Article

Study of wine producers' Marketing Communication in extreme territories - Application of the AGIL Scheme to wineries websites features

Stefania Chironi [1], Luca Altamore [1] Pietro Columba[1], Simona Bacarella[2] and Marzia Ingrassia [1]*

[1] Università degli Studi di Palermo, Department of Agricultural Food and Forest Sciences, Viale delle Scienze, Ed. 4, 90138 – Palermo, Italy; marzia.ingrassia@unipa.it.

[2] Università degli Studi di Palermo, Department of Economics, Business and Statistics, Viale delle Scienze, Ed. 13, 90138 – Palermo, Italy;

* Correspondence: marzia.ingrassia@unipa.it (M.I)

Abstract: This study measures the communication ability of wineries in two extreme territories of Southern Italy, Mount Etna and the island of Pantelleria. The evaluation of four dimensions of web communication was carried out by the AGIL Scheme (i.e. adaptation, goal-attainment, integration, latent pattern maintenance). The study provides a generalizable model to be applied in other similar studies. Also, focus groups of experts were carried out. The method proved to be suitable to measure the communication effectiveness of wineries through websites. Extreme territories may add value to the wine, regardless of the brand. The heroic wines may become the symbol of these territories helping environmental safeguard and contrasting territory abandonment by rural communities. The findings highlight that effective communication of heroic viticulture may be used to reposition these wines and increase their competitive advantage in foreign markets. The study generates new ideas for reflection on new types of web communication.

Keywords: Sustainable wine tourism; Territorial marketing; Wine marketing challenge; Wine farm marketing; Focus Group, Multidimensional analysis.

1. Introduction

Territory is one of the crucial elements that identify and characterize high-quality foods, especially wines. And the territory, precisely, deeply influences the characteristics of the vines, which in turn transfer to the wine unique elements of quality [1,2]. In fact, as we know, many characteristics of wines are closely linked to the territory of origin and cannot be replicated elsewhere, thus distinguishing a wine and its reputation [3,4]. The link between wine and territory is indivisible, and winemakers gain a competitive advantage when they manage effectively territorial communication of distinctive elements to potential consumers [5,6]. Wine encompasses a wide range of important symbolic elements that emotionally involve consumers in a hedonic experience [7,8]. Each terroir is characterized by its own specific identity, which is an expression of a rich heritage of natural and socio-cultural characteristics which, over time, have been imprinted in the wine and recognized. Therefore, belonging to a specific terroir is an intrinsic competitive advantage for winemakers both collectively and individually in a globalized market [9].

Some territories are considered "extreme" due to their unique morphological, geo-pedological, and climatic structure that make them not suitable for farming practices [10]. However, thanks to the farmers' hard work and will to succeed, in some of these territories some food products are grown, and, in few of them, particular wines with unique characteristics were produced over time and even commercialized in the market.

The viticulture carried out in these particular territories with extreme conditions is defined as "heroic viticulture" and it is a cultural element of these mountainous areas (such as Galicia and the Ribeira Sacra in Spain, the Douro Valley in Portugal, the Wachau of Austria, the Rheingau and Mosel of Germany, France's Banyuls and Switzerland's Canton Valais). Moreover, this type of viticulture is very important for the environmental safeguard of these geographic zones [11]. In Italy, the "Centre for Research, Studies, Safeguarding, Coordination and Valorization of Mountain Viticulture" (Centro di Ricerca, Studi, Salvaguardia, Coordinamento e Valorizzazione per la Viticoltura Montana – CERVIM) provided one definition for the concept of "heroic viticulture" establishing the criteria to identify territories wherein the so-called "heroic viticulture" is practiced[1]. The Italian legislative apparatus which collects and unifies most of the various laws in the field of wine is the Law 238/2016, usually referred to as the "Consolidated Wine Law"[2] [12]. In this Law, for the first time the heroic viticulture was recognized as a particular system of cultivation of vineyards that, for its specific characteristics must be safeguarded. Article 7 of the Law, in fact, states that "the Nation shall promote the restoration, recovery, maintenance and safeguarding of vineyards in areas subject to risk of hydrogeological instability, with particular landscape, historical, and environmental value, calling them heroic or historical vineyards." Therefore, the term "heroic viticulture" refers to the type of viticulture carried out in areas where the environmental and working conditions are extremely difficult but which, on the other hand, give the wines special characteristics, making them unique. Moreover, at the same time, maintaining agriculture practices in such extreme rural areas, may definitely limit environmental degradation and abandonment of territory by the indigenous local population [13], this gives also a social value to the heroic viticulture.

In Italy, there is a great variety of territories with particular environmental and pedo-morphological characteristics that can give to wine exclusive elements of typicality. Most of the main wine-producing countries have some extreme territories where heroic viticulture is carried out. In Italy, there are many territories where "heroic wines" are produced [14], including among others, the Valdobbiadene area in Veneto, Northern Italy (where the Prosecco wine is produced), the Langhe area in Piedmont, Northern Italy (which is famous for red wines), the National Park of the Cinque Terre, located in Northern Italy (Eastern Liguria area), the island of Pantelleria in Sicily, Southern Italy (where the Passito di Pantelleria wine is produced), and, again in Sicily, Mount Etna region (where unique red wines are produced).

The Mount Etna region is an irreplicable territory because it consists of several terroirs due to the presence of the volcano and its different soils, and to different climates, exposures and altitudes that make this area a real miniature of a continent. In fact, the Mount Etna characterizes this territory and its landscape, giving the soils a particular structure and an impervious morphology. The Mount Etna area extends on the east coast of Sicily (Southern Italy), between the cities of Messina and Catania [15]. It is located above convergent boundary between the African plate and the Eurasian plate. Etna is one of the most active volcanoes in the world and it is in an almost constantly active. Thanks to 2,700 years of eruptive activity, it is the highest peak in Italy south of the Alps. It is currently 10,912

---

[1] In order to be defined as heroic, viticulture must be carried out in a territory where there is at least one of these conditions: ground with a slope of more than 30%; altitude of more than 500 meters above sea level; production system developed on terraces and steps; being located on small islands.

[2] Law no. 238/ 2017 has led, in particular, to simplification concerning aspects of production, marketing, designations of origin, geographical indications, and traditions. Article 7 of this Law is entirely dedicated to heroic or historical vineyards and provides for their protection, including through interventions such as restoration, recovery, and the protection of those who persist in areas at risk of hydrogeological instability or with particular landscape value.

ft high, although this varies owing to eruptions at the summit, and covers an area of 45 km diameter (28 mi). These dimensions make it the most impressive terrestrial volcano in Europe and the entire Mediterranean area. The unique volcanic soil favors agriculture, with vineyards and orchards distributed along the lower slopes of the mountain and the wide Plain of Catania to the south, although the agricultural practiced are carried out with very special techniques. Thanks to its recent history and the nearby populations, Etna has been designated by the United Nations as a Decade Volcano[3]. In June 2013, Etna volcano officially entered the UNESCO World Heritage List [16].

Viticulture on Mount Etna has had a special place in European winemaking for more than 20 years, even before being defined as "heroic". The terraced landscapes, and the (sometimes dramatic) limited availability of resources, have guaranteed the existence of different productions that today are considered typical, and a living testimony to the local history and culture. In recent years, the ancient terraces of lava stone, characteristic of the agriculture of the area [13] have been recovered and, at the same time, cultivation processes, both in fields and cellars, have been improved in line with the most modern oenological models. The peculiarities of the "extreme" territories of Mount Etna are, therefore, able to give the local DOC wines unique characteristics. These characteristics should be communicated effectively by producers to consumers in order to enhance the distinctive features of the wines and also to gain a competitive advantage in the international market [17]. In addition, the proximity of places of natural beauty and cultural locations known all over the world, such as Taormina (ME) and Noto (SR), is an attraction for a large number of tourists, and makes the territory an exclusive tourist destination for foreign and Italian tourists and visitors.

