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THE ELECTRONIC WORD-OF-MOUTH IN RURAL TOURISM: THE CASE OF SCHIST VILLAGES

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Abstract

The rural area has undergone many transformations in terms of functionality and identity resulting in an attempt to grow tourism to improve environmental, economic, social and cultural promotion, preservation and revitalization of these areas when compared to urban spaces that are much more developed. In this way, tourism in rural areas (TER) in Portugal is seen as a driving force for the community development and its entire surrounding.

Over the years, technologies have been constantly evolving. This has been reflected in people's decision-making process and, consequently, how they purchase their products and services. Tourists increasingly use online reviews made by other users in their travel planning, which contain descriptive comments and/or a rating system, named as electronic word-of-mouth (eWOM).

In this way, this study intends to understand the evolution of the eWOM in rural tourism, by studying the main characteristics that influence consumers' satisfaction. To that end, the content of the comments and quantitative classification of Schist Villages lodgings on the platforms of TripAdvisor and Facebook were studied, using extraction, polarity and frequency techniques as well as the SPSS program for the analysis.

The results show that eWOM has increased in rural tourism, which is consistent with eWOM in general tourism, and that the satisfaction of tourists is more influenced by the friendliness of the hosts, the variety and good breakfast or Portuguese cuisine and the service provided.

Keywords: rural tourism, Schist Villages, online reviews, polarity

JEL Classification:

Z32 Tourism and Development; M300 Marketing and Advertising: General

Sumário Executivo

O espaço rural tem sofrido muitas transformações em termos de funcionalidade e de identidade resultando numa tentativa de crescimento voltado para o turismo com o objetivo de melhorar a promoção, preservação e revitalização ambiental, económica, social e cultural destas zonas quando comparadas com áreas urbanas que estão muito mais desenvolvidas. Deste modo, o turismo em espaço rural (TER) em Portugal é visto como impulsor da comunidade e de toda a sua envolvência.

O facto de as tecnologias terem-se desenvolvido constantemente ao longo dos anos, refletiu-se no modo como as pessoas realizam o seu processo de decisão e, consequentemente, a compra dos seus produtos e serviços. Os turistas utilizam cada vez mais as revisões *online* feitas por outros usuários no planeamento da sua viagem, que contêm comentários descritivos e sistema de classificação por escala, chamado *word-of-mouth* eletrónico (eWOM).

Desta forma, este estudo pretende analisar a evolução do *eWOM* no turismo rural, estudando os principais atributos que influenciam a satisfação dos consumidores. Para tal, o conteúdo dos comentários e a classificação quantitativa dos alojamentos das Aldeias do Xisto nas plataformas *TripAdvisor* e *Facebook* foram estudados, utilizando técnicas de extração, polaridade e frequência, e ainda o programa SPSS para a sua análise.

Os resultados mostram que o eWOM no turismo rural tem aumentado assim como no turismo em geral e que a satisfação dos turistas é mais influenciada pela simpatia dos anfitriões, pela variedade e bom pequeno-almoço ou pela boa comida portuguesa tal como pelo serviço prestado.

Palavras-chave: turismo rural, Aldeias do Xisto, revisões online, polaridade

Classificação JEL:

Z32 Tourism and Development; M300 Marketing and Advertising: General

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Abbreviations

ADXTUR: Agência para o Desenvolvimento Turístico das Aldeias do Xisto

APP: Mobile Application

B2B: Business-to-business

B2C: Business-to-consumer

BTT: Bicicleta de todo o Terreno

C2C: Consumer-to-consumer

eWOM: Electronic word-of-mouth

INE: Instituto Nacional de Estatística

OSNs: Online social networks

PENT: Plano Estratégico Nacional do Turismo / National Strategic Plan for Tourism

RQ: Research Questions

SPSS: Statistic package for social sciences

TER: Turismo em espaço rural

UGC: User-generated content

UNWTO: United Nations World Tourism Organization

WOM: Word-of-mouth

1. Introduction

Globally, the difference between urban and rural is steadily increasing, particularly in what concerns to socio-economic development (Costa and Chalip, 2005 cited in Dashper, 2014). Therefore, national and regional authorities see rural tourism as the solution to overcome this situation, bringing hope to rural communities. This type of tourism has been growing in the last 25 years because urban inhabitants (Dashper, 2014) are looking for wellness, peace and outdoor activities that are not possible in urban areas due to traffic, pollution and lack of time. In Portugal, this is not exception, having a substantial asymmetry in economic activities, population distribution and in cultural and social issues between urban and rural areas (Agapito, 2012; Valente and Figueiredo, 2003). This type of tourism is of great interest and can be under in the most varied forms of accommodation and events to attract tourists into these areas in Portugal.

Another change and evolution that has taken place is the number of Internet users worldwide. For instance, according to Statista (2017), it has grown sharply from 2005 to 2016, reaching in the latter year 3.488 million of people. Consequently, it emerged as new period in history, a new society with a new culture, an Internet culture with the subsequent virtual community (Porter, 1997). Individuals gained new habits of consumption, valuing more the time and the money, relying in this community rather than traditional ways of acquiring opinions, such as newspapers. This interaction between virtual communities is labeled as eWOM, which could be defined as "any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet" (Hennig-Thurau *et al.*, 2004: 39). This new way of communicate, has a huge impact on hospitality industry in terms of consumer purchase decisions, who are more informed about positive or negative feedback of a product or a service (Moro *et al.*, 2017). These feedback concerns reviewer experience and not only are potential consumers interested in this type of information but also managers and enterprises, despite it being a lot of information to track.

As stated by Jiménez-Zafra *et al.*, (2016), aspect-level in reviews and related knowledge of its sentiment and opinions, satisfies more companies and users than only the overall sentiment of the statement made on the WEB. Thus, polarity classification is one of the subtask of opinion

mining. Due to the significance of this, many studies were designed to address it (Hu and Liu, 2004; Marcheggiani *et al.*, 2014; Pontiki *et al.*, 2015). However, textual comments are a subjective matter and can induce into bias during its analysis. With the intention of overcoming it, some studies of eWOM only focus on study quantitative data based on qualitative features in review platforms, such as Moro *et al.*, (2017), Jeong and Jeon (2008) and Vermeulen and Seegers (2009), using IBM SPSS software or other data analysis tools to do so.

With the aim of bringing together all those problems, changes and aspects, this dissertation has the main objective of understanding the eWOM variable in rural tourism in Portugal, by studying Schist Villages lodgings. The reason for choosing lodgings and not restaurants, for example, is that online reviews have a huge impact on accommodation products decisions when compare to other types of touristic products (Gretzel and Yoo, 2008).

This research will contribute to the development of Rural Tourism Industries because they will be aware of consumers' needs and satisfaction when they consume this intangible service. In this way, managers have the chance to apply this knowledge to improve their own business, contributing to the growing of this activity in Portugal and to areas less developed in the same country. It is crucial that appeared new data to approach rural tourism as a driver to increase Portugal economy and decrease inequalities by combining and integrating cultural, environmental, social and economic resources.

So, features in online reviews will be analysed to understand with which ones' consumers felt higher and lower satisfaction. Also, it will be examined if tourism suppliers respond to the comments made by consumers since it is crucial to build a good relationship between them and incentivise previous customers to return and attract new ones. This is one of the factors that can influence eWOM credibility, that will be also analysed in this study.

With all this analysis, there will be enough information to convert into opportunities to Schist Villages promotion.

As a result, the three main research questions are as followed:

RQ.1: How is eWOM perceived in rural tourism in Portugal?

RQ.2: What are the features that influence most the review scores in Hospitality and consequent rural tourists' satisfaction?

RQ.3: Will this knowledge be useful for rural accommodation managers?

Despite the fact that this topic is very relevant nowadays from the wide range of advantages from economy to social being, there is a lack of studies that combine eWOM and rural tourism as the opposite to the combination of eWOM with mass tourism. All in all, the possible parties' interest and my curiosity to discover the actual situation of this rural activity in Portugal are the main reasons for the elaboration of this study.

This thesis is structured as follows. Firstly, Section 2 introduces a literature review about the main focus of the dissertation – tourism in a general perspective, conceptualization of rural tourism in Portugal and the reasons of its significance as well as tourist experience, ending with eWOM concept and importance relating with polarity of opinions – in order to understand the next section. Secondly, Section 3 presents the conceptual model and hypotheses of this study. Thirdly, Section 4 introduces how the process was done until the final result of database in addition to the proposed methodology. Thirdly, Section 5 will present and discuss the results from the hypotheses and question research stated. To sum up, conclusions and implications will be presented at the end of the study, in Section 6.

2. Literature Review

2.1. Tourism sector

Tourism is not a new phenomenon but its definition and interpretation have changed over the years, being differently expressed by diverse authors. In 1963, with the Conference on International Travel and Tourism in Rome presented by UNWTO, it was identified one of the most broad and commonly tourism definition, which encompass the activities experienced by people in the period of their journeys by staying in places outside their usual location for leisure, business and other motivations, not surpassing a consecutive year (Neves *et al.*, 2015). Moreover, according to INE (2008), tourism is classified also with the same terminology as presented before but with the addition that these activities and its motives are "not related to the exercise of paid activity in the place visited".

