & Chall, 1948) combines various aspects of text such as number of difficult words, words, and sentences to calculate the comprehensibility with respect to each EWOM text. The formula for measuring the DCRS score is given by Dale and Chall (1948):

$$DCRS = 0.1579 \left( \frac{difficult\,words}{words} * 100 \right) + 0.0496 \left( \frac{words}{sentences} \right).$$

According to Korfiatis et al. (2012), the level of readability of text affects the level of understanding of the reader (Korfiatis, GarcíA-Bariocanal, & SáNchez-Alonso, 2012). Ghose and Ipeirotis (2011) proposed that readability score affect the product sales (Ghose & Ipeirotis, 2011). Additionally, Chua and Banerjee (2016), readability score is a measure of review helpfulness (Chua & Banerjee, 2016). Therefore, we hypothesize:

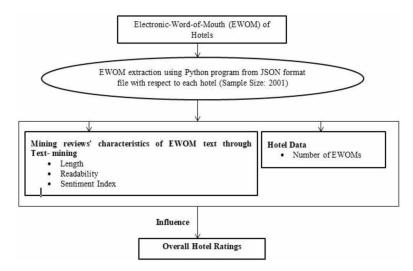
 $\mathbf{H}_{4}$ : Readability of the review has a significant impact on overall hotel ratings.

# **DATA ANALYSIS**

# **Data Description**

We used the data of Tripadvisor.com because it is world biggest social media platform specific to e-services and also it has more than 460 millions EWOM related to hotels, restaurants, and other e-services. We used set of EWOMs extracted from Tripadviosr webiste and originally crawled by Wang, Lu, and Zhai

Figure 2. Flow diagram of research



(2011). The dataset contains 12,782 json files in which each file holds the information with respect to different hotel. We accessed 2001 hotels out of 12,782 for our analysis. We extracted 27,3599 number of EWOMs with respect to 2001 hotels. Each EWOM contains the name of associated hotels, EWOM Title, and overall hotel ratings. The flow diagram of our analysis is give in Figure 2.

For statistical analysis, we have extracted the linguistic features of EWOM text such as readability and EWOM length. We have also extracted the EWOM sentiment through Naïve Bayes (NB) sentiment analysis approach. The overall ratings for each hotel is based on one to five Likert scale where one-star represents minimum and five-star for maximum satisfied experience with the hotel. Some summary statistics for the data included in our analysis is given in Table 3. Figure 3 represents the frequency

Table 3. Summary Statistics of Hotel review data included in the study

Significance: \*\*\*p<0.001; \*\*p<0.01; \*p<0.05

Independent Variable	Mean	Median	Std. Dev.	Min.	Max.
EWOM_Volume	136.73	131	25.982	100	190
EWOM_length	396.29	278.82	370.59	22.59	2991.65
Sentiment_index	20.72	19.34	12.37	3.27	95.24
Flesch_Kincaid_Grade	8.87	8.1	4.24	-0.4	58.7
Dale_Chall_Readability_Score	6.96	6.87	1.08	0.74	13.82
Smog_Index	9.95	10.1	2.71	0	19.6
Gunning_Fog	14.3	13.54	4.69	3.51	64.62
			2001		
Total Number of EWOMs			273599		
Dep. Variable			Overall hotel ratings		



Figure 3. Number of e-WOM per unit of the guest ratings

distribution for the overall hotel ratings or guest ratings. Figure 4 represents the frequency distribution EWOMs volume.

# **EMPIRICAL MODEL AND RESULTS**

We applied a multivariate linear regression technique for analyzing the impact of EWOM text on overall hotel performances through two models as provided by Eq. (6) and (7). In first model, we analyze the impact of EWOM\_Volume( $EV_i$ ) EWOM\_Length( $EL_i$ ) and EWOM\_Sentiment( $ES_i$ ) on overall\_ratings ( $overall\_ratings$ ) of hotel (i) by estimating model of the form:

$$overall\_ratings_{i} = \alpha_{0} + \alpha_{1}EV_{i} + \alpha_{2}EL_{i} + \alpha_{3}ES_{i} + \varepsilon_{i} \tag{6}$$

Figure 4. e-WOM volume

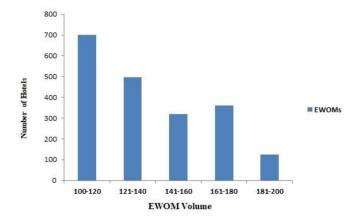


Table 4. Empirical results for both models

	Model-I		Model-II	
Independent variables	coef.	std. err.	coef.	std. err.
EWOM_Volume		0.000		0.001
EWOM_Length		0.001		0.000
EWOM_Sentiment		0.002		0.002
Flesch_Kincaid_Grade				0.026
Dale_Chall_Readability_Score				0.045
Smog_Index				0.009
Gunning_Fog			-0.1119***	0.029
Adj. R-squared	0.951		0.954	
Df	3		4	
Number of Hotels (N)	2001		2001	
Dep. Variable	Overall hotel ratings			

Significance: \*\*\*p<0.001; \*\*p<0.01; \*p<0.05

In the second model, we include additional variables related to the review readability name as the Flesch Kincaid Grade Level (FKGL<sub>i</sub>). Dale Chall Readability Score (DCRS<sub>i</sub>) the Smog Index (SMOG<sub>i</sub>) and the Gunning Fog index (GFI<sub>i</sub>).

$$\begin{aligned} & overall\_ratings_i = \\ & \beta_0 + \beta_1 EV_i + \beta_2 EL_i + \beta_3 ES_i + \beta_4 \text{FKGL}_i + \beta_5 \text{DCRS}_i + \beta_6 \text{SMOG}_i + \ \beta_7 \text{GFI}_i + \varepsilon_i \end{aligned} \tag{7}$$

In addition, we used an endogenous variable  $(\varepsilon_i)$  or incorporating all other environmental factors which may influence the performance of the hotel (i) (Ye et al., 2009). First, to analyze the impact of EWOM sentiment on hotels performances, we have estimated the basic model in which the information related to the EWOM sentiment is included (Eq. (6)). Later on to study the impact of EWOM readability on the overall hotel satisfaction, we estimate the multivariate linear regression model with four readability indexes (Eq. (7)). The empirical results for both models are represented in Table 4, including the number of hotels (N) adjusted  $R^2$  values, standardized coefficient of the key variables, standard errors of estimation.

The overall ratings of the hotel is directly related to the overall hotel performances such that one-star rating represents least and five-star for most satisfied experience of the guest with the hotel. Therefore, positive correlation between any independent variable and overall hotel ratings represents positive impact on hotel performances In other words, higher value of that variable corresponds to higher level of guest satisfaction towards that hotel.

This model gives a flexibility to analyse percentage change in overall hotel ratings with respect to given level of change in EWOMs variables. From the regression results it may be observed that  $EWOM\_Volume$  influence overall\_ratings significantly (p<0.001) across both models. This outcome is in agreement with many other past studies (Brandes & Nolte, 2011; Zhu & Lai, 2009). In both models,  $EWOM\_Length$ ,

has a negative impact on overall hotel performances, which means higher are the EWOM\_Length, the lower are the satisfaction level towards that hotel. These results were also reported in previous studies (Bradley et al., 2015; Sparks & Browning, 2010). It shows that review length is not positively related to the hotel performance, on the contrary the hotels having relatively more lengthy reviews have poor guest experience (Berezina et al., 2016). The coefficient of, *EWOM\_Sentiment*, is positive in model-I as well as II, This implies that the higher EWOM\_Sentiment percentage leads to greater overall hotel ratings. EWOM\_Sentiment reflects guests' emotions when they share their experiences towards that hotel. Higher positive sentiment shows that guest used more positive words as compare to negative in their feedback through EWOM (Geetha et al., 2017).

The proposed relationship between  $EWOM\_Volume$  and overall\_ratings is significant in both of the models  $(\alpha_1=0.0275,\ \beta_1=0.0152,\ p<0.001)$ , which supports  $\mathbf{H_1}\ \mathbf{H_2}$  investigates the relationship between the  $overall\_ratings$  and  $EWOM\_Length$ . Our findings show that the coefficient of  $EWOM\_Length$  is significant with a negative sign for both models  $(\alpha_2=-0.0015,\beta_2=-0.0007,p<0.001)$ . Thus, lengthy EWOMs will negatively affect the guest satisfaction. The relationship between the  $EWOM\_sentiment$  and  $overall\_ratings$  was significant for both models  $(\alpha_3=0.0385,\ \beta_3=0.0356,\ p<0.001)$ . Hence, our results support  $\mathbf{H_2}$ .

The model-II contained the readability metrices which measure the difficulty level of the EWOM text. By comparing the results obtained from model-I and II, we observe that model-II ( $AdjustedR^2$ =0.954) is better than model-I ( $AdjustedR^2$ =0.951). It reinforces that the readability of the EWOM text significantly influences the mood of customers and gives better results for analyzing the overall hotel performances. These findings, together with the value of coefficients ( $\beta_4$ ,  $\beta_5$ ,  $\beta_6$ , and  $\beta_7$ ) supports  $H_4$ . Hence, the qualitative characteristics of EWOMs will impact on overall hotel ratings. One of the crucial points we noted that the coefficient of all four readability measures showed a higher value as compared to EWOM\_Length. This implies that the readability of the EWOM text had a higher impact than EWOM\_Length on overall guest satisfaction.

# **CONCLUSION AND MANAGERIAL IMPLICATION**

Online user generated content (EWOM) act as an excellent source of information for both customer as well as the marketer in hospitality industry. The marketer analyzes EWOMs to extract useful information regarding customer preferences, feedback and satisfaction analysis it also helps the marketer to connect with its customer base in cost and time effective manner. The prospective customers' access and read online customer content to judge the service quality and performance on the basis of overall ratings and the verbal cues posted online by previous customers. EWOMs act as word of mouth available electronically and influence the purchasing intention of imitator class of adopters. E-services giants like Tripadvisor, and Yelp etc. maintain online review system to monitor the market pulse so as to design key marketing strategies with respect to promotion, advertising, vendor monitoring, service quality etc. In spite of this, it is an interesting area of research to examine the extent of relation that EWOMs has on the usage experiences of the customers. In this chapter, we identify the key variables related with EWOM text which affects the performances of the hotel opportunity conversion for the marketer.

# **Major Findings**

This study provides insight about the effects of EWOMs, and its measures on the buying intention of customers through multivariate linear regression modeling. We have constructed two multivariate regression models- one which includes the effect of EWOM\_Volume, EWOM\_Length, and EWOM\_Sentiment on the hotel performances (measured through overall hotel ratings); the second which includes readability measures in addition to the above mention variables. The models were validated on review data of 2001 hotels available on Tripadvisor.com. From the regression results, the key findings are as follows:

First, EWOM\_Volume and EWOM\_Sentiment have positive relation with overall hotel ratings. This indicates that a hotel whose EWOM text holds positive emotions, opinions and behavior, impact performance positively and large number of EWOMs has higher guest satisfaction. In contrast, EWOM\_Length have negative regression coefficient with overall hotel ratings. It means that lengthy reviews indicate low hotel performance or customer overall ratings.

Third, readability matrices enhance the accuracy of the model as represented by higher value of adjusted  $R^2(AdjustedR^2=0.954)$  as compared to model without readability metrices ( $AdjustedR^2=0.951$ ). The incorporation of readability measures in the model building not only helps in analyzing the actual hotel performance but it also provides a medium to measure the satisfaction level of the customer with respect to e-service platform, its vendors, payment mechanism, complaint handling, and market positioning.

# Theoretical Contribution

This study adds a value to the literature of marketing as well as social science in many ways. First, from social aspect, the method gives a technique to relate hotel performance with a customer feedback given in terms of verbal text/emoji/pictures. It helps us to understand how the people are influenced by the opinion, judgments of others.

Second, from marketing aspect, in this chapter, we have used an integrated approach for investigating the influence of different EWOMs measures on overall hotel ratings, which incorporate statistics, text mining, and sentiment analysis simultaneously. The previous studies reported in the literature focused only on one technique at a time (Berezina et al., 2016; Bradley et al., 2015; Sparks & Browning, 2010).

Third, Naive Bayes (NB) sentiment analysis has been used to capture positive, negative and neutral polarity as a combined opinion. Although, sentiment analysis has been used to examine EWOMs by many previous researchers also but NB methods give better results for the same (Fan et al., 2017).

Fourth, this chapter represents the connection between linguistic features of electronic-word-of-mouth (EWOM) and overall ratings. As compared with overall hotel ratings, linguistic features can highly reflect the guest's feelings and opinion in detail due to their profoundness. This chapter concentrates on the linguistic features such as readability and review length servers as a pointer to analyze the overall guest perceptions towards that hotel.

Finally, by incorporating readability measures in our analysis, we were able to study the impact of review language on the overall hotel ratings.

# **Managerial Implication**

Overall hotel ratings are directly related with the guest experience. EWOM text measures the customers experience with verbal protocols, which are indirectly related to customer perception and satisfaction

(A. K. Smith & Bolton, 2002). In this way, guests' feedback in terms of EWOMs affects the perception and satisfaction towards that hotel.

The results of this chapter can encourage hoteliers to extract other features from the textual content of EWOMs and to analyse the impact of these features on overall hotel ratings. These EWOMs generate a greater impact that influences future hotel bookings. However, electronic-word-of-mouth analysis remains challenging.

This chapter used a text analytics approach that provides a real-world technique for hoteliers to analyse that how linguistic features of EWOM text as well as EWOM sentiment related to the overall hotel ratings. Giving quick and effective reply to reviewers' negative comments is an efficient technique to apply service recovery activities and maintaining customers (Chevalier, Dover, & Mayzlin, 2018). Hotels may attempt to study the poor experiences of customers through EWOM text for future enhancements.

This chapter gives new direction in terms of detecting the EWOM sentiment as well as linguistic features of EWOM. This work uses a Naïve Bayes (NB) algorithm for analyzing sentiment polarity not only for each review but also in respect of each hotel. Lastly, our study confirms previous studies that lengthy reviews affects guest satisfaction negatively and also the readability of EWOM text significantly influences the overall hotel performances. We also noted that the review readability had a greater impact than review length on overall hotel ratings.

# LIMITATIONS AND FUTURE SCOPE

Even though the chapter represents a comprehensive and well explained study, there are some limitations of the research. Firstly, the non-English words were counted as wrong words in the study, however, the non-English words may have a say in the sentiment analysis. These non-English words may be considered for analysis in future work. Secondly, the analysis is based on the review text obtained from only one OTA website i.e. Tripadvisor.com. Therefore, research findings should be generalized to other domains also. Thirdly, this study considers reviews data of only 2001 hotels to evaluate their overall performance based on only four technical characteristics of reviews. Future research can consider more volume of reviews and additional technical characteristics to converge towards high level big data analysis. Also, machine learning techniques can be used to judge hotel guest satisfaction. Moreover, future work can also examine the helpfulness of the reviews with the available ratings.

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# Chapter 15 An Empirical Study on the Importance of Electronic Word of Mouth in the Concierge Industry: The Case of Cyprus

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# **ABSTRACT**

The widespread access of electronic word of mouth (e-WOM) enables contemporary consumers to assess the opinions of others, irrespective of geographical boundaries, about products and services. This research examines the impact of e-WOM on building international brand awareness when the former is used as a core part of a company's overall digital marketing strategy. By applying the survey methodology, the findings provide support for this positive effect; namely, the integration of e-WOM in the overall digital marketing strategy and activities applied by an organization can enhance brand awareness beyond country borders and contribute towards the overall organizational effectiveness and success. Taken together, the study provides further insight into eWOM and cross-border brand awareness relationship and outlines several questions that deserve further study.

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#### INTRODUCTION

Industry reports indicate that word of mouth (WOM), defined as "an interactive exchange of information between two or more consumers that is not commercially motivated" (Baker, Donthu & Kumar, 2016, p.226), influences 76 percent of all consumers' buying decisions (Jalilvand et al., 2017). The advent of the Internet and the freedom of expression that came with it have led to the emergence of a new form of WOM, the so-called eWOM, defined as "any positive or negative statements made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet" (Hennig–Thurau et al., 2004, p.39).

Innovations and technology-based interactions and communication between organizations and consumers have already precipitated as a corner stone of today's era (Vrontis, Thrassou & Amirkhanpour (2017). Information seeking, the Internet of Things, and other digital technologies, influencing the daily life of both individuals and businesses are all part of and influence the typical everyday online activities of both businesses and individuals (Santoro et al., 2018; Themistocleous, 2018). Moreover, in today's hypercompetitive and constantly changing business environment, businesses across the globe increasingly seek value for their products via concepts and channels, trying to communicate what really matters to the customer (Christofi et al., 2018; Campanella et al., 2016).

Today's consumers are engaged in a vast range of networks characterized by complexity and diversity. Technology enables such network communication among the involved parties (including, firms, consumers and other stakeholders), and enhances various types of interactions in these networks, such as transactions, analyses, consumers interfacing with connected devices and gathering information about products and services, and social information sharing (Verhoef et al., 2018).

EWOM established its position in both research and practice as an issue of strategic significance, and managers are challenged to comprehend its effects on various key outcome metrics, such as sales or brand awareness (Wilson, Giebelhausen & Brady, 2017). An example of the significance of eWOM in today's era, is the fact that 70% of consumers from U.S.A go online to seek out opinions related to tangible and intangible products before the actual purchase (Wilson, Giebelhausen & Brady, 2017).

The exponential growth of eWOM is further enhanced by the ability of consumers to generate and access this content wherever they are and whenever they want. An abundance of applications and connected devices through the Internet of Things provides consumers with location-dependent information to annotate on products and experiences everywhere in the world and at all times (Ransbotham, Lurie & Liu, 2019). Industry studies state that, approximately, 2.4 billion daily brand-related conversations occur, and marketing practitioners constantly invest largely on directly influencing and comprehending such eWOM conversations (Baker, Donthu & Kumar, 2016).

Furthermore, such communication provides a cost-efficient strategy for a brand to communicate with a large Internet audience and disseminate brand and product or service information online (Gao et al., 2018; Berthon et al., 2012). In practice, international brands have increasingly adopted eWOM through social media as a branding or advertising tool (Gao et al., 2018; Johnston et al., 2018). However, research on evaluating a company's strategy on global branding, via social media users and, subsequently eWOM, is absent (Gao et al., 2018; Berthon et al., 2012;). Adding to this, several researchers call for a better comprehending of the differences across WOM types and their specific effects on consumer decision making and product success (e.g., Marchand, Hennig-Thurau & Wiertz, 2017; Hennig-Thurau, Wiertz & Feldhaus, 2015; Berger, 2014;). Yet research, either theoretical or empirical, on the differential effects of various WOM typologies is scarce (Marchand, Hennig-Thurau & Wiertz, 2017).

This research endeavors to shed some light on these research gaps. Thus, the aim of this study is to investigate the value and impact of information on service-related products via the Internet and its impact on cross-border brand awareness and company growth, focusing on such information in the context of eWOM. It appears that the concierge industry has been overlooked in the literature as we found limited studies focused on concierge services. Thus, a Cyprus-based concierge company, well established within the service sector, served as subject in the study.

This study contributes to the literature on eWOM in several ways. First, we complement other research about the powerful effect of eWOM on consumers' purchase decisions. Second, we advance the existing literature by arguing that the increased use of Internet technologies and especially the exponential growth of social media usage magnify the impact of eWOM communications at a particular level of analysis. Specifically, the research was focused on exploration of the eWOM phenomenon within the service sector in the context of Cyprus. Third, the empirical results make a theoretical contribution by providing evidence that there are various antecedents that motivate customers to engage in the value co-creation process. Finally, we show that eWOM is rapidly becoming more prevalent in the form of mobile and text word of mouth.

The remainder of this study is structured as follows. Next, we discuss the emergence of the eWOM concept. This is followed by a description of the conceptual foundations of the research and the development of the research questions. Then, we describe our methodology, the results and analysis. We conclude by presenting the limitations of our study and propose various avenues for future research.

#### **BACKGROUND**

The fast-spreading Internet phenomenon has allowed anyone, who has access to the internet through computers, laptops or mobile devices to share their opinions and beliefs about a product or service with a multitude of other consumers quickly and inexpensively and affect their buying decisions (Sefiani et al., 2018). In today's world of always-on, the success of a product is indeed in the hands of the consumer. A consumer has more power to influence other consumers and his reviews are even more searchable and social. As people surf the Internet to find information about products, services and companies in general and expect this type of information to be easily available, consumer-generated content, either positive or negative, influences them, with profound implications for businesses.

Many studies (e.g., ArsaF, Backmana & Baldwina, 2008; Zhang et al., 2010; Jeong & Jang, 2011; Kim, Kandampully & Bilgihan, 2018) agree that eWOM is the most powerful tool of influence with regard to consumer behavior and the most often used way to get information before, during and after consuming a product or a service.

Prior literature discusses several aspects of eWOM, from seeking and providing behaviors of eWOM (e.g., Fong & Burton, 2006; Lieberman & Goldstein, 2005; Nelson & Otnes, 2005), to eWOM motivations (e.g., Goldsmith & Horowitz, 2006; Sun et al., 2006), eWOM types and format (e.g., Thorson & Rodgers, 2006), attributes of eWOM advertising (e.g., Bickart & Schindler, 2001; Evans et al., 2001; Okazaki, 2008), and consumers' psychological responses to eWOM advertising (e.g., Benedicktus & Andrews, 2006; Senecal & Nantel, 2004), to name but a few (Rodgers & Wang, 2011).

Kotler and Armstrong (2010) identified that one of the key influencing factors of consumers' purchasing decisions is social networks. These social relations, which are developed through social networking sites and online communities, are often more genuine and much more credible and trustworthy than an

advertising company (Kim, Kandampully & Bilgihan, 2018). Several other studies share the same view and indicate that there is an increasing number of consumers trusting consumer-oriented online discussions, meaning eWOM, over marketer-generated web content (e.g., Bickart & Schindler, 2001; Goldsmith & Horowitz, 2006). As the social media users are constantly increasing and they spend more and more time on social networking sites (Kemp, 2018), the effect of eWOM on consumer decision-making process is getting out of hand faster than companies can respond (Cheung & Lee, 2012).

Big corporations are already using natural language processing (NLP) for sentiment analysis in an effort to uncover the sentiment and emotion behind the human language. By detecting emotions and tones in a conversation or a given text, such as online reviews or social media posts, NLP engines can gain deep understanding of customer preferences and behaviors, share more compassionate responses and, in general, help companies make smarter and faster decisions. Living in a digital age where millions of messages are posted on social media platforms, NLP applications for sentiment analysis can turn all these social media channels into one giant focus group and convert mass information into structured data enabling companies to find how users feel about a particular product or service. As technology keeps advancing and innovation accelerates, companies will be able to reach and interact with consumers in so many different ways and more effectively than ever before.

### THE EFFECTIVENESS OF EWOM BEYOND BORDERS

Internet facilitates discussion and sharing among users and there are a number of digital tools and communication forms that consumers use when they want to comment about products and services (Gupta & Harris, 2010; Lee et al., 2011). Some people share their experiences on virtual communities, for example www.tripadvisor.com, others might prefer online forums such as www.reddit.com and there are those who enjoy discussing their stories on blogs or on their own YouTube channel. A company's website, for instance www.amazon.com, can be also regarded as a medium of eWOM. Online chat boards on social media platforms like the one on Facebook and Instagram are types of eWOM channels too (Cheung & Lee, 2012). Consumers are increasingly using these user-generated content tools as platforms where they share their opinions about goods and services they consume (Kohli, Suri & Kapoor, 2014; Zhang et al., 2010). Sharing their experiences with a product or a service with a large number of people has a causal impact on consumer behavior with a significant impact on businesses regardless of size, location or industry and the biggest impact on the relationship between customers and businesses.

The latest global digital report released by We Are Social indicated that 4.021 billion people are internet users, 3.196 billion are active social media users and 5.135 are unique mobile users (Kemp, 2018). Based on Technavio's report (2016) every minute around 650,000 search queries are raised on Google, more than 700 videos are hosted on YouTube, over 700,000 status updates and 500,000 comments are posted on Facebook, more than 65,000 tweets are made worldwide, and approximately 180 million e-mails are sent. This public intimacy that characterizes digital mediums offers a fertile ground for eWOM.

The eWOM phenomenon may be an inexpensive marketing tool but there is yet another aspect. While people share their views all over the world they even end up building fan bases, not to mention careers as so-called influencers. The concept of eWOM correlates with influencer marketing and companies are spending a big portion of their marketing budgets to manage the eWOM process through influencers. If we only consider that Kylie Jenner, an American reality television personality, gets an estimated \$1 million per sponsored post (Mejia, 2018), there is no doubt that companies acknowledge eWOM as one

of, if not the most effective forms of marketing to spread the word about their goods and services and influence consumer buying behavior.

Many international companies rely on eWOM rather than spending millions on traditional methods of advertising. When was the last time you remember seeing a Starbucks advert on traditional media? Can you name an ad for Tinder on TV? Starbucks has created its own virtual community and engages in a personal dialogue with its customers generating a high engagement rate via likes, share, mentions and comments. Tinder is a great example of how the Internet has transformed WOM into eWOM. This social media network grew to around 50 million users thanks to college campus representatives who were hired as brand advocates and were planning events where guests had to download and engage with the app. As more people joined through the WOM process, its social networking features enabled its fame to expand through eWOM. There are many companies that instead of using traditional marketing channels to promote their products and services, they create a product or service that gets people talking, therefore resulting in increased awareness and sales generation beyond country borders. There is plethora of supporting evidence in extant literature as regards to the benefits of this phenomenon to businesses, such as positive corporate reputation, brand awareness, positive purchase intentions, among others (Christofi et al., 2018; Chatzoglou et al., 2018; Scorrano et al., 2018).

Within the service literature, many researchers have recognized the importance of interpersonal influence and its role in determining a product's success or failure (e.g., Chen et al., 2013; Confente, 2014; Godes & Mayzlin, 2004). Voyer & Ranaweera (2015) and Bansal & Voyer (2000) claimed that when the tie between the sender and the receiver is strong, WOM significantly impacts the purchase decision of the receiver in a services context. Bansal & Voyer (2000) also found that sender's expertise is a very strong indicator of the impact of WOM on the purchase decision of the receiver. Williams and Buttle (2011) highlighted the effectiveness of eWOM especially in service industries where it is difficult for customers to make a purchase decision, because they cannot experience the services until buying them. In the same vein, Jalilvand, Ebrahimi & Samiei (2013) argued that due to service intangibility, companies rely on others' opinions to make a purchase and thus eWOM within the service sector plays a greater role and is more influential.

Indeed, the service sector is extensively dependent upon eWOM. Service firms' strategies are focused on creating strong customer engagement and brand loyalty by measures aimed at co-creating services and experiences in order to achieve a sustainable competitive advantage (Buonincontri et al., 2017; Chathoth et al., 2016; Singal, 2015). For example, when customers search for a restaurant before dining out, they read online reviews and obtain information that will either direct them towards or away from certain restaurants (Zhang et al., 2010; Jeong & Jang, 2011). Afterwards, many of them disseminate their experiences, continuing and feeding the circle of eWOM. Similarly, travelers rely heavily on eWOM to decide the destination and other travel-related activities (ArsaF, Backmana & Baldwina, 2008; Yoo & Gretzel, 2011). Moreover, Litvin, Goldsmith & Pan (2018) suggested that eWOM is a cost-effective means for promoting such firms.

In small countries with low population density, like Cyprus, a company can more easily understand its customers considering that as countries become larger, diversity of consumers' preferences and attitudes increases (Alesina, 2003). Also, being a small country, Cyprus has always boasted about the close ties between the companies and their customers (Melanthiou, Papasolomou & Komodromos, 2015). However, setting a goal to build brand awareness in new international markets for a local service company calls for adjustments and changes in the marketing strategy (Albaum & Tse, 2001). A proper plan must be in

place, which can successfully embrace eWOM and the new digital marketing tactics in such a way as to exponentially increase its brand awareness and transform into a glocal organization.

# RESEARCH PURPOSE

EWOM has become the most powerful tool in directing consumers' behavior and decisions, and the arsenal of organizations and, by extension, has redefined the relationship between customers and businesses (Nicoli & Papadopoulou, 2017). Prior studies have demonstrated the increasing tendency of people to create and share an extraordinary volume of content (e.g., Kohli, Suri & Kapoor, 2014; Zhang et al., 2010), have offered important insight into the power of eWOM (e.g., Bickart & Schindler 2001; Goldsmith & Horowitz 2006; Kim, Kandampully & Bilgihan, 2018) and has illuminated its great deal of influence over consumer buying behavior (e.g., Benedicktus & Andrews, 2006; Senecal & Nantel, 2004).

However, based on the review of extant research, there has been a significant lack of insight into whether a local service company can increase its brand awareness overseas via eWOM through digital mediums and more specifically understanding these issues in the context of Cyprus. Previous study has reported that Cyprus, among 50 European countries, ranked second in terms of combined degree of interactivity across four social media platforms Facebook, Twitter, Instagram and YouTube (Uşaklı, Koç & Sönmez, 2017). Papasolomou, Kitchen & Panopoulos (2013) also found that marketing in Cyprus has moved towards new digital approaches. Although Cyprus is increasingly becoming 'social', there is a lack of research on this topic in Cyprus. To our knowledge, eWOM literature has not been covered in the context of Cyprus. The empirical investigation of this study guided by a core research question aims at filling this gap in research and answering the following question: How can a local service company raise brand awareness overseas via eWOM? Subsumed in this question are others: Which digital mediums have the greatest impact on consumers? How customer engagement can be enhanced?

# **METHODS**

# Research Strategy and Setting

In order to examine the interrelationships among eWOM, digital media, consumers and brand awareness, the survey strategy was applied. The survey method is one of the descriptive research methods, which is usually used to gain insights into consumers' opinions, interests and behaviors. Conducted over a sample of the population of interest, a trend in consumers' behaviors can be identified and then generalized to an entire market segment.