Likewise, also the island of Pantelleria is another extreme geographic area in the Italian territory. Pantelleria, formerly named Cossyra or Cossura, is located in the Mediterranean Sea, in the Strait of Sicily, 100 km (62 mi) southwest of Sicily and 60 km (37 mi) east of the Tunisian coast, and it is characterized by an arid and windy climate for many months of the year. Administratively, Pantelleria island belongs to the Sicilian province of Trapani and it very small territory extends over an area of 83 km2 (32 sq mi), nevertheless, at the same time, it is the largest volcanic "satellite island" of Sicily [18]. In order to cope with the difficult climatic and orographic conditions of this island, over time, particular viticulture and growing techniques have been developed in Pantelleria, such as the terraces (i.e. dry stone walls); these techniques allowed viticulture to be carried out on the island despite the obvious natural problems. Specifically, for the cultivation of vineyards in Pantelleria is used "Alberello" system [19], which is a rare method that now is protected by UNESCO and recognized as human heritage.

This great territorial variability leads to the production of wines that cannot be replicated elsewhere; because of their unique characteristics. Wine-growing companies usually underline the close link between their products and the territory adopting the origin denominations (CDOs) when possible; this denomination, in Italy, is identified with Protected Designation of Origin (PDO). In this case there are the "Etna PDO" for the wines produced in the Etna territory, and the "Passito di Pantelleria PDO" for the raisin wines produced in Pantelleria[4].

These two territories represent a real "winescape" [20] because of the strong identity of the places and the local communities. In this context, communication may be a fundamental tool to make consumers aware of the difficulties faced when producing heroic wines and an opportunity for wine

---

[3] Decade Volcanoes are 16 volcanoes identified by the International Association of Volcanology and Chemistry of the Earth's Interior as worthy of particular study given their history of large destructive eruptions and high proximity to populated areas.

[4] In this regard, see Regulation (EU) No. 510/2006, relating to PDO and protected geographical indications.

producers to have their wines properly appreciated by consumers. This awareness, together with the wine's unique intrinsic characteristics, could become an additional element of appreciation for consumers and would allow producers to position these territories and wines differently in the market [21].

Today, communication comes primarily from companies' websites, which should provide information in the form of text, visual content, photos, and videos, and, to be effective, requires additional symbolic elements and emotional stimuli linked to the territory, regardless of the brands of the different wineries [22,23,24]. In recent years, with the rapid spread of social media, websites have been used by wineries to transfer information and communicate the territoriality of wine, and this phenomenon has been studied by several authors [25,26,27]. Recent studies have shown that websites, as well as social media (e.g. Instagram, Facebook, Twitter, etc.) are now the most effective communication tools for companies, because they allow them to establish a direct relationship with wine lovers, to provide information, and to receive opinions [28,29]. Wineries can promote and commercialize wines using content that illustrates the history of the company, and its production techniques, and can link the company brand name to the wine and the territory of origin ("brand–land").

In addition, the development of the Internet has revolutionized also the wine-tourism sector and websites and social media are more and more used to provide information to wine tourists [30], people who like to travel along the "wine routes" and visit wineries and territories, learn about landscapes and cultures, and stop along the way - at wineries, wine relais, chateaux, etc.-   for few days [31,32]. Wine tourism is an activity with strong emotional and hedonistic components that influence wine lovers' satisfaction and choices [7,31]. Additionally, sensory marketing has become crucial in driving consumer choices [4,34] and several contributions have supported the concept of customer experience as a lever to create value for businesses and consumers [35,36,37]. Wine has got specific characteristics that make it an information system linked to experiential components that involve consumers cognitively and emotionally, through the symbolic, hedonistic, and esthetic nature of consumption [38]. Moreover, some authors have demonstrated the importance of the uniqueness of the positive experience of a territory or particular events that take place only in certain tourist destinations [39] in the choice of a food product and how important can be an evoked emotion as reaction to perception of a relevant stimulus and its implication in product/food choice [40,39] emotion as reaction to perception of a relevant stimulus. The island of Pantelleria is a good example of the power of experiential components in travel destination choices. In fact, in the past decade, thanks to the extraordinary communicative power of its territory, Pantelleria island became a destination for elite tourism, this enhanced the value of this island and, at the same time, of the raisin wine that became the oenological symbol of Pantelleria [41].

Nowadays communication through websites plays an important role in experiential marketing activities, therefore it appeared interesting to analyze the effectiveness of online communication for the wineries located in extreme regions in order to provide new elements for enhancing the competitive advantage of wine producers located in these areas.

This work aims to observe how wine producers located in geographic areas where heroic viticulture is practiced, use web communication to communicate their heroic wines to consumers; moreover, the objective is to ascertain whether the types of communication used are effective for adding value to the wines of the territory. This study has also the aim to advance the conceptual foundations of the AGIL (i.e. adaptation, goal-attainment, integration, latent pattern maintenance) scheme, previously applied in a pilot recent study, strengthening the method, and providing a generalizable model that could be applicable to other similar studies. Finally, this study tries to gain a deeper insight on the effectiveness of communication of wineries located in extreme regions. In particular, this paper seeks to observe whether the wineries in the Mount Etna region are capable and aware of exploiting the "heroic" nature of viticulture practiced through the evocative and emotional potential that the

territory has, communicating the adversities of the territory in a consistent and conscious way through their websites, in order to give added value to their wines.

In the present study, the communication adopted by wineries in Mount Etna region and in Pantelleria island was analyzed through the observation of their websites. Specifically, the analysis of these wineries' websites was carried out to determine whether, and how, the peculiarities and the harshness of the territory were communicated effectively to wine lovers. The first comparison between two very extreme territories (i.e. Mount Etna and Pantelleria Island) was made in this study. From this comparison it was possible to generate new ideas for reflection on the effectiveness of a new type of web communication, for wineries, that uses the power of communication of the extreme territory to add value to high quality wines, regardless of the brand. This could allow the repositioning of these wine as a unique symbol of extraordinary territories.