Globally, although more and more people have been practicing this type of activity from the beginning of times, we only have notion of the tourism term until the recent days. Its expansion had its origins in 50's of the XX century. While in 1950 the number of worldwide tourist arrivals was 25 million, in 2000 its value was 674 million. In 2015, this number increased to 1186 million, which represented a growth of 4644% since 1950 (United Nations World Tourism Organization, 2016; World Tourism Organization, 2016). In the same reasoning, the revenues from worldwide tourism started in US\$ 2 billion, followed by US\$ 495 billion and ended with US\$ 1260 billion, respecting the three years mention before (United Nations World Tourism Organization, 2016).

Nowadays, tourism is responsible for 7% of the worldwide exports in services and good, ranking the third place in global export category, after chemicals and fuels (United Nations World Tourism Organization, 2016). On the word of UNWTO long-term forecast report "Tourism Awards 2030", the annual growth rate of international tourist influxes between 2010 and 2030 will be 3.3%, reaching 1.8 billion in 2030 (United Nations World Tourism Organization, 2016).

Portugal is not an exception in this strong growth worldwide tourism phenomenon. Hotel accommodation recorded 16.3 million guests and 46.5 million overnight stays in 2015, which

represented an increase of 8.6% and 7.0%, respectively, compared to 2014 (INE, 2016). Moreover, in the same year, the balance of "Travel and Tourism" in the Balance of Payments reached 7.8 billion, which is more 9.5% than the previous year (INE, 2016). According to *Turismo de Portugal* (2015), in its ambition for 2016-2020, the entity wants to turn Portugal in the most dynamic and agile tourism destination around Europe. Consequently, Portugal will have to be more competitive in tourism market by having a higher growth, gaining market quote, having a sustainable activity with high quality and profitability as well as taking all and better the opportunities facing the uncertainty. Effectively, Portugal ranked in 14th place on the Travel & Tourism Competitiveness Index 2017 (World Economic Forum, 2017) . In addition, for the first time, it is in the top 10 of the more competitive destinations in Europe, which is in line with the possibility of making this country even more competitive, both in Europe and globally. For instance, Portugal won this year, 2017, the Europe's Leading Destination award (World travel awards, 2017).

Taken into account all of this statistic data, it is unquestionable that tourism has become one of the most dynamic and important economic sectors in the world. In fact, it is seen as a motor of country development because it can provide a wide range of benefits, such as impact on the Balance of Payments and in GDP as well as unemployment decrease by creating new jobs, helping counterbalance the deficit account. Additionally, it has direct and indirect influences in several economic activities like accommodation, transports, food and beverage industry, construction and much more (Proença and Souziakis, 2008).

There are a lot of tourism products that a country can focus on to attract a wide range of people. Since the 60's and for many years, Portugal emphasized in the exploitation of a 3S's product – "Sun, Sea and Sand" (Cunha, 1997 cited in Daniel, 2010) – forgetting other areas in the country that could explore and beneficiate from tourism. Eventually this trend was somewhat inverted as it needed to respond not only to the competitiveness of other countries that offered the same type of touristic product but also to meet the new tendency of tourists' values and behaviour as well as to strength and to preserve the culture and the heritage of the country. The result over these concerns culminated in a new product, characterized also by 3S's – Sophistication, Specialization and Satisfaction (Cunha, 1997 cited in Daniel, 2010). The PENT 2006-2015, is an example of implementation of some strategies in the diversification supply, being in terms of products or regions.

The evidence of new products notes that Portugal has a multiplicity of resources and goods, which can be denominated as an alternative tourism to the mass tourism (Drăgulănescu and Druţu, 2012). In general, examples of this innovation, are related with nature and with sustainability, being tourism in rural areas one of them.

2.2. Portugal as a rural destination

To understand tourism in rural areas, we firstly have to understand what rural area means. This concept is extremely complex not only because it does not exist a unique definition due to a multiplicity of criteria, but also concerning the overall socio-economic and cultural changes perceived over the years (Valente and Figueiredo, 2003).

According to Ferrão (2000), rural areas are distinguished by four aspects, being food production the main function, agriculture the major economic activity, farming family with their own lifestyles and values the principal social group, and the nature the predominant landscape.

For OCDE (1994: 9), rural areas are characterized for three main ideas: "(1) population density and size of settlements, (2) land use, and its dominance by agriculture and forestry, (3) "traditional" social structures and issues of community identity and heritage". In this way, the population density is low, the economy is based on agriculture, forest and natural resources extraction and buildings occupy less than ten to twenty percent of the land. Moreover, this areas are regularly situated in isolated regions (Fleischer and Felsenstein, 2000).

In Portugal, rural areas have the same fragilities as the generality of it like weak infrastructures, elderly population and territory desertification. In this country, these areas are more concentrated in inland and despite the investment and innovation in the authentic of the inland, nowadays the tourism in Portugal is still very dependent on coastal areas. An immediate action is required to understand this niche market from its diversity so as to pleasure the demand while seeking for rural communities' sustainability (Eusébio *et al.*, 2017).

Since the 1970s that rural tourism demand and supply has grown and lengthened (Long and Lane, 2000 cited in Silva and Leal, 2015), resulted from the government and entities actions, who are trying to respond to the progressive disaster of the traditional rural areas.

TER was legislated in 1986 (*Dec-Lei n° 256/86*) and from this date numerous regulations have changed, ending in the current definition (*Dec-Lei n° 186/2015*). It defines tourism establishments in rural areas as establishments designed to provide accommodation services to tourists in rural areas, preserving, recovering and valuing the architectural, historical, natural and landscape heritage of the respective places and regions where are located, through the reconstruction, rehabilitation or expansion of existing buildings, so as to ensure their integration into the surrounding. TER modalities have been reduced since the first decree, classified now by Casas de Campo, Agroturismo and Hotéis Rurais, which according to INE nomenclature it is translated into Country Houses, Agritourism and Rural Hotels, respectively. As stated by this decree, Schist Villages is included in the wide definition and respectively sub points, contributing for all the benefits that can be taken from this type of tourism exploitation.

In the 1980s, the Europe faced an agriculture crisis which instigated tourism activity in rural areas as a solution for the development and diversification of these areas (Duarte, 2010). The rural development by tourism activity is seen as an imperative instrument to develop the economy of deprived and neglected rural areas as well as to make better conditions to communities who live there (Duarte, 2010; Drăgulănescu and Druţu , 2012). Furthermore, it could also contribute to the equilibrium between city and village, solving some problems relied essentially to the abandonment of these areas affected by the exodus of the rural population to cities or metropolis. For instance, rural population in Portugal has been decreasing from 2004 to 2015, representing in the latter 36.53% of Portuguese population, reducing almost 10 percentage points (Trading Economics, 2016). It might be possible to prevent this migration as the economic situation is stimulated and has improved, active population faced more stability, jobs are created, income is generated, natural landscape and the environment are protected and preserved and there are conditions to perform different economic activities and so, diversifying the economic base, without being agriculture activity (Drăgulănescu and Druţu, 2012; Heneghan *et al.*, 2016).

Bearing in mind all of these benefits of practising tourism in rural areas, we can recognise how such areas are increasing the interest among tourists. First of all, the level of education has increased. Second, there are more available information and resources about travels and its specific products. Last but not least, travellers have changed their demand requirements and motivations (Duarte, 2010).

People travel for many different reasons and motives, essentially to fulfil their needs and desires. Internal and external factors can influence the decision making process, which can be called as push and pull factors, respectively. The former is about internal intentions to satisfy their inherent needs and the latter are related with the destiny attributes and its decision process based on that (Devesa *et al.*, 2010).

According to Kastenholz *et al.*, (2012), the experience that rural tourists taken from is valued and based on a wide range and diverse of assets, services, persons, attractions and surroundings, assuming that particular destination features are the experience constituents.

Looking at the generality of the factors, there is a diverse range of why rural areas are increasingly chosen as a tourist destination. Based on studies in Frochot (2005), Kastenholz (2004), Kastenholz *et al.*, (1999), Molera and Albaladejo (2007) and Park and Yoon (2009) cited in Kastenholz *et al.*, (2012) they are: to be closer to nature and culture, to have the pleasure to seek and enjoy the peace, the quietness, the beautiful landscapes and relaxing. Furthermore, other drivers are addressed as follow:

• The possibility to try and do a lot of outdoor activities, such as walking, cycling, horse riding, biking, bird watching, mountaineering, hiking, fishing and water sports (Heneghan *et al.*, 2016; Zenelaj and Prifti, 2013);

• The novelty of trying different cultures, ways of live, learning and exploring nature rural lifestyle (Kozak and Andreu, 2006; Heneghan *et al.*, 2016);

• New types and traditional food (Heneghan et al., 2016);

• The warm welcoming by hosts. They play an important role in tourists' experience because visitors' felt more integrated, more comfortable, have better information about the place and can try this tourism product in a great atmosphere (Figueiredo *et al.*, 2014). Moreover, local community has also a dynamic role in tourists' satisfaction that result in a more deep experience (Kastenholz *et al.*, 2012).