The survey consisted of three groups which contained a set of questions related to the outline of the research purpose. The questions were derived from previous studies (Heinonen, 2011; Margarida Barreto, 2013; Pagani, Hofacker & Goldsmith, 2011; Tsai & Men, 2013) but they were refined in order to be fit for the purpose of examining the research questions that are posed in this study. The questions in the first group were of a personal nature and the participants were required to give background information on gender, age and nationality. The second group was focused on the respondents' internet use behavior. It included four themes: 1) internet usage, 2) device usage, 3) preferred online activities, 4) social media usage and log in pattern. The third group of questions investigated motivation factors for

online buying behavior. The questions were structured more towards respondents' personal experiences in order to discern their perceptions.

As regards to the setting, we chose to focus on the service sector as in today's economic market, it is of great importance because it contributes more than 70% of the gross domestic product in developed countries (Christofi et al. 2015). Therefore, we chose to focus on consumers of an organization that is based in Cyprus and operates in the service sector. The chosen organization is widely established as a service provider, embracing the concierge idea – integrated package of tailor-made services for corporations as well as individuals. The concierge industry is an excellent context for this study not only due to lack of focus on this particular industry but also because concierge services complement and support activities of tourism and hospitality companies. Thus it adds not only to the eWOM and marketing literature but also to the literature available on the service sector.

Continuing, the survey was hosted on an online platform, while paper surveys were given as well. A list of 300 recipients had been created that included managers and employees from overseas companies that the company has already built business relationships and existing customers both locals and foreigners from the company's client list. Regarding the online surveys, an introductory email was sent to individual contacts so that the clear aim of this survey was clearly explained along with the link to the survey. By reaching a global audience - people of different ages and cultures, skilled in different jobs - we would be able to identify the company's target audience's behavior and possible changing patterns so that the company can assess the effectiveness of eWOM and the digital dynamics in order to evaluate its existing digital marketing strategy and adjust it, if necessary, to different market conditions so as to lead to higher performance and facilitate the process of enhancing its brand value. The paper version of the survey provided the opportunity to reach consumers from middle-class and upper-class backgrounds whose email addresses were unknown or it was easier to reach them via this method. It is evident that online questionnaires minimize the influence of biases and avoid distortion by the respondent; hence combining them with traditional methods, such as paper surveys, helped reach as many respondents as possible and get as more reliable results as possible.

The data collection period lasted 47 days, from December 5, 2016 until January 20, 2017. Of the 300 questionnaires distributed 220 were returned. This constituted a return rate of 73.33%. Also, 20 questionnaires were excluded due to missing or incorrect information. The data from the remaining 200 questionnaires were included in the analysis.

# Sample

The sample of 200 respondents was diverse with regard to demographic characteristics. From the 200 recipients validly completing the survey, roughly three-fifths of the respondents happened to be women, which accounted for 62.5% (n=125) and two-fifths men, which accounted for 37.5% (n=75). The gender was of main concern and it was noted to check the responses both formed by male and female in order to identify any gender-based differences in relation to their patterns of behavior and attitudes. Age groups, much like gender, were also of concern, as they would have significance influence in the analysis. The sample included people of different ages; hence the ages were grouped into 4 different categories, 18-25, 26-30, 31-40, 41-50. People that participated in the survey were from nine countries, namely Cyprus, Greece, Romania, Bulgaria, England, Germany, Ukraine, Russia, and Australia. The respondents from Cyprus made up 52.5% of the total and from Australia 7.5%. The rest of the countries, which are es-

sentially part of Europe, represented 40% of the total, since the respondents from Greece made up 15%, Russia 7.5%, England 5%, Romania 5%, Germany 2.5%, Bulgaria 2.5% and Ukraine 2.5%.

### **DATA ANALYSIS**

# Internet Use Behavior

Out of the 200 total participants, 67% said they use the internet all day and 30% several times a day, while the remaining 3% use the internet several times a week. The options 'once a day', 'once a week', 'several times a month' and 'once a month' were not chosen by any respondents. Summing up, the results show that a whopping 97% of respondents make visiting the digital world a regular occurrence, thus demonstrating that the internet has become an integral part of consumers' everyday life. In terms of age groups, 77% of respondents who said they use the internet all day were between the ages of 26 and 40. The remaining 23% were distributed among the 18-25 and 41-50 age groups, representing 19% and 4% of total respondents, respectively. Moreover, the intention of using the internet several times a day was most commonly mentioned by 26 to 30 year olds (42%), while the respondents in the 18-25 and 31-40 age groups represented 25% and 33% respectively.

People that participated in the survey were asked to indicate the devices they mainly use when they are navigating the internet. Overall, almost 70% of respondents mainly use their smartphones to access the internet, 23% of respondents said that they use more than one device for online activities, while 7% go online using a computer and 3% a tablet. This finding reveals the growing smartphone use and the world's transformation into a smartphone society.

In order to gain a deeper knowledge of respondents' online behavior, participants were asked about their preferred online activities. They were provided with 11 possible answers from which they could choose up to 3 answers. Figure 1 summarizes their responses. Particularly, the most popular activity online appeared to be communication related to personal aspects of life, as 20% of respondents have chosen the option 'send and receive instant messages'. Activities related to generation of information were second with 16% of respondents choosing the option 'find information and read news', while the activity of sending or reading email was close third (15%), followed by an equal percentage of respondents (14%), who chose the options 'watch videos on a video sharing site' and 'update personal profile on social networks'. Based on the findings, people remain reluctant to pay bills online, as only 2% chose this activity.

It is noteworthy to mention that a few gender differences were evident (Figure 2). Although the favorite online activity of both male and female is sending and receiving instant messages in chat apps such as Viber, WhatsApp and Facebook, more men (25%) than women (17%) seem to have embedded mobile communication into their lives. With regard to purchase related activities and more specifically paying bills, purchasing products and making travel arrangements (tickets, hotels etc.), none of male respondents opted for any of these activities. This finding reveals men's perceptions or better said their hesitation towards online payments.

With respect to age, unsurprisingly, younger respondents between ages 18 and 25 are the most voracious video viewers. More specifically, the highest proportion of respondents aged 18-25 reported online video consumption as their favorite internet activity, whereas this favorability was found to decrease with increasing age. Contrariwise, mobile instant messaging seems to be more popular among older age groups.

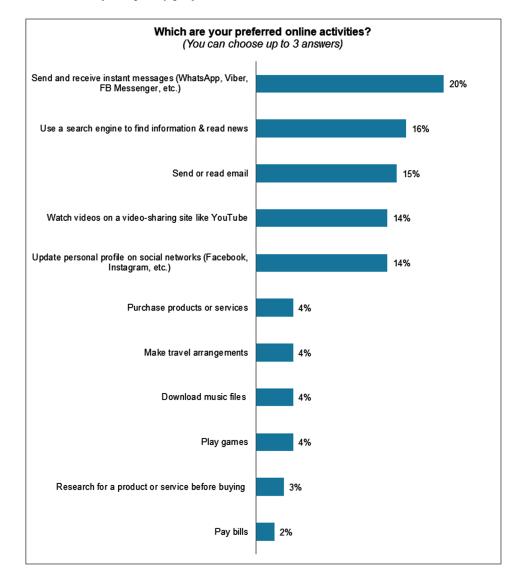


Figure 1. Distribution of sample by preferred online activities (%)

From the data gathered, 73% of all respondents have multiple social networking accounts and only 5% shun and don't use social media, proving that all these digital platforms are ingrained in consumers' daily routines. Further investigation of participants' presence on social networking sites revealed that Facebook is leading the pack (33%), followed by Instagram (22%), LinkedIn (18%), YouTube (17%) and Twitter (8%). Log in patterns were also explored. As Figure 3 indicates, fully 84% said they check their social media accounts daily, 47% of whom - almost half of all respondents - revealed an always on and connected pattern, while the rest 37% mentioned that they go on social media several times a day. Some 11% of respondents log in less often.

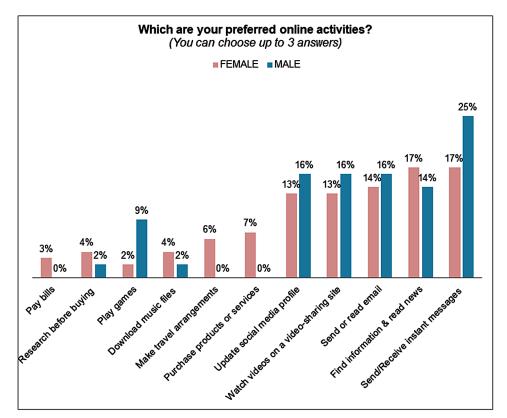
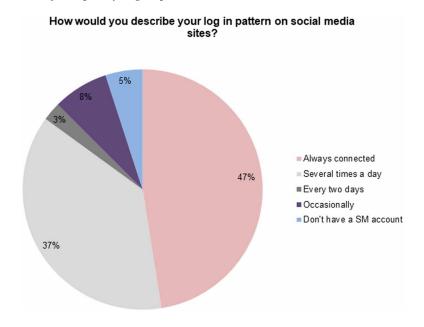


Figure 2. Distribution of sample by preferred online activities and gender (%)

Figure 3. Distribution of sample by log in pattern on social media (%)



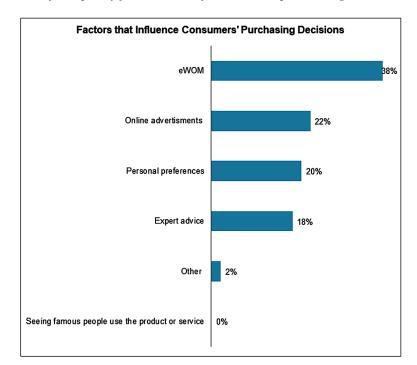


Figure 4. Distribution of sample by factors that influence their purchasing decisions (%)

# Influences on Purchasing Behavior

Data were also gathered in order to discern participants' perceptions regarding factors that influence them the most to try a new product or service. They were given several options to choose from: (a) online advertisements; (b) eWOM; (c) personal preferences; (d) expert advice; (e) seeing famous people use the product or service; (f) other - please specify. The visualizations in Figure 4 give some insights into the data. 38% of all respondents said they trust eWOM about new products and services making this option the highest ranked source of influence. 22% identified online advertisements as a key influencer in their purchasing decisions, while the personal preferences of 20% of respondents bias the choices they make.

Investigating the responses based on gender shed some light onto whether women and men respond similarly to the various types of influence. Figure 5 depicts the gender-based tendencies. The most interesting finding is that among male respondents, the higher proportion of men (35%) are more likely to try a product or service that an expert advises them to do so, whereas just 7% of women are influenced by an expert's advice. Moreover, the options 'eWOM' and 'online ads' were ranked among men as the second and third most influential factor with 30% and 18% respectively. Contrariwise, eWOM was ranked the most influential factor among female respondents with 43%, while 25% of women reported that they are most influenced by online advertisements and 21% said they try a new product or service based on personal preferences. The results suggest that there are observable differences in how men and women behave as shoppers. When responses were analyzed based on age groups, there were no significant differences; however, a very interesting result was revealed. Respondents aged 18-25 are twice more likely to trust eWOM than the 26-30 and 31+ age groups.

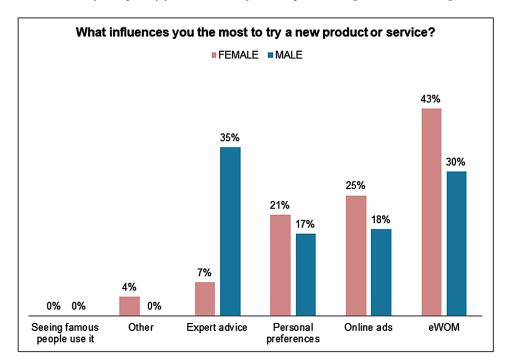


Figure 5. Distribution of sample by factors that influence purchasing decisions and gender (%)

To get a closer look at the factors that influence the consumer buying process, participants were asked about the characteristics they look out for in an advertisement. They were given six potential options and up to two answers were permitted. The options were: (a) a brand that I am familiar and trust; (b) product and price information; (c) discounts; (d) humor; (e) consumer interaction; (f) other - please specify. As Figure 6 indicates, the two most frequently chosen options were 'a brand that I am familiar with and trust' (31% of all respondents) and 'product and price information' (28%). These two options were ranked as the most popular answers by both women and men. In general, there were no notable differences between the two genders, except that men seem to look for humor in adverts at a far greater rate than women. Since there weren't any significant differences among respondents' age groups and nationalities, no further analysis will be made.

The last question in the survey was open-ended and the targeted survey respondents were asked to write down their favorite company in terms of its online advertising methods and then explain briefly. The majority of respondents wrote about international companies, such as McDonald's, Coca-Cola, Apple, Adidas, Amazon and several others. There were also some respondents among the age groups and nationalities who found it quite difficult to think of a favorite company based on its advertising campaigns.

#### FINDINGS AND DISCUSSION

The data analysis yielded several interesting findings. With regard to internet use, 97% of respondents indicated that they go online on a daily basis. While unsurprising, it is still an amazing finding that proves that the internet has completely integrated into consumers' daily lives, often without realizing it. This

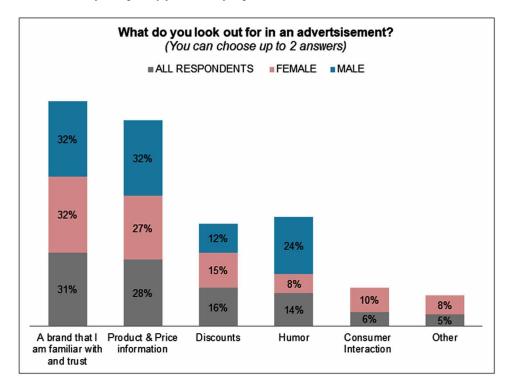


Figure 6. Distribution of sample by features of a persuasive advertisement (%)

unbelievably high figure represents a huge potential market for the company's marketing efforts towards building international brand awareness. When data were analyzed based on age groups, the findings were quite an eye-opener. While one might have expected a digital divide across generations with the younger ages between 18 and 25 to be more likely to access the internet every day, it is remarkable that once the 26-30 and 31-40 age groups join the online world, it becomes an essential part of their everyday lives.

It is significant that almost 70% of the company's customers said that their most important internet device is their smartphone, revealing that the usage of smartphones far outpaces the usage of tablets and laptops. The company needs to take advantage of the growth in the number of smartphone users and reach its target audience through effective mobile marketing at the different stages of the customer buying cycle. When consumers are targeted through their mobile phones, the company can vary its advertising message based on where the target consumers are geographically; therefore, fitting the local conditions and culture of each individual country. This practice called location-based advertising will allow the company to compete more effectively and with limited financial resources with international companies that have greater resources.

The three preferred online activities were of informational and social nature. Even when the analysis was made by gender the favorite online activity of both men and women was sending and receiving instant messages in chat apps. Respondents' preferred activities differed a little bit when examined by age groups. Participants aged 18-25 appeared to favor online video viewing, while older age groups seemed to prefer activities of information nature, such as sending emails or finding information online. Through these online actions, eWOM finds fertile ground to bloom. Considering that almost all respondents (97%) go online daily and 70% said that their smartphone is their most important internet device, people are

exposed to vast amounts of consumers' opinions and recommendations every single day. Having that in mind, it is worth pointing out that as consumers depend more and more on their smartphones, the company should invest resources into campaigns that rely on mobile and text word of mouth. Moreover, since age groups are into different online activities, the company not only needs to target customers individually based on where they live but also divide the target market into smaller segments on the basis of combinations of age and gender and, by extension, deliver custom content.

With regard to social media platforms, Facebook is by far the most popular social networking site, even among those who use multiple social media platforms, confirming the results of prior studies (Kemp, 2018). Also, fully 84% log in to social media several times a day, almost 50% of whom stay connected to social media at all times. The always on and connected pattern translates into posting on a continuous basis as well as being exposed to others' comments. Since the nature of social media enables people to express themselves freely and talk with friends and acquaintances, eWOM has become even more powerful in terms of influencing purchasing behavior. Senthilkumar, Ramachandran & Anand (2013) presented a clear interrelation between seeking product recommendations on Facebook and buying goods and services based on the Facebook friends' recommendations.

Conversations on social media channels can increase customer engagement more than any other form of digital advertisement and can have a positive impact on consumer buying behavior. If the company establishes a strong presence on social networking sites that matter most to consumers and treats its services as something to be shared with, the engagement rates will skyrocket. Furthermore, the company can take advantage of Facebook's dominance and its ad targeting options based on age, location and interests in order to easily reach the always-on consumers in target countries and on every device.

The findings highlight that advertising in the form of eWOM recommendations is the primary factor that influences consumers' choices. It has been proven through numerous research findings that when there is a choice of products available, three factors appear to be the dominant ones that influence consumers - some trust brand recommendations, while others are affected by advertisements or consider their personal preferences. To a lesser extent, the analysis revealed that the customers of the company are positively disposed towards online advertising. The company needs to combine these two marketing strategies in order to find the way into consumers' circle of trust. But before doing so, it is important to understand that there are differences in how men and women across age groups behave as shoppers and moreover, the effects of advertising repetition vary based on demographic variables. These differences require that the company builds customized online advertising campaigns that make diverse audiences create an emotional link with the company and its services; therefore, eliciting positive responses. Many previous studies on this topic have suggested that companies should apply the best practices in order to capture consumer attention. However, this study revealed that there is no such thing as an ideal approach that can be universally applied. More specifically, the findings suggest that the company should not use famous people in its campaigns since celebrity branding does not work for the company's customers. This result contradicts with previous studies which have shown that celebrity endorsement really influences consumers' decisions and when celebrities recommend and praise a product sales are likely to go up. Moreover, some want to be entertained, while others are interested in receiving product information in a more straightforward manner. And on top of that, creating an advertisement is a complex process. For example, the research findings show that a humorous advert will grab men's attention and enhance affection for a brand. Nevertheless, even if the company uses more humor when advertising to male customers, there is one big challenge. Humor is culturally specific and inevitably gets lost in translation because what is considered as funny in one country may not be in another. To sum up, in this ferociously competitive era, it is pivotal to tailor advertisements' content based on the context in which consumers will be exposed, thus constantly trying to find ways to improve the content in order to make consumers pay more attention to online ads, even those who deliberately skip or ignore the advertisements.

The data also revealed the main characteristics that respondents look out for in an advertisement, which are: a) a familiar and trustworthy brand and b) product and price information. Awareness, credibility, trustworthiness and information seeking are all part of the storytelling process. In particular, eWOM refers to stories that consumers share on the Internet and significantly impact the purchasing intention of consumer since they are perceived as more trustworthy and reliable than traditional media (Bickart & Schindler, 2001). The company must promote positive storytelling online and motivate customers to engage in the value co-creation process.

Respondents' affection towards international brands and their online advertising tactics was evident. Although these brands operate in different industries, three specific characteristics that are shared by all have been identified, based on respondents' comments: they are innovative, creative and have successfully formed an emotional connection with their customers. The inability of some respondents to recall ads highlights just how difficult it is to grab consumers' attention in the age of digital advertising overload.

Digital media have become embedded in people's everyday lives and consumers regardless of gender, age or nationality are relying more and more every day on them to make decisions about purchases locally and internationally. It cannot be denied that the digital mediums including social networking sites and mobile devices can be the driving force for businesses that want to reach out to new target markets not just locally but globally as well. Companies can discover plethora of benefits by integrating digital marketing tactics into their overall marketing strategy. Social media can provide a platform for online customer service that will improve retention rates, email marketing can nurture valuable relationships using valuable content, mobile marketing can help a company develop a brand presence, to mention but a few. The company must take advantage of this powerful marketing tool, called electronic word of mouth, in combination with other digital marketing tactics and use it to achieve its far-reaching goals, since the findings helped estimate a huge potential from branding perspectives. Through the strategic use of eWOM and digital media, the company has the opportunity to build brand awareness and leverage an international image with fewer resources. In fact, many organizations receive considerable cost savings from using digital marketing methods to promote their services (Gartner, 2013).

# MANAGERIAL IMPLICATIONS

This study offers a roadmap for combining eWOM with other digital marketing tactics in order to create digital marketing campaigns aimed at increasing cross-border brand awareness. Many marketers have realized the power of eWOM and how digital mediums unleashed its power for companies; however, they still struggle to determine which strategies are most effective and how to implement them in order to influence consumers. Furthermore, the present study suggests that marketing practitioners should constantly try to understand the way in which eWOM and digital promotional techniques affect consumers and what influences them to take that final step, so that they can find ways to stay at the forefront of consumers' minds.

# LIMITATIONS AND FUTURE RESEARCH

The results of this research reflect the noteworthy and rapid emergence of eWOM as an important component part of a company's digital marketing strategy that can serve different market segments. However, as with any other study, whether conceptual, empirical, or review, this research has certain limitations as well (Christofi et al. 2014; Christofi et al. 2015; Christofi et al. 2017; Leonidou et al. 2018).

First, this research investigates a local company which operates in the concierge services industry with specific marketing structures for business-to-business and business-to-consumer markets, organizational structure and specific customer acquisition methods, thus it is impossible to generalize to other industries and contexts. Therefore, future research could replicate this study in other industry contexts as well in order to examine whether or not these finding hold to other industries and sectors as well.

Second, although the survey method is commonly used in marketing research and social sciences, the data produced lack depth on the topic and may not be able to completely cover the complexity of the subject. Hence, future research could focus on applying a qualitative methodology approach by utilizing data gathering techniques such as interviews, observational techniques and experiments to overcome the limitations of surveys and gain rich insights considering the fact that are suited to dealing with complex issues.

Third, the questionnaires were administered only to the company's customers. This may possibly affected the results and restricted a better exploration of views and opinions than if the questionnaires were answered by consumers that were not the company's customers. Although this is the first study in the context of Cyprus, further research should cover a larger sample to strengthen the generalizability of the results. Also, future studies should deepen our understanding of negative types of eWOM in the service sector.

Fourth, a part of the results, revealed variables such as gender and age influence respondents' answers; thus revealing differences in relation to their behaviors or opinions. Further research can further examine and confirm the impact of gender and age as well as explore the impact of several other demographic characteristics on consumer behavior and attitude towards eWOM.

Lastly, none of the respondents was in the two older age groups, 51-60 and 61+, therefore future research can examine online behavior of older adults and their eWOM intentions and activities in order to enhance the applicability of this research.

# CONCLUSION

In conclusion, much progress has been made in research on eWOM and its effect on various organizational outcomes that has enhanced our understanding. Yet, several gaps about the relationship between eWOM and its outcomes in businesses within the internationalization dimension remain. This study makes significant contributions to the understanding of the effects of eWOM on cross-border brand awareness and company growth and the factors influencing this relationship. We find that the integration of eWOM in the overall digital marketing strategy and activities applied by an organization can enhance brand awareness beyond country borders. This means that more research on eWOM and its impact on various brand-related outcomes should account for the context of eWOM and that eWOM strategies are effective tools in enhancing brand awareness across borders. We also highlight the importance and possible differential effects of various contextual variables, such as gender and age, on the eWOM and

brand awareness relationship, a finding that interests both scholars and practitioners on their research targeting and application of eWOM. We hope that this work may inspire further research in this research stream to enhance our understanding of this relationship.

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## **ADDITIONAL READING**

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### An Empirical Study on the Importance of Electronic Word of Mouth in the Concierge Industry

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# **KEY TERMS AND DEFINITIONS**

**Concierge Company:** A company that provides personal assistance to corporations and individuals such as lifestyle management, transportation, travel, and vacation planning.

**Electronic Word of Mouth (e-WOM):** A consumer recommends a product or service to another consumer via social networks.

**Influencer:** An individual that influences consumers' purchasing decisions through his/her social media accounts.

Natural Language Processing: The ability of computers to understand human language.

**User-Generated Content (UGC):** Any content (images, videos, text) posted by consumers on digital mediums.

**Virtual Community:** A group of people with mutual interests who interact through social media. **Word of Mouth (WOM):** A consumer recommends a product or service to another consumer.

# Chapter 16 Communication Tools in the Customer's Journey: Application to the Tourism Sector

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# **ABSTRACT**

There are several paths in marketing to communicate with the consumers. More creative ways are reaching to the market increasing the fascia and trying to overcome customers' demands. Consumers have changed and are now more informed, demanding, and empowered. They are talking with brands and about them with other consumers but also about their personal experience, which means that the impact of the communication between them has evolved in massive terms. The new trends in digital communications has brought profound changes to the tourism sector. Tourists are now more critical in their decision-making process. The increasing access to new technologies by individuals has made travel research and planning easier, placing the stakeholders in a permanent challenge to meet the consumer's needs. In this respect, some points come out: are the new means of communications fundamental determinants in the consumer decision purchase in tourism products? Will companies beneficial to start including this new means as communication tools? Should they be incorporated in their communication plans?

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# INTRODUCTION

With the continuous evolution of society and technology, shifts in consumers' attitudes and behavior are expected to arise. Taking common behavioral traits into consideration, the creation of new groups of individuals and consumers are highly expected. All generations are daily consumers of products and services. They all have different characteristics and distinct behaviors, what makes it a challenger for brands to manage their full attention and ultimately keep them as loyal customers.

The emergence and evolution of the Internet, as well as continuous technological progress have had significant impacts on consumer behavior and marketing strategies. These two fields have suffered and continue to undergo profound and irreversible changes. According to Cantallops and Salvi (2014), a major aspect that influenced these shifts in consumer's attitude and buying patterns was the evolution of technology. In fact, it is believed that the main determinant that changed everything when it comes to consumer behavior was the arrival of social media platforms (Lin et al., 2011). Social media changed not only the way consumers communicate with each other, but also the way they communicate with brands. By using the Internet, consumers not only learn more about products and brands as also communicate with businesses and other consumers. Consumers can express their opinion more effectively, spread it easily over the Internet and see their peers' opinions. Recommendations became mediated electronically and with high levels of reliability, particularly among young people. Similarly, with the appearance of the Internet and with some type of websites, consumers began to have access to unlimited product information allowing them to investigate before making a purchase (Labrecque et al., 2013). A study by Statista (2018) emphasizes that the number of social media users has been increasing over the last ten years and it is predicted to keep growing exponentially. This growth justifies the different behavioral traits in generations, since they now have more access to information from all over the world and consequently have become more connected with each other. The outcome is a decreasing effectiveness toward consumer of traditional media marketing strategies (Wright, 2005; Groeger & Buttle, 2016).

Consumers' purchasing decision is influenced by a large number of factors that can be divided in two major groups (Solomon, 2009; Kotler & Keller, 2012). The first group is related to surrounding environment, including all sociological and psychological elements that affect the consumer. In this group we can find influential aspects such as culture, subculture, social class, reference group, contact group and family. Conversely, the second group comprises individual factors that make each consumer unique, aspects such as motivation, experiences, self-image, personality and attitudes. All these factors work together and affect the choices that each person makes. Indeed, decisions are mainly based on the assessment of concrete and contextual situation of each individual and the perception he/she builds from the limited information possessed. It is also accepted that consumers have different strategies to make decisions and take in serious consideration the effort required to make any particular choice (Solomon, 2009). Since social media usage has been increasing and registering massive numbers of daily usage, digital influencers have become the perfect opportunity for brands to take a chance on being daily present in consumers' lives. Like any other form of marketing, marketing through social media platforms is expected to have direct effects on consumers' actions (Miranda et al., 2016; Loureiro & Sarmento, 2017). According to several authors, it can bring substantial advantages for brands in terms of building brand awareness (e.g., Dehghani et al., 2016; Castronovo & Huang, 2012; Hoffman, 2010; Mangold et al., 2009), consumer's willingness to create a purchase (e.g., Dehghani et al., 2016; Castronovo & Huang, 2012; Mangold et al., 2009), and lastly to increase their level of loyalty toward the brand (e.g., Labrecque, 2014; Castronovo & Huang, 2012).

The emergence of the digital economy and new information and communication technologies has brought profound changes to the most diverse sectors of economic activity in recent years. The tourism was no exception. Globalization and technological evolution have made tourists more sophisticated, demanding and critical in the decision-making process, with implications at various levels, and from which an essential conclusion emerge, that is, tourists are both producers, actors and spectators. Tourism has become an intensive activity in search of knowledge and more and better information, possible because the growing importance of the Internet as a channel of communication, information and marketing. The increasing importance of connectivity and digital networks and the consequent growing preponderance of digital marketing allows a progressive democratization of access to culture, based on sharing / access to online content (Kotler & Keller, 2012).

With the increase in access to tourism proposals, customers began to have access to a much broader and more diversified choice, and there is a strong competitiveness, leading to an increasingly need to use digital marketing to differentiate from competitors. More recently, social networks (such as Facebook, Twitter, Instagram and others) have been increasing their influence on tourist activity, such as some apps - Booking.com, HomeAway, TripAdvisor, Trivago, Airbnb, VRBO, Expedia. These online booking platforms have simplified the reservation process in hotels and allow consumers to evaluate and make known the quality of services provided, based on customer satisfaction.

Over the years, multiple factors have influenced shifts in consumer behavior. Brands are constantly challenged to try to find a new and effective way of connecting and establishing deep relationships with consumers. With the growth of social media in our daily lives, brands started to use these platforms as a new way of communicating. In other words, they are integrating these types of means in their current marketing strategies. The managers of the 21th century must realize that consumers are increasingly distrusting traditional advertising and that they have nowadays new options to substitute or complement it and reach consumers in more effective ways. This new media communication marketing tools has been registering an exponential growth over the last years and correspondingly different methods of attracting consumers through these platforms have also increased:

- It will be beneficial to begin to include these new means as communication tools? Should they be incorporated in the communication mix of brands?
- The power of the social media has made it possible for the consumers to communicate with hundreds or more, instead of the previous ten people that one would talk daily. So, what is the role of E-WoM in the customer's decision purchase in tourism?
- What is the impact of the non-traditional communication tools, namely, Blogs, YouTube, Facebook, Virtual Reality, Artificial Intelligence? Do they influence the consumer/customer in different ways during their buying decision?