2. Materials and Methods

3.1 Model selection

Several studies have stated that communication is an expressive phenomenon of social relationships and that consumers' brand preferences are influenced by the psychological process of constructing the self, based on consumption situations and brand personality [42]. Multidimensional methods of analysis are commonly applied to the study of social phenomena as they make use of models methodologically suited to measuring the different aspects into which a complex phenomenon, such as communication, can be broken down [43,44]. For this purpose, the AGIL multidimensional analysis scheme was applied, considering that communication is presented as an expressive phenomenon of social relations [45]. In fact, according to T. Parsons [46,47], the basic assumption of this sociological paradigm is that every social system must meet four basic requirements or dimensions to survive and develop; these dimensions are indicated by the acronym AGIL: adaptation (A); goal attainment (G); integration (I); and latent pattern maintenance (L). The AGIL scheme is therefore based on a conceptual grid that breaks down any complex phenomenon, such as social phenomena, into four fundamental dimensions and a variable number of sub-dimensions and related indicators, which are sometimes identified on the basis of the functions performed by the phenomenon itself within the social system [48]. In practice, the scheme consists of a quadrant divided into four sectors that must be read following a path that is articulated starting from the maximum "symbolic complexity" and the maximum "contingency of action" to the minimum "symbolic complexity" and the minimum "contingency of action." The scheme should be read counterclockwise from the top right quadrant of the adaption dimension, followed by goal attainment, integration, and latent pattern maintenance, in a system of Cartesian axes that express social phenomena, i.e. the "contingency of action" and "symbolic complexity" (Figure 1). In this study, the sub-dimensions have been selected by the authors on the basis of those examined in previous studies [48] and adapted for this study. The adaptation dimension (A) follows the principle of optimizing resources and means, and has a persuasive function, through which communication finds itself operating in social structures (market, mass media, digital media, institutions) and satisfying multiple and different objectives. The goal-attainment dimension (G) indicates the cognitive dimension that operates through the distribution function of disseminating information; it follows the principle of realization of the dissemination action. The integration dimension (I) is oriented according to the norms of the community in which the communication is carried out, and follows the regulatory principle of compliance with the tradition and principles shared by the community. In this dimension, communication is considered from the point of view of the relevance of participation in community events. Finally, the quadrant of the latent patterns dimension (L) relates to communication as an expressive form of the identity of the social actor (individual or collective). This

is, in fact, the identity dimension of communication and, therefore, its being consistent and coherent with ideas and values [48].

This qualitative-quantitative methodology of multidimensional analysis has already proved to be valid and effective in qualitative studies, where it is frequently applied, both for the rapidity of obtaining results and for its relatively low cost (through the discussion among experts on a product it is possible to obtain instant feedback on perceptions, opinions, and ideas). Therefore, in this study this methodology was improved and consolidated for its generalization and applicability in other studies. Figure 1 shows the AGIL scheme with four quadrants corresponding to the four dimensions and their respective sub-dimensions and indicators (selected by the authors for this study).

<table>
<tr><td rowspan="3" style="writing-mode:vertical">**Symbolic complexity**</td><td>**Goal attainment (G)**

MANAGEMENT

Sub-dimensions:

- *Information provided*
- *Thematic areas*
- *Ease of access and browsing*</td><td>**Adaptation (A)**

VALUE CREATION

Sub-dimensions:

- *Site design*
- *Quality of images*
- *Pictures of the territory*</td></tr>
<tr><td>**Integration (I)**

COMMUNITY

Sub-dimensions:

- *Reception*
- *International profile*
- *Interactivity of website*</td><td>**Adaptation (A)**

VALUE CREATION

Sub-dimensions:

- *Site design*
- *Quality of images*
- *Pictures of the territory*</td></tr>
<tr><td colspan="2" align="center">**Contingency of action**</td></tr>
</table>

Figure 1. AGIL scheme with dimensions and sub-dimensions selected for the study. Source: Adapted from T. Parsons' model [47].

3.2 Statistical population

From the official lists available at the Italian Official Sources (Regional Institute of Wines and Oils of Sicily, the Etna Wine Road Association, the Chamber of Commerce of South-East Sicily) all the wine producers (wineries) located in the territory of Mount Etna (Census) were identified. Therefore, from this initial statistical population of wine producers in the Mount Etna region, only those that, at the time of the survey, had active websites were selected, i.e. a total of 52 wineries, representing the initial statistical universe. It was observed that these wineries were all located along the route known as the "Wine Road of Etna." The preliminary observation of the websites of the identified wineries showed that some were not active and others were under construction and, therefore, only the active and up-to-date websites were chosen; N=41 websites (Census).

Subsequently, the 41 active sites were observed by 36 experts in the field of online communication, selected from among professionals in the wine sector. The observations, in accordance with the chosen methodology, were made for 12 months (from March 2018 to March 2019) in order to take into account any changes to the sites or the type of communication adopted within a year, as well as possible interruptions due to web-site updates. During this period, the experts decided to delete three more websites and, therefore, the study was made using a total of 38 active websites.

For Pantelleria island, also the entire population of the wineries in the island was selected and after a preliminary analysis only N =11 active web sites were identified (census) and analyzed by the 36 experts, nevertheless the small statistical population, is coherent with the very small territory of Pantelleria island and it guarantees the full reliability of results.

3.3 Focus groups and selection of participants

The focus group methodology was used in this study, because the aim was to gather information about the type of communication used by wineries in small extreme territory by their web sites. Essentially, the focus group is a qualitative method of analysis that aims to explore an uninvestigated topic in depth [49] with a group of selected individuals. In the focus-group format, the experts could discuss among themselves, exchange ideas, and highlight issues and strengths.

This method has been demonstrated to be one of the most effective and suitable to developing a deeper understanding of how, and why, individuals think in regard to an investigated topic [50]. The reason of success of focus groups is the flexibility of the approach in the context of exploration [35]. In this case, focus group discussion allowed to obtain the opinion of a group of experts (in web-based communication of the wine sector) with regard to the effectiveness of types of communication applied by the wineries though their websites.

A panel of 36 experts (18 women and 18 men) in the field of wine communication and, specifically, communication through the Internet and Social Networks, was selected to observe and analyze the websites and to evaluate the four dimensions of the AGIL scheme. A general recommendation is that participants should be strangers, although various reasons can support the use of acquaintances [35,49]; in the present case, where there was a need to increase the number of participants for reasons related to the statistical significance of the sample, this implied that some of the experts could get to know each other. The composition of each focus group was designed according to the literature and previous studies [50,51,52] and is presented in Table 1.

Table 1. Composition of focus groups, and sociodemographic characteristics of participants.

Focus group	Participants (n)	Gender and age range	Competences and role
1	12	Seven females, five males; age range 25–35 years old	Wine influencer; Wine blogger; Web designer of wineries and wine events; Researcher in Communication sciences; Oenologist with experience in Etna DOC wine
2	12	Six females, six males; age range 35–45 years old	Food and wine journalist; Marketing manager with experience in territorial politics; Journalist expert in web communication; Researcher in communication sciences; Researcher in wine marketing and communication

3	12	Five females, six males; age range 45–65 years old	Wine marketing manager with experience in heroic wines; Wine marketing manager with experience in territorial politics; President of the Strada del Vino Etna DOC; Associate professor of wine marketing and communication; Full professor of wine economics and policies; President of the Italian Sommelier Association; Wine influencer

These experts observed individually, for 12 months, both the 38 sites of the wineries in the Etna territory and the 11 sites of those in Pantelleria, and, at different times, they came together to discuss through focus groups. Literature on focus groups suggests that three to four focus groups are enough to collect all the information needed in the first step of exploration [49]; in fact, additional focus groups tend to collect the same information and no new insights would be generated [53]. Therefore, in this study, nine focus groups were carried out, with three groups of participants that met three times to discuss about the websites of wineries in Mount Etna and three times to discuss about the websites of wineries in Pantelleria.

Over the 12 months of observation, the experts took part in three focus groups of 12 participants each: in practice, three focus groups were organized, namely as "Focus Group 1", "Focus Group 2", and "Focus Group 3". The experts belonging to each focus group discussed three times about the Etna wineries' websites, and other three times about the Pantelleria wineries' websites (in total each focus group convened six times). The phases of the study for the Focus groups 1, 2 and 3, were as follows: (1) four months of individual websites' observation; (2) first focus group discussion for Etna and first focus group discussion for Pantelleria; (3) four months of individual websites' observation; (4) second focus group discussion for Etna and second focus group discussion for Pantelleria; (5) four months of individual websites' observation; (6) last focus group discussion for Etna and last one for Pantelleria. This last focus group allowed us to have the unique and shared evaluation of the Etna and the Pantelleria wineries' websites from "Focus Group 1", "Focus Group 2", and "Focus Group 3" that assigned the scores to all the indicators of the four dimensions of the AGIL scheme. The design and phases of the study are illustrated in Table 2.