• Contrast with the mass tourism in terms of stress factors typical of urban areas like pollution, noise and congestion (Kastenholz *et al.*, 2012) as well as in terms of environment, natural traditions and lifestyles (Figueiredo *et al.*, 2014);

• A remember of "the good old days" when people were younger and used to play, relax and feel a freedom feeling in a quitter place, bringing nostalgia (Cavaco, 2003; Figueiredo, 2004;

Kastenholz, 2010; Ribeiro and Marques, 2002; and Walmsley, 2003 cited in Kastenholz *et al.*, 2012).

According to Tung and Ritchie (2011: 1369), experience is defined as "an individual's subjective evaluation and undergoing (i.e., affective, cognitive and behavioural) of events related to his/her tourist activities that begins before (i.e. planning and preparation), during (i.e., at the destination), and after the trip (i.e., recollection)". Therefore, in general, what the consumer need and expect is an irreplaceable and unforgettable experience (Figueiredo *et al.*, 2014) characterized by atuthenticy and traditional rural lifestyle in addition to activities with services and rural lodgings (Melo *et al.*, 2016).

Experience is the word that could better describe the discovery of rural life.

2.3. The use of social media

Nowadays, people live in the social media Era where Internet has evolved to Web 2.0, which is considered the sharing interface among end users (Thevenot, 2007). Consequently, many OSNs platforms emerged, such as blogs (e.g., Travelblog), forums, social network (e.g., Facebook), review sites (e.g., TripAdvisor), social bookmarking and wikis (Leung *et al.*, 2013), considering electronic social media as the core asset of this Internet development (Brogan and Smith, 2009, Li and Bernoff, 2008, Qualman, 2009, Weber, 2009 cited in Munar and Jacobsen, 2013). These concepts not only have changed to an easiest way how people interact, connect and share information between them, influencing B2B, B2C and C2C communication (Leung *et al.*, 2013), but also increased the empowerment of consumers by producing and distributing this information (Gretzel and Xiang, 2010).

In tourism industry, denoted as Travel 2.0, this technological progression has been used as marketing tools to products, services and destinations (Gretzel and Xiang, 2010). It is considered powerful and influential because it contributes to commenting, rating and spreading travel experiences, resulting in a collective knowledge in the process of decision-making and buying (Inversini and Masireo, 2014; Law *et al.*, 2015 cited in Bilgihan *et al.*, 2016). Moreover, it is not only seen as an important source to compete in the market for suppliers but also as

good opportunity to consumers. Furthermore, this UGC is a factor really essential for the image of a destination (Yeoh *et al.*, 2013 cited in Wong and Qi, 2017).

2.4. Electronic word-of-mouth

The interaction between virtual communities is label as eWOM, which has been defined previously. Rural tourism providers ought not to undervalue the power of eWOM due to the fact that it is significant, critical and reflect the customer opinion and perception (Melo *et al.*, 2016), specially being this type of tourism a niche in the market with low scale of marketing.

On one hand, travellers can research online content and reviews from users around the world to plan, organize and decide before or during their trip and annotate and share their experiences after it. Therefore, travellers' consumers are influenced by eWOM in the three phases of the trip – pre-trip, during-trip and post-trip (Minazzi, 2014) - which is available anywhere, with a lot of interactivity, user-friendly, consuming less time and costing less (Gretzel and Xiang, 2010; Buhalis and O'Connor, 2005). For instance, a study made by Huang *et al.*, (2010) cited in Leung *et al.*, (2013) outlined the fact that the principal motivation for travellers to use social media and its UGC is seeking and obtaining useful information to make the most of their destination and journey. However, the customer has to pay attention on the risk of reading forged reviews based on an attempt made by the company to increase its reputation and sales, being one the challenges of eWOM (Hensel and Deis, 2010 cited in Pabel and Prideaux, 2016; Litvin *et al.*, 2008).

On the other hand, it is important for suppliers because help to promote its own product, increasing its online presence which may result in more awareness and reputation. Therefore, companies take advantage of this to attract potential customers along with retaining the existing ones by engaging and establish relationships with them. As an example, responding to each review made, being positive or negative, is a good way to do so, especially in terms of negatives comments because consumers tend to be more influenced by negative reviews in their process of purchasing making due to the fact that they prefer to be cautious and reduce the risk about a product or a service that has more negative comments than positive (Bandyopadhyay, 2016). When replying, suppliers are demonstrating an honestly attitude, concern and effort, to recover

customers' dissatisfaction while decreasing bad reputation among any customer who read that review (Leung *et al.*, 2013; Litvin *et al.*, 2008).

Another vital advantage of eWOM for tourism providers is the understanding of customers' preferences by researching and analysing reviews in its own product/service or in the competitor. For instance, some studies were made to know what were the features that customers most complaint about (Zheng *et al.*, 2009; Sparks and Browning, 2010). All in all, these benefits for future strategies are only achievable if the company has the capacity to manage it well, at real-time and with the budget needed (Pabel and Prideaux, 2016; Leung *et al.*, 2013).

Based on the fact that the importance of eWOM is increasing among touristic players and changing the accessibility, structure and knowledge of travel information (Litvin *et al.*, 2008), the question is how reliable is. Building trust and being committed in an online relationship, is the key factor for OSNs development and use, perceive less risk when a consumer is making a decision (Nusair *et al.*, 2013).

The fact that online reviews are written with anonymity can affect negatively on the sensitivity of credibility when we compared to traditional word-of-mouth (Dellarocas, 2003 as cited in Munar and Jacobsen, 2013). However, it is suggested that this information can be more reliable than traditional WOM because the latter is done by tourism organisations, which can take advantage from it. If a user have done a lot of reviews, it is considered a trust source.

People who read the content are also a target to generate it. However, it is easier to do the first thing than to convince doing the latter, causing the success of tourism companies (Urban *et al.*, 2012 cited in Bilgihan *et al.*, 2016). This is mainly because of privacy, time costs, laziness, anxiety and not community-belonging feeling (Wang and Fesenmaier, 2004 cited in Munar and Jacobsen, 2014; Nonnecke and Preece 2001, Gretzel *et al.*, 2007 cited in Alan *et al.*, 2012). A relevant question here is why do people share their experiences. All depends on motivational, social or personality factors. First of all, helping others in the decision-making process by preventing a bad choice is the main reason (Sarkar *et al.*, 2013 cited in Bilgihan *et al.*, 2016; Munar and Jacobsen, 2014). Secondly, if users feel the sense and belief in integrity, they will be more prompt and motivated to share knowledge. The easy-friendly use is another aspect, referring that if the online social network is hard to work and with a lot of errors, it decreases feelings of trust and, consequently, utilitarian beliefs (Bilgihan *et al.*, 2016). Another one is the sense of being recognize and belonging in an online community, augmenting self-esteem and

feel being needed. Lastly, expectations and reciprocity feelings are analysed in this terms (Munar and Jacobsen, 2014).

The more a review has attributes, the more credible it is, which will directly influence the confidence of a user about that specific comment and, consequently, about the perception and expectation of it, reflecting directly on purchasing. This features are retrieved from contextual information from reviewers' point of view that cannot be withdrawn using only rating methods (Melo *et al.*, 2016). According to the same authors, studies about online reviews made by tourists are still scarce and so they had studied the factors that drive comments by diving into categories used in the current study as well as the contribution of such online reviews to overall business performance of a rural lodging and its visibility on an online platform.

Online comments are useful because people can perceive the quality of a product or a service, affecting business performance. In the same reasoning, this quality perceptiveness as well as the usefulness of eWOM has a positive effect in decision-making reflected by source credibility (e.g., type of platform, reviewers' reputation, revelation and knowledge), the quantity of comments that consumers can read, the quality of messages in terms of valence, polarity of attribute and experience-based and elaborateness as well as the previous awareness of consumers about the service appraised. Therefore, if a product or a service related with travel is accepted or rejected, it means that eWOM information has been useful (Bandyopadhyay, 2016).

2.5. Sentiment polarity classification

Blackshaw and Nazzaro (2006: 4) outlined that consumer generated content supported through social media is a "mixture of fact and opinion, impression and sentiment, founded and unfounded tidbits, experiences, and even rumour". As a result, social media has the capacity to influence people because people have emotions and emotional communication in digital media is very successful (Baym, 2010 cited in Munar and Jacobsen, 2013).

Opinions and sentiments from public opinion resulted in opinion mining and sentiment analysis fields. Despite the fact that both are used as synonymous, the former is more related with polarity detection (positive and negative opinions) whereas the latter in recognizing emotion

(Cambria *et al.*, 2013). Polarity is classified as the "task of determining the semantic orientation of a subjective text" (Jiménez-Zafra *et al.*, 2015: 214).

Opinion mining was matter of study in three different levels: document, sentence and feature. Taken these into account, the feature level expressed in the current study, is when people express their opinion about singular features and not only an overall positive or negative evaluation. To address this situation, it is necessary to not only extract the aspects of the product or service but also its opinion and corresponding feeling (Pekar and Ou, 2008), following the extraction first and the polarity - positive, negative or neutral - afterwards (Jiménez-Zafra *et al.*, 2015).