In this vein, the current chapter is focused on the bridge between tourism marketing and new technologies. We intend to give an overview of the state of the art in the interrelationship between the mentioned two fields.

# **OVERVIEW ON CONSUMER BEHAVIOR**

Consumer behavior is one of the core field in marketing. Globally could be defined as "the processes involved when individual select, purchase, use or dispose of products, services, or experiences to satisfy needs and wants" (Solomon, 2015, p.28). Those needs and wants could be categorized into two types: utilitarian (functional) and hedonic (emotional/experiential). More importantly, it represents an ongoing process that exists before, during and after a purchase (Solomon, 2015).

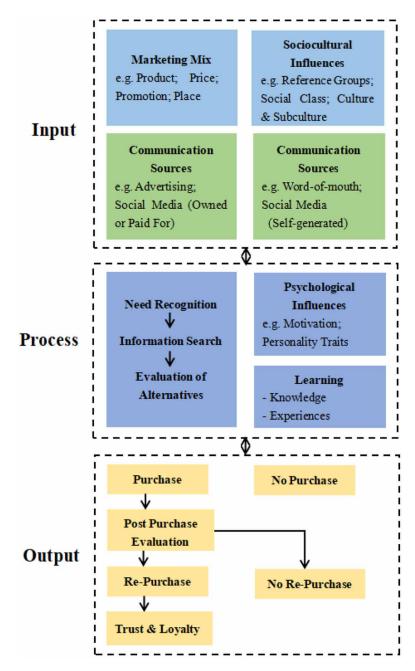
There are several sociocultural influences that could have effects on consumers and their behaviors, including cultural and sub-cultural dimensions, social class, reference groups, as well as family impacts and interpersonal communications. On the other hand, marketing stimuli and individual psychological factors also play significant role in affecting consumer behavior, such as individuals' personality and lifestyle, their motivations, perceptions and information processing, among others (Schiffman & Wisenblit, 2015; Solomon, 2015). Thus, due to the uniqueness of consumers, it is of great importance for marketers to understand the needs and wants of different segments that affected by a range of factors, which call for further segmentation strategy. Besides, the important criteria that help marketers to identify them are demographic (e.g., age, family structure, social class), geographic (e.g., nationality) and psychographic (e.g., values, preferences and lifestyles) (Schiffman & Wisenblit, 2015; Solomon, 2015).

Understanding the decision making process of potential customers is essential to developing marketing strategy. Based on the previous studies, scholars mainly consider decision making as a process consisted of multiple stages that lead to customer's final choice. In general, the decision making model that widely accepted includes three stages: input, process and output (as Figure 1). "Input" stage includes the purchase situation affected by marketing efforts, customers' sociocultural characteristics and information sources (e.g., marketing mix and social media) transmitted to customers. "Process" stage focuses on how customers make decisions, including some important variables like need recognition, information search, and evaluation of alternatives, which are mediated by consumers' psychological factors on the impacts from the input stage; it is also the stage when individuals learn from the evaluation. "Output" stage refers to the post-decision aspect that consists the purchase itself and post-purchase evaluation (Schiffman & Wisenblit, 2015). Through this, knowledge is accumulated by learning, and often store for extensive periods as memory (Moore, Smallman, Wilson, & Simmons, 2012).

To explain differences in consumer decision making, level of involvement and level of decision-making are also important. Consumer involvement is influenced by personal factors (e.g., needs), object or stimulus factors (e.g., marketing communication) and situational factors (e.g., occasion). Finally, the level of involvement may be affected by more than one of them (Solomon, 2015). Globally, lower involvement is associated on habitual consumption decisions (e.g., household cleaners), while higher involvement with cognitive and affective decision making (e.g., travel arrangement) (Smallman & Moore, 2010; Munar & Jacobsen, 2012).

Nowadays, technology and culture create a new "always on" consumer; with the development of the Web and social media, consumers and companies could interact with each other online, also between consumers, regardless of some constraints, like the distance and time (Solomon, 2015). As besieged by an abundance of information, no matter they are promotional or non-promotional, decision making is more sophisticated and even more important to consumers today.

Figure 1. Consumer Decision-Making Model Source: Schiffman and Wisenblit (2015)

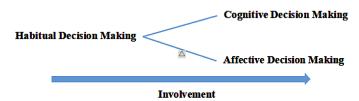


# **CONSUMER BEHAVIOR IN TOURISM**

A good management of tourism requires successful understanding of tourist's behaviors and experiences, which remains a significant challenge for both tourism practitioners and researchers (Moore *et al.*, 2012). Indeed, related tourism research about consumer behavior has becoming more complex and challeng-

#### Communication Tools in the Customer's Journey

Figure 2. Involvement and Decision Making Source: Solomon (2015)



ing, since consumers are now rapidly changing, who have become more demanding and unmanageable, which leads to complicated behaviors (D'Urso, Disegna & Massari, 2016). Some key concepts would be highlighted to understand consumer behavior: *Decision making, Motivation, Information search, Perception and Future behavioral intentions.* 

**Decision making**. The process of decision making is not perfectly rational. Yet, we may find five steps which are generally acknowledged (Martin & Woodside, 2012) (1) need recognition. (2) information search, (3) alternatives evaluation, (4) product choice and purchase, (5) post-consumption evaluation.

This process is not only affected by both internal/personal factors, such as, attitudes, motivations and lifestyle, but also interpersonal (e.g., word-of-mouth) or by non-interpersonal factors (e.g., marketing stimuli), particularly in tourism context, since a tourist decision is impacted more by situational factors (Sirakaya & Woodside, 2005; Schiffman & Wisenblit, 2015). Arguably, little research on tourist decision making focused on the "process" aspects (Smallman & Moore, 2010; Moore *et al.*, 2012; Cohen, Prayag, & Moital, 2014) has been developed. It is suggested that the conventional decision making process is not suitable in every situation, like the travel decision (Morgan & Pritchard, 2012; Moore *et al.*, 2012). As suggested, those "grand models" of consumer behavior fail to clearly distinguish tangible products from intangible ones (e.g., services), as they mainly conceptualize decision making as a "simple" input-output model (Smallman & Moore, 2010). However, tourists' decision making is more complex, including planned and unplanned choices that are made before and during the travel (Smallman & Moore, 2010; Choi *et al.*, 2012; Moore *et al.*, 2012), while the perceived risk and uncertainty is relatively higher. Furthermore, most studies explored only a particular aspect, like the destination choice, whereas, the choice made after selecting a destination is also of importance (Smallman & Moore, 2010). Hence, the conventional models of decision making are constrained and not good for effective marketing practices.

Recent researches also demonstrate that travel decision making is a dynamic and an ongoing process (e.g., Choi *et al.*, 2012; Martin & Woodside, 2012). Unlike the classic decision making stages, decisions on purchase of services is different for its intangibility, inseparability, heterogeneity and perishability (Morgan & Pritchard, 2012).

When regarding the tourism field, there are more complex variables included in a travel decision making: 1) recognizing a need to travel, 2) pre-trip planning (e.g., destination choice, trip booking), 3) on-site experiences (e.g., planned/unplanned activities and evaluation), 4) post-trip evaluation and future intentions (Martin & Woodside, 2012). Thus, the travel decision is sophisticated because the purchase decision is seen as risky, requires more problem solving and planning and relatively higher costs, in addition to the lack of knowledge and experiences related to the tourists themselves. Therefore, tourists tend to be highly involved and concerned (Sirakaya & Woodside, 2005; Smallman & Moore, 2010; Martin & Woodside, 2012). The travel decision process is not only affected by individual's thoughts, but can also be related to group (e.g., family) decision (Gardiner & Kwek, 2017).

*Motivation*. As a psychological term, motivation is the initial driving force that plays a crucial role in market decisions, such as segmentation, positioning and product development (Cohen *et al.*, 2014). Globally, it is defined as "a disposition or a state of need that drives individuals toward types of action that are capable of satisfying those needs" (Li & Cai, 2012, p. 475). There are two types of human needs: physiological and psychological needs, and both of them affect individual's buying behaviors; besides, the consumers usually set purchase goals satisfy more than one need (Schiffman & Wisenblit, 2015). Motivations could be utilitarian and hedonic, which are keys for purchase decisions (Solomon, 2015). As for motivation in general, the hierarchy of needs proposed by Maslow (1943) is one of the most influential theories in consumer research, which is considered as a useful tool to understand consumer that consists of five-level ranking in order of importance from lower-level needs to higher-levels, including physiological, safety, social, ego, and self-actualization needs. In the tourism context, motivation plays a role in the dynamic tourist behaviors. Indeed, Maslow's hierarchy is too general to explain tourism specific motivations and decision (Gnoth, 1997).

It is widely acknowledged that the "push or pull" model is well cited in some important tourism literature (e.g., Crompton, 1979; Chon, 1990). The "push or pull" model is originated from the Maslow's hierarchy of needs and has become the most-used by tourism researchers (Prayag & Ryan, 2011). On one hand, "push" refers to the factors that impel individuals to travel, such as the desire for novelty, escape/relaxation, self-development, relationship enhancement and social interaction (Cohen *et al.*, 2014). On the other hand, "pull" relates to the factors that direct consumers toward it, like the perceived value of a destination, namely, historic attractions, local food and recreation facilities (Yoon & Uysal, 2005; Prebensen, Woo, Chen, & Uysal, 2012). The model suggest that individuals travel because they are pushed by intrinsic motives and pulled by some external forces from a specific destination. The latter (pull) is considered to inherent to and reinforce the former push motives (Yoon & Uysal, 2005; Prebensen *et al.*, 2012).

Motivations exercise a direct and significant influence on the affective image of a destination (Beerli & Martín, 2004). Therefore, it is essential for tourism practitioners to explore the consumer insights, while identifying the attributes that should be promoted and the features, as well as resources that destinations could offer to meet their evolving needs and expectations.

Furthermore, motivation literature covers many aspects, for instance, a stimulus for actual behavior and its measurement (Crompton, 1979), study a new emerging market (Jiang, Scott & Ding, 2015) and tourists' characteristics (Woodside & Dubelaar, 2002), among others. Once travel motivation is mainly investigated in Western countries, now there is an increasing attention on nations with different cultural background, indicating the importance of extensive research regarding different emerging markets.

*Information search*. Information search is part of the decision making or pre-decision necessity, which has a great impact on consumers' decisions and behaviors, for reducing the cognitive dissonance, perceived risks and uncertainty (Sirakaya & Woodside, 2005; Choi *et al.*, 2012). It could be also viewed as a dynamic and ongoing process includes pre- and post-purchase stages (Choi *et al.*, 2012). More important, consumers now are prone to actively engage in word of mouth, especially online (Luo & Zhong, 2015; Xiang *et al.*, 2015).

Generally, tourists make their destination choices on the basis of a variety of information sources, and this information sourcing behavior involves when, where to and how to search. It is noted in the influential research by Fodness and Murray (1999) that these sources could be classified into "external" and "internal" dimensions. External sources include promotional information from the marketers (e.g. advertisements) but not only limited to this, and could also come from some unbiased channels, such as

news media, books, word-of-mouth (e.g., recommendations) and movies. Meanwhile, internal sources could be individuals' previous experiences and past information searches, either toward the same destination or a similar one (Fodness & Murray, 1999), which form their prior memory and knowledge; it is deemed that these have an initial impact in the destination image formation (Ho *et al.*, 2012).

Notably, interpersonal influence, with its contribution to an individual's psychological formation, is an important determinant of decision making process (Bieger & Laesser, 2004; Ye, Law, Gu, & Chen, 2011; Gardiner, King, & Grace, 2013; Luo & Zhang, 2015). Therefore, consumers are prone to accept information from their reference groups (Ye *et al.*, 2011), and word-of-mouth is one of the most influential sources for its high credibility -when a destination is significantly evaluated after actual experiences- and the effect of friends and family referrals is stronger due to the social ties among them (Bieger & Laesser, 2004; Luo & Zhong, 2015).

Digital revolution has become one of the most influential factors on consumer behavior (Ye et al., 2011; Munar & Jacobsen, 2012; Xiang, Magnini, & Fesenmaier, 2015). Particularly, as for tourism, the Internet provides the platform for information exchanges among the consumers themselves, consumers and intermediaries (e.g., travel agents) and destination marketing organizations (e.g., tourism offices), etc. (Xiang & Gretzel, 2010). three types of website that are deemed as the most trustworthy are official sites of tourism organization, travel agencies and websites (Luo & Zhong, 2015). They are the essential sources of destination information for travelers to gain familiarity and details before making a decision (Ho et al., 2012).

Beyond that, social networks have aroused a worldwide upsurge in destination marketing as they become a daily necessity for consumers (Luo & Zhong, 2015). Social media is increasingly important for consumer generated contents, where tourists could share their experiences and photos as references as a virtual community, and, therefore, traditional travel intermediaries is being challenged since consumers increasingly rely on online sources (Xiang & Gretzel, 2010; Ye *et al.*, 2011; Luo Zhong, 2015; Xiang *et al.*, 2015). Thus, tourists always seek for needed information through various channels, while firstly recall the internal sources and then move forward for more useful external sources for trip planning.

As for tangible products, tourists could try before purchase or observe others' experiences (Sirakaya & Woodside, 2005). However, they could not perceive the quality of tourism products in advance, since it is experiential (Ye *et al.*, 2011; Luo & Zhong, 2015). After deciding to start a trip, tourists would have higher involvement and engage in more extensive search due to the higher risk and uncertainty (Smallman & Moore, 2010; Martin & Woodside, 2012). Potential tourists tend to consider online reviews more helpful and particularly significant, relying on this type of word of mouth than information offered from service providers and mass media (Ye *et al.*, 2011; Filieri, Alguezaui & Mcleay, 2015; Xiang *et al.*, 2015).

More importantly, after the destination choice and purchase in the initial stage, post-purchase information search is more detailed and destination-specific (Choi *et al.*, 2012), including the future weather, food choices, recreation activities and events, etc. Usually, there is a particular time lag between the purchase and consumption.

Prior studies tend to focus a lot on the information channels from the perspective of tourists, such as their demographics, behavioral and geographic characteristics, which are considered valuable for targeting a specific segment. Besides the usage of related sources mainly depends on travel behavior, like past experiences, situational factors, such as travel companions and the destination, and the availability of internal and external sources (Choi *et al.*, 2012).

**Perception**. Perception -a key concept in consumer behavior- refers to the process about "how individuals select, organize and interpret the stimuli in a meaningful and coherent way" (Schiffman &

Wisenblit, 2015, p.114). Perception regards how consumers see the products or services. Generally, sensation is an important element of consumer perception, which is the response to five basic sensory stimuli: sights, sounds, smells, taste and textures (Solomon, 2015). Even when individuals are exposed to the same stimuli, they may have different perceptions toward them, due to their personal factors, like expectations and previous experiences. Expectations and previous experiences, in turn, lead to the variations of behavioral intentions (Beerli & Martín, 2004).

Since a destination is an experiential product (Luo & Zhong, 2015), tourist perception runs through the whole travel experience, including prior knowledge about it, actual experience there and post-visit assessment (Cohen *et al.*, 2014). Moreover, tourism behavior research on perceptions mainly investigate tourists' cognition in the perceptual process, followed by affective and conative dimensions. In tourism studies, perception plays a significant role in tourists' involvement, satisfaction and destination image as well as the service quality (Cohen *et al.*, 2014).

Particularly, destination image is one of the most researched topics among scholars. With regard to its value, this image plays a critical role in individual's subjective perception, influencing the destination choice, on-site experience, evaluations, as well as the post-visit behavioral intentions (Bigné, Sánchez, & Sánchez, 2001; Chen & Tsai, 2007; Chi & Qu, 2008; Stylos *et al.*, 2016). Perceived service quality is another important topic. Tourists satisfaction and dissatisfaction mainly depends on the differences between their expectations and the experienced service quality of that destination (Chi & Qu, 2008; Chen & Chen, 2010). Thus, this image may change constantly due to the potential influences of external information and actual experiences, as the image that forms after travel is more realistic and complex than the initial one (Beerli & Martín, 2004; Stylos *et al.*, 2016).

Studies on perceptions also focus on perceived risk and safety (Sharifpour *et al.*, 2014), which is also in connection with the destination image. Therefore, it is important for marketers to understand tourist perceptions when analysing a destination, since creating and managing a positive image and service quality are of great significance (Wang & Hsu, 2010).

Future behavioral intentions. Generally, behavioral intention refers to an individual's subjective judgment for planned future behavior that represents the expectations of a specific pattern of behavior and the likelihood to act (Chen & Tsai, 2007). Positive disconfirmation could influence consumers' emotions, satisfaction and therefore behavioral intentions (Bigné et al., 2009a). In the tourism setting, positive behavioral intentions are mainly as follows: (1) revisit the same destination, (2) recommend the place to other potential consumers, and (3) say positive things about them (Castro, Armario, & Ruiz., 2007; Chen & Tsai, 2007).

Many researchers have studied the revisit intention, examining the factors that contribute to it (e.g.,, Bigné *et al.*, 2009b; Stylos *et al.*, 2016). Findings suggest that the willingness to return to a place is impacted by the level of satisfaction (Chen and Tsai, 2007), the perceived value, and past behavior; besides, variety seeking also may influence the revisit intentions, as tourists who seek for novelty and variety tend not to do the same (Bigné *et al.*, 2009a; Prayag *et al.*, 2017).

Recommendation to others is also a commonly acknowledged measures of tourist behaviors (Prayag *et al.*, 2017). Many researchers have already ascertained that tourists are more likely to recommend if they have a positive overall image towards a place (Bigné *et al.*, 2001; Papadimitriou *et al.*, 2015). The relationship between satisfying experiences and willingness to recommend has already been examined and verified (Bigné *et al.*, 2001). Therefore, tourists who are satisfied are more likely to recommend to others than to return to the destination in the future.

A positive word of mouth is considered as an indicator of intention to continue the relationship with the destination; it is also a convincing source for potential visitors (Yoon & Uysal, 2005). Indeed, the likelihood to return and recommend are both directly and indirectly impacted by destination image (Castro *et al.*, 2007).

#### THE ROLE OF ICTs IN TOURISM

For all the revolution that the new generation of mobile phones has created, the amount of time they spend online, the number of things they do online and the attention they spend on various platforms have increased exponentially (Bell, 2016). The development of the Internet has enabled consumers to share their views about products and services and discuss them with other consumers. In this context, online referral sources have become more credible and relevant, particularly among the younger ones. New opinion leaders began to emerge on the Internet being -in some cases- more credible for young people than traditional opinion leaders. Every day consumers face numerous situations that require decisions, i.e., the selection of an option from two or more alternatives. These decisions are usually made without thinking about what is involved in the decision making process, itself (Schiffman & Kanuk, 2007).

Consumers face a large number of choices and make several decisions when purchasing a product or service. These decisions include, for example, whether to buy or not the product or service, which product or service categories to choose from and which stores, or brands, to buy from (Sheth *et al.*, 1999). Therefore, the actual act of purchasing is just one step of a broader process that comprises mental and physical activities, preceding or following the actual buying (Loudon & Bitta, 1988). Decisions are an important part of this process.

Information and communication technologies (ICTs), like the Internet, virtual communities, immersive virtual worlds or social media, have a significant role in tourism experience co-creation and its success, since these tools simplify and mediate the process by allowing the consumer to be more involved in each step of the consumption (Wang, Park & Fesenmaier, 2012). As a matter of fact, according to the Global Digital Report 2018 (Kemp, 2018, p.9), "with more than 4 billion people using the internet for an average of 6 hours each per day, digital has become an essential part of everyday life for most of us. (...) As a result, brands need to evolve beyond today's siloed approach to digital and build seamless digital integration into everything they do.". Actually, ICTs lead to a paradigm shift in the tourism industry, which Buhalis & Jun (2011) called as e-tourism, which changed the practices adopted by tourism service organizations and the functions of the stakeholders involved in the process. According to Živković, Gajić, and Brdar (2014, p. 758), "from the 'static web' and unidirectional flow of communication until 'the second phase' of web 2.0 and bidirectional communication, new levels of relations have started up.".

The term Web 2.0 was formerly created by DiNucci (1999, p. 232), which marked the conversion of the web from "screenfulls of text and graphics" to a "transport mechanism (...) through which interactivity happens" (p.32). In 2008, Constantinides & Fountain described Web 2.0 as

a collection of open source, interactive and user-controlled online applications expanding the experiences, knowledge and market power of the users as participants in business and social progress. Web 2.0 applications support the creation of informal users' networks facilitating the flow of ideas and knowledge by allowing the efficient generation, dissemination, sharing and editing/redefining of content.

Web 2.0, social networking and mobile internet started a revolution. Indeed, due to such tools value co-creation started to gain more relevance and the customers stopped being a passive subject of the producers (Prahalad & Ramaswamy, 2003), turning into connected consumers searching for valuable and extraordinary experiences enriched by technology (Tsiotsou & Ratten, 2010). According to Kaplan and Haenlein (2010), it was the appearance of a subdivision of Web 2.0 applications, called social media, that led to the major repercussions of Web 2.0, i.e., the empowerment of the consumer and the enlargement of word of mouth, being the Web 2.0 "not only a mass medium, but a platform that has a much broader role and function than any of the traditional mass media." (Fotis, 2015, p.38).

Tourists are using the information and communication technologies (ICTs) to analyze, compare, evaluate, and choose the destination that better suits their expectations, desires, and needs, thus gaining control over the process (or over part of it), responsibility for their choices and feeling more independent (Berrada, 2017). The tourism industry benefits from technological innovations, since it requires a significant amount of information, in an intense way (Stamboulis & Skayannis, 2003). As a matter of fact, according to Tussyadiah and Fesenmaier (2007), ICTs have fundamentally changed the nature of tourism experiences, i.e., experience co-creation has become richer and been multiplied (Gretzel & Jamal, 2009).

ICTs are also crucial for the structure, strategy and operations in tourism firms (Buhalis & Law, 2008). In fact, through several platforms -such as websites, mobile technology, travel guides, portable city guides, etc. (Binkhorst & Den Dekker, 2009)- information systems bring a chance for organizations in the tourism industry to stablish a closer and more meaningful collaboration with the consumers, which leads to the development of personal, uniquely designed, compelling, innovative and valuable experiences (Neuhofer, Buhalis, & Ladkin, 2012; Berrada, 2017).

According to Watson et al. (2004), ICTs are a crucial tool when it comes to comprehending the three major stages of tourism experience in which value is consumed and the tourist connects with other actors, like friends, family, community, firms (Andrades & Dimanche, 2014), which are: planning (before the trip), tourism (during the trip), and memory (after the trip). During the first stage, the tourist -who is globally connected thanks to the tools provided by the Internet- gathers new information about the touristic destination (like what to visit, where to eat and sleep, and so on), by using the diversified web sources and the interactions with friends, family members or other tourists, before "purchasing" the tourist experience. It is also during this first stage that tourists interact with the reservation systems and other service providers through the Internet (Watson et al., 2004). In the tourism stage, tourists use their mobile devices to access information anywhere and in real time about the destination and the available services, thus expanding to the usage of ICT's service while moving (Schmidt-Belz, Nick, Poslad & Zipf, 2003), in order to adjust activities and give recommendations. This means that mobile technologies lead to the enhancement, intensification and co-creation of experiences in any place and at any time (Neuhofer, Buhalis, & Ladkin, 2012). Finally, in the memory phase the process turns to a C2C tourism experience co-creation, since tourists extend their trips in time and space by sharing their stories and experiences at the destinations in person or using ICTs -after reflecting on the experience they lived and thinking about the good memories (Watson et al., 2004; Caldito, Dimanche, & Ilkevich, 2015). By sharing their tourism experiences during the post-travel stage, tourists are "active in creating, reinforcing or devaluating destination images" (Caldito, Dimanche, & Ilkevich, 2015, p.116). This way, destinations and tourism service providers are able "to create and manage quality experiences" (p.116) are going to take great advantages out of the tourists' inputs (Caldito, Dimanche, & Ilkevich, 2015). In fact, ICTs have brought new opportunities for a combined co-creation of tourism experiences in every stage of the process, which leads to a significant increase in the value created (Wang et al., 2012). According to Neuhofer, Buhalis & Ladkin (2012, p.550), the tourism experience becomes "an almost real-time shared adventure that is co-constructed with the connected social network of tourism providers, friends, followers and other tourists online".

The degree in which the tourists actively involve themselves (by combining resources) during the experience co-creation in each of the previously mentioned stages of tourism experience strongly influences the outcome of the process and the degree in which the experience corresponds the tourists' expectations (Grissemann & Stokburger-sauer, 2012; Chathoth et al., 2016). As claimed by Bertella (2014), the active participation of the tourist in the design, production and consumption of the experience might regard emotional, mental, or physical involvement and be enhanced by the usage of their skills and personal resources. Mathisen (2013) suggests that this involvement is highly influenced by emotions and cognition (making tourists feel interested, aroused or motivated), which leads to a higher level of perceived personal value and existential authenticity. Thus, involvement can be defined as a motivational variable that mirrors the decisions that tourists make based on their values and objectives (Richins & Bloch, 1986) and on how relevant the tourism product or activity is for them (Andrades & Dimanche, 2014) and leads to higher levels of customer loyalty and perceived value. Both customer loyalty and perceived value generate a greater satisfaction, according to the studies conducted by Chen & Tsai (2008). As a matter of fact, "when tourists come back to a destination and recommend it to their peers, they heavily contribute to a destination sustainability and competitiveness" (Caldito, Dimanche, & Ilkevich, 2015, p.112). Indeed, high level of motivation leads to tourists being more involved in the tourism experience, which makes them more likely to travel (Clements & Josiam, 1995). Yoon & Uysal (2005) stated that "motivated behaviours result from tourists' biological or phychological needs, desires and wants" (Caldito, Dimanche, & Ilkevich, 2015, p.110).

The pull and push model of motivation is a well-accepted theoretical framework regarding the concept of motivation, which claims that tourists travel due to some pull and push factors (Dann, 1977; Uysal, Li, & Sirakaya-Turk, 2008). The push factors can also be called internal motivations and are connected to the internal wishes and emotions that make tourists want to travel. By contrast, the pull factors -also known as external motivations. are the "tourism destination attributes and situational conditions" (Caldito, Dimanche, & Ilkevich, 2015, p.111), i.e., external factors like the local culture climate, history, etc., that make tourists want to visit a certain destination (Gnoth, 1997; Kim & Lee, 2002). Because of the latter factors, in order to motivate potential tourists to visit a certain destination, it is important to build a strong and appealing image and positioning of the destination in the mind of the consumers (Caldito, Dimanche, & Ilkevich, 2015). In fact, "destinations develop and build their value proposition based upon their core resources and attractors, and these represent external motivating factors for tourists" (Caldito, Dimanche, & Ilkevich, 2015, p.112).

Caldito, Dimanche, & Ilkevich (2015) have highlighted the fact that tourists are influenced by different types of motivations toward different stages of the tourism experience co-creation process. During the initial stage of planning the trip the motivations "work as initiators of the purchasing phase" (Caldito et al., p.112) (for example, when potential tourists feel the desire to leave their routine). At the second stage of the process, i.e., when the tourist experiences the planned trip at the destination, different motivations might lead the tourists to choose certain activities and cultural locations to visit. Lastly, during the post-travel stage, the motives that make the traveler want to communicate about the tourism experience also differ, from the desire to give advices to the need to share important memories with friends and family (Caldito, Dimanche, & Ilkevich, 2015).

The social dynamics during the tourism experience also influence the outcome of the experience cocreation and the Web 2.0 and social media have turned ICTs into a broad area "of computed-mediated social networking and Internet users' collaboration." (Sigala, 2009, p.3). In fact, the relationships established with known (friends and family) and unknown (other users of the internet or tourists) subjects influences the memorability of the experience and the success of the value co-creation (Buonincontri, Morvillo, Okumus & Niekerk, 2017). Tourists tend to appreciate the ability to reinforce friendships, meet new people, embrace new cultures and share information and stories (Buonincontri, Morvillo, Okumus & Niekerk, 2017). After the trip -during the memory stage- appears the need to maintain the friendship established between the tourist and his network, which can be fulfilled through ICTs (Buhalis & Foerste (2015). ICTs allow the tourist to share thoughts, recommendations, questions, and memories of the trip that they consider relevant and respond to the environment in an accurate way.

To understand how tourism organizations and destinations can strategically enhance experience and value, Neuhofer, Buhalis, & Ladkin (2013) have developed a Tourism Experience Value Matrix, which differentiates four types of experiences in terms of intensity of co-creation and technology. The researchers argue that the highest value proposition for tourists can be accomplished through the maximization of the elements of co-creation and technology, i.e., the *fully technology-enhanced tourism experiences* (the most differentiated type where the tourist is very involved, mirroring the social and interactive scopes, and uses ICTs to enhance the process). Furthermore, in the matrix there are other types of experiences, namely, the *conventional tourism experience* (an approach centered in the company and with a moderately low level of consumer participation and technology used), the *co-creation tourism experience* (which admits a high involvement and participation from the tourist but is restricted to "interactions in the real world and offline spaces"), and the *technology tourism experience* (which is related to a high usage of technology but is predominantly "*company-centric*"). This technology is mostly used to make the company processes and the service delivery easier (Neuhofer, Buhalis, & Ladkin, 2013).

#### **Brand Communities**

When using each social media platform, users feel socially connected with each other and in most cases, communities based on common interests and aspirations tend to arise. Some of these communities are likely to be created based on attitudes and relations toward brands. These are commonly known as brand communities (Hajli *et al.*, 2017; Popp *et al.*, 2017). There are plenty different kinds of social media platforms throughout the Internet, where each type of user can fulfil their needs and interact in many different ways. Social interaction is believed to be one of the main drivers for consumers to engage in online content generation platforms (Hennig-Thurau *et al.*, 2004).