Table 2. Design and phases of focus groups analysis both for the Etna and the Pantelleria wineries' web-sitesa. Data collected from all three focus groups (total 36 experts: 18 women and 18 men).

Phases	Focus group 1 (12 participants: 6 women and 6 men)		Focus group 2 (12 participants: 5 women and 7 men)		Focus group 3 (12 participants: 7 women and 5 men)	
	Operations	Outputs	Operations	Outputs	Operations	Outputs
Phase 1 (after 4 months)	4 months of individual website observation, followed by the first	Personal judgements of experts on websites and discussion of Focus group	4 months of individual website observation, followed by the first	Personal judgements of experts on websites and discussion of Focus group	4 months of individual website observation, followed by the first	Personal judgements of experts on websites and discussion of Focus group

	meeting of Focus group 1	1 on identified topics	meeting of focus group 2	2 on identified topics	meeting of Focus group 3	3 on identified topics
Phase 2 (after 8 months)	4 months of individual observation of the websites, followed by the second meeting of Focus group 1	Personal judgements on websites and Focus group 1 discussion on identified topics	4 months of individual observation of the websites, followed by the second meeting of focus group 2	Personal judgements on websites and Focus group 2 discussion on identified topics	4 months of individual observation of the websites, followed by the second meeting of Focus group 3	Personal judgements on websites and Focus group 3 discussion on identified topics
Phase 3 (after 12 months)	4 months of individual observation of the websites, followed by the third meeting of Focus group 1	Final discussion of Focus group 1 on the identified topics and scoring of each website (for all indicators of the scheme)	4 months of individual observation of the websites, followed by the third meeting of focus group 2	Final discussion of Focus group 2 on the identified topics and scoring of each website (for all indicators of the scheme)	4 months of individual observation of the websites, followed by the third meeting of Focus group 3	Final discussion of Focus group 3 on the identified topics and scoring of each website (for all indicators of the scheme)

[1] These phases were replicated twice: both for the study of the wineries' websites in the Mount Etna and for the study of the websites of wineries in Pantelleria. Recording of the focus group discussion and verbatim transcription.

Preliminarily, for this study, a question guide was prepared by the authors in order to help the moderator (expert in each focus groups) throughout each session, although a non-directive technique (avoiding leading questions) was used to explore the topic. The first question concerned the general communication efficiency and effectiveness of the websites. Following this, participants were asked to discuss about the apparent awareness of the web designer with regard to the "heroic" viticulture and the extreme territory where the wineries were located. The final topics of discussion concerned the ability of the wineries to communicate the extreme territory of production and the heroic viticulture practiced, basing on the indicators of the AGIL scheme.

In each session, all participants were seated around a round table in an empty room, a moderator supervised the discussion and some researchers witnessed the focus group sitting separately and without being seen from participants. Each participant had a tablet connected to the Internet to allow the visualization of the websites during the discussion. Participants were invited to discuss openly and freely without positions of dominance of some over others. Notes were taken by researchers during and after each session and discussions were recorded and handwritten verbatim. In total, eighteen focus groups were carried out, nine for the web sites of the wineries in Mount Etna and nine

for the sites of the wineries in Pantelleria (i.e. Focus group 1, 2 and 3 discussed three times about the territory of Etna and three times about the territory of Pantelleria). The last session of focus group (the one carried out after 12 months of observation) led to the shared evaluation of the group of experts of the sites observed (Table 2) with respect to the indicators examined. During the last focus group, the experts analyzed the websites together and, subsequently, after discussion, assigned a shared score, from 0 to 5, to each indicator (corresponding to the 12 sub-dimensions identified for the study) for each website observed. The scores were attributed on the basis of the "level of the communicative ability of the site with respect to each indicator" (level of communicativeness) observed at each time (Table 3). For the measurement of the "level of communicativeness" of the observed websites, a Likert scale from 0 to 5 was used (0 = lack of communicativeness, 1 = low communicativeness, 2 = acceptable communicativeness, 3 = sufficient communicativeness, 4 = satisfactory communicativeness, and 5 = excellent communicativeness).

Table 3. Dimensions, sub-dimensions, indicators and score ranges used for the study.

Dimension	Sub-dimension		Indicator	Score
A - Adaption	1	Site design	Quality of site design	From 0 to 5
	2	Ease of access and browsing	Ease of navigation in the website	From 0 to 5
	3	Quality of images	Quality characteristics of pictures of the territory	From 0 to 5
G - Goal attainment	1	Information provided	Quantity of information about the link with the Etna Mountain territory	From 0 to 5
	2	Thematic areas	Quantity of touristic information, i.e. information and other activities linked to the territory (culture, wine and food activities, nature, sport, art, folklore, etc.)	From 0 to 5
	3	Pictures of the territory	Number of pictures evoking (linking with) the Etna Mountain territory	From 0 to 5
I - Integration	1	Communication style of the website's reception	Communication style	From 0 to 5
	2	International profile	Number of foreign languages used	From 0 to 5
	3	Interactivity	Chat rooms, forums, social networks	From 0 to 5
L - Latent pattern maintenance	1	Identity	Distinctiveness of the website	From 0 to 5
	2	Originality/innovation	Originality and innovation of the website structure	From 0 to 5
	3	Coherence/consistency	Coherence of communication (images, language, contents, text, immediacy of the comprehensibility of the message, evocation of the territory)	From 0 to 5

For the assessment, (score from 0 to 5), each focus group (at the end of the third phase) was provided with a matrix containing the list of websites observed (for each territory) and the indicators to be evaluated for each dimension of the AGIL scheme. The C × V matrix (Cases = websites × Variables = indicators) was strictly followed in order to collect the scores attributed to all the websites observed for each indicator of the four dimensions of the AGIL scheme. In total, for Etna territory, three matrices were obtained consisting of the scores attributed by the 3 focus groups to all the indicators of the scheme for all the sites observed (C × V matrix = 38 × 12; where C = 38 cases = websites, and V = variables = 12 indicators), and similarly, three matrices were obtained for Pantelleria's wineries (C × V matrix = 11 × 12; where C = 11 cases = websites, and V = variables = 12 indicators).

3.4 Data collection and analysis

For each sub-dimension (or indicator, see Table 3), given the 0–5 scale used, and the fact that each dimension comprised three sub-dimensions, a score between a 0 and 15 was obtained for each dimension. According to the scores obtained, the communicative capacity of each winery, the extent of the most effective communication, and the sub-dimensions that contributed with their scores to the score of the dimensions of the scheme were highlighted. The analyses were carried out by calculating the mean values of the scores attributed to the indicators. In addition, the mean values of scores attributed to the dimensions were calculated in order to make comparisons between homogeneous values and interpret the results correctly. The means of the dimensions were calculated considering all the scores given to the indicators of all dimensions for all websites, by a matrix as data base for the Etna territory and another as data base for the Pantelleria territory. Each matrix was therefore composed of the scores given by all three focus groups [i.e. for Etna one matrix (n × m), where n = 3 indicators and m = 114 units, consisting of the 38 websites evaluated by the three focus groups (the matrix was obtained by merging the three final matrix of each focus group), and for Pantelleria another matrix (n × m), where n = 3 indicators and m = 33 units, consisting of the 11 websites evaluated by the three focus groups (likewise the Etna case, this matrix was obtained by merging the three final matrix of each focus group)].