For companies, the more interesting analysis nowadays is the aspect-level because they can improve their products and services by adding or removing something from the reviewers' polarity opinion and, for consumers, it is good because it helps in the process of decision and purchasing (Jiménez-Zafra *et al.*, 2015).

Not every website includes the permission of specific aspects ratings like cleanliness or service provided by an accommodation, as it happens in TripAdvisor. However, this rating is not the best way to evaluate a feature because you cannot know why it had a good score or bad. Therefore, it is crucial to read the descriptive review where opinion with its polarity is written (Marcheggiani *et al.*, 2014)

Over the years, many studies were developed due to increased interest on treat this subjective information, especially in scientific and business sectors (Jiménez-Zafra *et al.*, 2015; Cambria *et al.*, 2013). Blair-Goldensohn *et al.*, (2008) used positive, negative and neutral as polarity values in their study to summarize and be more accurate in sentiments of distinct service aspects that are usually rate by users. That aspects were based on frequency, patterns and lexicon, removing candidates without, for example, a considerably occurrence. In Melo *et al.*, (2016) study, they categorized online reviews in terms of content in order to find out what kind of considerations were important and satisfied tourists who practise tourism in rural areas, being the aspect useful for the current study.

In general, opinions are measured as positive or negative point of view or emotion about an aspect of that entity from a reviewer, who is an opinion holder, in a particular date and time (Liu, 2007).

3. Conceptual model and research hypotheses

In the previous chapter, a reflexive and critical literature analysis was taken, for the construction of a relevant theoretical-conceptual model for this study. Thus, a broad literature in tourism and rural tourism areas was reviewed as well as on online reviews and sentiment polarity classification.

The purpose of this chapter is to present the conceptual model for this study to identify and analyse the variables in eWOM in rural tourism lodgings by investigating Schist Villages, which is a project framed in TER. Melo *et al.*, (2016) as well as Bandyopadhyay (2016) provide the basis of this model.

3.1. Conceptual model

On one hand, this research applies part of Melo *et al.*, (2016) study to build a branch of the conceptual model. The outcome from analysing a rural lodging in France was a category system that reflected the global service quality perception from reviewers about specific elements (e.g., decoration, environment and space). Therefore, the author of the current study has used those elements while analysing Schist Villages lodging comments but included a more generalized perspective as it will be demonstrated in the following chapter. However, it is the perspective of customer perception and satisfaction that is important in this conceptual model.

On the other hand, Bandyopadhyay (2016) theoretical study connects many concepts that are addressed along the dissertation (e.g., valence rating, attributes and credibility) with the intention to explain the usefulness of online reviews and, accordingly, the factors that affect the adoption of eWOM in purchasing behaviour. As a result, his framework served as input in the present research, such as eWOM quality and credibility, which are signalling with a circle in Figure 1. It has suffered some alterations and additional constructs (Table 1) to build the conceptual model that represents better the outcome of this study (Figure 2).

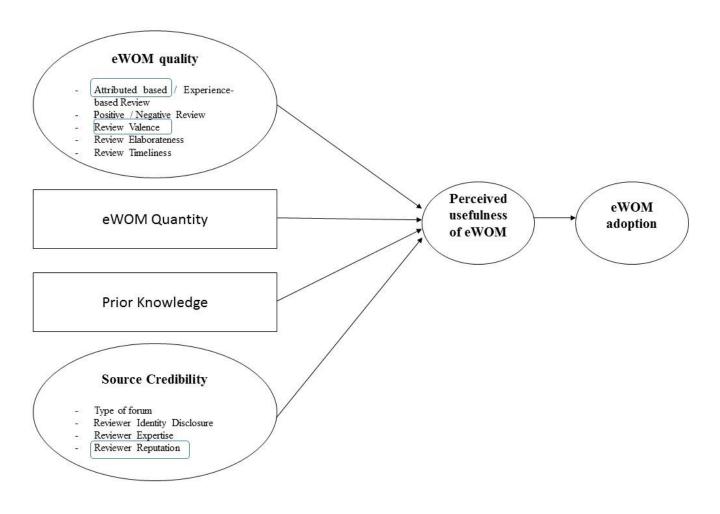


Figure 1: Framework of Bandyopadhyay study [Adapted from Bandyopadhyay framework (2016)]

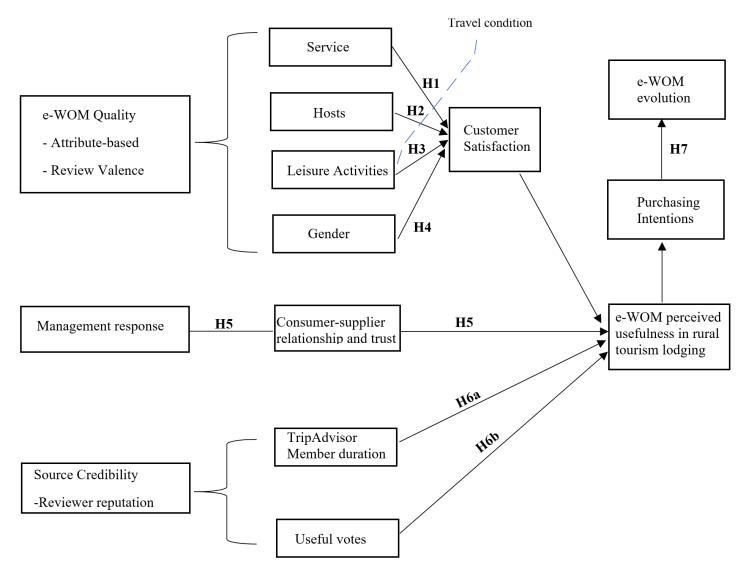


Figure 2: Conceptual model of the current study

Figure 2: Conceptual model of the current study

Construct	Definition
Service Hosts Leisure activities	In general, these constructs concerned to not only aspects mentioned in reviewers' comments but also in rating classification.
Gender	This construct is defined as male and female reviewers in TripAdvisor.
Customer satisfaction	This construct can be defined as how consumers' expectations and needs are met as well as evaluated and understandable by property managers. Thus, the better the quality of service, the greater the satisfaction (Albacete-Sáez <i>et al.</i> , 2006).
Reviewer reputation	This construct it is measured by reviews' feedback and reviews helpfulness by other people. The higher the reputation, the more credible a review is seen (Bandyopadhyay, 2016).
Management response	Management response is how properties owners respond properly to an online review, being an increased area of study (Levy <i>et al.</i> , 2013).
eWOM perceived usefulness	How useful or not is the electronic word-of- mouth is influenced by eWOM nature (e.g., valence, timeliness, elaborateness), credibility, quantity and previous knowledge about services considered (Bandyopadhyay, 2016).

Table 1: Constructs of the conceptual model

3.2. Research Hypotheses

Once the theories and models that make up the theoretical-conceptual framework have been identified, it was possible to establish a set of hypotheses that will be described below, previously identified in Figure 2.

3.2.1. eWOM quality

eWOM quality concerns to characteristics of online reviews that impact the apparent usefulness of reviews. According to Bandyopadhyay (2016), review valence and attribute-based are two of five characteristics in his framework. On one hand, the former is about the positive and negative rating on the overall review that is nominated in the current study as total score. On the other hand, attribute-based imply the features of the service/product described in the online comment, which in this study is extracted from TripAdvisor and Facebook pages, and defining with a polarity scale (e.g. positive: 1; negative: 0).

However, in the current study, not only these textual features extraction is made, but also the analysis of TripAdvisor's fixed attributes that people can evaluate with a rate scale from 1 to 5.

Customers' needs and satisfaction information of the present study are based on these two types of features described before with the help of attributes category made by Melo *et al.*, (2016) research. Moreover, gender will be another variable in analysis and it is in this subsection because will be related with review valence.

Therefore, the attempt to take out the most important information (e.g., customers' needs and satisfaction and perceived usefulness of online reviews) based on the database collected along with the conceptual model made, the topics and subsequent hypotheses are as follow:

The service in tourism industry is important to customer loyalty

A choice of a destination in rural areas could be influenced by many elements such as, infrastructures, lodging, natural atmosphere as well as service quality (Albacete-Sáez *et al.*, 2007). The relation between high quality service and customer fidelity is positive, being a crucial aspect to invest on to please the customers, even though being encompassed different aspects within it and perceived in different ways by some researchers and eventually reviewers.

From these results, the first hypothesis of the model was formulated to explain if service itself as a specific feature, has receiving a high value of satisfaction among the other features classified by TripAdvisor that can be included as service in general (e.g., cleanliness):

H1: From all TripAdvisor features, service is valued by reviewers

The hosts welcome is important to rural tourism

As stated in the literature review, a warm welcoming from hosts play an important role to memorable tourists' rural experience (Figueiredo *et al.*, 2014) because they feel like being at home with this social interaction. Moreover, according to Kastenholz *et al.*, (2013), that interviewed hosts and guests from two Portugal villages, being one of them included in Schist Villages network, mentioned that hosts hospitality is considered the main traveller attraction to practise this type of tourism. In relation to it, the tourism suppliers from the village that makes part in the study present in this dissertation, perceive this contact in a more positively way than the other village due to the natural interest and appreciation to do so. Nevertheless, visitors and hosts view this interaction as positive by influencing customer return.