According to Kaplan and Haenlein (2010), there are four types of social media sites that aim to satisfy and entertain different type of users: Collaborative Projects (Joint and simultaneous creation of content by multiple users, Blogs - Display of date-stamped entries in reverse chronological order), Content Communities (Sharing of different types of media content among users, Social Networking Sites - Creation of a profile that contains personal information and connection with friends and colleagues), Virtual Game Worlds (Users create a personalized avatar and behave according to strict rules in a context of a multiplayer online role-playing game) and lastly Virtual Social Worlds (Users create a personalized avatar and choose their behavior more freely and essentially live a virtual life similar to their real life). Social networking sites (like *Facebook*, *Instagram* and *Twitter*) are the ones that have been growing in terms of popularity over the last decade. Moreover, it is important to refer that *YouTube* -considered by

Kaplan and Haenlein (2010) a Content Community- contains some characteristics from social networking sites, such as the profile creation, social interaction between users and others.

The growing importance of opinion leaders on the online world makes crucial for brands to engage with bloggers and other online influencers, as a way to reach authentic and trustworthy presence among online communities (Sahelices-Pinto & Rodríguez-Santos, 2014). YouTube actors are included in this group because they are online influencers. Following Morimoto and Trimble (2012), blogs are an example of user-generated media that allow both marketers and consumers to communicate their ideas on products and/or brands. These two authors have also pointed that, nowadays the number of blogs that address product reviews and that are available to consumers during their online search is extremely high and that marketers will benefit significantly if they include blogs in their marketing communication programs. In fact, Colliander and Dahlén (2011) discover that companies are increasingly embracing social media engagement as a complement to the traditional advertising in the daily and business press. Wright (2005) claim that marketers have assumed blog advertising as a new mean for brands to obtain awareness, visibility and attention.

With the advent of online social networking, word of mouth (or viral) marketing is increasingly being recognized as a crucial strategy in social influence and marketing domains (Li et al., 2011). Unlike direct and mass marketing -which only recognize the intrinsic value of a customer- word of mouth marketing additionally exploits the network effect of a customer by taking the network factors in consideration to measure the real customer value (Li et al., 2011). Consumers gained voice power due to its network and User Generated Content capability (UGC) (Hennig-Thurau et al., 2013). UGC is commonly used to describe the multiple types of media content that is created by individuals on social media and is publicly available for everyone. This may include comments, likes, shares, views and others. Thus, consumers have a more proactive role in creating content and getting involved in conversations. Consumers can even express their opinion more effectively and spread it easily over the Internet and see the opinions of other consumers. In this context, UGC and word of mouth communication (WOM) gain new relevance. Recommendations become network-amplified and considered true, even when they come from strangers. Therefore, e-WOM grows significantly to be an important source of information, particularly for young people, because "consumers find the assessments of products and services put online by their peers more reliable than the brand information produced by the brand" (Morrison, et al., 2013, p.98). It represents "the potential for an ordinary consumer to communicate and influence a mass audience" (Daugherty et al., 2008, p. 1). The essence of word of mouth marketing is to reach out to a broad set of potential customers and attract considerable attention via social interactions (Li et al., 2011).

Through word of mouth diffusion, information can spread more quickly and easily among social networks (Li *et al.*, 2011). The diffusion capacity to share the message of the first node and the capacity of the subsequent nodes is crucial to the message reach. This process may seem linear, but it's not. The nodes capacities and characteristics are crucial to the efficiency of word of mouth strategies. Consumers need to be engaged in the process of exchange online information in order the WOM be effective (Loureiro, Gorgus, & Kaufmann, 2017; Loureiro, Maximiano, & Panchapakesan, 2018).

The customer network is a valuable resource to companies. Word of mouth has a niche marketing effect, represents the customer shares of information to his/her close circle and most likely to the ones who have interest in the type of product, service or information. People are highly influenced by information received from others (Roelens *et al.*, 2016; Godes & Mayzlin, 2004). When the information is passed thought a parent or close family, the information will be taken as true, that is why word of mouth is so powerful. Consumers tend to trust more their friends and family opinions than brands communication

messages. In a social network, marketing through word of mouth is extremely powerful, as people are likely to be affected by the decisions of their friends and colleagues (Li *et al.*, 2011). The differential point of word of mouth is that, when information is shared, it has more influence on the consumer behavior. Word of mouth is the most influential source of information to a customer (Roelens *et al.*, 2016; Keller, 2007).

Empirical research confirmed that consumers rely heavily on the advice of others in their personal network when making purchase decisions (Roelens et al., 2016; Iyengar et al., 2013; Sadovykh et al., 2015; Vebraken et al. 2014; Schmitt et al., 2011; Hill et al., 2006) and that positive WOM has a positive effect on business outcomes, i.e., sales (Roelens et al., 2016; Bao & Chang, 2014). Word of mouth is not a marketing gimmicky; it brings return to companies. Appropriate marketing campaigns based on social networks could generate a significant increase in the sales amount and reduction in the promotion cost (Li et al., 2011). Applying word of mouth principles and considering referral programs in social media campaign can add great value to companies. Referral marketing has become an important marketing technique to stimulate WOM in a controlled way for acquiring new customers (Roelens et al., 2016; Van den Bulte et al., 2015). However, using WOM principles in a campaign presupposes that companies know clearly which are the most influential nodes in the social networks. Globally, discovering influential nodes from online social networks is one of the major avenues of WOM marketing research (Li et al., 2011; Duan et al., 2008; Kiss & Bichler, 2008). Therefore, identifying influential nodes on social media and the users who really have influence, is a big issue for companies who intend to do an influencer marketing campaign. Without the effect of WOM, an influencer marketing campaign is nothing different than several individuals releasing information to random people.

Scholars defined social media influencer marketing as a viral marketing approach that an online personality shapes consumers' attitude through tweets, posts, blogs, or any other formats of communication on social media (Xiao et al., 2018; Ferguson, 2008; Freberg et al., 2011). It has been well recognized in marketing and consumer behavior literature that eWOM, or the information consumers obtain from interpersonal sources, has stronger effects on consumer decision making than traditional advertising techniques (Veirman et al., 2017). Consumers will likely buy something recommended by a peer. Consumers have always valued other opinions, however, the advent and still growing popularity of social media has amplified the effects of peer recommendations, as such empowered consumers share their opinions and experiences one-to-many (Veirman et al., 2017). Influencer marketing rises as an answer that maximizes the advantages of WOM and bypasses shortcomings of traditional advertising techniques, such as avoidance and resistance (Veirman et al., 2017; Fransen et al., 2015; Kaikati & Kaikati 2004). Crucial to the diffusion of eWOM is the identification of opinion leaders, who exert a disproportionate amount of influence on others, an idea that has already been recognized decades ago (Veirman et al., 2017; Katz & Lazarsfeld, 1955). Through their social media activities, nowadays digital opinion leaders or influencers are able to influence the attitudes, decisions and behaviors of their audience of followers (Veirman et al., 2017; Lyons & Henderson, 2005). Influencers are content creators who accumulated a solid base of followers. Through blogging, vlogging or creating short-form content (e.g. Instagram, SnapChat), they provide their followers an insight into their personal, everyday lives, their experiences and opinions (Veirman et al., 2017). By sharing their everyday lives and opinions, influencers are able to create an affective connection with their followers. Unlike mainstream celebrities, influencers are believed to be accessible, believable, intimate and thus easy to relate to, as they share the personal, usually publicly inaccessible aspects of their life with their followers and interact with them in flesh (Veirman et al., 2017; Schau & Gilly 2003). By involving influencers (e.g., by offering to test a

product, organizing an exclusive event, ... or simply paying them), brands aim to stimulate influencers to endorse their products and -this way- build up their image among influencers, a practice that is called influencer marketing (Veirman *et al.*, 2017). Because the competition in eWOM marketing has become fierce, and social networks are now the most important marketing channel, identifying influencers is vital to increasing the efficiency of social network-based marketing (Liu *et al.*, 2015).

Influencer marketing consists of identifying and targeting influential users and stimulate them to endorse a brand or specific products through their social media activities (Veirman *et al.*, 2017). Choosing appropriate influencers to spread the (commercial) message continues to represent a challenge. Yet, the digital age also introduced a transparent consumer experience where consumers can share their experiences and feedback online and they can also access other consumers experiences. One customer who has a positive attitude for a certain product after purchasing of a particular commodity or experiencing enjoyment of a particular service will have a higher possibility of re-purchase, while feeling satisfaction for that product or service. This inclination eventually becomes and further evolves into sharing the experience with relatives and close friends. E-WoM can be a catalyst of the purchase intention. If the marketplace successfully wins the trust of people, this will lead toward the high usage of social commerce. Trust in marketplace can enhance the individuals' willingness to participate in online shopping, reduce risk perceptions (Chiles & McMackin 1996).

In addition to all the growth and evolution verified in the digital area, in particular in the most wellknown area, social networks, another revolution has happened. There are new industries that are using Virtual Reality (VR) as a marketing tool in order to persuade consumers to buy a product or service which represents a significant opportunity to VR when it comes to change the consumers' perceptions in a positive way. Virtual 3D appeared has an opportunity for the organizations to communicate with the potential customers offering them a more realistic way to explore the destination environment and activities. Through VR, tourism marketers can integrate sensory experience into their communication strategies to support web-site information and to incentivize the decision making process, as well as build relationships between the clients and the brand and place itself. This technology is being used not only to spread details and information, but also to create awareness and desire and to motivate sales transactions (Wasko, Teigland, Leidner & Jarvenpaa, 2011). Providing the customers with an interactive and sensorial information will influence not only the customers' expectations and desires about the travel, but also stimulate the business and the industry, by advertising different places and activities that sometimes consumers don't know enough about. Virtual reality allows tourism marketing to create memorable experiences that integrate meanings, perceptions, consumption and brand loyalty and that can have a variety of applications since the planning of the trip, to all the tourism activities (entertaining and heritage activities) that can be advertised using new tourism marketing tools and are able to bring dynamics and to complement the websites already existent (Guttentag, 2010). These experiences will be stronger if the customer is able to co-create and plan the activity to feel more autonomy and relate more with the travel. This relatedness will affect both the satisfaction with the experience and the intention to travel. So, marketers need to use VR in a way that the customers could be a part of the process getting involved and engaged to it. All of these in order to build meaningful relationships that can extent into the real world.

# IMC – Integrated Marketing Communication

Making a journey through time, the differences in communication goals of the old days and those of today, are significant. In the old days, Marketing was considered the same as advertising, where its focus was only on selling products, usually using television, radio, billboard and press advertise. However, a new concept emerged with the technology revolution, as seen before. Nowadays, companies have other communication options, such as: search ads, display ads, websites, mobile, email and social media. A mix of traditional and new media is the key to a successful communication plan.

IMC (Integrated Marketing Communication) is a strategy that is increasing in the last years and it is a way of combining the traditional media with the newer online media. The explosion of online media offers a wide range of options but also brings even more difficult planning courses of action. The importance of mixing all forms of communication is a consequence of each form having its own pros and cons (combining the different ways of communication, the cons can be minimized), conflicting messages from different promotional approaches that can confuse the brand image. The objective is to co-ordinate all forms of communication (not too uniformed) in order to transmit a clear, compelling and consistent message about the organization and its products (Kotler & Keller, 2012) and achieve greater brand coherence.

IMC is a process that has as its main objective to align all messages and communications across the channels focusing on customers. More than just focusing on the customer, the messages should be designed and tailored to reach all the selected target audience groups (Batra & Keller, 2016). The need to integrate the marketing communication mix is increasing mainly because none of those ways of communicating individually can accomplish the loyalty of the consumer on their own. To make an effective communication first, the manager should do an audit of all potential contacts (Pickton & Broderick, 2005).

According to Batra and Keller (2016), in order to develop a well-integrated marketing communication, we need to keep in mind these features:

- Consistency: The aim is to induce action (the same persuasive message is reinforced in different ways).
- Complementarity: Each communication option can cover a different consumers information needs
- **Cross-Effects:** When consumers have previous exposure to specific communication option can amplify the communication effects from that consumer in other source of communication.

In the past, brands use -most of the times- advertising (ads) as a way to reach consumers, by talking to the "masses" and focusing only on selling products. Marketers used to focus on broadcasting television ads to reach a larger target audience and making them aware of the brand, for example. The web was not considered a crucial tool in communication – all the sites were very similar, and they were not informative about the company's products. It was like a puzzle, where the pieces did not match. Companies used to invest in PR (public relations), packaging, design, and sales promotion -among others- in an independent way, which meant that all these strategies alone were useless. Nowadays, the strategy has changed. All these communication channels still have power, they still build a strong IMC, if they are combined, integrated. As claimed by Batra and Keller (2016), there is a new concept emerging: Newer online media. Companies are now shifting to other ways of promoting their brand and products, engag-

ing with their consumers and followers and creating relations between both parts. They also highlighted six key online communication options:

- 1. **Search Ads Focusing on SEO** is an effort that will be paid off, defining the right keywords that are associated with the brand or product; it is a huge advantage that can put the brand ahead of their competitors, so that when the customers search for those keywords, their brand is the first one to appear.
- 2. The **Display ads (advertising)** that appear in websites, social networks, among others are multiple times related to our personal interests due to the usage of cookies.
- 3. When using **Websites** as communication strategy, it is important to understand that websites can be better used if they match the consumer's expectations and needs, but also if they match the consumer's cognitive styles and address their age, gender and geographical location.
- 4. With **Mobile** usage competing with desktop and laptop, it is crucial that all the contents that are available online are customized to different devices.
- 5. **E-mail marketing** that are sent are highly customized to the consumer's profile: age, gender, buying persona, their consumer behavior, among others.
- 6. **Social Media** may be the most widely known way of promoting a brand, product or service. With different channels to be used for different occasions, profiles and outcomes, social networks (as Facebook, Instagram, LinkedIn, YouTube, Pinterest, Snapchat, Tumblr, among others) address different targets and goals.

The key to a successful communication campaign is to combine each channel in order to have a coherent, consistent and targeted campaign. IMC not only combines new trends, but also the present resources with the traditional ones. However, it is possible to conclude that synergies are very important when talking about IMC, synergies between Online and Offline Methodologies. The consumer is increasing his/her expectations toward the marketplace. Companies have to be able to join various efforts, creating a mix between different dimensions to provide to the consumer the experience that he/she is expecting and more. In a basic sense, developing the optimal IMC program requires choosing the best set of communication options and strategically managing the relationships between the chosen options (Batra & Keller, 2016).

Since we live in an age where marketers have a broad selection of tools to use for their communication campaigns, it is important for them to evaluate each of those campaigns in order to improve their overall communication strategy. Everything should be done so all the different communication options are reaching their objectives and that they are working in unison to improve the whole communication strategy. In order to evaluate how efficient a certain communication program is, Batra and Keller (2016) developed the Communication Optimization Model that is assessed by taking in to consideration seven criteria, which can be call by the 7C's:

- 1. Coverage is defined as the proportion of the target market reached by each communication option, as well as how much overlap exists among communication options.
- 2. Cost is associated with the financial efficiency of our communication options/programs, since we check how much we are spending with our communication options.
- 3. Contribution explains if the communication option created the desired outcome and if it achieved the communication objectives that are determined.

- 4. Commonality determines how common the communication effects and objectives are, meaning it checks if there's an overlap in the communication options.
- 5. Complementary helps us to understand if the communication option that we use addresses effects and objectives that others don't.
- 6. Cross-Effects will determine which communication options are specifically designed to work together in order to enhance the effects that result from them.
- 7. Conformability tells us if the communication options that we deployed work across a wide array of consumers, even with their communication history and characteristics.

When talking about the tourism industry, two different categories can be defined based on the budget associated to it. There are large businesses with more luxurious and high sophistication characteristics and then there are a lot of small and medium size businesses that do not invest much money in marketing activities. However, the diversity of this industry isn't about the size of the business but about the multiplicity of people from different nationalities, cultures and ages that interact together. It is important to state the role that tourism can have in the economy of each country, being a source of multiple investments to attract more visitors, stimulating commerce and generating more revenues for the country. Tourism needs marketing to better communicate the major benefits of the business with its usual, potential and ideal clients. The difficult part is to find the right way to do it, managing different communication tools and channels to address the same message to different needs. IMCs can have a strong impact on the way consumers feel about tourism brand equity, perceive quality and brand loyalty (Seric, Gil-Saura, & Ruiz-Molina, 2014).

#### **FUTURE RESEARCH DIRECTIONS**

Three major streams of research could be pointed out. First, researchers would like to understand how customer will interact with machines/robots, when they act as frontline employees. How would be the empathy and the personality? The personality of intelligent robots could change depending on the customers? The second stream is associate to the deep immersion of customers in online platforms. In this case, researchers would like to dedicate their effort to understand whether or not in the new future, customers will use only online platforms to search information, select, purchase and even have the experience of travel and stay at the hotel in the selected destination. Indeed, the travel experience could be through a virtual reality process and not a real travel journey. Finally, new studies should be prepared to understand how intelligent robots could behave as consumers. They will spread the word through other robots? They will prefer to interact with human beings?

# CONCLUSION

The growth of internet and technology has transformed the tourism industry, as well as changed consumers' perceptions about different destinations. Technology helps to break geographical boundaries, making easy to discover new cultures and histories. In the past, technology was used just as a marketing tool to provide more information about the destinations that could persuade consumers to visit it. However, with the technological evolution, this spread of information started to be done using more than

just internet and digital marketing. Once consumers are taking control of whether and when they receive the messages, new and creative ideas to interact to them are essential, so marketing activities have to be integrated to deliver a consistent message and accomplish the strategic position. Considering all of these aspects, brands should start integrating their social media practices into their marketing communication strategies, especially as a way of effectively communicating with hard-to-reach consumers, or in other words, those who are less likely to consume traditional media. Nevertheless, it is important for marketers to understand that each social media platform has different key strategies that can be adopted according to the audience and content that can be found on each website.

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#### **KEY TERMS AND DEFINITIONS**

**Consumer Behavior:** Represent the study of individuals, groups, or organizations and all the activities associated with the purchase, use, and disposal of goods and services.

**Consumer Decision Process:** The process that describe the several steps employed by consumers to take a decision on purchase.

**e-WOM:** The information is communicated between partners through online platforms.

**Information and Communications Technology:** Represent the role of unified communication and the integration of telecommunications. This process enables users to access, store, transmit and manipulate information.

**Integrated Marketing Communication:** A strategy to create a unified and seamless experience for consumers to interact with the brand/enterprise.

**Social Media:** Represent computer-mediated technologies that facilitate the creation and sharing of information.

# Chapter 17 The Role of WOM in Affecting the Intention to Purchase Online: A Comparison Among Traditional vs. Electronic WOM in the Tourism Industry

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#### **ABSTRACT**

Recent studies have focused on the influence of online word-of-mouth (WOM) on tourist behavior. However, the role of traditional versus online WOM on travel decisions remains to be expanded. This chapter addresses this research gap by empirically investigating the impact of offline and online WOM on travel decisions across four different cohorts: Generation Y, Generation X, the Baby Boomers, and the Silent Generation. In addition, it explores generational differences with regard to online booking intentions. Findings reveal that traditional WOM affects travel decisions by all cohorts, with a higher impact for the Baby Boomers and the Silent Generations. Online WOM has a higher influence for younger cohorts, who also show a higher intention to purchase online than older generations. Still, the results show that senior individuals are well aware of the possibilities offered by the Internet as both an information source and a purchase channel.

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### INTRODUCTION

Beyond the role of traditional word of mouth (WOM) from friends and relatives, the advent of the Internet and social media has boosted the importance of online social influence as a powerful driver of travel decisions (Tanford & Montgomery, 2015). With respect to tourism products, Jeong, Oh and Gregoire (2003) highlighted WOM communication from satisfied customers as the key factor influencing consumers' choice of holiday destination. However, the advent of user-generated content (UGC)—such as online communities and social media—has changed the way in which people communicate (Nambisan & Baron, 2007). These 'platforms', particularly online review websites, can play a significant role in travel choice behaviour and decision making (Ladhari & Michaud, 2015), increasing awareness, providing information and helping form opinions and attitudes about purchasing products, and offering a means for sharing past travel purchase experiences (Mangold & Faulds, 2009).

Compared with traditional (offline) WOM, electronic or e-WOM offers greater convenience, anonymity, many-to-many communication and no restrictions in terms of time and space (Tsao, Hsieh, Shih, & Lin, 2015). Despite the increasing importance of e-WOM and online reviews in the tourism industry, this topic requires further investigation to consolidate theoretical knowledge about consumers' usage of e-WOM in their decision processes (Confente, 2015; Sotiriadis & van Zyl, 2013), especially across age cohorts (Confente & Vigolo, 2018).

This study offers an important insight into the tourism and hospitality debate over the existence of differential impacts of online versus offline 'influencing' tools on tourists' online behaviour. Examining this impact represents the main aim of this chapter. In addition, this difference will be explored across four generations, shedding light on the impact such antecedents have on behaviour intentions across cohorts.

The chapter opens with a literature review on the transition from traditional information sources such as offline WOM to online sources such as e-WOM, drawing out the differences between these two important marketing tools. It then focuses on the methodology, providing a description of the sample and survey procedure. Finally, results and theoretical and managerial implications are provided.

# LITERATURE BACKGROUND

# **Information Sources for the Tourism Industry**

Tourists tend to use a combination of information sources to help them in their decision to book a tourism product (Snepenger, Meged, Snelling, & Worrall, 1990). Specifically, they can use both offline and online sources. Online information sources include both commercial sources (e.g., hotel websites, tour operators and websites) and peer-to-peer sources (online reviews or online WOM) (Luo, Feng, & Cai, 2005). WOM from family and friends has long been regarded as one of the major influential sources in travel decisions, and particularly, in hotel booking decisions (Bieger & Laesser, 2004). The following sections review a selection of offline and online information sources as possible drivers of online purchase intentions.

#### **Offline Sources**

#### Traditional WOM

Beyond traditional company information sources, both offline and online, consumers can be aided in their decision-making process by other referents. WOM can be defined 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' (Arndt, 1967, p. 3).

With respect to tourism products, Jeong et al. (2003) highlighted WOM communication from satisfied customers as the key factor influencing consumers' choice of holiday destination. A number of studies have shown that WOM has an important influence on tourists' purchases, and that this influence is particularly strong when a consumer is considering purchasing a new product or service (Katz & Lazarsfeld, 1955). In particular, Beerli and Martin (2004) demonstrated that WOM from friends and family can be influential in the formation of components of image perception of destinations.

Since purchase behaviour is related to the level of perceived risk, some drivers, such as suggestions from experienced consumers, can help individuals to reduce this uncertainty (Murphy, Mascardo, & Benckendorff, 2007). Specifically, online purchase may be considered more risky compared with offline contexts (Van den Poel & Leunis, 1999). Hence, to reduce perceived uncertainty, senior tourists, for instance, might rely heavily on other consumers' advice. This influence in advising where and how tourists can purchase online services depending more on traditional vs online information tools is less explored.

# Help from Others in Online Purchase of Tourism Services

Technology adoption and related learning are relevant when considering consumers and their decision to purchase online. Indeed, even if senior consumers are determined to use computers, they might find online applications and their documentation too complicated, or have inadequate support (Eisma et al., 2004). For this reason, in some cases, senior consumers are reported to have learnt how to use the Internet and make online purchases with the help of peers and relatives (Eastman & Iyer, 2004; Eisma et al., 2004). This 'help' from relatives and peers might become an effective driver for online purchasing by reducing the perceived complexity of the online purchasing experience. Therefore, there is a need to further explore the role of help in online purchase of tourism services.

# Impact of the Online Context on Consumers' Decision Process for Tourism Services

Since the Internet has become a predominant means of travel shopping in European countries (Buhalis & Law, 2008), the influence of UGC, such as online communities and social media, has changed the way consumers and marketers communicate (Nambisan & Baron, 2007). In fact, consumers are connected in numerous ways that were not available in the past, including through social networking sites, blogs, wikis, recommendation sites and online communities (Hennig-Thurau et al., 2010). In the tourism industry, the Internet and particularly online reviews can play a significant role in consumer decision making, as they help to increase awareness, obtain information and form opinions and attitudes, to purchase products and share past travel purchase experiences (Mangold & Faulds, 2009). In particular, e-WOM has become important in travel planning (Litvin, Goldsmith, & Pan, 2008) since travellers are more likely to trust other tourists' e-comments than travel agent websites (Pantelidis, 2010).

This environment has caused companies to reconsider how they define and understand customer-to-customer interactions and their importance to the firm (Wen, 2009). To implement effective marketing strategies for tourism companies, it is important to understand the drivers of tourists' online purchase intentions. Online purchase intention is measured in a subjective way through the perceptions of tourists in relation to their own behaviours (San Martín & Herrero, 2012). In this challenging context, it is of the utmost importance to understand how tourists deal with the potentialities offered by the Internet.

#### Online Sources

Some early studies predicted the importance of the Internet as an information source for tourism products (e.g., Bonn et al., 1998).

Consumers place great importance on information collected from several online platforms and an increasing number of information platforms related to tourism products, such as hotel accommodation (Tsao et al., 2015), which provide useful information on hotels and accommodation (Pitta & Fowler, 2005). However, only recently has the study of online tourism information searches gained major attention from scholars (Munar & Jacobsen, 2013). In particular, the literature provides useful explanations on the link between prior knowledge and experience—at work during information searching and navigation—and how these affect future intentions towards online activity (Ho, Lin, & Chen, 2012).

Several types of online information are continuously used by customers for evaluation, including product information, means of payment, delivery terms, service provided, privacy, security and navigation; this information can be accessed through 'commercial' platforms, such as company websites, tour operators and tourism search engines platforms (Parasuraman & Zinkhan, 2002). Beyond these, in recent years, online social influence in the form of UGC (such as online reviews or e-WOM) has joined traditional offline social influence (friends and relatives) and online commercial information sources as a driver of travel decisions (Tanford & Montgomery, 2015).

#### Online Word of Mouth (E-WOM)

Although recent studies have focused on the effect of e-WOM on booking intentions (e.g., Ladhari & Michaud, 2015; Tsao et al., 2015), the effect of offline versus online WOM on online booking intentions across these four cohorts remains to be explored.

Compared with traditional (offline) WOM, e-WOM offers greater convenience, anonymity, many-to-many communication and no restrictions in terms of time and space (Tsao et al., 2015). As a result, e-WOM exerts greater and wider influence than traditional WOM (Pan & Zhang, 2011). In particular, e-WOM has become important in travel planning (Litvin et al., 2008), as travellers are more likely to trust other tourists' e-comments than travel agents and company websites before making travel decisions (Pantelidis, 2010). This is supported by considering the effect of online reviews on willingness to book a room, as well as on the perception of trust in a hotel (Vermeulen & Seegers, 2009).

Despite the increasing importance of e-WOM and online reviews in the tourism industry, this topic requires further investigation to consolidate theoretical knowledge about consumers' usage of e-WOM in their decision processes (Confente, 2015; Sotiriadis & van Zyl, 2013), especially across cohorts (Confente & Vigolo, 2018). Since Baby Boomers and the Silent Generation are late adopters (Porter & Donthu, 2006), they might find online applications and associated documentation too complicated, or have inadequate support (Eisma et al., 2004). For this reason, in some cases, older individuals are

reported to have learnt how to use the Internet and make online purchases with the help of peers and relatives (Eastman & Iyer, 2004; Eisma et al., 2004; Zickuhr & Madden, 2012). The role of this kind of assistance has been overlooked in tourism research, even though it might represent an effective driver for online purchase decisions; in particular, for older cohorts.

With the increasing influence of e-WOM and online reviews for tourism products, it is argued that the topic needs further investigation to improve theoretical knowledge on how tourists use e-WOM in their decision processes (Sotiriadis & van Zyl, 2013). Moreover, researchers should devise new methods for studying offline and online interpersonal influence, so that they can test theoretical propositions derived from the existing literature on social influence (Litvin et al., 2008).

# **Defining Cohorts and Online Behaviour**

Even though there is not a general agreement about generation ranges among scholars, a well-known classification frequently used in tourism studies comprises Generation Y (born after 1981), Generation X (1961–1981), Baby Boomers (1946–1960) and the Silent Generation (1925–1945) (e.g., Bolton et al., 2013; Brosdahl & Carpenter, 2011). Cohorts and the ageing process of individuals have been used in the tourism literature to explain travel behaviour or for segmentation purposes (e.g., Borges Tiago, de Almeida Couto, Borges Tiago, & Faria, 2016; Gardiner, Grace, & King, 2013; Vigolo, 2017). As stated above, in recent years, online sources have gained increasing relevance in tourism booking decisions, even though online behaviour may differ between cohorts, especially between younger and older generations (Friemel, 2016;Huang & Petrick, 2010; Zickuhr & Madden, 2012). Despite the existence of a 'grey digital divide' (Millward, 2003), recent research as well as recent statistics have shown that the online context is gaining increasing importance in travel decisions of older cohorts (e.g., Eurostat, 2016; Kazeminia, Del Chiappa, & Jafari, 2015; Tom Dieck & Jung, 2016). While most cohort studies have focused on a specific generation, limited research has compared travel behaviour between cohorts (e.g., Confente & Vigolo, 2018; Kim et al., 2015; Yoo & Gretzel, 2009).

Studies have identified significant differences in experience with technology between cohorts (e.g., Friemel, 2016; Lee, Chen, & Hewitt, 2011). Millward (2003) referred to a 'grey digital divide' to emphasise the gap in technology use between younger and older cohorts. Although Baby Boomers and the Silent Generation might not be as familiar with the Internet as Generation Y or Generation X (Nusair, Bilgihan, & Okumus, 2013), several studies support the importance of the online context and technology in the travel behaviour of older cohorts (e.g., Kazeminia, Del Chiappa, & Jafari, 2015; Thébault, Picard, & Ouedraogov 2013; Tom Dieck & Jung, 2016). Specifically, recent statistics (Eurostat, 2016; Smith, 2017) show that the number of individuals aged 60 and over using ICT for tourism purposes is constantly increasing.