Moreover, to analyze the overall communicativeness of each winery in the Etna territory, the wineries were ranked basing on the score assigned by the focus groups for all dimensions combined [therefore, as each dimension has three indicators, the total score ranges from a minimum of 0 (score = 0 for each indicator of each dimension) to max a maximum of 60 (score = 5 for each indicator of each dimension)]. Subsequently, in order to simplify the interpretation of the result, these scores were converted into a score from 1 to 10, and five score bands were created: 1–2, no communication; 3–4, poor communication; 5–6, acceptable communication; 7–8, satisfactory communication, and 9–10, excellent communication. This allowed to know the communicative ability (namely "level of communicativeness") of the wineries located in the Mount Etna region by using the power of the extreme territory for communicating the heroic viticulture practiced to produce the wine.

3. Results

By comparing the results obtained for the two extreme territories, it is possible to observe some interesting differences between the communication of the Etna's and the Pantelleria's wineries.

Figures 2 and 3 show the mean values calculated for the dimensions and indicators to carry out a comparative analysis between the communicative approach of websites both for Etna's and Pantelleria's wineries.

In particular, if we observe the scores obtained for each dimension, it is possible to understand that wine producers in the Mount Etna territory, although showing interest in communicating their wines through the website, do not appear focused on communicating the elements of uniqueness, individuality, and distinctiveness that their heroic territory have. Contrarily, in Pantelleria, wine producers appear more aware and use the territory to communicate their wine.
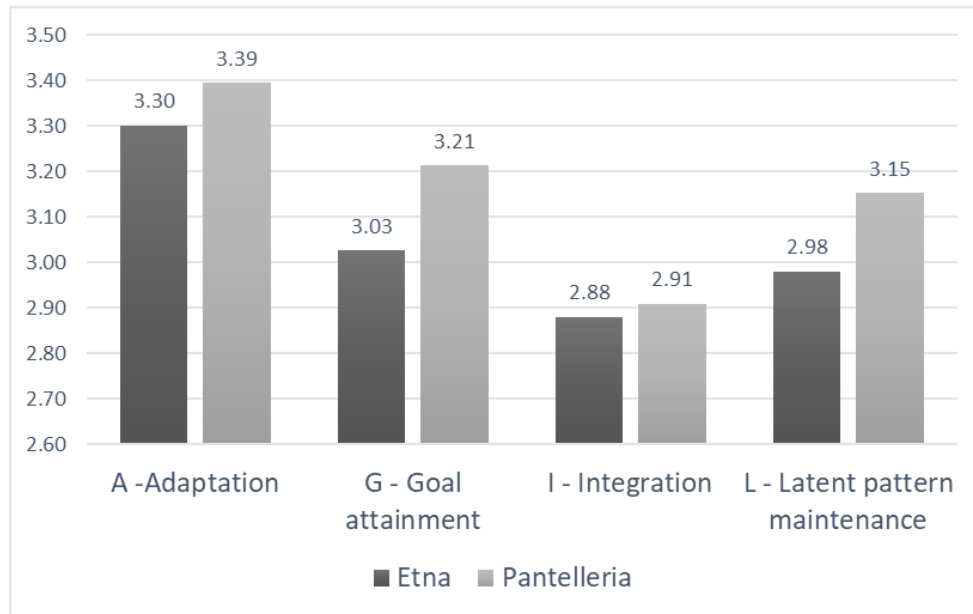
Figure 2. Comparative analysis between mean values obtained for the four dimensions (Pantelleria vs Mount Etna).
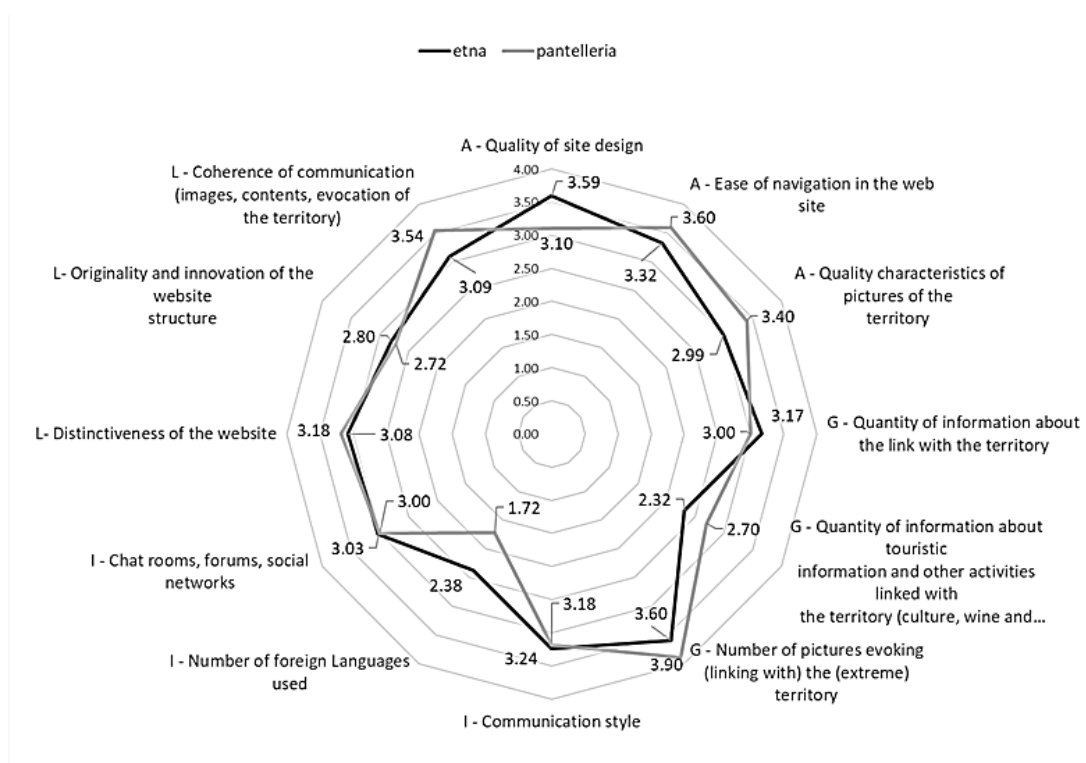
Figure 3. Comparative analysis between scores (mean values) given by focus groups to indicators of the wineries' websites of the two territories (Etna Mountain and Pantelleria).

More particularly mean values of each dimension and indicator are discussed following. The dimension Adaptation (A) represents high contingency of action and high symbolic complexity. This dimension measures the persuasive ability of the website, in this case, and its value is obtained by the evaluation of a group of qualitative variables (i.e. indicators) basing on visual elements that links

the company and the territory. In this case, the visual elements on each website were evaluated with reference to the perceived communication skill of the website to tell the extreme territory (for example using the vine terraces on the slopes of the two volcanic territories, the landscapes), and describe the characteristics of wines with reference to the territory in which they are originated.