In this context, the second hypothesis arose:

H2: Having friendly hosts is seen as a relevant feature in rural tourism.

Outdoor activities make rural tourism unique

Bearing in mind all the literature review in the previous section, it can be made the conclusion that resources and features of a destination are crucial components to choose the place to go. Thus, outdoor activities which will be defined with its elements in the next section, are considered unique to increase tourists' satisfaction in rural tourism.

The way people travel (e.g., with family or friends, as a couple, alone or in business), is an interesting input for the results of this study. Since open-air activities encompass many activities such as river beach, sports and animals' outdoor activities, the author of the current study thought that with kids the probability to do so would be higher in order to increase family togetherness and well-being (Coyl-Shepherd & Hanlon, 2013). As a result, the next hypothesis was inferred:

H3: Most tourists who wrote about outdoor activities travelled with family.

Differences between genders can be reflected in tourists' behaviour

Identity disclosure regards personal information of the reviewer like name, gender, nationality and other type of background information that depends on each platform online, which makes readers notice the similarity between them and the reviewer helping to see the review as more credible and useful (Bandyopadhyay, 2016). In this reasoning, gender will be analysed in terms of discrepancy on customer satisfaction and not in terms of credibility as explained in Bandyopadhyay research. The rest of personal information, will be only useful to characterize the sample of this study in Section 5.

According to Meyers-Levy and Sternthal (1991) men and women evaluate products in different way with their own knowledge and opinions due to the significance that both give to the distinct characteristics that each product has.

In this way, this difference could be noticed in rating system generated by female and male reviewers of their overall tourism experience. Therefore, another hypothesis was expressed to measure customer satisfaction in men and women, being good for marketers to be aware the perception of both gender in their choice for a destination in each dimension:

H4: There is difference between genders in the attribution of total score.

3.2.2. Management response

It is important to have notion of how business owners manage their online pages and if they are concerned about their corporate reputation in addition to their relationship-base with customers as cited in some studies (Leung *et al.*, 2013; Litvin *et al.*, 2008). Levy *et al.*, (2013) analysed only negative reviews, with one-star, and it respective response to understand the lodging market in Washington. As a result, complaints were extracted and responses visualized to conclude that hotels that had higher rating, had more responses frequently than the ones that had lower rating. The same authors suggested some plans to managers communicate and respond in an accurately way due to the importance of doing so.

Bearing in mind this specific study and the importance to respond to comments, especially negative ones, the fifth hypothesis was developed:

H5: The hosts reply to all negative comments.

3.2.3. Source Credibility

Reviewer reputation induces to credibility and, consequently, to purchasing behaviour

While planning a trip, people often go to read the comments of previous consumers to have notion about a general perception of the place, helping them to decide if it is a good choice to go there or not. All this decision-making process is influenced by how credible the source is and, consequently, how useful is the information stated on online review (Bandyopadhyay, 2016) due to the fact that readers do not know the person who writes comments and if what is written is true or not. Based on Bandyopadhyay's (2016) research there are four dimensions to analyse source credibility: type of online platform, reviewer identity expose, expertise and reputation.

The type of online platform dimension will not be used to formulate the next two hypotheses. Nevertheless, being TripAdvisor an independent review website and not a vendor-owned one, is perceived as more trustworthy (Bandyopadhyay 2016).

In terms of reviewer's characteristics, only reputation will be discussed considering that Bandyopadhyay (2016) does not specifically state that the duration of platform membership is included in identity disclosure, defined as reviewer personal information. Therefore, this variable it is included in the construct of reviewer reputation along with the number of useful votes.

TripAdvisor has an online reputation system that allows to vote on the "helpfulness" of a written review, which reduces hesitations about the quality and performance of touristic product because it helps travellers decision on whom to rely and trust (Helm and Mark, 2007; Resnick *et al.*, 2000 cited in Lee *et al.*, 2011). This online reputation is computed and calculated regarding some algorithms that use objective evidence like duration of membership and ratings made by other associates, that is why H6a and H6b were formulated below (Zacharia *et al.*, 2000 cited in Lee *et al.*, 2011).

According to the same study mentioned along this construct (Lee *et al.*, 2011), people who search for online reviews information tend to perceived them as more useful if the valence is with lower score than higher, having a negative correlation between these two variables (e.g., reputation and valence). Therefore, reputation is more related to negative WOM rather than positive, which will be assessed by H6b.

H6 a: The TripAdvisor member's duration influence has a positive correlation on the number of useful votes.

H6 b: Tourists who have higher number of votes have on average more negative reviews.

3.2.4. EWOM tendency in rural tourism

The eWOM evolution

Online reviews in tourism industry are receiving a huge attention from researchers to understand consumer behaviours, motivations, complaints, preferences and profiles due to the fact that eWOM issue and adoption has been increasing (Moro *et al.*, 2017; Melo *et al.*, 2016; Bandyopadhyay, 2016; Munar and Jacobsen, 2014; Albacete-Sáez *et al.*, 2007; Sparks and Browning, 2010). However, this interest and evolution is not extensively reflected in other types of tourism, such as TER.

The interest in this area is a very important factor to understand tourist business performance and people adoption to not only review their stay but also confer others reviews to be aware of the good or bad products and services offers in the market.

From that point of view, the last research hypothesis emerged to understand how online content and ratings system has been increasing in other lodging type of tourism apart from mass tourism in urban areas from all the perceived utility of eWOM in rural tourism in Portugal.

H7: The eWOM has been increasing in the rural tourism.

Overall, seven hypotheses were analysed to achieve this study's aim (Table 2).

Table 2: Summary of hypotheses

Hypotheses

H1: From all TripAdvisor features, service is valued by reviewers.

H2: Having friendly hosts is seen as a relevant feature in rural tourism.

H3: Most tourists who wrote about outdoor activities travelled with family.

H4: There is difference between genders in the attribution of total score.

H5: The hosts reply to all negative comments.

H6 a: The TripAdvisor member duration influence has a positive correlation on the number of useful votes.

H6 b: Tourists who have higher number of votes have on average more negative reviews.

H7: The eWOM has been increasing in the rural tourism.

4. Materials and Methodology

This chapter intends to adapt the theories, studies and conceptual model described in the previous chapters to explain and have an insight of eWOM in Schist Village as an illustration of rural tourism in Portugal. Subsequently, the study background, the data source, the sample selection method and the data collection process of this study will be described.

4.1. Background of the case study

Schist Villages¹ are composed by 27 villages in 16 counties located in the Central Region of Portugal, between *Castelo Branco* and *Coimbra* (Aldeias do Xisto, n.d.). Schist stone is seen as a unifying element of a rich material and immaterial patrimony, resulted from the combined work between nature and man, shaping these villages itself and its surroundings (Aldeias do Xisto, 2015).

This is a regional sustainable development project which is led by ADXTUR with many partnerships (public and private) operating in the territory. Over the years, there has been a consolidation of those partnerships, brand resources and an affirmation of ADXTUR as a management entity. The Agency's main strategic lines focus on the sustainability of a territory and the promotion of its endogenous values. The brand Schist Villages represents the offer of tourist services of its associates (hotels, accommodation in rural areas, catering, tourist animation, and traditional commerce) articulated with the Calendar of Animation of the Schist Villages (Aldeias do Xisto, 2015).

Table 3 highlights how tourist products and services increased from 2009 to 2014, with outstanding percentages.

This project aims to promote and preserve the cultural landscape of the area, the socioeconomic development (e.g., creating jobs, human resources qualification, infrastructures improvement), contributing to quality improvement of local people, and the valorisation of the heritage through tourists' attractiveness, building its own identity. The tourism potential is

¹ http://aldeiasdoxisto.pt/

reflected in gastronomy and traditions, architecture, animation, nature and other unique cultural elements presented in services and products of excellence. The villages offer a wide variety of tourism offers and leisure in close contact with the nature and human culture. Moreover, it provides a wide range of activities such as BTT, radical sports over the network of river beaches or outdoor, concerts and many other surprising and innovative events.

Schist Villages evolution of the touristic resources	2009	2014	
Schist Villages	24	27	13%
Schist Villages stores	10	18	80%
Housing units	26	70	169%
Hotel	1	7	600%
Restaurants	7	13	86%
Touristic Animation Businesses	6	12	100%
Fluvial beaches	21	50	138%
Walking routes (small route)	14	45	221%
Big routes	0	1	NA
Total of the pedestrian traces (Km)	140	700	400%
BTT Centres	2	6	200%
Total cycling trails (Km)	260	900	246%
Associates (Privates)	70	179	156%
Rooms	52	492	846%
Beds	114	920	707%

Table 3: Schist Villages evolution of the touristic resources (units)

Adapted from Schist Villages report (Aldeias do Xisto, 2015)

In order to increase brand attractiveness by pursuing a communication and marketing plan, ADXTUR has implemented a consistent strategy of disclosure of Schist Villages and the promotion of its resources, equipment, animation and services, which resulted in a constant and growing presence in the media, including online social networks. According to data from the report 2015, the written press and online media stand out clearly with 96.45% of total published news during July 2012 and June 2015. Moreover, in the beginning of 2014, Schist Villages Facebook page had 6.822 followers where at the end had 36.791 followers, increasing 439% visibility. Nowadays, until 02 of June 2017, has 52.939 followers, with 302 reviews and a 4.6 score in a star rating classification, from 1 to 5. Also, for its promotion it counts with a website, magazines, App, and other elements.