# RESEARCH METHOD

#### Data Collection and Sampling

This study adopted a quantitative methodology; data were collected via a self-administered questionnaire. Being part of a broader research project, the final questionnaire included variables adapted to suit the online context. Three questions were related to the influence of the following factors on tourists' travel decisions: 1) offline WOM, 2) e-WOM and 3) help from friends and relatives with the tourism product purchasing process (from information collection to payment via an online platform). Specifically, the participants were asked whether the above-mentioned influencers had ever played a major role in determining their tourism product booking intentions. These items are derived and adapted from previous studies (Husin & Rahman, 2013). A dichotomous scale (yes/no) was used because the aim was to measure the actual influence of relevant others (whether offline or online acquaintances) on travel behaviour, rather than the perceived importance of social influence. In addition, questions related to attitude towards online booking were measured via three items representing respondents' overall evaluation of the attractiveness of booking a tourism product online. A 5-point Likert scale (1 = totally disagree; 5 = totally agree) measured respondents' level of agreement with the three items. Online booking intention was measured with a single item: How likely is it that you will book a tourism product online over the next 12 months? A 5-point Likert-type scale (1 = not likely at all; 5 = very likely) measured the response. This was compared with another general question related to booking intention towards consumer goods adopting the same scale, as follows: Are you going to purchase consumer goods online in the next 12 months?

Purchase intentions can be considered a concrete construct (Bergkvist & Rossiter, 2007). Therefore, the use of a single-item measure is adequate and well supported by previous studies (e.g., Gruen, Osmonbekov, & Czaplewski, 2006).

The questionnaire included also questions to investigate previous online experience, gender, income, education and, of course, age. In particular, previous online experience is widely recognised as an antecedent for tourism online purchasing intention (Kim & Kim, 2004). Before conducting the survey, the questionnaire was pre-tested on 20 tourists, which led to minor modifications being made.

A non-probability sampling technique known as 'snowball sampling' was adopted. This type of sample implies that people interested in participating in the study act as referents to generate other potential participants. A drop-off-collect-later procedure (Lovelock, Stiff, Cullwick, & Kaufman, 1976) was adopted, with the help of three trained fieldworkers. An informative cover letter was attached to each questionnaire. The first 40 voluntary participants were recruited from the north-east of Italy. Eventually, a usable sample size of 1,236 respondents was obtained, aged from 18–93 years The respondents were then divided into four cohorts based on age (Bolton et al., 2013), as specified in Table 1.

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Cohort	Male (%)	Male (n)	Female (%)	Female (n)	Age mean (years)
Generation Y N= 875	9.1	80	90.9	795	22.7
Generation X N= 104	24.1	48	75.9	56	41.7
Baby Boomers N= 199	30.8	82	69.2	117	67.3
Silent Generation N= 58	34.0	23	66.0	35	76.9

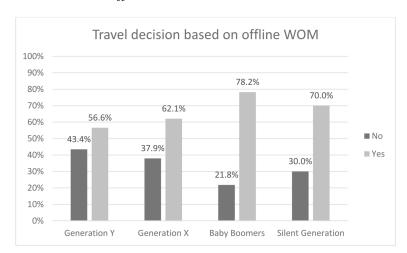


Figure 1. Travel decision based on offline WOM

# Data Analysis

Generation Y represents the most numerous sub-sample with 875 respondents, followed by the Baby Boomers, with 199 respondents, Generation X, with 104 respondents, and the Silent Generation, with 58 respondents (Table 1). The vast majority of participants were female in all cohorts, ranging from nearly 91% in Generation Y to 66% in the Silent Generation. The mean age for Generation Y is 22.7 years; for Generation X, 41.7 years; for the Baby Boomers, 67.3 years; and for the Silent Generation, 76.9 years.

The use of traditional WOM for travel decisions is more widespread than the use of online WOM across all cohorts (Figure 1). The Baby Boomers are the cohort that relies the most on the recommendation of friends and relatives for travel decisions (78.2%), followed by the Silent Generation (70%) and Generation X (62.1%). The youngest cohort, i.e., Generation Y, shows the lowest percentage of use of traditional WOM for travel decisions (56.6%).

Some respondents also asked a family member or a friend for help to purchase a travel service online (Figure 2). This behaviour was most frequent within Generation X (37.9%) and Generation Y (35.5%), followed by the Baby Boomers (23.1%) and the Silent Generation (20%).

With regard to use of WOM for travel decisions, the differences between younger and older cohorts is particularly evident (Figure 3). Generation X is by far the cohort with the highest proportion of individuals with travel decisions based on online WOM (79.3%), followed by Generation Y (61.9%). This proportion is much lower among Baby Boomers (16.7%) and the Silent Generation (10%). In line with these findings, the percentage of individuals who actively generated online WOM about their travel experience is higher between Generation X (48.3%) and Generation Y (45%) than among the older generations. Specifically, only 15.4% of Baby Boomers had written an online review, while none of the respondents belonging to the Silent Generation had shared their travel opinions online (Figure 4).

Online information searches on commercial websites for travel purposes are generally more widespread across cohorts than active online reviewing (Figure 5). Nearly all respondents in Generation Y and X have looked for information online, followed by the Baby Boomers (52.6%) and the Silent Generation (26%). With regard to actual purchase behaviour (Figure 6), Generation Y represents the cohort with the highest proportion of individuals who purchased a travel service online (91%). Generation X comes

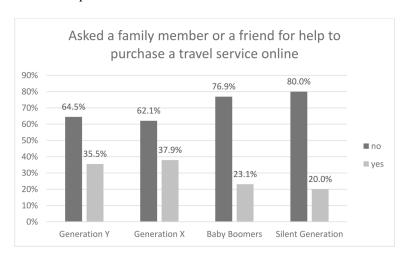


Figure 2. Help from others to purchase online

immediately after this (79.3%), while the Baby Boomers and the Silent Generation report much lower scores with regard to online travel purchase experience (25.6% and 8%, respectively).

Finally, the results show a clear difference in online purchase intentions between the younger and the older generations (Table 2). Overall, in all cohorts, there seems to be a higher propensity to buy online consumer goods (e.g., books) than travel services. Specifically, Generation Y shows the highest propensity to purchase online, both for consumer goods (mean = 4.55) and for travel services (mean = 4.09). The online purchase intention is slightly lower among respondents in Generation X (mean = 4.09). As expected, online purchase intention is low among Baby Boomers (mean = 1.77 for consumer goods and 1.72 for travel services) and the Silent Generation (mean = 1.42 for consumer goods and 1.18 for travel services).

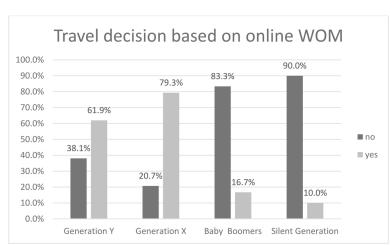


Figure 3. Travel decision based on online WOM

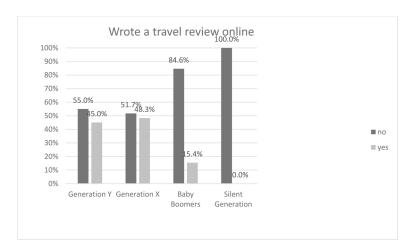


Figure 4. Active e-WOM members

# DISCUSSION, IMPLICATIONS AND FUTURE RESEARCH

This study contributes to understanding consumers' behaviour in the online context compared with the offline context, with specific attention paid to the information sources individuals consult to make tourism product purchases. In particular, the effect of e-WOM vs traditional WOM on tourists' behaviour in the online context has been explored, with a particular focus on the difference among age cohorts.

Results indicate that offline WOM is still recognised as a powerful and useful 'tool' that affects travel decision by all four cohorts, with a higher impact for the Baby Boomer and Silent Generation cohorts. This confirms previous literature, in which it is well accepted that WOM from relatives, friends or close acquaintances plays a major role in tourism-related decisions (Murphy et al., 2007).

This is reinforced by responses to another statement in the survey, related not only to the influence of traditional WOM as an information source but to the active intervention by a family member or a friend/

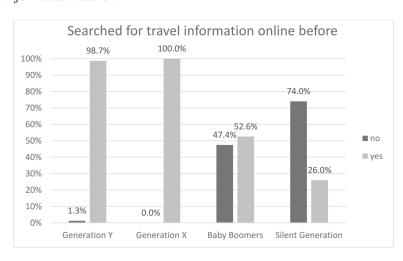


Figure 5. Online information search

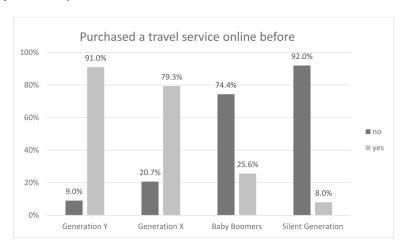


Figure 6. Online purchase of travel services

acquaintance to help to purchase online. Despite our prediction, this help has been indicated as powerful for the success of the online booking of tourism products by all the cohorts, youngest ones included. However, on reflection, this may be justified, as this help may be required during the 'transaction' phase rather than for previous steps of the decision process (information retrieval, for instance). Sometimes, travel behaviour is influenced by individuals, such as family members or friends, who are not the actual consumers, but still play an important role in the online purchasing process of tourism products (Lee & Beatty, 2002; Swarbrooke & Horner, 2007). Our study contributes to the extant literature by providing evidence that intergenerational influences may be relevant not just for senior tourists, but also for young tourists who do not feel confident with online payments and related security.

The findings reveal that e-WOM positively affects travel decisions but with a higher influence on younger cohorts (Generation X, followed by Generation Y). Such a result is consistent with the literature and is supported by other related questions respondents answered related to their online behaviour. First, the same results are obtained when asking if they write online travel reviews, where a coherence between those who 'receive' online WOM and those who 'send' WOM was found. In fact, active online WOM senders belong to Generation X, followed by Generation Y. While some Baby Boomers did actively participate in writing online reviews, no respondents from the Silent Generation did. However, to support the transition towards the online context for senior tourists, evidence from our study reports that both the Baby Boomer and Silent Generation cohorts purchase travel services online (though less

Table 2. Online purchase intentions

Cohort	Are you going to purchase consumer goods online in the next 12 months? (mean)	Are you going to purchase a travel service online in the next 12 months? (mean)	
Generation Y	4.55	4.09	
Generation X	4.00	3.72	
Baby Boomers	1.77	1.72	
Silent Generation	1.42	1.18	

frequently than the younger generations) and search online travel information. This latter activity is relatively high for Baby Boomers (almost half of respondents), and it is present for the Silent Generation as well (a quarter of respondents).

Hence, this study demonstrates that, despite some resistance to the use of the Internet for purchasing purposes, senior tourists are highly aware of the potentialities it offers, in terms of an information source and for booking possibilities via the help of other members of the family and/or friends. In this sense, today's seniors differ greatly from past generations of seniors, who (stereotypically) were reluctant to experiment and unwilling to try new activities (Beneke, Frey, Chapman, Mashaba, & Howie, 2011). Conversely, today's seniors seem willing to grasp the potential of new technologies. It can be argued that as their online experience increases, their intention to further explore the possibilities of the Internet increases too. These results are valuable in light of the 'active ageing' perspective (WHO, 2002). The new paradigm of active ageing aims to dislodge the old 'decline and loss paradigm' (Holstein & Minkler, 2007) while highlighting and facilitating active contributions of seniors to society (Stenner, McFarquhar, & Bowling, 2011). The Internet experience could help seniors overcome difficulties related to transfer/movement, to gather information and compare alternative products before making final purchasing decisions. Moreover, the virtual social context of online communities, in which tourists share their experiences, could enhance the possibilities of interacting in real life.

On the other hand, this study confirms the usage by younger generation of the online information and e-WOM as a key information driver to make online purchases for tourism products and their active behaviour in terms of e-WOM spreading and online purchases. However, this research did not find a 'substitution' of offline WOM with online WOM for such cohorts; rather, it found that e-WOM is gaining more and more importance but works in parallel with traditional WOM, including for younger generations.

This study has some limitations, particularly related to sample selection. With this regard, snowball sampling has been criticised because it limits the validity of the sample.

However, the precautions explained in the methodology section greatly reduced the risk of having biased responses. In addition, though subject to a degree of bias, this method is appropriate for generating information from individuals who have particular characteristics but are quite difficult to locate and contact (Lee et al., 2010). The use of snowball sampling has been supported by and adopted in recent consumer behaviour studies (Erasmus & Grabowski, 2013; Filieri & McLeay, 2013; Richard, Chebat, Yang, & Putrevu, 2010; Scott & Vigar-Ellis, 2014) as well as senior consumer studies (e.g., Sudbury & Simcock, 2009) and tourism studies (Del Chiappa, 2013; Huang et al., 2009; Lee et al., 2010). Further studies using probability sampling will allow better statistical analysis to verify the findings of this exploratory study. In addition, this study was limited to Italy, in which the ageing population phenomenon is particularly evident. A cross-cultural comparison with other European and non-European countries (e.g., countries with emerging economies) would increase the generalisability of these findings.

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#### **KEY TERMS AND DEFINITIONS**

**Cohorts:** Group whose members share a significant experience at a certain period of time or have one or more similar characteristics

**Digital Divide:** Is a term that refers to the gap between demographics and regions that have access to modern information and communications technology, and those that don't or have restricted access. This technology can include the telephone, television, personal computers, and the internet.

**Online Information Sources:** Information consumers can collect from the online context which include both commercial sources (e.g., hotel websites, tour operators' websites, etc.) and peer-to-peer sources (online reviews or online WOM).

**User-Generated Content:** Is defined as any type of content that has been created and shared by unpaid contributors. It can refer to pictures, videos, testimonials, tweets, blog posts, and everything in between and is the act of users promoting a brand rather than the brand itself.

**Word of Mouth:** 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.

# Chapter 18 Business Case of the Affiliate Marketing Business Model

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#### **ABSTRACT**

This chapter will provide a description of affiliate marketing models, their advantages and disadvantages. A lot of companies use affiliate marketing models for providing better consumer acquisition and sales results in online arena recommending to other companies or users their products or services. The authors present business case of Catena Media and Askgamblers.com, the leading Casino Affiliate Business Model. Affiliate programs are business that use affiliate marketing to promote their casino worldwide. Today most online casinos offer commissions to private advertisers for sending traffic to their website. They usually use commission-based fee or revenue sharing models to pay affiliates.

#### INTRODUCTION

Affiliate Marketing has transformed traditional marketing and is seen as one of the most expanding online advertising led generation. It is viewed as a multibillion-dollar industry. According to (Mazurek&Kucia, 2011) affiliate marketing is a prospective strategy of e-commerce, the essence of which lies in the shift of responsibility for sales onto a third party (clients) who are rewarded commission after convincing other shoppers to purchase products or services offered by a sponsor (company using the e-promotion tools). The most common generic definitions depict affiliate marketing as an online partnership "which involves partners being paid commission for each sale or lead". (Quinton & Khan, 2009). A recent study shows that affiliate marketing is related to improved sales results: "It is about leveraging relationships to be able to tap into new audiences for incremental traffic, sales and sign-ups". (Oskam, 2017).

The online gambling industry - which is mainly led by betting, casino, and poker applications - had a market size of around USD 51.96bn in 2018. Almost half of this sum (47.6%) is generated by the EU markets. (BX study, 2018). Most research in the online gambling area focuses on sociopsychological topics, issues regarding law and security with very little business research attending to the operation of

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an online casino. (Levin, 2013). This research gap provides us with an opportunity to examine the way how to make money for online casinos through the application of affiliate marketing models.

The market for online gambling is growing and knowledge of the profile of a typical online gambler is a start, but with such competition, online gambling operators must use additional methods for customer acquisition. (Hing et. al, 2014). For affiliate marketing users, new technology platforms give the opportunity to expand a third party consumer database in the growing online gambling industry. Affiliate marketing companies provide an opportunity to explore the power of electronic word-of-mouth for shoppers to purchase service offerings from online casinos. Engaging online gamblers is an ongoing challenge. Companies like Catena Media (Askgamblers.com) have taken advantage to interact with online casinos and this helped them develop a successful global brand.

#### LITERATURE REVIEW OF AFFILIATE MARKETING

The growing acceptance of the Internet among consumers and the growth of online retail sales has resulted in a large number of retailers using online advertising formats. (Purushottam &Amit, 2002). The majority of previous research in this field focuses on how to attract and retain appropriate affiliates (Martin-Gill et al., 2009).

As an online advertising tool, affiliate marketing is mainly aggregated in networks and acts as the middleman between a customer and the company. It can be understood as a business partnership. (Prabhu &Satpathy, 2015) There are many affiliates that build and manage websites to sell the products or services of advertisers. Most advertiser-affiliate relationships are managed through several major networks involving the technology to support tracking activities and the sales transaction. (Duffy, 2005).

In contrast, other authors (Bystrova, 2015) describe affiliate marketing as a performance-based online marketing channel enabling the company to gain more visibility with relatively low costs. Affiliate marketing combines the value of personal sales and technology solutions offered by online marketing. To companies with lower marketing budgets it provides an affordable opportunity to increase profits and raise awareness of their brand. (Jurišova, 2013). According to (Akcura, 2010) affiliate marketing programs help firms to increase their reach and acquire the customers of other firms, when the firm agree to refer their customers to third parties. Numerous merchants pay affiliates a referral fee for each referral that is converted into a customer (pay-per conversion). There are various levels of referral fees. For example, Amazon pays its affiliates up to 15% commission on sales made to a converted customer. Pay-per-conversion is sometimes considered a form of pay-for-performance because it reduces the merchant's risk of paying for referrals that do not convert into buyers. Another commonly used method is pay-per-lead. This is the case when affiliates are paid for referrals regardless of whether their referrals are converted into buyers. (Libai et al, 2003) The main goal of every company is how to transfer referrals into a converted lead.

# AFFILIATE MARKETING: HOW IT REALLY WORKS

Affiliate Marketing programs began in 1996 when Amazon began to pay websites for referring customers to join their site. (Hag, 2012) The research study by (Venugopal et. al., 2013) came to the conclusion that the most active sectors for affiliate marketing are the adult, gambling, retail industries as well as

file-sharing services. The three sectors expected to experience the highest growth are the mobile phone, finance, and travel sectors.

Affiliate marketing is a relationship between three parties: Advertiser or Merchant, Affiliate and Customer. (Prabhu S & Satpathy T, 2015). Figure 1 shows the application of affiliate marketing programs in online gambling for AskGamblers.com Company.

Merchant is an online store or other online advertiser that has joined an Affiliate network to perform affiliate marketing. The Advertiser or Merchant is a firm selling any products or services online. Products could be consumer or business products, airline tickets or services such as insurance, tourism etc. (Gregori et al, 2014)

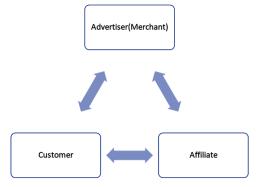
Affiliate, also called publisher, can be a company or a person who promotes the products or services of a merchant website through their own website by publishing ads and providing links. An affiliate is required to register itself to an affiliate program of the advertiser. Once registered, the affiliate provides links, ads, or banners from the advertiser and incorporates it in its own website. Affiliate platforms (such as website) provide tracked links to the Merchant's web page. The platform is operated by the Affiliate.

An affiliate network tracks the sales for the advertiser and the affiliate and takes care of the payments from advertisers to affiliates. The affiliate makes money by a commission, overwrite or monthly fixed fee, paid by the advertiser. The network also delivers a dashboard with data and insights that can help both the affiliate and the advertiser to optimize their campaigns. Merchants and affiliates typically join affiliate networks for accurate commission tracking, reporting and analysis tools, as well as for simplification of multiple accounts. Affiliates typically seek for quick, high-volume sales that will generate lots of commission. While merchants like to see high volume too, they also want a professional affiliate network, whose members do not engage in black hat or questionable marketing techniques. (Grant, 2011). Examples of Affiliate networks are: Affiliate Window, Affilinet, Commission Junction, TradeDoubler, TradeTracker and Webgains. (Forsten, 2015, Affilinet, 2015).

The Customer is the third entity in the service chain. The customer visits the affiliate's website; if he/she likes the ads or links and clicks them, he/she is redirected to the merchant website. A shopper is an individual customer who clicks on the links placed on the Affiliate platform or other marketing material set up by the Affiliate and completes a purchase on the Merchant's website.

The key to successful affiliate marketing lies in the construction of a win-win relationship between the advertiser and the affiliate. As more advertisers launch affiliate marketing programmers and more

Figure 1. Affiliate marketing: how it really works (Source: Prabhu S & Satpathy T, 2015).



affiliates participate in the marketplace, affiliate marketing is likely to become the leading marketing strategy for e-commerce businesses in the future. (Duffy, 2005, Haq, 2012). For global thinking companies affiliate marketing should become the most important communication and sales channel. (Jurišova, 2013)

#### AFFILIATE MARKETING TYPES

The review of affiliate marketing literature does not identify any one universal affiliate typology.

According to Mariussen (2012), there are numerous affiliates which vary depending on: their size (small-scale, large-scale, affiliate networks), tactics (customer database management, SEO), traffic capacity (small, medium, large), focus or commercialism (focused, unfocused) and methods employed to reach the affiliate's objectives (niche marketing, loyalty schemes, email, registrations).

We will explain affiliate types, each of which support different objectives around awareness, position features, assisting purchase decision making and facilitating purchases. The Internet Advertising Bureau from the UK (2014) differentiate between affiliates based on the communication objective stages including: social, e-mail, content websites, coupon websites, cashback, loyalty reward websites, paid search affiliate, retargeting & remarketing, comparison websites, see Table 1.

Knowing which type of customer to engage, choosing when to optimize content in customer buying journey process and understanding communication objectives can help affiliate companies to choose an adequate mix of affiliate types. (Internet Advertising Burau, 2014, Purushottam & Amit, 2002, Becker et. al, 2017).

#### ADVANTAGES AND DISADVANTAGES OF AFFILIATE MARKETING

Many of the benefits of affiliate marketing are the main reasons why a large number of companies participate in the billion dollar industry. The main benefits of affiliate marketing are:

- **Reaching Different Audiences:** They can use different affiliates to target different audiences, product or service categories
- Pay-per-Performance: The costs of acquisition can be well controlled
- Convenience and Flexibility: You can continuously create multiple campaigns on different affiliate websites and landing pages to market your affiliate links so that you can abandon the poorly performing ones and optimize the successful ones.
- Low Investment Required: Affiliate marketing is an inexpensive way of getting customers/leads and can be very effective.
- Less Accountability/Responsibility with Respect to Customer Service: As an affiliate marketer, you might not be getting a customer base that can be locked in, but the trade-off is that you do not have to handle the customer service issues either. If you receive complaints about a product or service, you can simply refer someone to the home company customer service line.

Affiliate marketing also has a lot of serious drawbacks. The potential disadvantages are:

Table 1. Affiliate types supporting different stages of the customer buying journey

Affiliate Type	How it works	Customer Buying Journey Stage	Communication objectives
Email marketing	Email marketing affiliates have their own email database or access data from third parties.	Perception of Need	Generate Awareness
Social media	Social media can extend reach, raise awareness and help originate the need via highly targeted promoted posts and ads on Facebook, or promoted tweets.	Perception of Need	Generate Awareness
Content websites	These sites are editorial focused, including reviews, blogs, forums and user generated content. They can generate awareness of a large base of consumers whose needs are aligned to a particular interest	Perception of Need Information Search Evaluation of Alternatives	Generate Awareness Position features Assist purchase decision
Comparison websites	These sites enable consumers to compare prices from a range of advertisers and quickly identify which product has the cheapest price or best meets their needs.	Information Search Evaluation of Alternatives Purchase	Position features Assist purchase decision Facilitate purchase
Cashback, loyalty & rewards websites	These affiliates reward their members by paying commission received from advertisers for purchases made.	Evaluation of Alternatives Purchase	Assist purchase decision Facilitate purchase
Voucher and rebate websites	Highly trusted brands with vast reach, providing directories of discounts, offers and vouchers to save money on purchases.	Evaluation of Alternatives Purchase	Assist purchase decision Facilitate purchase
Paid search affiliates	These specialize in PPC (pay-per-click) advertising in search engines for keywords relating to their site or advertisers that are being promoted on branded microsites.	Purchase	Facilitate purchase
Re-targeting & remarketing	These affiliates provide technology that enables re-engagement with consumers who have visited a website but who haven't purchased (targeted email and display)	Purchase	Facilitate purchase

(Source: modified by author: IAB the Big Affiliate Marketing Network)

- May damage your Reputation. Your ads may be displayed on a site inconsistent with your brand image, such as gambling or pornography sites;
- Program Management Fees. If using the affiliate network to manage your campaigns, they may take up to 30% of each agreed affiliate commission as additional "network override";
- Incremental Profit or sales may be limited: You may be cannibalizing the business you would have achieved;
- Affiliates have no exclusive rights: They can be promoting your products and those of the competition at the same time. (Chaffey & Ellis-Chadwick, 2012).

### A COMPARISON OF ONLINE AND TRADITIONAL GAMBLING BEHAVIOR

Online gambling is one of the fastest growing sectors of e-commerce and rapidly growing as a mode of gambling. It is characterized by high levels of customer choice. A recent Australian survey of 6682

### Business Case of the Affiliate Marketing Business Model

gamblers showed that online gamblers are a heterogeneous group, although there is a tendency for the internet gamblers to be male, have high incomes and be well educated. Comparing traditional and online gamblers research shows that online gambles have more positive attitudes towards gambling and are more highly involved gamblers, engaging in many different gambling activities in both online and offline forms. The privacy and anonymity are important factors for online gamblers. (Gainsbury et. al, 2012, Maurits et. al, 2015). Furthermore, understanding the participation in and frequency of gambling for different products or services is of utmost importance to managers seeking to keep up with market needs. (Gandolfo & De Bonis, 2015).

It is important to understand the consumer behaviour of gamblers in the gambling process. The online casino differs from the traditional casino. A research study by (Roberto and Manzin, 2008) summarized these differences comparing different characteristics, see Table 2.

Table 2. Comparison of characteristics of online and traditional gambling

Characteristics	Online casinos	Traditional casinos
Language	Multiple languages can be used	Usually operates in one language
Currencies accepted	Various currencies can be used, depending on which country the gambler is from	Normally operates using only one currency.
Means of payment	A wide variety of payment options, various cards are accepted	The usual means of payment is cash; a limited number of cards are accepted
Money used	Online gamblers play with real money	Gamblers always exchange money for chips
Dress code	No requirements, you can play anywhere, wearing whatever you want to.	There are regulations about the dress code; players wearing inappropriate clothing are not allowed to enter.
Human presence	With online casino games the payouts are accurate 100 percent of the time.	You do not have a human being to talk or interact with. However, no human beings mean no human error.
Responsible issue	A significant portion of online gambling sites have unsatisfactory business and responsible gambling practices.	Traditional gambling is more regulated.
Free gambling	A definite possibility, usually included in the offer, mainly as a means of attracting players.	A faint possibility, only on special occasions.
Variety of games	A large variety of games.	A limited choice of games.
Accompanying costs	Only includes internet costs	Includes transport, accommodation and meal costs.
Instructions/assistance to players	Offers telephone, email or chat assistance	Usually does not offer additional assistance, such as explaining the rules.
Player privacy	Complete privacy, no cameras, no need to register using a personal i.d.	Inside the casino the guests are monitored by cameras; they have to identify themselves showing their ids.
Atmosphere, players' well-being	The atmosphere is not competitive, the players can relax.	The competitive atmosphere is more intense.
Accessibility	24-hour access, 365 days a year; access from anywhere with internet connection.	Access (entrance) possible only during operating hours.
Operation costs	Usually lower than in traditional casinos, especially with respect to labour and equipment costs.	Usually very high, especially with respect to labour, equipment and premises costs

(Source: Roberto and Manzin, 2008, Wood & Williams, 2009)

Another study conducted by (Wood et al, 2007) identified that the primary reasons people provided for preferring Internet gambling were:

- The relative convenience, comfort, and ease of Internet gambling;
- an aversion to the atmosphere and clientele of land-based venues;
- A preference for the pace and nature of online game-play; and
- The potential for higher wins and lower overall expenditures when gambling online.

Affiliate Companies need to know which sites (online casinos) are effective and partner with them to provide the best customer experience for online players.

### AFFILIATE MARKETING AND PLAYERS IN THE ONLINE GAMBLING INDUSTRY

According to Statista, The Statistics Portal, as of 2018 the global online gambling market was worth over \$47 billion, and by the year 2020 is expected to be worth up to \$60 billion. In Europe, the market for online casinos is expected to grow by 7.6 per cent annually during the period 2016–2022 and the market for sportsbook is expected to grow by 7.1 per cent annually during the same period. The affiliate and lead generation market in which Catena Media operates is expected to develop faster than, or in line with the underlying markets. (Catena Media Annual Report, 2017). The industry of online gambling also uses the term iGaming as a synonym.

The famous industry players in the largest online gambling groups include: Catena Media, XLMedia, Latest Casinos Bonuses and others that have transcended affiliate marketing. (TalkBusiness, 2017).

### **XLMedia Plc**

Founded in 2008 by three entrepreneurs, the XLMedia Plc is a powerful affiliate that has taken online gambling or iGaming affiliate marketing to soaring heights. With its headquarters on the island of Jersey, the LSE-listed XLMedia has market capitalisation of GBP 325 million. Renowned as a market-leading digital marketing services provider, it has four lines of business; Affiliate Program (over 300 sub-affiliates), Media Buying (paid search, banners, mobile and social), Publishing (2,000+ sites in 18 languages), and a Social, Web and Mobile Presence. This super affiliate makes use of a series of proprietary methodologies and tools with a single aim – to generate high value, high volume traffic for the international online gambling industry in exchange for competitive CPA, revenue share or a combination of both. A few of XLMedia's most noteworthy acquisitions include Money Under 30 (for \$7 million), Secure Thoughts, ClicksMob (for \$5.1 million), Mobile Performance Marketing Platform, GreedyRates. ca (for \$9.3 million), Marmar Media Ltd and ExciteAd (for \$19 million).