For the Etna territory, the mean value of the scores obtained by the Adaptation (A) dimension was 3.30 (out of a maximum of 5), Pantelleria, instead, obtained higher mean value (3.39). For interpreting and understanding the meaning of this result, it is important to notice that this characteristic of the website is strictly connected with the talent of web designer and with the participation of wine producers to the creation of their website, because the ease of access and browsing in the web site depends on the low complexity of the website or on the experience of the web designer. Moreover, the communication of symbolic elements related to the extreme territory and wines depend on the participation of producers in the choice of visual elements and, therefore, on the awareness of wine producers of what they want to communicate. In this case, despite the low complexity of websites for Pantelleria, the visual elements on wineries' websites appeared more effective to communicate both the beauty of the landscape and the harshness of the territory, including the terraces on which the vines are grown. (see Figure 2). As far as the websites of the Etna wineries are concerned, it turned out that the visual elements present were only beautiful images of the volcano's territory but not focusing on the heroic viticulture practiced there and the link between wine and heroic viticulture. Moreover, despite the Adaption dimension of Etnean wineries received a score (mean value) higher than all the other dimensions, this result relates more to the high contingency of action rather than high symbolic complexity. More particularly, the score of this dimension, for Etnean wineries, depends on the "Quality of site design", in fact, it was observed that most of the Etnean wineries' websites were designed by web professionals. On the other hand, the lack of communication between producers and web experts may be the reason of the low effectiveness of this dimension compared to the Pantelleria wineries' websites.

The Goal attainment (G) dimension expresses high symbolic complexity and low contingency of action. The sub-dimensions (see Table 2) concern text-based information about the producer, the wines, and the production processes; moreover, information about events and activities related to the territory (tourism, nature, gastronomy, sports) through thematic areas of the websites. Finally, the ease of access and browsing was also an indicator. Results show that (see Figure 2), the Etna wineries' websites obtained lower scores (mean value equal to 3.03) than the Pantelleria ones (mean value 3.21), highlighting that, also in this dimension, the producers are more interested in communicating by the use of the website because all information provided, thematic areas and pictures of the territory were highly coherent and consistent with the territory of Pantelleria and the *Passito* wine. This type of information is very important for visitors because it helps them to contextualize the wine within a territorial context and a social context, and it is very important and attractive for wine consumers and wine tourists as well, because these elements contribute to consolidate the emotional bond with the wine and the producer.

The Integration dimension (I) obtained an average score of 2.88 for Etna's vs 2.91 for Pantelleria's wineries. This dimension expresses the minimum symbolic complexity and minimum contingency of action, and it assess the integration degree between visitors and the website. The indicators used to measure this dimension were: Communication style, Number of foreign languages used, Chat rooms, forums, social networks, etc. Moreover, the Focus groups observed the number of interactive actions and their contents. In this dimension, the elements evaluated were the style of communication, the availability of web pages in different languages, the presence of chats with producers and the links provided to other websites or social networks (Instagram, Facebook, etc.). It is clear that this dimension is affected by the company's ability to open up the website to foreign internet users and to establish direct relations with consumers. The analysis, carried out by the focus groups, shows that only few websites among the Etna's wineries have web pages with translation in more than other two foreign languages apart from Italian, and none among the Pantelleria's ones use

another foreign language in addition to English (and Italian) language. This reflects in some deficiencies, from the internationalization point of view that is accentuated by the modest use of the most popular social networks.

Finally, the Latency dimension (L) is characterized by the minimum symbolic complexity and the maximum contingency of action, and it evaluates the identity profile of the website through the sub-dimensions related to sharing aspects. This dimension obtained an average score of 2.98 for the Etna's and 3.15 for the websites of wineries in Pantelleria, and it is conceptually based on the identity and originality of the website, as well as on the consistency between the text and the related images. This dimension also takes into account the structure of the website and the layout of each webpage. In this dimension, collaboration between the entrepreneur and the web designer during the creation of the website is very important. Specifically, the wine producer should work together with the web designer in order to highlight the concept of a "wine territory coherent with the products". This concept should be easily decoded by the website's visitors through images, text, and other communicative elements. The importance of this dimension is, therefore, to grab the user's attention through the originality of the structure of the site, which is necessarily related to how the website may be identified uniquely among other similar websites. Only in this case website visitors would be able to recognize the producer and the wine by unique elements of the website. The Etna's websites obtained good scores in this dimension, except for one indicator closely related to the coherence of communication (3.54). This indicator, however, appears more related to the ability to communicate using the evocative power of a territory.

As we said, in this study the interest was to analyze the objective(s) of the visual representations, and specifically the ability of pictures and contents to recall the characteristics of heroic viticulture and communicate them to visitors through representative contents understandable. Therefore, a deeper analysis of each indicator was made.

By observing the mean values assigned to each indicator of the four dimensions, it is possible to highlight that, interestingly, the highest scores given to the dimensions, in the case of Pantelleria, are due to the scores given to the indicators that most express the uniqueness of the territory, the identity of belonging to it, and the consistency in the communicativeness of these symbolic values, i.e. the effectiveness of communication of a heroic viticulture in an extreme territory through the use of the communicative power of the territory itself, evoking it by the coherent use of images and contents linked to the wine.

Contrarily to Pantelleria's wine producers, communication of Etna wineries through websites appears to be more focused on other elements than to the heroic viticulture and extreme territory. More particularly, (A) "Quality of website design" (3.59 Etna vs 3.10 Pantelleria); (G) "Quantity of information about the link with the territory" (3.17 Etna vs 3.00 Pantelleria); and "Number of foreign languages used" (2.38 Etna vs 1.72 Pantelleria) (see Figure 3).

However, all the indicators related to the ability of the websites to communicate the heroic viticulture are higher for Pantelleria's wineries. Specifically, these indicators are: (A) "quality characteristics of pictures of the territory" (3.40 Pantelleria vs 2.49 Etna); (G) "quantity of information about touristic information and other activities linked with the territory (culture, wine and food activities, nature, sport, art, folklore, etc.)" (2.70 Pantelleria vs 2.32 Etna); (G) "number of pictures evoking the extreme territory" (3.90 Pantelleria vs 3.60 Etna); and (L) "coherence of communication (images, contents, texts, evocation of the territory)" (3.54 Pantelleria vs 3.09 Etna). The selection of images to communicate the heroic nature of the viticulture practiced in the extreme territory would seem to be a skill of entrepreneurs than of website designers. Therefore, it will be interesting to know if there has been collaboration between entrepreneurs and web designers. The results of the discussions of the three focus groups on the criticalities that emerged, and their possible causes, can help answer this question.

With regard to the analysis of the communicativeness of each winery, the authors grouped the observed wineries' websites in bands of scores with respect to the level of communicativeness. It was possible to observe that around 40% of the wineries observed had "Excellent" or "Good" communicativeness (Tables 4, 5, 6). These wineries are aware of the added value that the terroir gives to their wines, and communicate through their websites the concept of heroic viticulture, succeeding in adequately transmitting to Internet users the difficulties in producing in extreme conditions and how this terroir is, along with the work of the producers, represents a unique value of Etna DOC wines. It is interesting to observe that the wineries whose websites received the highest scores ("Excellent" communication) well known on the national, and international wine market. In addition, these wineries are in the territory of Mount Etna from decades and generations, and over time have grown, both in terms of production and sales. These companies, compared to the others, appeared more marketing-oriented than others and, therefore, their website are more effective in conveying their values and the heroic territory, as the strength for the differentiation of their wines, doing so they are more easily distinguishable by consumers. These wineries, in recent years, have also invested in the Etnean territory thanks to their increased notoriety, funding all types of communication because these producers are aware of the importance of link between a wine and its terroir.

Table 4. Evaluation of websites of wineries in Mount Etna made by focus group 1.

Number of wineries belonging to this group	Scoring band obtained	Scoring band on a 1–10 scales	Percentage of wineries belonging to this group	Assigned level of communicativeness
3	52–55	9–10	8%	Excellent
12	40–50	7–8	32%	Good
10	30–39	5–6	26%	Acceptable
9	21–27	3–4	24%	Poor
4	15–20	1–2	10%	None

Table 5. Evaluation of websites of wineries in Mount Etna made by focus group 2.