Schist Villages is currently an unavoidable mark in the Portuguese tourist panorama and an inspiration for the development of low economic and demographic density places. It is a good example of national capacities and competence when led by a dream and managed in a mission spirit. It won many rewards (e.g., *Prémio 85 Anos do Diário de Coimbra; Prémio Internacionalização do Património 2014*) and participated in several international fairs (e.g., International Fair for Applied Arts and Design), which is good to national and international acknowledgement.

4.2. Data source

On one hand, when tourism industry and travel-related content is matter of subject, it is widely recognized that TripAdvisor is a popular virtual community and symbolised the eWOM among the other sites (Mauri and Minazzi, 2013; Melo *et al.*, 2016). Operating in 49 markets globally, it contains 535 million opinions and reviews and reaches on average 415 million visitors per month (TripAdvisor, 2017). Moreover, it is one of the few websites that rating specific aspects is allowed for reviewers to evaluate (Marcheggiani *et al.*, 2014). The rankings classified in this platform have six distinct features - location, cleanliness, sleep quality, rooms, value and service - being categorised from 1 to 5 values, where "1 - terrible" and "5 - excellent" are the both extremes, and 3 the average.

On the other hand, as stated by the Social Media Marketing Industry Report (Stelzner, 2016), Facebook is identified as the most significant social network for marketers. In this reasoning,

not only Schist Villages has a general Facebook page as mentioned before, but also count with Facebook pages for most of its accommodation and restaurants in order to improve its brand. Facebook stars rating system assume the same values as TripAdvisor, from 1 to 5. Moreover, this quantitative system is not for specific features as in TripAdvisor platform, but only for general classification (total score).

4.3. Data collection

The data collection process will be described in this point in a very detailed way, but the Table 6, at the end of this description, shows a summary of the main steps to reach the data used for the analysis of the hypotheses.

For the study of eWOM in Schist Villages, all the lodgings in Schist Villages website were analysed, in two different online sources – TripAdvisor and Facebook – except from rural hotels and camping areas. Consequently, by seeing if all had page on these two online platforms, the total number retrieved were only 29 different accommodations (Table A,1 in Appendix).

Initially, data was gathered since 2006, when the first customer impression in social media was published, until 22 of May 2017. Summing all, 764 evaluations were registered: some with only quantitative data (e.g., score from 1 to 5) and others with both quantitative and qualitative data (e.g., descriptive reviews). However, to analyse the assumptions of this study without compromising the sample quality to achieve the goals, only 430 online reviews, from 15th of October 2008 to 22nd of May 2017, are matter of study, represented in Table 4. The reason for this elimination is that 315 were blank reviews and 19 of them, the content had no specific quantitative features to be analysed due to the fact that the description made were examples like "Wonderful", "I love it", "A fantastic holiday", which are not suitable for the analysis in terms of features extraction, reflecting more an experience.

Source	N° of evaluations	0⁄0
Facebook	146	34%
TripAdvisor	278	65%
Both	6	1%
Total	430	100%

Table 4: Number of evaluation per online platform (units and %)

Even though the reviews were written in various languages apart from English, Portuguese and Spanish, which are the well-known languages for the author, the remaining (e.g., German, Dutch) were translated into Portuguese using Google Translate, which it is a translation service used as well in Wang (2011) study who converted Chinese label features into English and vice-versa.

The lodging attributes most discussed were primarily identified among the most frequently revealed important characteristics in the reviews. After analysing all of them, some of the features were excluded because the sample size were not significant (e.g., Wi-Fi and noises) and others were included in a more general attribute (e.g., bed quality and rooms security) as Table 5 can show. Moreover, this occurrence terms were also in accordance to the study made by Melo *et al.*, (2016) where they analysed rural lodgings in France and had the same categories and similar descriptions, except from food category that was not mentioned in their research.

Later on, all the attributes reviews were coded in Excel according to their polarity and this qualitative data was further interpreted as quantitative data. In terms of valence, the "extra" aspects apart from the ones already established by TripAdvisor as mentioned in section 4.2, were analysed into positive (n=1) and negative (n=0) opinions since it is the next step after the identification of the categories (Jiménez-Zafra *et al.*, 2016). In general, since each target (e.g., rooms) has a subsystem of aspects (e.g., air conditioner, shower and bed quality) (Table 5), sometimes the attribution of Positive and Negative could have a bias. For instance, when a reviewer says "the bed is crawling and is not comfortable", it is immediately attributed a negative score (n=0). The outcome will be that the sentiment about each category is related to the frequency of polarity of each features belonged to that category (Jiménez-Zafra *et al.*, 2016).

After giving numerical codes to all variables, it served as an input to the SPSS of IBM to achieve a more accurate statistic results. The t -student test and the Correlation of Pearson were the most common tests made while trying to look for other correlations or frequencies.

All the information retrieved and the features extraction was made manually like the study made by Marcheggiani *et al.*, (2014).

To sum up, grouping quantitative and qualitative content analysis is the suggested approach in this study to analyse the vast documented electronic reviews by extracting the aspects that customers value the most. The chapter 5 will present and discuss the outcomes found.

Features based on comments	Typology of the features	
Food/ Breakfast	Typical and general food; Variety	
Decoration	Styles (e.g., rustic); Pillows and other adornments;	
Peacefulness	Relaxing, quiet and calm; Nature	
Exterior Place	Pool; Gardens; Animals; Landscape	
Hosts	How hosts are (e.g., friendly)	
Leisure Activities	Sports; Hiking; River Beach	
Cleanliness*	Rooms and general spaces cleanliness	
Service*	Check-in; 24h service; Hospitality; Attention	
	to customers' requests and needs	
Location*	Cars, persons and place accessibility and	
	visibility; Road infrastructures;	
Rooms*	Air conditioner; Cozy; Shower; Fridge; Bed	
	quality; Rooms security; Comfort;	

Table 5: Features extracted from TripAdvisor and Facebook reviews

*These features are the same in TripAdvisor that people can classify from 1 to 5, but it is relevant to add them again from the comments since many consumers wrote about it. It were only counted in reviews without a score from 1 to 5 to avoid double counting.

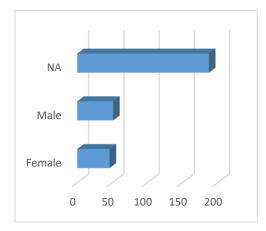
1 st phase	Went to Schist Village website and see how many properties were available there, except from rural hotels and camping areas.
2 nd phase	Saw one by one if it had Facebook and TripAdvisor pages, making a total of 29 different lodgings.
3 rd phase	Collected all ratings scores and comments from both platforms in Excel, along with hosts response and other reviewer personal characteristics such as, gender, age, nationality and member duration.
4 th phase	Deleted 315 blank reviews and 19 reviews that were impossible to extract any attribute
5 th phase	Read all comments and figure out the most written features bearing in mind the ones in Melo <i>et al.</i> , (2016) study.
6 th phase	Analysed those features' polarity (1 for positive opinions; 0 for negative opinions), nominated as "extra" features.
7 th phase	Assessing the validity of the hypotheses proposed.

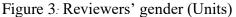
Table 6: Summary of data collection process

4.4. Reviewers' characteristics

This section will be an attempt to characterize Schist Villages customers who review the final experience after their trip, as well as some results based on this information. This part of the study was conducted as Moro *et al.*, (2017) study in which many TripAdvisor user characteristis were identified and collected to a database.

As the reviews accommodation were pre-selected based on Schist Villages lodging and, consequently, not every person has his profile complete, there are missing values to dealt with. In this manner, 284 reviews and its reviewers were considered from TripAdvisor sources since with Facebook is impossible to track clients profile. This number is more than half of the sample (n=430), making valid to draw some conclusions about rural tourists in Schist Villages.





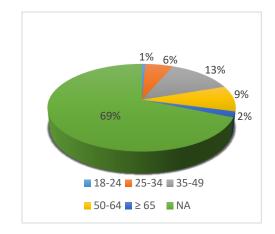


Figure 4: Reviewers' age (%)

In Figure 3 and Figure 4, more than half of the reviewers do not post in their TripAdvisor profile their gender (n=187) neither their age (n=195), respectively, which could be seen as a limitation in one of the follow hypothesis analysed. Despite this fact, men and people who age range from 35-49 (13%) and 50-64 (9%) are more likely to generate online content.

Most of the reviewers travel as a couple (38%), followed by 29% as a family (Figure 5). Apart from the non-responses (NA), traveling with friends is the third most common way to enjoy Schist Villages. Moreover, Portuguese people are the ones that review more about Schist Villages lodgings, followed by the rest of Europeans (Figure 6).