### Latest Casinos Bonuses (LCB)

One of the best examples of an online gambling power affiliate is the Casinos Bonuses (LCB), which is well known throughout the remote gaming industry. The LCB Story started way back in 2006, when a budding entrepreneur launched a humble 5-page website. Today this power affiliate promotes over 1,390 online casinos and lists almost 2,000 regular and exclusive bonuses. It has almost 100,000 registered users

along with almost 400 casino reps. Add to that, the site attracts some 300,000 to 2,000,000 visitors every month. The site has become the 'go to online gambling destination' for internet gaming fans seeking the latest and most comprehensive online casino reviews, tips, bonuses, game reviews, software reviews, forums, tournament information, news, research and much more. The LCB's long line of acquisitions include OnlineBlackjack.com in 2014, GamesandCasino.com, Wizard of Odds, Wizard of Vegas and Wizard of Macau, Bj21.com, Real Money Action, World Directory Casino, Key To Casino, Two Little Fleas and Affiliate Guard Dog in 2017.

### Catena Media Plc

Launched in 2012, Catena Media Plc is one of the planet's biggest power affiliates, or as it bills itself, 'the world's number 1 provider of high value iGaming leads.' Headquartered in Malta, Catena has over 250 employees from 30 countries in 6 locations around the globe. Started by two childhood friends, Catena Media has become a poster child for affiliates due to its rapid expansion and key focus areas. These include organic growth, entering new markets, (i.e., verticals and locations) and strengthening its position via acquisitions. In 2016 the firm practically doubled its operating profit in comparison with the previous year to EUR 21 million and revenue growth year to year is 69% to EUR 67.7 million in 2017.

Catena Media's the main acquisitions include:

- Spelbloggare.se Swedish sportsbook company in 2016
- award-winning affiliate AskGamblers.com (for EUR 15 million) in Serbia in 2016
- award-winning sportsbook Bettingpro.com (for GBP 13.9 million) in Australia in 2017
- Catena Media acquires casino affiliate newcomer of the year slotsia.com from Sweden in 2017
- Catena Media acquires casino affiliates MrGamez and Spielekiste from Germany in 2017
- Catena Media acquires casino affiliate Newcasinos.com in 2017
- BeyondBits Media financial service company from Latvia in 2017
- Catena Media acquires Japanese affiliate Casino online in 2017
- Catena Media strengthens its financial services vertical by acquiring BrokerDeal.de in 2018.

On 3 April 2016, Catena Media Plc's fully owned subsidiary acquired the affiliate website AskGamblers.com ("AskGamblers"). AskGamblers operates one of the markets most highly visited web portals for player reviews and rankings of online casinos. The company also provides players with the unique opportunity of trying online casino-related disputes via the portal and, to date, this has resulted in more than  $\in$  5 million being repaid to players. Players across Europe utilise AskGamblers with the UK being the company's largest market. At the prestigious iGB Affiliate Awards, AskGamblers has won the Best Casino Affiliate Award for three consecutive years, most recently in 2015. The transaction includes all affiliate accounts, domains, mobile apps and social media accounts. "The purchase price amounts to  $\in$ 15 million, which will be paid in three stages:  $\in$  3 million will be paid on completion of the transaction;  $\in$ 8.25 million will be paid when all assets have been transferred to Catena Media and  $\in$ 3.75 million will be paid six months after the acquisition has been completed." (Menmuir, 2016).

AskGamblers' sales in the first quarter of 2016 amounted to approximately € 810,000 with a profit margin surpassing 80%. The revenue stems from organic traffic under revenue sharing agreements and is expected to generate at least 25,000 new depositing clients each year. Revenue will accrue to Catena Media from and including 1 April 2016.

### **ABOUT ASKGAMBLERS**

Catena Media's core markets are Sweden, Norway, Finland, the Netherlands and the United Kingdom. The benefits of affiliates for online casinos and other gaming sites are plain to see – they are promoted by numerous sources 100% free of charge in the form of review and bonus sites, and only ever have to pay affiliates the agreed CPA or Revenue Share for depositing players.

AskGamblers' development centre is based in Serbia and comprises a team of 30 employees, all of whom will be offered continued employment by Catena Media. This will give the company access to a talent pool of employees who are skilled in technical development and programming. Accordingly, Catena Media now has approximately 130 employees. The Group's headquarter is located in Sliema, Malta.

### **BUSINESS MODELS IN ONLINE SERVICE INDUSTRY**

The research stream has devoted the greatest attention to business models concerning e-business. E-business means "doing business electronically". (Zott et al, 2011). The online business model is a summary of how a company will generate profit by identifying its core product or service value proposition, target customers in different markets, position in the competitive online marketplace or value chain and its projections for revenue and costs. (Chaffey and Ellis Chadwick, 2012) The use of technology and other digital media to support the development of appropriate business models in the online service context has given rise to special attention by both academics and professionals. There are four types of business models for different classes of service suggested by the author (Lyons et al, 2009). The crucial things are to understand the nature of the value exchange and common fee structures. The four classes of business models consist of the following:

- 1. Computational processing and database services, offered as old-style utilities;
- 2. Content providers from the old media (gathered by news teams and shared through wire services) and new media (gathered from the Internet or created by online communities);
- 3. Transactional services for physical products and packaged software information, or media products; and
- 4. Brokerage or affiliate models that help bring partners together to make their own transactions or barter.

In the value exchange, we consider three main parties (user, provider, and third-party). The third-party category can take on several different roles: broker, advertiser, infomediary, sponsor, and affiliate. Table 3 also highlights three types of fee structures – fixed fees, fee-for-access, and fee-for-service – chargeable with online services, provided that proper metering technology is available.

We can conclude that affiliate models align on partner relationship (the third-party category) and help them to make money. The most common fee structures are: fee-for-access and fee –for-services per click.

### **Business Model for Catena Media**

The focus of our study is to explain the business model of affiliate marketing for Catena Media, see Figure 2. Catena Media is in the middle between iGaming players and iGaming providers and has a role

### Business Case of the Affiliate Marketing Business Model

Table 3. Service classes, online business models, and fee structures

Service Class	Value Exchange: Business Model	Fee Structures and Examples of Companies
Computational processing and database services, offered as old-style utilities	Utility Model: User pays \$ to provider; provider provides service to user.	Fee-for-Access: Various forms of SaaS. Fee-for-Service: Salesforce.com, Concur Technologies, Digital Insight, Digital River, Rightnow Technologies, Rypple, Taleo, UltimateSoftware, WebEx, WebSideStory, Workstream
	Advertising Model: Third-Party (advertiser) pays \$ to content provider; provider places advertisement in media; end-user receives services for free and is exposed to advertising	Fee-for-Service: Google, Yahoo, Standard newspapers such as the New York Times.
	Subscription Model: User pays \$ to provider; provider provides service to user.	Fee-for-Access: Standard newspapers and cable TV. SaaS applications. Fixed Fees: World of Warcraft
Content providers in the old media (gathered by news teams and shared through wire services) and new media (gathered from the Internet or created by online communities)	Infomediary Model: Third-party service provider pays \$ to info provider; info provider consolidates list of service providers; user selects service provider; third-party provides service to user. (User may also co-create the service and provide ratings of service providers.)	Fee-for-Service: Doubleclick, Cnet. (the only difference from traditional media is the nature of the content).
	Community Model: Provider makes available service to user; users create content which attracts other users; third- party pays \$ to provider (advertising); user may pay \$ to provider (subscription)	Free: Wikipedia, Facebook, Youtube, Amazon, customer review Fee-for-Access: Second Life, LinkedIn, Cyworld, ClubPenguin, ActiveWorlds, World of Warcraft Fee-for-Service: Facebook Ad, Youtube Ad, Second Life Land, ActiveWorlds Land, Webkinz Toys (Ancillary objects), World of Warcraft merchant (inworld)
Transactional services for physical products and packaged software information, or media products	Merchant: User provides \$ to provider; provider makes available products or services to user; provider may create service or procure products or services from third-parties for \$.	Fee-for-Service: Most standard eCommerce: 1800flowers.com, Apple's iTunes Store, Borders. com, sears.com, runningroom.com.
information, or media products	Manufacturer (Direct): User pays \$ to provider; provider sells product or service to user	Fee-for-Service: Ikea, SaaS.
Brokerage or affiliate models that help bring partners together to make	Brokerage: User pays \$ to broker; broker facilitates match-up of users and service providers (which may involve a service exchange)	Free: FriendFeed. Fee-for-Service: eBay (auctions), expedia.com (travel), Comfree (real-estate). Often commission based.
their own transactions or barter	Affiliate: Users click through to third- party for service; third party pays \$ to provider; user pays \$ to provide	Fee-for-Access: Google Affiliate Network Fee-for-Service (per click): Amazon Affiliate Program

(Source:Lyons et al, 2009)

to promote iGaming providers to online iGaming players. iGaming players buy products and services from iGaming providers using Catena's affiliate links. The iGaming provider (online Casino) pays commission to Catena Media.

As regards the way in which Catena Media makes money it is important to understand how they convert potential players (lead) to players (converted lead). They have they own web site like Askgam-

Figure 2. Catena media does lead generation within the igaming industry (Catena Media, Annual Report, 2017.)



blers.com and iGaming Operators as business partners. Figure 3 shows that through affiliate marketing techniques, they used different types of revenue stream possibilities to provide players the best customer experience in online casino.

Catena Media uses different types of affiliate marketing to convert potential players to players. Some of the most important are: Search traffic, Adwords, Youtube, social media and email marketing. (Catena Media, 2018). The YouTube monetization model is based on the insertion of advertising messages, at some time during visitors' exposure to their sought-after audiovisual content and, as every month more than one billion people visit this video-sharing platform to watch more than six billion hours of video, the number of people subscribing to this community continues to triple. (Belanchea et al, 2017). Marketing through social media will lead to an overall increase in gambling participation, consumer to consumer interaction, create further opportunities to promote responsible gambling. (Parke et al, 2014).

According to a recent study of authors (Aslam & Karjaluoto, 2017) there are three different forms of digital advertising that are important for gaining revenue: search engine marketing, social media advertising and display advertising. Online advertising usually uses two common pricing models for websites: cost per impression (CPM) and cost per click (CPC). By comparing the CPC- and CPM-based ad revenue models, they show that the CPC model leads to greater stability in service pricing in both monopoly and duopoly settings. (Xu &Duan, 2018). In addition to the CPM and the CPC models, there are also other advertising pricing models adopted by firms. Hu et al. (2016) investigate the trade-offs between the CPC and the CPA (cost per action) models. They identify the conditions under which the CPA model derives higher publisher (or advertiser) payoffs than the CPC model. In summary, online

Figure 3. How catena media makes money (Source: Catena Media Annual Report, 2017.)



advertising models show up on web sites in several forms: cost per click (CPC), cost per thousand (CPM) and cost per acquisition (CPA).

### ASKGAMBLERS.COM CASINO AFFILIATE PROGRAM

AskGamblers is a leading online gaming portal that delivers current and accurate information about hundreds of online casinos. Since their inception, they have been dedicated to providing an easy and informative experience to their readers. Anyone interested in the online gaming industry can enjoy the company's coverage of almost 1000 different casino websites, each one of them complete with a full review containing useful, up-to-date information, bonus offers, current complaints history and real players' comments and ratings.

Askgamblers.com received many prestigious awards in different categories: Best Casino Website (2017 and 2016 by iGaming Business), Best Casino Affiliate (2015, 2012 and 2010 by iGaming Business) and eGR's 50 Power Affiliates list 2016, 2015, 2014, 2012, 2011 and 2010.

The Casino Affiliate Program offers online casinos, slots, bonuses and forum. There are many different possibilities for communication with Askgamblers.com: Live chat, Twitter support, Create a ticket, Email Support and opportunity to submit a complaint.

For over a decade AskGamblers, a well-known and trusted online casino affiliate website, has helped steer players towards a safe gambling experience thanks to the perfect blend of an unbiased online casino, slot reviews and real players' opinions and ratings. The results that Askgamlers.com has achieved is \$18,727,459 returned to players through complaints. Their message is to show that they care about players. Whenever they get any feedback/complaint on their casino review, good or bad, they leave feedback. AskGamblers have built a trusted online casino portal, dedicated to guide players to a safe gambling experience. They give you dozens of important casino details separated in 6 groups - Casino Review, available Bonus Codes, existing Casino Complaints, Casino Details, Contact Casino and Players Reviews. Their system automatically detects your IP when you are browsing AskGamblers and display all existing online casinos within their database in the following order and groups: casinos accepting players from your country of residence, blacklisted casinos and closed casinos.

### REVENUE MODELS FOR CATENA MEDIA

It is crucial for business leaders to understand the range of the options for generating revenue online. Catena Media's revenues are commission-based fees either in the form of revenue share contracts, CPA contracts or a hybrid of these two models. This applies within iGaming and in online financial transactions.

### Revenue Share

Their most important revenue model is through revenue-sharing with customers. This means that they receive a certain amount of net revenue that a user generates on a customer's website after Catena Media has referred the user to the customer website. Net revenue is calculated as the total losses of an online user adjusted for bonus payments and other direct costs. In general, Catena Media generates such rev-

Figure 4. Deal structures for catena media (Source: Catena Media Annual Report, 2017.)



enue over the account lifetime of a user, notwithstanding a potential termination of the contract with the operator. Revenues are paid monthly to Catena Media.

New customer commission (CPA, Cost per Acquisition) Catena Media also has a model based on a fixed fee, the Cost Per Acquisition (CPA) model. This entails that they receive a lump for every end-user that creates a new profile and makes a deposit on an operator's website.

Hybrid model is combination between a New Customer Commission and an Revenue Share Model. Fixed fees Catena Media also generates revenue by charging a fixed fee for specific events, for example, when an operator pays a fixed fee to be listed or reviewed on one of our websites, or when advertising space is sold to an operator. These specific events are most often negotiated as part of a broader contract that also includes a variable fee component.

Knowing each type of commission offered is only the first step. The more difficult question comes after and that is choosing the correct deal structure for your business. The easiest way to decide on this when starting out is to determine: What is your goal? What are you trying to achieve? Are you in it for the short term or the long term? Who is your audience and how active are they going to be?

Considering the short term, if you want profits upfront, and expect your referrals to not stick around and become long-term users of the service/product you are referring, then you will be better off taking a CPA structure. This will allow you to get larger, one-off payments, the moment one of your leads becomes 'qualified,' with no worry about what happens afterwards. Of course, if you're choosing your partner based on the structure you want then at the end of the day it comes down to what you want to achieve with each referral program and what audience you have access to. (Hoe, 2017) Revenue share models can be really attractive because it can get excellent percentage in introductory deals. It is a constant revenue stream for a long-term period. There is always a potential risk in using this model because the revenue share model assumes that players will play and generate money, but this is not always the case. The CPA model also has advantages and disadvantages. The main advantage is that an affiliate has an immediate fixed return (it is fast and fixed) for every depositing player introducing to online casino. A negative side of the CPA calculation is that the affiliate may regret if the quality of spending powers of players introduced is above average. The main reason why the revenue sharing model is better than the CPA in this industry is that most players will return and keep playing several times. Because of these some affiliates use a hybrid model and mix both revenue deals for online casinos. Some partners only offer one option or do not offer hybrid at all, so if you are set on offering a specific partners service/ product, you might not actually have any choice in what you accept which makes this decision obsolete.

### CONCLUSION

The findings of this paper has by come to add value to both theory and practice.

First, the theoretical contribution of the research is explaining the potential of affiliate marketing and a better understanding of advantages and disadvantages of this online advertising strategy. This chapter explains the studied affiliate marketing types in the different customer buying journey stages following the different communication objectives. The study provides a detailed description of key affiliate marketing elements: merchant, affiliate and customer.

Secondly, we have explained the difference between traditional and online players in the gambling industry, the main characteristics and motives why players like to gamble online. The study shows potential in online gambling industry and the main players that operate as affiliate marketing companies.

Third, the chapter contributes to the research in online gambling industries showing an example of a case study research. From the practitioner's perspective, the example of successful affiliate company Catena Media and Askgamblers.com explained well the role of connecting iGaming providers (online casino) with iGaming players (customers). We have shown the Askgamblers.com Casino Affiliate Program and all awards of the best website and best affiliate. We have described business models and potential deal structure considering earning revenue streams including: revenue share, cost per acquisition, hybrid deal and flat feet, etc.. Knowing the market where the companies operate, customer behaviour assurts. The Claimant suffers left shoulder between spine and the other two appointments. needs and short-term vs long term objectives, the affiliate key account managers choose the right revenue model for Catena media and Askgamblers.com.

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### **KEY TERMS AND DEFINITIONS**

**Affiliate Marketing:** An advertising model where a company pays third-party publishers to promote leads to the company's offer: products and services.

**Affiliate Program:** Describes a relationship in which a merchant pays you a commission to promote their products on your site.

Business Model: Company's plan for how it will generate revenues and make a profit.

Casino: A building or room used for social amusements; specifically: one used for gambling.

Online Gambling: It is internet gambling and includes poker, sports betting and casinos.

**Online Service:** Refers to any information and services provided over the Internet and may be free or paid.

# Chapter 19 Communicating Natural Calamity: The Sentiment Analysis of Post Rigopiano's Accident

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### **ABSTRACT**

This chapter aims at understanding the dynamics that led to the exchange and value co-creation/co-production in the interaction between P.A. and citizens during natural calamities. In addition, it proposes a horizontal communication model in which both actors cooperate to respond to crisis, a semantic and semiotic space on the net able to satisfy their information needs. When natural disasters occur, citizens' primary need is to reach as much information as possible about the status of loved ones possibly involved in the accident, road traffic, how to give an effective contribution to the cause without hindering, etc. On the other hand, P.A. and rescuers need to know as much information as possible about the reports, on the site of the disaster so as to intervene promptly to help the population in danger. Therefore, P.A. and citizens are called upon to cooperate to guarantee crisis containment, crisis management, and also future crisis prevention.

### INTRODUCTION

When natural disasters occur, citizens primary need is to gather as much information as possible (relatives involved in the accident, road traffic, how to give an effective contribution to the cause without hindering et al). On the other hand, Public Administration and rescuers need to know as much information as possible about the reports, on the site of the disaster to intervene promptly to help the population in danger.

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In this scenario, all the actors involved in this dynamic interaction tends to create a system in which value is seen as a systemic process generated/produced as a consequence of that dynamical relation. Accordingly, appeared particularly relevant to the author to make a distinction between the concept of generating and co-producing value. By addressing the most relevant literature in this field, they found both interesting correlation and even consistent differences. As a matter of fact, the review pointed out that authors such Whitaker (1980), Levine and Fisher (1984) associate the term 'co-production' to citizens active participation in improving public services. On the contrary, 'co-creation' – according to Gebauer H. (2010) is due to the involvement of customers, and in this case the producer is asked to 'create value'. Therefore, co-production is an active process of citizens' involvement in improving together with public administration - public services to promote a better experience of their daily life. Value co-creation, instead, is a natural propensity to interact to achieve needs, as Vargo and Lusch (2008) suggest: the customer is 'always a co-creator of value'.

Co-creation is a spontaneous process which benefits the players involved in the dynamic interaction that occur when P.A. and citizens went to communicate. Public administration needs are to manage logistically and communicatively the phenomenon to avoid daily life challenges (live time traffic information, hospital structures available etc.), to better coordinate volunteers and provide as much as possible effective services for citizens, to favor a long-lasting trust. Citizens, on the other hand, when facing a catastrophe, must be aware of the risks they are going through, specific information on facilities, unavailable services, and so long. They both have to cooperate to achieve their survival by exchanging information with each other, so to improve all the processes available in those situations.

It follows that the active players are called to cooperate to establish a horizontal communication model in which they can talk to each other to satisfy their information needs.

Social media, nowadays, allow the community to be active part of the current crisis communication response. As a matter of fact, the social network Twitter was mostly used to quickly share information and updates during the 2007 and 2008 California wildfires, 2008 Mumbai massacre, 2009 crash of US Airways Flight 1549, 2010 Haiti earthquake and so long (Veil S.R. et al., 2011).

The effort that this work wants to produce and the contribution that it aims to give to literature and to the academic community is, therefore, to connect the theoretical framework of value co-creation (once its distance from the concept of co-production of value has been marked) to the constant dialogue between public administration and citizens during natural crisis, analyzing it through the use of Sentiment Analysis on Twitter. Authors will use Twitter because tool to set the communication model. As a matter of fact, thanks to its immediacy and syntax, it represents the most suitable tool to build and strengthen the link between citizens and relief efforts.

The chosen case study – that of post-Rigopiano's accident – it is important to verify authors assumption:

To what extent sentiment analysis allows both practitioners and scholars to understand citizens/
 P.A. interaction?

The effort that this work wants to produce and the contribution that it aims to give to literature is, therefore, to connect the theoretical framework of value co-creation to the constant dialogue between public administration and citizens during natural crisis.

### THEORETICAL BACKGROUND

### Value Co-Creation and Co-Production

As previously mentioned, the introduction on value co-creation and co-production showed a particular interest of academy on the themes of value co-creation, which has been tackled and implemented over time. For instance, Osborn (2010, 2011, 2013) has been the first author who postulates a distinction of four different types of value 'which are co-created in public service delivery by the dynamic interaction of service users and/or service professionals with public service delivery systems' (Osborn et al., 2016). They can be classified in four pivotal points:

- The co-creation of value by the meeting of an individual social need (or of groups of individuals) through co-production in a way that adds to society such as enabling individuals with disabilities to enhance their lives (Type I).
- The co-creation of value by the meeting of community needs through co-production in a way that adds to society such as through a community regeneration scheme (Type II).
- The co-creation of value by the individual well-being created through type I or type II activities, such as the well-being created for individuals as a result of helping them resolve the impact of a disability upon their life (Type III).
- The co-creation of social capital in an individual and/or community through co-production that co-creates capacity to resolve problems in the future such as developing the skills and/or confidence of individuals with disabilities or local communities, as a consequence of Type I or Type II activities, and that enable them to address and resolve other issues in the future (Type IV).

To explain this classification, authors investigated the systemic literature on value co-creation and co-production, stressing those theoretical issues in other scientific works (Capolupo N., Piscopo G., Annarumma C., forthcoming) which represent a starting investigation point: according to several scholar, the first one has been processed as a natural, spontaneous moment (Chandler and Lusch, 2015) in which the service user generate value through its personal desire of achieving that good/service, thinking at how can be positively affect its own experience and upon their life (type 1 and/or 3). Contrariwise, value coproduction represents a different matter: it is identified as 'the conscious will of individual and/or social communities to improve specific service issues' (Bovaird and Loeffler, 2012) and generate a value that somehow adds to the entire society, as point 2 and 4 suggests. Moreover, co-created value occurs when customer contributions, network support, and macro environmental conditions are synergized: 'Customers must be active participants in service coproduction in order to optimize value co-creation' stated Black and Gallan (2015). The literature, instead, provide a definition of co-produced that can be expanded far beyond the simple idea of service provision. Although considered by several scholars similar to value co-creation process, it requests the active participation of citizens in identifying a common issue which affect a community daily life, organizing as a social group of people – as Osborn point out (2010) - which act as one but to achieve a universally usable value, delivering and better performing public services.

The distinction between co-production and co-creation leads consequently to face other several key concepts, such as that of globalization and active citizenship, understood as citizens' ability to organize themselves in several social groups, with the aim to mobilize resources and to act in the public sphere in order to protect rights and take care of common goods. 'Active citizenship usually does not start from

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government interventions but operates somewhat independently from public authorities. It is also referred to as self-organisation, self-governance, Do-It-Yourself democracy, or bottom-up governance' (Buijs et al., 2016). Nevertheless, this process must not be seen as a degeneration of democracy into ochlocracy, or a 'coup d'etat' to the Public Administration and the State. Self-organization means instead, as Vicari suggests (1998), 'the ability to act without resorting to hierarchy or coordination mechanisms. The elements that lead to self-organization can be individuals or formal or informal groups. What matters is that they collaborate and compete with each other.' Moreover, the agents and the interconnections between them are fundamental (Olson and Eoyang, 2001). It is not a matter of leaving absolute freedom, but of stimulating a context in which self-organization can arise. Therefore, authority and power are no longer centred or hierarchically structured, instead are delegated to every single person. Control, in the broadest sense of the systemic governance, is distributed between the parties and not concentrated in one or a few. This suggests that it is crucial adopting a widespread responsibility and interdependence of feedback mechanisms, logics no longer predominantly top-down but bottom-up (De Toni, 2011).

### Social-Mediated Crisis Communication (SMCC) Theory

The literature review conducted by the authors in another aimed also at pointing out which were the most relevant theoretical strands that connect crisis communication and value co-production during crisis. This effort was by all means oriented to contextualize the practical communication model proposed by the authors in the following chapters.

Hence, the review found that social-Mediated crisis communication (SMCC) theory represents the most suitable theoretical approach in which contextualize both the emergency communication model and the value co-production field of study. It is not a coincidence that, according to the Pew Research Centre's Internet & American Life study (2006), when affording crises, audiences' social media use increases,, 'and audiences perceive social media to be more credible than traditional mass media' (Procopio & Procopio, 2007). The literature arguments also that this model is divided into two different parts which explain how the source and form of crisis information affect organizations' response options and recommended social-mediated crisis response strategies. paper (Capolupo N., Piscopo G., 2018).

When crisis information source occurs, this model depicts the interaction between a given organization experiencing a given crisis and three types of publics who produce and consume crisis information via social media, traditional media, and offline word-of-mouth communication (Liu et al., 2011).

Austin (2012) proposes a classification of three different actors which possess different values/ scopes. The first ones are 'influential social media creators', who generate crisis information for others to consume; the second ones are 'social media followers', players that consume the influential social media creators' crisis information; lastly, 'social media inactive', who 'may consume influential social media creators 'crisis information indirectly through word-of-mouth communication with social media followers and/or traditional media who follow influential social media creators and/or social media followers'. (Austin et al., 2012). Thence, is necessary contextualizing them in the active relation between the citizen and P.A. on the net and, in particular, on social media, by classifying them for their polarity:

- Influential social media creators: active polarity LEADER
- Social media followers: mid-active polarity FOLLOWER
- Social media inactive: passive polarity UNFOLLOWERS

By addressing this kind of approach and- in particular – adopting social media as the ideal field in which analyse those relations and polarity, it follows an exponential increase of indicators like efficiency, convenience, accountability, transparency, citizens involvement and improved trust and democracy. (Chang & Kanan, 2008; Cromer, 2010; Dorris, 2008; Kuzma, 2010).

As a matter of fact, the use of social media – like the vast majority of literature (Graham M.W. et all, 2014) – allows governments to communicate more efficiently with publics nowadays than with more traditional media and are often capable of saving resources including time and money (Kingsley, 2010; Kuzma, 2010). In addition, this mediated communication stream generates a value-in-use from which both Public Administration and citizens may benefit over time, because on the one hand, P.A. is able to manage the crisis through the mediation of active users (classified according to the above-mentioned roles and polarities), and citizens may be able to reach all the information they need to survive the crisis.

### MAIN FOCUS OF THE CHAPTER

### **Methodological Issues**

Sentiment analysis, also called opinion mining, is the field of study which examines opinions, feelings, values, attitudes, and emotions of people to entities such as products, services, organizations, individuals, issues, events and their attributes (Bing Liu, 2012). 'The two-way relationship which occurs between producer and consumer, accomplices in a mutual exchange of co-creation of the product, born from the needs of developing new businesses and social organizations, the need for which is to draw the views of consumers or the public about their products and services, and those of individual consumers who also want to know the opinions of an existing product before buying it'. (Capolupo N., Basile G., Scozzese G., 2017)

Several authors (Wiebe J., Wilson T., et al., 2004) propose a methodology of automatic learning of sentiment analysis which applies the techniques of categorization of parts of a given text to analyze the subjective portions of the document. It is mainly composed of two moments:

- 1. Label the phrases in the document both subjective and objective, discarding the latter;
- 2. Apply a classifier machine learning standards for the part extracted.

The chosen case vignette is the Rigopiano avalanche, occurred on the afternoon of 18th January, 2017: a major avalanche occurred on Gran Sasso d'Italia massif, one of the mountains above Rigopiano, hitting a 4-star hotel in Pescara, in Abruzzo region. 'The avalanche struck the luxury resort Hotel Rigopiano, killing twenty-nine people and injuring eleven others'.

Nevertheless, applying sentiment analysis to the present case study it will be fundamental not to focus our attention on how events occurred and the communication stream is managed, but to explain how the proposed communication model during natural disaster works.

Therefore, the research has been conducted and contextualized on Twitter from the 3<sup>rd</sup> to the 11<sup>th</sup> of April 2018, for two main reasons: firstly, to demonstrate how – even more than one year far from the timeline of the catastrophe – the attention of public opinion and users/citizens to the argument seems to remain pivotal on the net; secondly, to analyse the episode occurred after Easter which has mobilized public outrage regarding the landslide areas.

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Although not need it at this stage, authors used a free data extractor software called Tweet Reach, which allowed to collect Tweets with the hashtag #Rigopiano. The analysis found 100 Tweets in this 8-days period, that authors then classified for their polarity in neutral (35%, press, news and general information), negative (60%, sense of outrage and shame for the Easter Monday celebrations on the sites of the disaster) and positive (5% memory and celebration of the heroes who have helped during the avalanche).

The following Tweets, translated in English by the authors, are clear example of negative, neutral and positive polarity of users' feedback.

Matteo Grittani'\ @mdimagritt 3<sup>rd</sup> Apr I'll say it once again. The problem isn't Italy itself, which is a wonderful country. The real problem is 'Italians' as such, a people of saints, poets and sailors. The problem is this generation of Italians, which is for a large part damaged goods. #Rigopiano

The user Matteo Grittani defines as 'damaged goods' this Italian people generation because of the celebration of Easter Monday close to Rigopiano's hotel. Both the repetition of the word 'problem', the use of stereotypes ('people of saints, poets and sailors') and the expression 'damaged goods' clearly suggest a negative polarity of the Tweet, which have been retweeted 92 times, commented 24 times and liked 216 times.