Number of wineries belonging to this group	Scoring band obtained	Scoring band on a 1–10 scales	Percentage of wineries belonging to this group	Assigned level of communicativeness
5	52–55	9–10	13%	Excellent
9	40–50	7–8	24%	Good
14	30–39	5–6	37%	Acceptable
26	21–27	3–4	26%	Poor

Table 6. Evaluation of websites of wineries in Mount Etna made by focus group 3.

Number of wineries belonging to this group	Scoring band obtained	Scoring band on a 1–10 scales	Percentage of wineries belonging to this group	Assigned level of communicativeness
1	52–55	9–10	3%	Excellent

18	40–50	7–8	47%	Good
16	30–39	5–6	42%	Acceptable
3	21–27	3–4	8%	Poor

4. Discussion

In summary, it is possible to observe that, the power of the communicativeness of the territory is not effectively used to tell visitors the characteristics of the viticulture practiced in the extreme territory of the Mount Etna. The websites of wineries in the Mount Etna region are more complex than those of Pantelleria, and are structured to attract the immediate attention of visitors using specific website structuring, brand recognition, and interaction with users.

Contrarily, the websites of the wineries of Pantelleria have a greater amount of contents and information about the territory and its activities, and the pictures strongly evoke the island landscape and the heroic characteristics of viticulture practiced on the island linking them uniquely to the "Passito di Pantelleria" wine.

The analysis of the focus group results revealed five main issues for the wineries in the Mount Etna:

1. poor communication of the heroic nature of viticulture practiced in the territory

2. lack of coordination between the entrepreneur and the designer of the website

3. a lack of strong identifying elements that allow visitors to properly distinguish the winery from others, except through the brand name

4. a lack of information on activities that affect the territory of origin

5. limited use of foreign languages.

6. With regard to the wineries in Pantelleria, the issues highlighted were:

7. small dimension of firms and territory dedicated to wine production

8. lack of funding for territorially coordinated communication activities

9. limited use of foreign languages.

Overall, all focus groups agreed about the good standards of the observed websites, and the interest of wine producers in having a website with basic information about the winery and the wines produced.

About the effectiveness of communication applied by the web-sites, results highlighted that only a low percentage of companies' websites were evaluated as having little or no communication, with reference to heroic viticulture. A substantial percentage demonstrated paying sufficient attention to communication and information regarding the territory as a whole (culture, gastronomy, tourism, sports), although, considering the huge variety in the Etna territory, the information communicated in the wineries' websites was limited with regard to the companies' activities related to the promotion of the region and territorial integration. Such activities, however, have been shown to support a territory, adding value and creating notoriety, and linking it to typical food products on the basis of the "brand-land" union, which can, therefore, provide added value to companies and products, particularly to wines.

The results obtained show that the wineries of Mount Etna are less communicative than those of the island of Pantelleria; the reason could be the interest of producers in communicating their own brand rather than the evocative potential of the heroic viticulture practiced in their territory, possibly because they are not fully aware that this could be a competitive advantage to enhance the commercialization of their Etna DOC wines. However, the Etna wineries' websites despite the good structure provide little information about the local context. On the contrary, because the dimension of wine firms in Pantelleria is very small (except one case), producers have generally less funds to finance web marketing (only two wineries assigned to web marketing agencies the task to design their websites). Nevertheless, in Pantelleria, wine producers probably take a personal interest in the communicative characteristics of their websites and particularly in the communication of the extreme territory and the heroic viticulture. Therefore, in Pantelleria, wine producers "use the island" more than the brand-name to give to the Passito wine uniqueness features, and to attract wine lovers. The intensity of the emotions that the landscape can convey to visitors is evoked by tasting the wine produced in this extreme territory. In agreement with other authors, in this case the territory and its product (the passito wine) become a just "one" product [54] for consumers and visitors/tourists. Similarly, the volcano, the landscape, and the difficulties of a heroic viticulture could and should be conveyed to add value and distinctness to the Etna DOC wines and increase consumers' willingness to buy and pay for them. In fact, the presence of the volcano gives the area a unique perspective, which can be used to represent the key element of communication in wineries' websites. This especially in relation to sensory marketing could add value to the wine Etna DOC [40,55,56,57]. In fact, according to previous marketing studies on consumer preferences, the results highlight the importance of the different characteristics of wines in consumer choice, in particular, the results confirm the crucial role of marketers in highlighting the strongest and most attractive product attributes for the consumer in order to guide their purchasing behavior [58]. In addition, according to eminent studies, consumers tend to reduce the risks of buying a complex product such as wine by relying on their direct experience [58]. Therefore, an effective communication, appropriately conveyed by wineries through guided video visits in the winery or in the territory or other digital tools available today, through their websites, can contribute, on the one hand, to evoke previous experiences experienced by wine consumers as tourists/visitors of those extreme places/territories such as Pantelleria or the Etnean territory, and on the other hand it can contribute to make the curious consumer live a complete albeit virtual experience [58,59,60]. Moreover, according to other previous studies on perceived quality of wines by consumers, wherein it was observed that the quality rating of a winery is influenced by its terroir, and wine quality among wineries in the region is higher for those producing the territorial brand wine [3], also in this study one of the most relevant findings is the importance, for the extreme wine territories to enhance territorial products as "territorial brands" like the Passito wine for Pantelleria and the Etna DOC wines for the Etna wineries.

5. Conclusions

The results of this study can provide valuable support to guide companies' communication in all areas where heroic viticulture is practiced, allowing them to gain a competitive advantage.

Although the potential of the web as a relational tool is now well known and widely used for marketing purposes, the wineries of the Mount Etna region demonstrate only a modest ability to use this tool to transmit to potential consumers the communicative power of their territory, which is distinguished throughout the world and recognized by UNESCO as a World Heritage Site.

Most wineries in Pantelleria rely on the territory as an essential element of communication, probably because producers are aware that the powerful beauty of this island and its landscapes are very attractive to consumers/visitors and tourists, and that these elements are the only strength of the territory.

Despite the difficulties that the territory imposes, both in the field and in the winery, and that strongly affect the wine uniqueness, producers of the "Etna Rosso DOC" wine do not exploit the combination of Wine-Vine-Territory-Etna, but they always combine exclusively the wine with their brand. Therefore, their websites should improve their symbolic complexity by using images related to the characteristics of the extreme territory.

Therefore, the results show that the Etnean companies, unlike those in Pantelleria, do not exploit the potential of the territory to promote the heroicness of their viticulture.

The producers in the Mount Etna and in the Pantelleria island can contribute to the sustainable development of the economy of the area, taking full advantage of the opportunities offered by agricultural policy and its financial contribution to heroic viticulture.

Moreover, the Controlled Denomination of Origin (CDO) certification, can help to maximize the benefits of the heroic territory through the enhancement of their wines and in synergy with other economic activities, such as cultural tourism, environmental awareness, and food and wine production only if a good communication is applied.

In summary, the AGIL scheme can be considered as a valid tool to measure the effectiveness of communication trough the web sites; moreover, this methodology that combines it with focus groups appears robust and can be applied in other similar studies to have more insight on communication strategies of wineries in other extreme territories or where quality wine and territory are strictly connected.