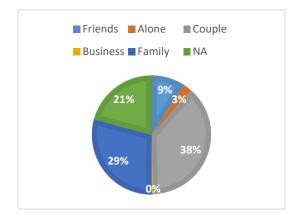


Figure 5: Who do reviewer travel with (%)

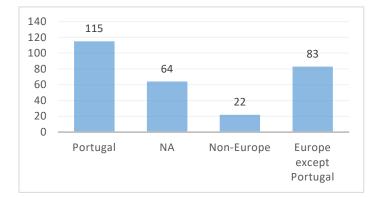


Figure 6: Reviewers' Nationality (units)

To sum up, being with family, friends or as a couple and depending on age and sex, the needs in what a tourist expect from its accommodation and its overall experience, is different. Therefore, the main outcome of the next section is to understand these needs in order to rural tourism industry and, more specifically, Schist Villages respond better to them.

5. Results and discussion

The results were achieved through the process described, where quantitative data was combined with the qualitative text data, which was also transformed into quantitative data, through Excel and SPSS program, for a more complete comprehension about rural industry and converging on an important tool for rural tourism managers.

The results and it's correspond discussion, are presented one by one in the order mentioned previously in the form of and in frequency tables, t-student test and the Correlation of Pearson.

H1: From all TripAdvisor features, service is valued by reviewers.

Table 7: TripAdvisor features mean			
Ranking	TripAdvisor Features	Mean	
1°	Cleanliness	4.78	
2°	Service	4.73	
3°	Rooms	4.69	
4°	Sleep Quality	4.64	
5°	Value	4.58	
6°	Location	4.51	

T 11 7 T ' A 1 ' c

Bearing in mind Table 7, we can say that despite the fact that the means are always more than 4.50, meaning excellent, Cleanliness is the feature that people valued with highest score, having a better perception and expectations fulfilled. The other two most important are Service and Rooms. However, these last two are the only features that had negative scores (1 and 2 values), as shown in examples below.

Example of score 1 in Service:

"A tremendous lack of respect. I made the appointment via telephone where I received the confirmation by email and when I arrived there, I had no reservation". (translation from Portuguese)

August 2015

Example of score 2 in Rooms:

"There was no air conditioning as had been mentioned (...)". (translation from Portuguese)

August 2016

One of the interesting things about these negative scores is that they referred to the same accommodation, which may imply that this could be one of the 29 lodgings that will need a restructuration for meeting customers' expectations, to avoid suffering a significant impact in sales.

Overall, the hypothesis is not validated.

H2: Having friendly hosts is seen as a relevant feature in rural tourism.

From the aspects that were extracted from the description made about consumers' experience, it is interesting to note not only the frequency that they mentioned in it but also the adversities of opinions. Having extracting this result in terms of Positive (n=1) and Negative (n=0), Hosts feature only had 1 negative review and 289 positive, having in total 140 missing value. Consequently, it result in 67.2% positive reviews, being the highest percentage in all extra features (Table 8). Therefore, the hypothesis is true.

	Positive (%)	Negative (%)	Missing Value (%)
Food/Breakfast	39.3%	3.5%	57.2%
Decoration	25.8%	0.2%	74.0%
Peacefulness	46.0%	-	54.0%
Exterior Place	32.1%	0.7%	67.2%
Hosts	67.2%	0.2%	32.6%
Leisure Activities	21.2%	-	78.8%
Service	20.0%	0.2%	79.8%
Cleanliness	9.6%	0.2%	90.2%
Locations	13.0%	1.6%	85.4%
Rooms	14.9%	2.1%	83.0%

Table 8: Opinion about the additional features extracted (%)

Source: SPSS output

In textual reviews for rural tourism, people also quote as positive the fact to be around nature where they can relax and stay out from the busy life in urban areas. Moreover, Portuguese gastronomy as well as a good and varied breakfast is another thing that tourists written favourably. However, in the same reasoning, it can be noticed that when people talk negatively about anything, food topic is the most cited.

To have another perspective, as mentioned in data collection, Test t-student for independent samples was made in order to evaluate the mean differences of total score between the individuals that scored negatively and positively to the different variables (Table 9).

	Negative	Positive	p-value
Food/Breakfast	3.93 ± SD	4.85 ± SD	0.009
Hosts			n.a
Rooms	$3.44 \pm SD$	4.86 ± SD	0.009

Table 9: Relation between reviews' polarity and additional features

Source: SPSS output

Through SPSS output, "Food/Breakfast" and "Rooms" are the only ones that have statistical evidence to state that the mean of those features are different from the both groups (Negative and Positive) analysed, because p-value ≤ 0.05 .

H3: People who wrote about leisure activities travelled with family.

Outdoor activities are one of the things that distinguish rural tourism from urban tourism. Thus, it is important to study this issue. As a result, the single and interested variable to study that with is the group that describes who people travel with (e.g., family, couple, alone, business and friends).

Due to the fact that everyone who talked about these activities in their reviews only mentioned it in a positive way, this hypothesis has the perspective of more who talk about having leisure activities in rural areas or not. In this way, Table 10 shows crosstabs made in SPSS to understand from who wrote about and possibly did leisure activities, if travel with family, friends, alone, business or as a couple.

From the 69 people who responded, 28 travelled in family, accounting for 40.6%. This result was followed by people who travel as a couple and with friends with 39.1% and 13.0%, respectively. Thus, H3 is supported.

				Total
			Leisure	
			Activities	
Who do	Family	Count	28	28
people		% within Who do people	100.0%	100.0%
travel with		travel with		
		% within Leisure Activities	40.6%	40.6%
		% of Total	40.6%	40.6%
	Couple	Count	27	27
		% within Who do people	100.0%	100.0%
		travel with		
		% within Leisure Activities	39.1%	39.1%
		% of Total	39.1%	39.1%
	Alone	Count	5	5
		% within Who do people	100.0%	100.0%
		travel with		
		% within Leisure Activities	7.2%	7.2%
		% of Total	7.2%	7.2%
	Friends	Count	9	9
		% within Who do people	100.0%	100.0%
		travel with		
		% within Leisure Activities	13.0%	13.0%
		% of Total	13.0%	13.0%
Total		Count	69	69
		% within Who do people	100.0%	100.0%
		travel with		
		% within Leisure Activities	100.0%	100.0%
		% of Total	100.0%	100.0%

Table 10: Who do reviewer travel	with * Leisure Activities	Crosstabulation
----------------------------------	---------------------------	-----------------

Source: SPSS output

H4: There is difference between genders in the attribution of total score.

According to Table 11, there is no difference statistically significant between male and female and the total score, since p-value > 0.05. Therefore, the hypothesis is rejected. One of the reasons for this is that not only exists few negative scores but also the difference between the number of males and females is small. Nevertheless, being H4 rejected, it means that men and women have the same perception and satisfaction of the lodgings despite the fact their particular preferable tastes when they stay in an accommodation. For instance, male tourists are more attracted to adventure and sports in their travel experience while female tourists prefer explore the culture of the place and opportunities for family closeness (Meng and Uysal, 2008).

Table 11: Relation between gender and review total score

	Female	Male	p-value
Total Score	$4.70 \pm SD$	4.53 ± SD	0.283

Source: SPSS output

H5: The hosts reply to all negative comments.

First of all, it can be noticed in Table 12 that statistically, there is no significant difference between "No response" and "Response" in total score, since p-value > 0.05.

Table 12: Relation between hosts' response and review total score

	Response	No Response	p-value
Total Score	$4.74 \pm SD$	$4.78 \pm SD$	0.605
Source: SPSS output			

Source: SPSS output

If we consider the real values of responses and make a proportion, the hypothesis is not valid. For this purpose, average responses (score of 3) were gathered to negative responses in order to not only have two groups to be easier to analyse but also to increase the sample that is already very limited. In this way, two groups were considered:

$$n \le 3 \text{ and } n > 3$$

	Number of reviews	Responses
Negative reviews $(n \le 3)$	12	3
Positive reviews (n > 3)	418	71
TOTAL	430	74

Table 13: Number of hosts' response to online reviews

Source: Author elaboration

$$\frac{3}{12} = 25\%$$
 VS $\frac{71}{418} = 17\%$

The percentage of responding to negative online reviews does not correspond to 100% but 25%, rejecting H5. However, this percentage is higher than the percentage of response to positive opinions, being a good measure since consumers tend to be more influenced by negative reviews in their decision-making process (Bandyopadhyay, 2016). Still, both ratios are less than 50%, implying that hosts do not reply independently of the total score. Therefore, this is a constraint to suppliers, who do not see that eWOM in general, and review responses in particular, are good for their business and reputation, seeing them as a problem (Pwc, 2015).

H6 a: The TripAdvisor member duration influence has a positive correlation on the number of useful votes.