What's Trending?\@breakingnewsit 3rd April Few minutes ago #BREENT, #Rigopiano, #20Mediaset, #AllianzStadium and #Invalsi Twitter trend topic

Concerning neutral polarity, feedbacks were majorly on news and updates. What's Trending? account reminded that the hashtag #Rigopiano became trend topic in Italian Twitter rating.

carlasicuro @CarlaSicuro1 RT @4Paguz2: 9 km on skis and then get to the hotel and start digging, these are the true heroes. I honor you. #Rigopiano

The user Carla Sicuro on the 11<sup>th</sup> of April decided to retweet a message of another user on January 2017, precisely when rescuers arrived at Hotel Rigopiano. Words like heroes and the expression 'I honor you' express the positive polarity of the Tweet, even shared over time by other users.

Furthermore, the report pointed out several interesting aspects which should be taken into account to positively evaluate the accuracy of the chosen methodology:

- 1. From 3<sup>rd</sup> to 11<sup>th</sup> of April 162,305 of Twitter's accounts have been reached by using the hashtag #Rigopiano, achieving 194,254 impressions:
- 2. The top 3 #Rigopiano Tweet contributors achieved 21,5k impressions, 30 retweets and 30 mentions. Moreover, the most retweeted Tweets seems to have negative (expressing rage and shame) polarity.

TWEETREACH SNAPSHOT FOR
#rigopiano

ESTIMATED REACH

EXPOSURE

194,254 IMPRESSIONS
44
42
10
4 0

Figure 1. Tweet reach estimated reach and exposure

### More Practical Issues

Given these points, authors agreed on the fact that Twitter in a first stance may be used as the pivotal tool to set the Emergency communication model. As a matter of fact, thanks to its immediacy and syntax, it represents the most suitable tool to build and strengthen the interaction between citizens and relief efforts.

Therefore, the communication model between P.A./rescuers and citizens should be structured in different agents and moments:

- 1. P.A./rescuers, who receive the information sorted by the filter and coordinate the support or respond to requests for information from citizens.
- 2. Citizens, which help to report in a verified way (with the help of photos and videos) the requests for assistance and information during the natural catastrophe or the consequent disservices.
- 3. The 'filter', a team of communicators and IT analysts which have the task of identifying the hashtags on the network that uniquely mark the help request; check that the reports are true and send them to the rescue units.

This circular model could be represented as follow:

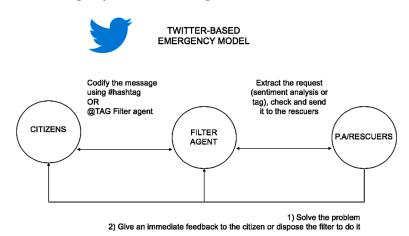
The first moment concern the report of the natural disaster and related problems to it through the use of unique hashtag (for example, #Rigopianohelp) or tagging the filter account @RescueTeam. Citizens



Figure 2. Tweet reach top contributors and most retweeted tweets

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Figure 3. Twitter-based emergency model according to authors view



must be able, when asked, to prove the reporting. They could ask for information about viability, their family conditions etc.:

Mario Rossi, @MarioRossi 3<sup>rd</sup> Apr, #Rigopianohelp and/or @RescueTeam Send help to the Hotel Rigopiano, address Contrada Rigopiano 65010 farindola (Pescara). Avalanche in progress. I enclose videos/photos

Mario Rossi, @MarioRossi  $3^{rd}$  Apr #Rigopianohelp and/or @RescueTeam which road may I take to reach Pescara driving from...

By checking citizens report, discarding the whole information which does not produce added value for relief efforts, the filter communication team will be in charge of contacts by tag and hashtag rescuers and P.A. to convey – both online and offline if not applicable - only those verified information that can be useful for reporting and solving the problem:

Rescue Team, @RescueTeam 3<sup>rd</sup> Apr #Rigopianohelp @Protezione Civile VERIFIED HELP REQUEST, Hotel Rigopiano, address Contrada Rigopiano 65010 farindola (Pescara). Avalanche in progress.

Rescue Team, @RescueTeam 3<sup>rd</sup> Apr #Rigopianohelp @Autostradeperlitalia Are there any alternative routes to reach Pescara from...?

Rescue Team, @RescueTeam 3<sup>rd</sup> Apr #Rigopianohelp Thanks for your report @MarioRossi, we are contacting Civil Protection Unit to send help immediately at the coordinates you sent us / You can reach Pescara by taking the Highway...

P.A./rescuers will provide relief on the basis of the indications received from the filter and citizens, will be in contact with the filter in order to receive as many indications as possible and – once rescue operations has been settled – answer to those citizen's question through the filter mediation.

### **FUTURE RESEARCH**

In the last decade crisis management studies have largely stressed the importance of co-producing value implementing processes and technologies available to both citizens and rescuers to support them during crisis and catastrophes. Social media, in this sense, played a pivotal role to crisis management, allowing citizens to be active protagonists in crisis mediation, and to public administration to use this activism and participatory being to improve its services and better coordinate the emergence. In this connection, literature use to confirm that value co – production occurs if organizations and their stakeholders, P.A. and citizens cooperate with each other in order to develop systems, products or services, 'reinforcing the idea that consumer experience is central to enterprise value creation and innovation' (Prahalad and Ramaswamy's, 2004). Therefore, it can be stated that the main stakeholder and the most interested external partner of an organization is its consumer - citizen, in the specific case (Izvercianua M., Serana S.A., Branea A., 2014). Thus, it happened that citizens and P.A. / rescue units, thanks to the proposed communication model, establish a horizontal profitable dialogue between each other, creating a sub-system autonomous, self-reliant and dependent, interactive vertically and characterized by rules of behaviour, that is called 'holon' (Mella P., 2007). According to Koestler (1968), the holon is self-organization characterized by its ability to interact and coordinate with other superordinate and subordinate holons (integrative tendency) – which derives from its being both included and inclusive, and by its ability for self-preservation. The effort that this work aims to bring forward consists in contextualizing the new methodologies of rescue and management of natural disasters, starting from a qualitative methodology – i.e. sentiment analysis - to build around its I.T. logic a communication model that, through the contribution of multiple actors, aims to co-produce value which can be universally used over time. As mentioned above, from this interaction emerges a sub-system of civil society in which people share at the same level the same aims, and collaborate with each other to reach them.

### CONCLUSION

The sentiment analysis methodology shown – both in the case vignette and applied to the twitter-based communication model – that there could be a strong bond between presented is nothing but a simple targeted re-use of a social network with specific characteristics that are extremely suitable for the prompt reporting of large-scale problems. It represents an interesting interactive platform between active citizenship and P.A., within which there are no hierarchies and both its actors play their part in order to achieve the same result and co-produce value. Nevertheless, requires timeliness and skills concerning the filter communicators; active citizens Twitter knowledge and accuracy in reporting the catastrophes; collaboration and cooperation with P.A. and rescue units specifically in charge of this activity. In order to overcome these issues, authors will structure the Rescue team as a non-governmental organization that works on multiple levels autonomously but working synergistically with the relevant stakeholders: on the one hand, training internal staff and making it ready for sorting and filtering help requests, conveying them to rescuers; on the other hand, organizing free training courses through local communities and territories aimed at both citizens (thus teaching them how to report the problem) as well as rescuers and PA (creation of territorial reporting networks, help agreements, knowledge of IT tools).

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### **KEY TERMS AND DEFINITIONS**

**Crisis Communication:** The effort of communicating with the public and stockholders when an unexpected event occurs that could have a negative impact on the organization reputation.

**Disaster Management:** The attempt to understand the driving mechanisms of natural disasters.

**Holon:** An autonomous self-reliant unit.

**Leader:** A person who holds a dominant or superior position within its field, capable of exercising a high degree of control or influence over others.

**Sentiment:** An idea or feeling that someone expresses in words.

**Twitter:** A social networking website, which allows users to publish short messages that are visible to other users.

**Value:** The worth of all the benefits and rights arising from ownership.

## Chapter 20

# How Consumers Respond to Editorial Communication Strategies: Is Content Marketing Replacing Publicity?

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### **ABSTRACT**

With the advent of Web 2.0 and the fact that brands can now communicate directly with consumers, it has been suggested that content marketing is replacing publicity. However, to the best of the authors' knowledge, no previous study has supported this relationship. The purpose of this chapter is to explore this theory, drawing a comparative study on how consumers respond to both approaches. The effects of content marketing and publicity on message credibility, attitude toward the brand and purchase intention are analyzed, as well as the impact of consumers' antecedents on these indicators. The findings indicate that publicity is still relevant and is not being replaced by content marketing. This chapter illustrates the power of content in influencing customer decision making and provides relevant insights into how content must be used to serve consumers' needs more effectively, allowing a 360° view.

### INTRODUCTION

In 2004, an expression that would change our lives forever was used for the first time. Web 2.0 marked the beginning of a new digital and interactive era and opened the door for companies to interact with their consumers in new and meaningful ways (Durkin *et al.*, 2014). Indeed, the possibility of a constant and less expansive dialogue has facilitated the creation and development of a relationship between brands and their existent – but also potential – clients (Zhang & Lin, 2015). The internet became the number

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one place to search and evaluate information (Järvinen & Taiminen, 2016) and consumers became more demanding, expecting to be provided with the exact type of content they look for at all times (Kee & Yazdanifard, 2015).

As content marketing gives companies the opportunity to communicate straight with their audience and be wherever their customers are, the academy has been suggesting that all kinds of non-media brands are taking over what used to be the space for public communication (Verčič & Verčič, 2016; Zerfass *et al.*, 2016). Some authors point out the low success rate of mass media (Hetch *et al.*, 2017), others highlight the fact that brands can now act as their own gatekeepers (Andaç *et al.*, 2016), and it is suggested that the communication model based on mass media – namely, publicity – does not work anymore (Pulizzi, 2012; Zerfass *et al.*, 2016). However, to the best of the authors' knowledge, no previous study specifically compares publicity and content marketing as editorial strategies and analyzes their effects on consumers. The aim of this research is to fill in this gap, exploring the dynamics between the two strategies and assessing if content marketing might be – or not – replacing publicity as an editorial communication strategy.

In this context, the research question was defined as "how do consumers respond to content marketing and publicity editorial communication strategies?" and it was answered by measuring the impact of the two strategies on three indicators, dissecting these comparisons back-to-back with complementary consumers' content consumption habits information. It should be noted that this study is relevant for the academy – as a first step to assess if content marketing is, indeed, replacing publicity, as suggested – and it is also crucial from a managerial point-of-view, as it concerns the present and the future of the public relations sector and consequently the careers of thousands of publicists all around the world.

As the purpose of this study is to verify if the observed phenomena confirm a theory (Gelo *et al.*, 2008), a quantitative deductive methodology was selected. The research selection was guided by the work of Zerfass *et al.* (2016), namely a study about how European practitioners perceived the rise of new mediatized companies and organizational practices on the public relations sector. Considering that the research found highly significant differences between Northern and Southern Europe – meaning that different cultural contexts had an impact on how practitioners from different locations perceived these new collaboration practices –, the need for country-specific research became apparent. Moreover, Zerfass et al. (2016) pointed out the single-perspective of the study as a limitation, suggesting that future works should include the point-of-view of other relevant stakeholders, such as consumers. In Portugal, although previous research has been conducted about how communication agencies are embracing content marketing practices (see Machado & Gonçalves, 2014), there is no known study which focuses particularly on the consumers' point-of-view. Therefore, Portuguese consumers were defined as an appropriate research population.

A survey was made available, and 400 participants were selected using a mix of quota sampling and snowball sampling. The purpose was to evaluate the impact of content marketing and publicity on message credibility, attitude toward the brand and purchase intention ratings given by respondents. Statistical data analysis was conducted, and the results did not fully support what has been previously proposed by the academy. Research findings indicate that media relations strategies are still successful and thus are not being replaced by new content marketing approaches. On the other hand, the growing power of content matches what has been suggested and denotes that editorial communication strategies must be used complementarily.

From an academic perspective, this study fills in the lack of comparative research on content marketing and publicity, particularly in what concerns the consumers' responses. It highlights new directions

and therefore leads the way to further investigations. This research is also useful for the industry, as it proves the relevance of the publicity approach and also unveils interesting findings that might guide the marketers and publicists' development of strategies based on content.

User generated content should not be analyzed without exploring the companies' point-of-view, as they are an important part of the process, either by encouraging and generating conversations between users or by monitoring and colleting feedback. On the other hand, the link between user generated content and the media should also be considered. Today, the traditional concept of agenda-setting is being replaced by the "reverse agenda-setting", in which the mass media are deeply influenced by social media content (Jang *et al.*, 2017). By exploring how consumers respond to different types of content, this chapter aims to provide readers a 360° view.

### **BACKGROUND**

### **Publicity**

### The Emergence of Publicity

The birth of publicity is generally associated with the beginning of the twentieth century, when the journalist Ivy Lee released a declaration of principles that his publicity firm would follow (Zoch *et al.*, 2014) and other similar companies started to appear (Ribeiro, 2015). However, while Lee's declaration was a landmark in the history of publicity and public relations, it happened after almost 200 years of practice: in fact, publicity might exist for as long as there has been journalism (Zoch *et al.*, 2014).

It is argued that two main motivations led to the emergence of publicity: a partial journalistic system that resulted in the lack of representation and/or false reporting regarding some societal actors, and the fact that these actors (either government, companies or organizations) could not reach the public anymore without the intermediation of mass media (Schönhagen & Meißner, 2016). Other authors claim that publicity was a response to the fast mediatization of society – in which journalists earned power acting as middlemen between organizations and the general public –, having publicists to intermediate the relationship between mass media and organizations (Verčič & Verčič, 2016). The First World War was also a turning point in what regards the growth of media and public relations, as the USA needed a favorable public opinion regarding the country's involvement in the conflict (Ribeiro, 2015).

### **Definition and Techniques**

Publicity is generally defined as earned content in the editorial part of the media (Verčič & Verčič, 2016). Publicity and public relations are often used as interchangeable terms, but it is crucial to highlight that these concepts are not the same. Bernays – one of the most important personalities in the development of public relations – defined the concept as "the relation of an individual, association, government or corporation with the publics they all need to take into consideration to fulfill their social functions" (Rüdiger, 2014). On the other hand, publicity may be defined as the management of the relationship between organizations and the mass media (Verčič & Verčič, 2016) or, more specifically, as a type of communication that, for promotional objectives, gets editorial space in mass media without identifying the sponsor (Eisend & Kuster, 2011). In this sense, it can be concluded that publicity is just a part of

public relations, but it is assuredly a crucial one (Zerfass *et al.*, 2016). Not only is publicity the most active field in the sector, but it is also perceived by many nonpractitioners as the exclusive function of public relations (Verčič & Verčič, 2016).

In practice, a publicist is a professional whose functions are issuing information, interacting with the media, counseling and advising, producing content and generating publicity, in order to spread information and to influence the media agenda (Macnamara, 2014; Zerfass *et al.*, 2016). One of the main techniques used by publicists is the creation and diffusion of press releases. A press release is a text similar to a news story, which is sent to journalists in the hope that they transform it into actual news, thus generating publicity (Ribeiro, 2015). Press releases are often referred to as information subsidies, that are defined as content produced by the organizations in order to secure time and space in the media, to convey their messages and promote themselves (Hetch *et al.*, 2017).

### The Persuasion Game

Since information subsidies do not disclose the source, they create the perception of objectivity. In this sense, the legitimacy and ethics of this technique are often called into question, as it is considered that without revealing the source of the message, publicists are violating principles of transparency and the consumers' right to be informed by whom they are being persuaded (Nelson & Park, 2015). Indeed, publicity has always suffered from an "image problem" (Zoch *et al.*, 2014): the discussion about public relations tends to emphasize the possible damage caused to society (Halff & Gregory, 2015) and not the fulfillment of the social functions proposed by Bernays.

Although it is true that publicity aims to persuade the public, information subsidies face multiple gates – such as journalists' perceptions of newsworthiness, the media's duty to be independent, economic limitations or even the media outlet's profile – that can either stop the information flow or let it continue and be published as a news story (Hetch *et al.*, 2017). This power is known as gatekeeping and means that, despite the publicists' efforts, the journalists always have the final decision on what concerns the spread of persuasive messages. Moreover, journalism itself maintains a persuasion power, which is enforced through the effects of agenda-setting and framing.

Agenda-setting is considered one of the strongest mass media's effects. This theory states that there is a direct relation between the media agenda and the public agenda: the mass media defines media agenda, and, in turn, media agenda set public agenda (Verčič & Verčič, 2016). Framing is based on selection and salience, by making some information more prominent and other subtler (Cole & Greer, 2013). By highlighting certain aspects of a message, media has the historical faculty of molding perceptions and shaping opinions (Senocak, 2017), constructing edited media realities for the public (Verčič & Verčič, 2016). In this context, publicity might be seen as the public's attempt to participate in the construction of the reality.

### The Internet: An Opportunity and a Challenge

Being a communication instrument, public relations are deeply influenced by the information and communication technologies (ICT) evolution (Verčič *et al.*, 2015). Digital public relations – defined as the communication's management between an organization and its audience through the Internet (Huang *et al.*, 2017) – has been the focus of much of the latest research. As most public relations practitioners

work as publicists, the digital, social and mobile revolution is generally studied within the scope of media relations (Verčič *et al.*, 2015).

In the last decade, indeed, the digital world has constituted an opportunity for publicity: as the online environment requires instantaneity, journalists had to adapt themselves to 24-hour news cycles and multiple media platforms (Nelson & Park, 2015), which makes it tempting to copy-paste ready-to-wear press releases, without checking the source (Bastos, 2012). Moreover, as the print industry falls and the advertising profits decrease, newsrooms have now fewer reporters and lower resources, being more receptive to the efforts of publicists, who gather information and provide news stories for free (Nelson & Park, 2015).

However, Web 2.0 also brought significant challenges to the industry. Firstly, as journalism struggles to adapt in a digital world, public relations – especially publicity – have to develop new strategies and techniques (Macnamara, 2014) and adapt itself to the expectations and routines of journalism (Verčič & Verčič, 2016). Secondly and more importantly, the development of the ICT lowered the costs of media creation, production and distribution, allowing companies to bypass traditional mass media organizations and to communicate directly with their consumers (Zerfass *et al.*, 2016). Without the need for mass media intermediation, it can be wondered what the future holds for publicity.

### Content Marketing

### Early Days, Concept and Objectives

Despite being a relatively new approach, the first known practical applications of content marketing appeared on the 1890s, when August Oetker start selling baking powder packages with print recipes – and later even published a recipes book –, and John Deere published a magazine that, instead of selling his equipment directly, educated farmers on new technology and helped them to be more successful (Patrutiu Baltes, 2015). Whilst the trend has been evolving and spreading ever since, the first theoretical frames only appeared in 2007 by the hands of Pulizzi, who created a blog focused on content marketing, that later would lead the way for the foundation of the Content Marketing Institute.

Content marketing can be defined as a marketing approach based on the creation and distribution of free informational or entertainment content (Wall & Spinuzzi, 2018), which allows the company to captivate, obtain and engage a previously defined audience, who might, eventually, carry out a profitable action to the organization (Content Marketing Institute, 2015). In this regard, it should be emphasized that although profit is the ultimate objective of any organization, content marketing is used for other related goals, such as raising brand awareness and improving the company's image (Järvinen & Taiminen, 2016), building relationships based on trust, enticing new leads, enlarging the audience, stimulating a need for a specific product or service, developing loyalty or even testing a new product or business model idea (Patrutiu Baltes, 2015).

In spite of also involving the traditional content formats – as customer magazines or brochures –, content marketing is mostly associated with the digital environment (Järvinen & Taiminen, 2016). In this sense, content might be created and distributed through multiple forms, such as videos, images, blogs, white papers, social media posts, websites, microsites, webinars (Wall & Spinuzzi, 2018), e-books, animations, infographics, podcasts (Chaffey & Smith, 2013), among many others. Regardless of the format, there is just one rule: to tell a story that the target audience wants to hear and which is perceived as useful and valuable.

### Marketing 4.0: Focusing on the Consumer in a Digital World

The exponential growth of content marketing is intrinsically linked to the consolidation of marketing 4.0. This forth evolution can be characterized by two main changes – the shift from traditional to digital and the absolute focus on the consumer (Kotler, 2017) – which are transversal to content marketing.

Firstly, the digital world surely played a decisive role in the development of the content strategy (Pophal, 2015), as the internet became the place to go in what regards the search and critical assessment of information (Järvinen & Taiminen, 2016). Secondly, the customer-centric side of marketing 4.0 is the main feature of content marketing. Instead of pitching products and services, this strategy focuses on what is relevant for the consumers (Du Plessis, 2017) and offers a solution to a client's or a prospect's problem (CMI, 2015).

The two main characteristics of marketing 4.0 are inseparable: in order to focus on consumers, companies need to know what their audience wants. To this matter, online offers endless opportunities, as brands are able to adapt the content according to the insights provided by their customers (Patrutiu Baltes, 2015) on multiple platforms. Today, consumers are savvy: they know precisely what information they want to consume, through which format and if the content is trustful or not and, furthermore, they want to be entertained and informed 24 hours a day, seven days a week (Kee & Yazdanifard, 2015).

### Social Media and User-Generated Content

As content marketing follows a consumer-centered philosophy (Kuş, 2016), it cannot be analyzed without mentioning social media. Social media platforms allow and encourage conversations between users about content, which gives an opportunity for brands to step into the discussion and present solutions (Du Plessis, 2017). In this sense, active listening is now a *sine qua non* skill for companies, through customer feedback collecting and social media monitoring (Järvinen & Taiminen, 2016). Brands can subsequently become gatekeepers, generating discussions around relevant content for both the industry and the consumers (Andaç *et al.*, 2016).

On the other hand, mainly through social media, users can now produce their own content and present their own solutions. User-generated content is a broad concept that may be defined according to three criteria: the users must create the content themselves; the content has to be published and accessible in order to allow discussion; and it must be created outside the scope of professional activities (Naab & Sehl, 2017). The phenomenon of co-creation is particularly relevant to content marketing, as user-generated content represents an opportunity to develop positive relationships between the company and its customers and to build trust, as consumers tend to rely more on companies which listen to their ideas and needs (Kee & Yazdanifard, 2015).

Considering the power of social media and user-generated content, the academy has recently proposed the concept of a "reverse agenda-setting", which challenges the original notion of this effect: the mass media is now heavily influenced by social media content, especially user-generated content (Jang *et al.*, 2017). In this line of thought, the public sets public agenda, which, in its turn, sets media agenda.

### **Publicity and Content Marketing**

Recently, it has been suggested that organizations can now bypass mass media and connect directly with the audience that really interests them (Verčič & Verčič, 2016), a theory that implies that content

marketing might be replacing publicity as a communication instrument. In order to explore the validity of this assumption, it is imperative to compare publicity and content marketing, exploring what draws these strategies together and what tears them apart.

The primary resemblance lies in information. In an information-driven decade, customers demand useful information to aid them in the decision-making process. Content marketing is the art and the science that answers that request (Kee & Yazdanifard, 2015). At the same time, a publicist's function is to work the information (Ribeiro, 2015) and issue informative content to the media (Zerfass *et al.*, 2016). Not only information is the foundation of both strategies, but storytelling also plays a crucial role in this relationship. Regardless of the goal, content marketing cannot be effective without compelling storytelling (Pulizzi, 2012) and, on the other hand, a press release is a story itself (Ribeiro, 2015).

Alongside information and storytelling, "editorial" is also a keyword in both strategies. This kind of content might be either communicated directly by the brand (content marketing) or through the media channel (publicity). Furthermore, content marketing goals include increasing the brand awareness, attracting new leads (Pulizzi, 2012), improving the company's image (Järvinen & Taiminen, 2016) and reinforcing its positioning (Kee & Yazdanifard, 2015) – objectives that also apply to publicity.

The control over the message is another main difference: while content marketing allows companies to get the complete control over the message – as they speak directly to their audience – in publicity, the final product is often beyond the company's control (Spotts *et al.*, 2015) and the journalist has always the final decision in if or how the message is conveyed (Hetch *et al.*, 2017).

Content marketing and publicity are also distinct in what concerns emotion and interactivity. On the one hand, one of the keys to effective content marketing is how much emotion the message carries, as the customers tend to act – and interact – more upon the content when the emotion is more extreme (Kee & Yazdanifard, 2015).

As nowadays customers expect to have increasingly customized experiences that reflect their own needs (Light, 2014), personalization is also an interesting topic. While marketers use content marketing (especially digital content marketing) to better personalize contents for consumers (Kee & Yazdanifard, 2015), publicity cannot customize news stories, leaning on segmentation to get their messages to the right audience.

### **Future Dynamics**

Lately, the boundaries between editorial content, advertising and publicity have been blurring (Zerfass et al., 2016) as new concepts such as native advertising and brand journalism are born. Native advertising can be defined as paying to embed sponsored messages within editorial or entertainment content of online publishers (Hallahan, 2014), whereas brand journalism allows businesses to target customers with relevant, tailored editorial content (Cole & Greer, 2013) by using journalistic skills (Zerfass et al., 2016). Brand journalism plays an important role in the relationship between content marketing and publicity because organizations are now hiring journalists and editors to help coordinate their content marketing strategies (Pulizzi, 2012) and to craft brand stories (Hallahan, 2014). The academy suggests that the future of the marketing department is half marketing and half publishing and that soon the leading journalists in the world may be working for big corporations (Pulizzi, 2012). Should this prophecy come true, we should ask ourselves what will happen to journalism and, consequently, media relations.

Publicity was generally thought to be more credible and more influential than other forms of company-controlled communication because the media were considered to be independent and impartial sources that provide the full story without a hidden intent (Eisend & Kuster, 2011). In the last years, however, some authors have argued that this communication model based on mass media does not work anymore (Pulizzi, 2012). Today, media production is being decentralized from traditional media to all kinds of companies and organizations, and non-media brands are filling in the space for public communications (Verčič & Verčič, 2016).

In this context, some questions are being raised. Will the opportunity of communicating directly with the audience via content marketing and social media replace publicity? Or is the third-party endorsement power still worth the gatekeeping and low success rate of mass media (Hetch *et al.*, 2017)?

### CONCEPTUAL FRAMEWORK AND HYPOTHESES

In order to achieve a valid comparison between content marketing and publicity, three indicators were analyzed: message credibility; attitude toward the brand and purchase intention. Message credibility is defined as a consumer's perception of the truthfulness and accuracy of the content of communication (Appelman & Sundar, 2016). Attitude toward the brand is a person's internal assessments, which includes some kind of evaluation (good or bad) and is presumed to lead to a certain behavior (Spears & Singh, 2004). Purchase intention represents the possibility that a consumer will acquire a determined brand or product (Li *et al.*, 2018) and is usually defined as "an individual's conscious plan to make an effort to purchase a brand" (Spears & Singh, 2004). Figure 1 presents the conceptual framework of this study.

As stated above, the digital realm brought some challenges to journalism. In the middle of 24-hour news cycles (Nelson & Park, 2015), the pressure for instantaneity has been causing the increase of mistakes and, therefore, the loss of media's credibility (Bastos, 2012), which might explain, in part, mass media's low accomplishments (Hetch *et al.*, 2017). On the other hand, the interactivity and co-creation between brands and consumers that content marketing allows – and encourages – makes brand content not only entertaining but trustworthy (Kee & Yazdanifard, 2015). Nowadays, companies hope to build trust using the power and credibility of editorial content, often seen as more uncorrupted than commercial content (Cole & Greer, 2013). So, the following hypotheses was formulated:

H1: Content marketing will be associated with higher levels of message credibility than publicity.

Moreover, the literature review showed that one of the main differences between content marketing and publicity is that the former relies on emotion, which causes the consumers to interact more (Kee & Yazdanifard, 2015), while the later needs to follow journalism's objectivity and neutrality (Ribeiro, 2015). As content marketing gives companies the opportunity to communicate straight with their audience (Verčič & Verčič, 2016; Zerfass *et al.*, 2016), the consumer brand relationships could be leveraged. Hence, it should be noticed that content marketing aims to create brand awareness and brand image (Järvinen & Taiminen, 2016). Consequently, the following hypotheses was formulated:

**H2:** Content marketing will be associated with more positive attitudes toward the brand than publicity.

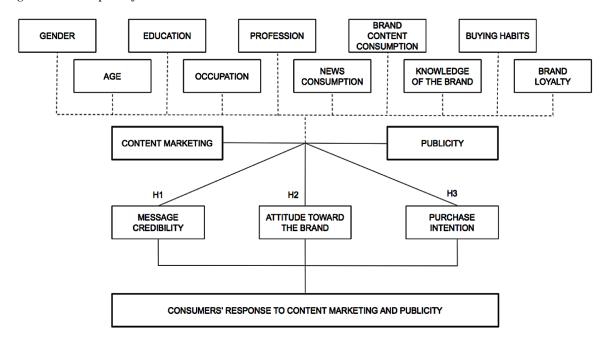


Figure 1. Conceptual framework

Moreover, content marketing is the communication of relevant content by the brand itself (Pulizzi, 2012), while publicity requires a third-party endorsement (Nelson & Park, 2015). In this sense, companies using content marketing only benefit from signing their contents, whereas the non-disclosure of the source is the soul of publicity. Additionally, content marketing desire stimulating the need for a specific product, service or brand developing loyalty or stimulating the first consumer brand experience (Patrutiu Baltes, 2015). Hence, interactivity and user-generated content are vital concepts in content marketing. On the contrary, publicity has to respect and adapt itself to the journalist impartiality and objectivity (Ribeiro, 2015), leaving no room for emotions. In addition, although Web 2.0 brought an opportunity to the readers to react and engage with the news, as the source cannot be disclosed, this interactivity might happen between the audience and the media, not including the brand.

Furthermore, the context in which the consumers receive the content is also relevant. Push marketing tends to irritate customers because it forces them to receive information, whereas pull marketing gives the consumers the freedom to choose to search and read (Kee & Yazdanifard, 2015). Content marketing is considered an inconspicuous pulling technique (Järvinen & Taiminen, 2016) but publicity might be considered a mix between the two approaches, depending on whether the reader is looking for the information or not.