		Member years	Votes
Member years	Pearson Correlation	1	0.305**
	Sig. (2-tailed)		0.000
	N	284	284
Votes	Pearson Correlation	0.305**	1
	Sig. (2-tailed)	0.000	
	N	284	284

Table 14: Correlation between TripAdvisor membership and the number of useful votes

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

Source: SPSS output

Pearson's r statistic for the correlation between the TripAdvisor member years and the number of useful votes is 0.305 (Table 14). On one hand, the fact that this number is closer to 0, it means that there is a weak relationship between these two variables. On the other hand, being a positive number it means that as one variable increases in value, the second variable also increase, called positive correlation. Therefore, we can conclude that the variables analysed has a positive weak correlation between member years and useful votes, meaning that credibility and trustworthy of a review is not influenced by this variable as it might be seen.

H6 b: Tourists who have higher number of votes have on average more negative reviews.

In this hypothesis, the total score was transformed in the same two groups as in H5, presented below:

```
n \le 3 \text{ and } n > 3
```

Votes	Number	Mean
Negative	12	$20.18 \pm SD$
Positive	273	$12.34 \pm SD$

Table 15: Relation between reviews' polarity and the number of useful votes

Despite the fact that statistically the difference of mean in both groups are not significant (p-value > 0.05), the average of useful votes is higher in negative reviews than positive reviews if we considering that only exist 12 negatives reviews, which limit always this study. It can be made the conclusion that when people are planning their trip, they are more careful, interested and trust more on reading negatives reviews in order to make a better decision.

H7: The eWOM has been increasing in the rural tourism.

Figure 7 shows that eWOM in Schist Villages accommodation has increased during the years, supporting H7. This steadily growing has started after 2012, which is in agreement with the study made by Kwok *et al.*, (2017) cited in Moro *et al.*, (2017), where they found out a growing of online reviews after the date mentioned in Hotel reviews. The biggest difference in online

reviews written by travellers were between 2014 and 2015, with more 93 reviews. Due to the fact that 2017 has data only until May, we cannot conclude anything regarding this year. However, since most of past online reviews were made during the summer, it is expected that this number may reach 155 reviews.

Most of these comments were retrieved from TripAdvisor and not Facebook as the former platform is friendlier to use and to evaluate and it is associated with online booking platforms.

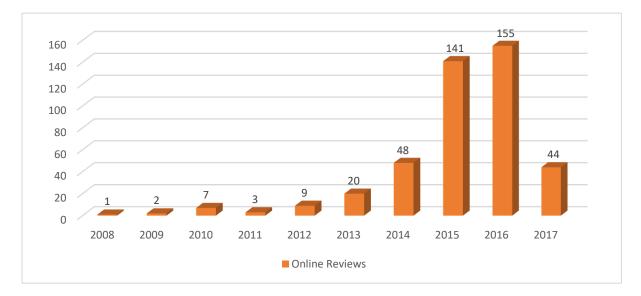


Figure 7: eWOM evolution (units)

The average of total score in 430 online reviews analysed is 4.77 in 5, which mean that Schist Villages' accommodations are evaluated, on average, as excellent units, meeting customer expectation with high satisfaction. Thus, the mode was 5 and the minimum and maximum score attributed was 1 and 5, respectively. Table 16 shows how many reviews were classified with each possible score as well in what source.

On one hand, we can see that on Facebook platform, there are no negative reviews and just one with an average classification, meaning that most people using Facebook to spread the word have a positive thinking about Schist Villages' lodging. On the other hand, TripAdvisor has not only a large number of positive reviews but also 12 reviews with negative and average scores. The reasons that can explain this difference between TripAdvisor and Facebook are:

• TripAdvisor is a specifically designed hospitality reviews' website, while Facebook is a generic online social network platform;

• TripAdvisor has 6 features to classify from 1 to 5, making reviewers more aware about the criteria for evaluating accommodation units.

Range of Possible	Number of times	TripAdvisor	Facebook	Both
Score				
1	2	2	0	0
2	5	5	0	0
3	5	4	1	0
4	64	59	5	0
5	354	208	140	6
TOTAL	430	278	146	6
	100%	65%	34%	1%

Table 16: Analysis of reviews total score (units & %)

6. Conclusions, limitations and future research

Portugal and, particularly, Schist Villages have not been a matter of study in terms of eWOM neither rural tourist's preferences prior to this research; thus, this dissertation is the first aiming at better understanding it. Despite the limited sample, it can be concluded that eWOM is increasing in rural tourism, a niche market, over the years, following the general tendency of this variable.

As suggested in TripAdvisor Insights (2015), properties can become more popular when compared to others, based on reviews quality, quantity and how recent it is. It is like a virtuous cycle because all these three aspects reflected on each other to the main purpose of always attracting more visitants and, consequently, more reviews in this online review website. Additionally, other way to increase the rating is to improve lodger experience by using their feedback to respond exactly to their needs. Thus, this study helped to collect reviewers' feedback that spent time in Schist Villages accommodation, motivating owners to improve and get to know better their consumers and, consequently, convert the analysed data into opportunities. Nevertheless, findings solidly show Schist Villages hold an excellent rating (4.77 mean from the reviews taken) and with few negative or average reviews.

In the literature review, the benefits of responding to online reviews were outlined, both positive as well as negative. In the same reasoning, TripAdvisor also recommends that business holders should respond to reviews, especially the ones with a score below the average. It is indicated that a management response helps to make evident that the owner is worried about the customer service that did not fill the expectations along with the chance to explain how the problems will be solved and to apologise. In terms of positive reviews, a response demonstrates that the reviewer's feedback is appreciated and attention is being paid. In general, the consequences of replying are related to giving a competitive advantage to business by listen customers and understand their perceptions (TripAdvisor Insights, 2013). Schist Villages has to take this into consideration and start responding to online reviews on TripAdvisor and Facebook pages in a timely and personalized manner, to perform higher than the competitors and to increase their visibility and revenue while improving their reputation with a proper management response. For this purpose, suppliers could apply two solutions: contracting

someone to do all this control or creating a system that could monitoring and responding to comments.

Based on the collected dataset, we can split it into two types of consumer perceptions in this study: one related to the accommodation itself and the other connected to the surroundings. The results addressed a research gap, finding that generally speaking, content categories in comments differ at some point from those categorised in a rank.

From the results' insights, it was observed that rural reviewers evaluated positively the services provided by Schist Villages accommodation studied in the sample due to the fact that more than half of the online reviews were favourable, judging the place with good and very good connotations. Therefore, it can be inferred that there is a high level of professionalism in providing rural experiences to customers. Despite this majority of positive post comments and its features evaluations provided by rural lodgings, it is necessary that managers of this tourism companies reflect about the reviews with low levels of satisfaction along with which feature and why that happened. The most regular complaints were inside Rooms and Service features along with Food/Breakfast.

Also, results revealed that gender do not seem to have an effect on the perception of accommodation quality because there is no difference between the attribution of total score and gender. Thus, the theory that reviewer profile could influence online word-of-mouth has not a linear relationship in this specific case. However, reviewer's reputation has the opposite result, influencing readers' process decision.

In addition to these noteworthy inferences of the study findings, some limitations were considered. First, it was considered only user-generated content on Facebook and TripAdvisor. Although both platforms are well-known among potential rural tourists, there are others that could be matter of study, such as Booking or Toprural website. Second, bearing in mind that rural tourism is a niche in tourism market, the sample size were not extensive and hold a large number of missing values. Finally, it must be taken into account how difficult it is to deal and to identify motivational or emotional elements within textual because in this research it was not possible to deal with 19 comments since they were not transmitting any visible or direct reaction about the features analysed.

It is recommended to expand the analysis to other type of establishments within TER consideration, like rural hotels, and in other rural regions of Portugal as well as in other

countries. In the same reasoning, it could be useful to extend to other social media platforms to see if there are differences in how consumers perceived rural tourism. Moreover, existing other content except from text like videos and photos, could also be a good analysis for the future. Last but not least, comparing different types of tourism with the same factors analysed could reveal hints for suppliers.

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Appendix

Lodging name	Number of data collected	Number of data collected after excluding	
		327 evaluations	
Quintal de Além Ribeiro	178	65	
Quinta do Sobral	45	44	
Casa dos Hospitalários	37	9	
Casa do Zé Sapateiro	4	2	
Casas da Encosta	9	6	
Vilar dos Condes	25	13	
Alojamento Turístico Moradal	3	3	
Campus Natura	3	3	
Casa Cova do Barro	16	11	
Casa da Ladeira	3	3	
Casa da Cimeira	17	6	
Casinha do Conde	6	-	
Casas da Serra do Açor	46	22	
Casa da Sobreira	8	4	
Casa de Janeiro	9	4	
Casa do Quelho	1	1	
Cerdeira Village	32	32	
Xisto Sentido	25	11	
Aldeia Oliveiras	36	10	
Vale do Ninho Nature Houses	19	19	
Quinta do Forninho	32	24	
Quinta da Moenda	21	15	
Casa Princesa Peralta	19	10	
Casa da Urze	3	1	
Sotam Country House	72	43	
Quinta dos Esconhais	1	1	
Sete Quintas – Museu do Azeite	67	42	
Agroturismo Quinta da Fonte	24	24	
Casa do Rosmaninho	3	2	
TOTAL	764	430	

Table A. 1: Schist Villages lodging data collected from TripAdvisor and Facebook