Since the research also suggests that attitude toward the brand has a positive effect on purchase intention (Spears & Singh, 2004; Wu & Lo, 2009; Hartmann & Apaolaza-Ibanez, 2012), the following hypotheses was formulated:

**H3:** Content marketing will be associated with higher levels of purchase intention than publicity.

### METHODOLOGY AND RESULTS

### Sample Selection

In quantitative research, the goal of sampling is to select individuals that are representative of a certain population, so that there is external validity, i.e., the results can be generalized (Gelo *et al.*, 2008). In this sense, the sample approach used was a mix between quota sampling – a nonprobability sampling procedure in which the researcher defines relevant characteristics and determines the distribution of these features in the target population, ensuring the composition of the sample is the same as the composition of the population, in what concerns the defined characteristics – and snowball sampling – a sampling technique in which the selected participants are asked to identify others who belong to the population of interest (Malhotra, 2008). In this case, the authors considered gender and age as the most relevant features, so the sample replicates proportionally the 2017 national results from Pordata, a database which provides certified statistics about Europe and, more specifically, Portugal. In this sense, 53% (n = 213) of the participants were female and 47% (n = 187) were male. In what concerns the respondents' age, 19% (n = 77) were 19 years old or younger, 11% (n = 43) were 20 to 29 years old, 21% (n = 84) were 30 to 44 years old, 28% (n = 112) were 45 to 64 years old and 21% (n = 84) were 65 years old or older.

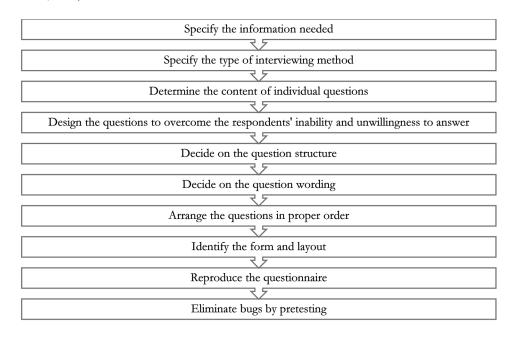
Regarding the level of education of the population, there was also a concern to keep the sample fairly representative. Therefore, although the largest slice of the participants had the secondary education (42%) or higher education (30%), there were also respondents who had the basic education (14%), primary education (12%) or no education at all (2%). The majority of the participants were part of the active population (56%), but there was also a significant representation of retired people (22%) and students (20%).

As for the profession, respondents worked on the manufacturing industries (13%), human health and social support activities (11%), wholesale and retail trade (10%), consulting activities (9%), information and communication activities (8%), education (8%), administrative activities and support services (8%), accommodation, catering and similar activities (8%), amongst others. In this regard, it should be noted that professions were defined according to the Portuguese Classification of Economic Activities, provided by Statistics Portugal (Instituto Nacional de Estatística). To further consumer characterization details, see Table 4 in the Appendix .

### **Data Analysis Procedure**

To analyze the hypothesized relations, as well as other relevant associations, a questionnaire was designed – following Malhotra's (2008) design process (see Figure 2) – and distributed between May and June 2018. As the participants were Portuguese and the scales were developed in English, the questionnaire was translated, in order to make it accessible and understandable to all age classes and people with different educational backgrounds. A pilot study was held with 233 participants to identify errors, comprehension problems and to assure the translation's quality. The pilot study revealed some major concerns and all advice has been taken into consideration and integrated into the final version of the survey. This new version was distributed physically, in order to be more accessible to older participants. In total, 488 respondents completed the questionnaire in full, but only 400 were taken into account for analysis, in order to keep the sample representative.

Figure 2. Questionnaire design process (Source: Malhotra, 2008)



(Source: Malhotra, 2008)

The final questionnaire was divided into three sections (see Table 5 in the Appendix). The purpose of the first one was to assess the respondents' general content consumption habits, namely news consumption and brand content consumption. In the second section, respondents were introduced to a brand – Ikea – and were asked to give information about their relationship with the brand. More specifically, they were asked about their knowledge of the brand and their buying habits – both filter questions – and, when applicable, about their brand loyalty (answering a question drawn from an Action Loyalty scale by Bobâlcă *et al.*, 2012). (1) International presence, (2) high brand awareness, (3) unisex/everyday use, and (4) quality content marketing were the criteria that led the authors to choose Ikea as the research subject.

In the same section, participants were exposed to two different types of content – a brand content piece produced by Ikea and a news piece about the brand, signed by a well-known Portuguese newspaper, Expresso. The brand-produced content – retrieved from the Ikea's website – was focused on the "Life at Home Report", which reveals the home-related fights and frustrations from people all around the world. Among multiple possibilities, this article was selected because the authors considered it was exactly halfway between informational content marketing and emotional content marketing. On the other hand, the news piece focused on the opening of new Ikea stores in Portugal and more generically about the brand's prosperity and success. The newspaper selection criteria were based on its high reputation amongst Portuguese consumers, and the news piece was considered adequate because it did not unveil any evident trace of publicity efforts.

In relation to each one of these content pieces, respondents were then asked to indicate their degree of agreement or disagreement with statements which represented the constructs mentioned above – message credibility, attitude toward the brand and purchase intention (see Table 1).

#### How Consumers Respond to Editorial Communication Strategies

Table 1. Constructs

Construct	Scale items	Authors	Recently used by
Message Credibility	<ul><li>Accurate</li><li>Authentic</li><li>Believable</li></ul>	Appelman and Sundar (2016)	Willoughby & Liu (2018)  Berger (2018)  Lee (2018)
Attitude toward the brand	<ul> <li>Unappealing – appealing</li> <li>Bad – good</li> <li>Unpleasant – Pleasant</li> <li>Unfavorable – Favorable</li> <li>Unlikable – Likable</li> </ul>	Spears & Singh (2004)	McLean (2018) Lim et al. (2018) Yu et al. (2018)
Purchase intention	Never – Definitely     Definitely do not intend to buy – definitely intend     Very low – high purchase interest     Definitely not buy it – definitely buy it     Probably not – Probably buy it	Spears & Singh (2004)	Dai & Pelton (2018) Ketron (2018) Hyun and Choi (2018)

Message credibility was measured using three items: (1) authentic, (2) accurate and (3) believable (Appelman & Sundar, 2016). Attitude toward the brand and purchase intention were measured using five-item scales – (1) unappealing-appealing, (2) bad-good, (3) unpleasant-pleasant, (4) unfavorable-favorable, (5) unlikable-likable and (1) never-definitely, (2) definitely do not intend to buy-definitely intend to buy, (3) very low-very high purchase interest, (4) definitely not buy it-definitely buy it and (5) probably not-probably buy it, respectively, both developed by Spears & Singh (2004). In order to facilitate the evaluation and analysis, the items were transformed into seven-point Likert scales, in which  $1 = Completely \ disagree$  and  $7 = Completely \ agree$ . Finally, section three was composed of five questions related to demographics – gender, age, education, professional occupation, and profession – in order to characterize the respondents.

## Statistical Analysis Criteria

Having reviewed the literature (Carifio & Perla, 2008; Norman, 2010; Fagerland, 2012; Pestana & Gageiro, 2014; Schmidt & Finan, 2018), the authors opted to recode the single items means into the three correspondent indicators – message credibility, attitude toward the brand and purchase intention – and analyze the data parametrically, even though the assumption of normality was not fulfilled (see Table 6 in the Appendix). In this context, negative items were recoded and rescored into positive ones.

Cronbach's alpha test was first carried out in order to verify the internal consistency of the new latent variables. The majority of the items appeared to be worthy of retention, resulting in a decrease in the alpha if deleted. The only relevant exception was message credibility's item 2 (see Table 2) which would considerably increase the alpha from  $\alpha = 0.68$  to  $\alpha = 0.80$  regarding content marketing evaluations and from  $\alpha = 0.63$  to  $\alpha = 0.79$  in what concerns publicity. In this context, the authors chose to delete this item in both scales (message credibility motivated by content marketing and driven by publicity) in order to increase their internal consistency.

To test the hypotheses, a Paired Sample T-Test was used, as it is frequently used when a subject is analyzed twice (usually before and after some type of intervention), forming pairs of observations whose

Table 2. Cronbach's Alpha coefficients for message credibility, attitude toward the brand and purchase intention scale items

Strategy	Indicator	Cronbach's Alpha	Items	Cronbach's Alpha if Item Deleted
	Message credibility	0.684	<ul><li>(1) The message is authentic</li><li>(2) The message is not accurate</li><li>(3) The message is believable</li></ul>	0.467 0.797 0.461
Content Marketing	Attitude toward the brand	0.775	<ul> <li>(1) The brand is appealing</li> <li>(2) The brand is good</li> <li>(3) The brand is unpleasant</li> <li>(4) The brand is favorable</li> <li>(5) The brand is unlikable</li> </ul>	0.722 0.688 0.762 0.697 0.783
	Purchase intention	0.827	(1) I will never buy this brand's products (2) I definitely intend to buy this brand's products (3) I have high purchase interest in this brand's products (4) I will definitely not buy this brand's products (5) I will probably buy this brand's products	0.816 0.764 0.768 0.829 0.777
	Message credibility  0.632  (1) The message is authentic (2) The message is not accurate (3) The message is believable		0.373 0.788 0.354	
Publicity	Attitude toward the brand	0.795	<ul> <li>(1) The brand is appealing</li> <li>(2) The brand is good</li> <li>(3) The brand is unpleasant</li> <li>(4) The brand is favorable</li> <li>(5) The brand is unlikable</li> </ul>	0.749 0.731 0.781 0.722 0.785
	Purchase intention	0.825	(1) I will never buy this brand's products (2) I definitely intend to buy this brand's products (3) I have high purchase interest in this brand's products (4) I will definitely not buy this brand's products (5) I will probably buy this brand's products	0.829 0.765 0.761 0.828 0.752

differences are tested. It is also appropriated to analyze two different groups which have a common characteristic and therefore might be compared (Pestana & Gageiro, 2014).

Additionally, and to better answer the research question, parametric statistical tests were used to compare groups and analyze if there were statistically significant differences amongst the consumer descriptive variables on the indicators for both content marketing and publicity. More specifically, Independent T-tests and one-way ANOVAs were performed, to compare the mean score of the indicators – message credibility, attitude toward the brand and purchase intention – amongst 10 independent groups (1) gender, (2) age, (3) education, (4) professional occupation, (5) profession, (6) news consumption habits, (7) brand content consumption habits, (8) knowledge of the brand, (9) buying habits and (10) brand loyalty – on the dependent variables. Post hoc analysis was then performed to establish a more detailed comparison between groups when statistically significant differences were found. The Bonferroni test was used to analyze small numbers of comparisons, and Tukey H.S.D was employed to assess differences between a large number of comparisons (Pestana & Gageiro, 2014).

The statistical analyzes were performed using SPSS, version 24. The statistical significance value was set at p < 0.05 and, when applicable, at p < 0.01 and p < 0.001.

Table 3. Paired Sample T-Test for message credibility, attitude toward the brand and purchase intention, adopting two different strategies

	Content marketing		Publicity			Paired Sample T-Test	
	М	SD	М	SD	Correlation	t	p
Message credibility	4.59	1.53	5.01	1.43	0.52 (p <0.001)	-5.91	< 0.001
Atittude toward the brand	5.37	1.05	5.39	1.05	0.70 (p <0.001)	-0.55	0.58
Purchase intention	5.39	1.21	5.33	1.19	0.81 ( <i>p</i> <0.001)	-1.76	0.08

Strategy (n = 400)

## Sample Profile

In what concerns news consumptions habits, 59% of the participants consumed news proactively, and 39% of the respondents did it passively. Results indicated that television was undoubtedly the consumers' favorite news channel (74%) followed by the digital world, namely online newspapers (49%) and social media (42%). Press was used by 38% of the participants who consume news and radio seemed to be consumers' least favorite channel, being referred by only 35% of the respondents.

Regarding brand content consumption, the majority of participants stated that they usually consume content produced by brands (58%). For these consumers, information was by far the leading motivation (81%), followed by entertainment (53%). On the other hand, only 15% of the participants indicated "sense of belonging/proximity to the brand" as a consumption motivation.

Concerning the knowledge of the brand, almost 95% of the participants knew the brand. Amongst these consumers, 35% of the participants claimed to buy Ikea once a year, 34% two or three times a year and 25% had never bought the brand products. The analysis indicated that only 5% of the participants usually bought Ikea products on a monthly basis and just 1% on a weekly basis. As for brand loyalty, 50% of the buyers indicated that Ikea was their first choice when they wanted to buy home-related products (for detailed descriptive statistics about the consumers' content consumption habits and previous relationship with the brand, see Appendix 5).

## Hypotheses Testing

Since, in this case, each dependent variable was measured twice – in order to evaluate the effects of the two strategies (content marketing and publicity) – a Paired Sample T-Test was performed, to determine whether there was a statistically significant difference between the two means. The correlation between the two variables was estimated at r = 0.52, p < 0.001 for message credibility, at r = 0.70, p < 0.001 for attitude toward the brand and at r = 0.81, p < 0.001 for purchase intention, confirming that the Paired Sample T-test is appropriate in this case (see Table 3).

A Paired Sample T-Test showed a statistically significant increase in message credibility scores from content marketing strategy (M=4.59, SD=1.53) to publicity (M=5.01, SD=1.43),  $-t_{(399)}$  = -5.91, p < 0.001. Since publicity was, in fact, associated with higher levels of message credibility than content marketing, H1 was not supported.

H2 assumes that content marketing is associated with more positive attitudes toward the brand than publicity. However, participants rated the brand as more positive after reading the news piece (M=5.39, SD=1.05) than the brand content (M=5.37, SD = 1.05). The Paired Sample T-test means comparison for attitude toward the brand motivated by content marketing and by publicity disclosed that this difference was not significant ( $t_{(399)}$  = -0.55, p > 0.05), meaning that, statistically, content marketing and publicity were equally associated with positive attitudes toward the brand. Therefore, H2 was rejected.

Regarding purchase intention, respondents rated purchase intention at average at 5.39 (SD=1.21) when exposed to content marketing and at 5.33 (SD=1.19) after reading the news piece. Although this could come in line with the hypotheses that content marketing is associated with higher levels of purchase intention than publicity, no statistically significant difference was found between the two variables' means ( $t_{(399)}$  = -1.76, p > 0.05). Consequently, H3 was not supported.

## SOLUTIONS AND RECOMMENDATIONS

In the last few years, the academy has been advocating that companies can now interact straightforwardly with their consumers through content marketing, eliminating the need for publicity's mediation. Since no known study had tested this theory, the purpose of this research was to give a first step towards finding out if content marketing is, indeed, replacing publicity. After reviewing the literature, hypotheses were defined based on the power of content marketing over publicity. It was therefore expected that the first approach was associated with higher levels of message credibility, attitude toward the brand and purchase intention. However, data collection through a questionnaire answered by 400 Portuguese consumers and subsequent statistical analysis has not supported any of the hypotheses.

The first hypothesis was that content marketing would be associated with higher levels of message credibility. Nonetheless, the news piece's message credibility proved to be significantly higher than the brand content. This result does not come in line with the low success rate of mass media suggested by Hetch *et al.* (2017). In order to achieve a better understanding of this outcome, it is crucial to consider the descriptive statistics regarding the sample's news consumption habits. In fact, 98% of the respondents stated that they consume (read/watch/listen to) news and the majority of participants said that they did it in a proactive way (59%). This significant news consumption tendency might suggest that Portuguese consumers trust media outlets; otherwise the news consumption levels would most certainly be lower.

These results also do not disclose any apparent loss of credibility that Bastos (2012) predicted could occur due to the proliferation of online journalism. Although television is still Portuguese consumers' favorite news channel (selected by almost three out of four respondents), the digital world comes up second, either via online newspapers or social media, which are used by 49% and 42% of the respondents, respectively. While these numbers might not seem relevant, they are particularly interesting if we have in mind that almost one-quarter of the sample was constituted by senior people (65 or more years old). Overall, the results do not indicate that the public space communications that belong to mass media are being taken by non-media brands, as suggested by Verčič & Verčič (2016).

The second hypotheses stated that content marketing would lead to more positive attitudes toward the brand than publicity. Since several authors (Spears & Singh, 2004; Wu & Lo, 2009, Hartmann & Apaolaza-Ibanez, 2012) agree that attitude toward the brand comes hand in hand with purchase intention, the third hypotheses also stated that content marketing would be associated with higher levels of

purchase intention than publicity. However, the results indicated that there were no significant differences between the two indicators' means for both content marketing and publicity.

Analyzing descriptive statistics regarding the participants' brand content consumption habits, we can see that the majority (58%) of the respondents stated that they usually consume content produced by brands. This number is especially relevant having in consideration that the sample was constituted by participants from all age groups and with different educational backgrounds and confirms the proposition that brands are now communicating directly with consumers, as suggested by Zerfass *et al.* (2016). Information and entertainment were appointed as the main motivations for brand content consumption, which comes in line with the authors' definition of content marketing, that highlights the distribution of free informational or entertainment content – proposed by Wall & Spinuzzi (2018) – as one of its core functions.

However, the outcomes showed that information has a far more significant power – being indicated by 81% of the participants who usually consume content produced by brands, against just approximately half of the respondents who selected entertainment as a motivation. These results validate the starting point of this comparative study, supporting the authors' claim that "information is the foundation of both strategies". They show that information is not only the basis for the whole publicist scope of action – as highlighted by Ribeiro (2015) – but it is also the main content marketing's attraction factor for Portuguese consumers. On the same line of thought, one can note that just 15% of brand content consumers indicated "sense of belonging/proximity to the brand" as a consumption motivation, which might suggest that, in general, Portuguese consumers do not use content so much as a way to establish a closer relationship with the brand or to reach higher levels of interaction, as indicated by Kee & Yazdanifard (2015). This background information might actually explain why content marketing and publicity displayed similar attitude toward the brand and purchase intention scores. It can be suggested that, regarding these two indicators, Portuguese consumers reacted similarly to both approaches, because they both satisfy one common need: information.

The group differences seem to support this theory, as respondents who proactively consume news were associated with not only higher news' message credibility levels – which could be expected – but, were, simultaneously, linked to a more positive attitude toward the brand motivated by content marketing than passive consumers. Likewise, after being confronted with both strategies, brand content consumers rated all three indicators higher than participants who do not usually consume content created by brands. These results come in line with the works of Patrutiu Baltes (2015) – who claimed that it is the quality of the content the most important part of digital marketing – and might, indeed, indicate that consumers look for great content, regardless of the channel.

In what concerns the statistical comparisons between groups, it should be underlined that women were associated with a more positive attitude toward the brand after reading the brand content than men. Since – to date and to the best of the author's knowledge – there are no previous studies which measure the impact of gender on content marketing effectiveness –, the authors consider that content selection might explain this outcome. Although one of the specific criteria to choose Ikea as a brand was its unisex/familiar character (alongside international presence, high brand awareness, and quality content marketing), it can be argued that the chosen content appealed more to the feminine public, culturally more associated with the "Life at home". This theory is in agreement with the works of Ribeiro *et al.* (2015), which concluded that women in Portugal continue to assume the workload associated with traditional gender roles.

The statistical tests have also shown noteworthy outcomes regarding the impact the knowledge of the brand, buying habits and brand loyalty on how Portuguese consumer respond to content marketing and publicity. Participants who did not know the brand and non-loyal buyers exhibited significantly lower scores in every indicator after reading the two different contents. Also, non-buyers were associated with a less favorable attitude toward the brand and with lower levels of purchase intention than the groups of buyers. These results might imply that editorial strategies are more useful and powerful to maintain ongoing conservations with consumers, as proposed by Wall & Spinuzzi (2018), and build relationships based on trust (Kee & Yazdanifard, 2015), than attracting new leads, as indicated by Patrutiu Baltes (2015). This proposition should be explored by marketers and publicists, in order to create and develop more efficient content-based strategies. On the other hand, however, it could be argued that these scores display that consumers' preconceptions about the brand influence the way they respond to both strategies.

In what regards the impact of content marketing and publicity on different professions, means comparisons showed that wholesale and retail trade sector was associated with higher purchase intention levels than the extractive industries and transport and storage sectors motivated by both strategies. It can be suggested that these results might be explained by the proximity factor: professionals working in commerce-related functions deal more often with content than the production and logistics professionals, being more predisposed and perceptive to this kind of approach. This finding also seems to come in line with the work of Järvinen & Taiminen (2016), who revealed how content marketing strategies might be combined with selling processes, putting an end to the conflicts between marketing and sales department. These results, therefore, might convey that new productive relationships between content marketing, publicity, and the commerce sector should be cultivated.

This research also provides other useful insights to marketers. The fact that the 65+ age group exhibited significantly lower ratings in every category than other groups matches the overall lower scores attributed by retired respondents and, also, with participants who selected primary education as their educational level, after reading both types of content. In light of these results, it could be suggested that literacy difficulties constitute one of the reasons that might explain the older respondents' lack of interest in the brand content and the news piece. However, it also raises an interesting point that should be discussed.

As described in the literature review, content marketing is fundamentally related to the digital world (Pophal, 2015) and public relations professionals are now managing the organization-public communication through the Internet (Huang *et al.*, 2017), adapting themselves to the new routines of 24h online journalism (Verčič & Verčič, 2016). In this case – although the questionnaire was distributed physically, precisely to reach the older population –, the portrayed contents were created for online platforms and retrieved from websites, therefore following a specific digital language and visual codes, which senior people might not be familiar with. In this context, it is essential to ask: is there a place for senior consumers in the content world? How can brands better reach this segment, with contents that match their wishes and needs? Even in the highly digital environment of the 21<sup>st</sup> century, these results indicate that marketers and publicists must consider offline approaches, which is already being done successfully in Portugal, as pointed out by Moreira (2017).

To sum up, this research suggests that the Portuguese paradigm does not match what has been suggested by Pulizzi (2012), Verčič & Verčič (2016) and Zerfass *et al.* (2016) regarding the failure of the mass media communication model: in Portugal, media outlets seem to still be considered unbiased sources that report the story without covert purposes (Eisend & Kuster, 2011). However, it does come

in line with Patrutiu Baltes (2015), who claimed that is the content's quality the most important feature of the digital strategies.

## **FUTURE RESEARCH DIRECTIONS**

This study represents a first step in assessing if content marketing is replacing publicity and, therefore, studies in other countries are strongly encouraged. Upcoming researches should also explore the more appropriate functions of editorial communication strategies, namely, their effectiveness in feeding relationships versus in attracting new leads. The potential benefits of synergies among content-based approaches and the commerce and trade sector is another suggested topic.

## CONCLUSION

With the new digital trends that allow companies to use their own power of gatekeeping (Andaç *et al.*, 2016) – communicating directly with their audience –, the academy been suggesting that, through content marketing, companies are dominating the mass media's public communications sphere (Verčič & Verčič, 2016; Zerfass *et al.*, 2016). However, to the best of the authors' knowledge, no previous study specifically had tested this theory, comparing the effects of content marketing and publicity on consumers. In this sense, this research's objective was to determine if content marketing might be indeed replacing publicity as an editorial communication strategy.

To answer the research question – how do Portuguese consumers respond to content marketing and publicity editorial communication strategies? – a quantitative methodology was used, data was collected from 400 questionnaires, and hypotheses were formulated based on the literature review. Whilst confirming the undeniable importance of content, statistical analysis did not support any of the formulated hypotheses and overall results do not completely match what has been suggested by the academy.

Firstly, the message credibility of the news piece proved to be significantly higher than the content created by the brand. Consumer antecedents' analysis suggested strong news consumption habits by Portuguese consumers, mainly in a proactive way and also through digital platforms. This result is in disagreement with the aforementioned theory that online journalism could lead to loss of credibility.

Secondly, no statistically significant differences were found between the impact of content marketing and publicity on attitude toward the brand and purchase intention, meaning that both strategies had similar effects on consumers. Descriptive statistics showed that brand content consumption's main motivation was information and group differences also unveiled strong connections between news consumers and content marketing and brand consumers and journalism/publicity.

In this sense, while coming in line with academy's suggestions in what concerns the proliferation of content marketing – on this matter, it should be regarded that the majority of participants already consumes content created by brands –, this study indicates that, in Portugal, this strategy is not replacing publicity, as proposed. Results imply that, in this country, media outlets maintain the credibility that makes publicity a valid and useful approach and in what regards the personal assessments of the brand and the potential buying interest, both strategies had similar effects on consumers. This finding not only

validates the whole purpose of this comparative study but also constitutes one of its most important conclusions: consumers seem to want information and quality content, be it through the media channel or directly through the brand.

This study also led to relevant insights regarding consumers' response to editorial communication strategies. One of them has to do with the impact of the knowledge of the brand, buying habits and brand loyalty on the effectiveness of these approaches. Results indicate that consumers who did not know the brand, non-buyers, and non-loyal customers displayed significantly lower overall scores than people who knew the brand, regular buyers and loyal customers, respectively. To understand this outcome, the authors propose two potential explanations: (1) consumers' preconceptions and previous experiences impact the effects of content marketing and publicity; (2) these editorial communication strategies are more useful in the development and maintenance of a relationship with customers than to attract new leads. Both propositions are pertinent – not only to the academy but also to the everyday practice of content marketing and publicity – and should be explored more in-depth by academics and professionals.

Another interesting finding, especially for the industry, is related to the significantly low ratings given by older consumers (65+) transversally to all categories of both strategies. This result has led to pertinent reflections about the place of senior consumers in the world of content – typically digital – and encourages brands to rethink their approaches and embrace traditional strategies, whenever necessary, to reach this segment. From a managerial point-of-view, this study also indicates that synergies between content marketing, publicity and the wholesale and retail trade sector should be created and explored by professionals.

To the academy, this study contributes to the lack of research about the dynamics between content marketing and publicity and, to the best of the authors' knowledge, it is the first that compares these strategies, from theory to their practical effects. What is more, this research also answers the expressed need for research about consumers' perspective (Zerfass *et al.*, 2016; Moreira, 2017) – particularly in what concerns content marketing. Overall, this study highlights new directions, proving the ever-changing dynamics of marketing and leading the way to further investigations.

From a managerial point-of-view, this research proved to be relevant as it not only validated the importance of publicity and media relations but provided critical insights of how content can be used to answer the Portuguese consumers' needs more efficiently as well. It also showed marketers should not disregard either of the strategies but must instead use them together and complementarily focusing on what consumers truly want: great quality content.

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#### **KEY TERMS AND DEFINITIONS**

**Attitude Toward the Brand:** The consumer's personal assessment and evaluation of a brand. **Content Marketing:** A marketing strategy focused on the production and dissemination of content with the objective of engaging an audience.

Marketing 4.0: The fourth evolution of marketing; a customer-centric and digital era.

## How Consumers Respond to Editorial Communication Strategies

**Message Credibility:** The consumer's appreciation of the veracity and accuracy of a certain content. **Publicity:** A public relations approach which manages the relations of companies/organizations with the media, getting free editorial placement for promotional goals.

**Purchase Intention:** The consumer's plan to possibly purchase a brand's product or service. **User-Generated Content:** Content produced and published online by users.

# **APPENDIX**

Table 4. Consumers' characterization

Vontables		Fr	requencies
Variables		F	f
Gender	Male	187	47%
Gender	Female	213	53%
Age	≤ 19	77	19%
	20-29	43	11%
	30-44	84	21%
	45-64	112	28%
	65 ≥	84	21%
	No education	8	2%
	Primary education	48	12%
Education	Basic education	58	14%
	Secondary education	167	42%
	Higher education	119	30%
	Worker	225	56%
	Student	78	20%
Professional occupation	Retired	87	22%
occupation	Unemployed	6	1%
	Stay-at-home	4	1%
	Agriculture, livestock, hunting, forestry and fishing	4	2%
	Extractive industries	6	3%
	Manufacturing industries	29	13%
	Electricity, gas, steam, hot water and cold hair	3	1%
	Construction	7	3%
	Wholesale and retail trade	23	10%
	Transport and storage	10	4%
	Accommodation, catering and similar	18	8%
D 0 1	Information and communication activities	19	8%
Profession	Financial and insurance activities	6	3%
	Real estate activities	4	2%
	Consulting activities, technical and similar	21	9%
	Administrative activities and support services	18	8%
	Public administration and defense, social security	2	1%
	Education	18	8%
	Human health and social support activities	24	11%
	Artistic, entertainment, sports and recreational activities	6	3%
	Other	7	3%

## How Consumers Respond to Editorial Communication Strategies

Table 5. Normality tests of message credibility, attitude toward the brand and purchase intention

Stuatogy	Indicators	Kolmogorov-S	Smirnov	Shapiro-Wilk	
Strategy	indicators	Statistic	p	Statistic	p
	Message credibility	0.09	<0.001	0.96	<0.001
Content marketing	Atittude toward the brand	0.07	< 0.001	0.97	<0.001
	Purchase intention	0.09	< 0.001	0.95	<0.001
	Message credibility	0.11	< 0.001	0.95	<0.001
Publicity	Atittude toward the brand	0.07	<0.001	0.97	<0.001
	Purchase intention	0.09	<0.001	0.95	<0.001

Table 6. Descriptive statistics for content consumption habits and previous relationship with the brand

X7. *.11		Fre	quencies
Variables		F	f
News consumption	No consumption	10	2%
	Passive consumption	156	39%
	Proactive consumption	234	59%
	Television	294	74%
	Press	150	38%
News channel	Radio	141	35%
	Online newspapers	196	49%
	Social media	169	42%
Brand content	Yes	230	58%
consumption	No	170	42%
	Information	190	81%
Brand content	Entertainment	123	53%
consumption motivations	Sense of belonging/proximity to the brand	34	15%
	Other	3	1%
Knowledge of the	Yes	378	95%
brand	No	22	5%
	Never	94	25%
	Once a year	132	35%
Buying habits	Two or three times a year	128	34%
	Once a month	20	5%
	Once a week	4	1%
D 11 1	Loyal	143	50%
Brand loyalty	Non-loyal	141	50%

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