References

1. Vaudour, E. The quality of grapes and wine in relation to geography: Notions of terroir at various scales. *Journal of Wine Research* **2002,** *Volume* 13(2), pp. 117-141.
2. Van Leeuwen, C.; Seguin, G. The concept of terroir in viticulture. *Journal of Wine Research* **2006,** *Volume.* 17(1), pp. 1-10.
3. Kunc, M.; Menival, D.; Charters, S. Champagne: the challenge of value co-creation through regional brands. *International Journal of Wine Business Research* **2019,** *Volume* 31(2), pp. 203-220, doi:10.1108/IJWBR-09-2017-0056.
4. Riviezzo, A.; Garofano, A.; Granata, J.; Kakavand, S. Using terroir to exploit local identity and cultural heritage in marketing strategies: An exploratory study among Italian and French wine producers. *Place Branding and Public Diplomacy* **2017,** *Volume* 13(2), pp. 136-149.
5. Santini, C. The Business of Wine Tourism: Evolution and Challenges. In *Management and Marketing of Wine Tourism Business*; Sigala, M., Robinson,N.S., Eds; Publisher: Palgrave Macmillan, Cham, **2019**; pp. 261-276, DOI 10.1007/978-3-319-75462-8

6.   Charters, S. "Marketing terroir: A conceptual approach", Proceedings of 5th International Academy of Wine Business Research Conference, Auckland 8–10 February 2010, available at: http://academyofwinebusiness.com/wp-content/uploads/2010/04/Charters-Marketing-terroir.pdf

7.   Bruwer, J.; Rueger-Muck, E. Wine tourism and hedonic experience: A motivation-based experiential view, *Tourism and Hospitality Research* **2019**, *Volume* 19(4), pp. 488-502.

8.   Scorrano, P.; Fait, M.; Maizza, A.; Vrontis, D. Online branding strategy for wine tourism competitiveness, *International Journal of Wine Business Research* **2019**, *Volume* 31(2), pp. 130-150.

9.   Warman, R.; Lewis, G. K. Wine place research: getting value from terroir and provenance in premium wine value chain interventions, *International Journal of Wine Business Research* **2019**, *Volume* 31(4), pp. 493-508.

10.   Skinner, K.; Hanning, R.; Tsuji, L. Prevalence and severity of household food insecurity of First Nations people living in an on-reserve, sub-Arctic community within the Mushkegowuk Territory, *Public Health Nutrition*, **2014**, *Volume* 17(1), pp. 31-39. doi:10.1017/S1368980013001705

11.   Capece, A.; Romaniello, R.; Siesto, G.; Romano, P. Diversity of Saccharomyces cerevisiae yeasts associated to spontaneously fermenting grapes from an Italian heroic vine-growing area, *Food microbiology* **2012**, *Volume* 31(2), pp. 159-166.

12.   Ministero delle Politiche Agricole Alimentari e Forestali ["Italian Ministry of Agricultural, Food and Forestry Policies"] Disciplina organica della coltivazione della vite e della produzione e del commercio del vino ["Organic regulation of grape cultivation and wine production andtrade"], available online: URL https://www.politicheagricole.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/12012 (accessed on 3 September 2019).

13.   Barbera, G.; Cullotta, S.; Rossi-Doria, I.; Rühl, J.; Rossi-Doria, B. In *I paesaggi a terrazze in Sicilia: Metodologie per l'analisi, la tutela e la valorizzazione* ["The Sicilian terraced landscapes: Methodology for their analysis, protection, and valorisation"], Collana Studi e Ricerche, Editor ARPA Publisher Palermo, Sicilia, Volume 7, **2010**.

14.   EATALY Magazine. Alla scoperta dei vini eroici ["Discovering heroic wines"]. Available online: URL https://www.eataly.net/it_it/magazine/eataly-racconta/cosa-sono-i-vini-eroici/ (accessed on 10 september 2019).

15.   Parco dell'Etna ["The Etna regional park"]. Available online: URL http://www.parcoetna.it/default.aspx (accessed on 1 october 2019).

16.   UNESCO [United Nation Educational, Scientific and Cultural Organization]. World Heritage list. Available online: URL http://whc.unesco.org/en/list/1427 (accessed on 3 october 2019).

17.   Stupino, M.; Giacosa, E.; Pollifroni, M. Tradition and innovation within the wine sector: How a strong combination could increase the company's competitive advantage In *Processing and Sustainability of Beverages*, ed.; Grumezescu, A., Holban, A.-M., Publisher Woodhead, Sawston, 2019, pp. 185-204.

18.   Terraces and Landscapes. Available online: URL http://www.terracedlandscapes2016.it/en/pantelleria/ (accessed on 18 october 2019).

19.   Oliveri, C.; Bella, P.; Tessitori, M.; Catara, V.; La Rosa, R. Grape and environmental mycoflora monitoring in old, traditionally cultivated vineyards on mount Etna, Southern Italy. *Journal of the Science of Food and Agriculture* **2016**, *Volume* 97(1), pp. 65-73.

20.   Sottini, V. A.; Barbierato, E.; Bernetti, I.; Capecchi, I.; Fabbrizzi, S.; Menghini, S. Winescape perception and big data analysis: An assessment through social media photographs in the Chianti Classico region. *Wine Economics and Policy* **2019**, Volume 8(2), pp. 127-140.

21.   Hall, C.M. and Prayag, G. "Special Issue: Wine tourism: moving beyond the cellar door?", *International Journal of Wine Business Research* **2017,** *Volume* 29(4), pp. 338-502.

22.   Carsana, L.; Jolibert, A. The effects of expertise and brand schematicity on the perceived importance of choice criteria: A Bordeaux wine investigation. *Journal of Product & Brand Management* **2017**, *Volume* 26(1), pp. 80-90.

23.   Lewis, G.K.; Byrom, J.;Grimmer, M. Collaborative marketing in a premium wine region: The role of horizontal networks. *International Journal of Wine Business Research* **2015**, *Volume*   27(3), pp. 203-219.

24.   Brás, J. M.; Costa, C.; Buhalis, D. Network analysis and wine routes: the case of the Bairrada Wine Route. *The Service Industries Journal* **2010**, *Volume* 30(10), pp. 1–21.

25.   Fuentes Fernández, R.; Vriesekoop, F.; Urbano, B. Social media as a means to access millennial wine consumers. *International Journal of Wine Business Research* **2017**, *Volume* 29(3), pp. 269-284.

26. Wallace, E.; Buil, I.; de Chernatony, L. Consumer engagement with self-expressive brands: Brand love and WOM outcomes. *Journal of Product & Brand Management* **2014**, *Volume* 23(1), pp. 33-42.

27. Wilson, D.; Quinton, S. Let's talk about wine: Does Twitter have value? *International Journal of Wine Business Research* **2012**, *Volume* 24(4), pp. 271-286.

28. Pentina, I.; Guilloux, V.; Micu, A.C. Exploring social media engagement behaviors in the context of luxury brands. *Journal of Advertising* **2018**, *Volume* 47(1), pp. 55-69.

29. Dolan, R.; Conduit, J.; Fahy, J.; Goodman, S. Social media: Communication strategies, engagement and future research directions. *International Journal of Wine Business Research* **2017**, *Volume* 29(1), pp. 2-19.

30. Duarte Alonso, A.; Bressan, A.; O'Shea, M.; Krajsic, V. Website and social media usage: Implications for the further development of wine tourism, hospitality, and the wine sector. *Tourism Planning & Development* 2013, *Volume* 10(3), pp. 229-248.

31. Ingrassia M.; Altamore L.; Bacarella S.; Columba P.; Chironi S. The Wine Routes in Sicily as a tool for Rural development: An Exploratory Analysis. Proceedings of the X International Agriculture Symposium "AGROSYM 2019", Jahorina, Bosnia and Herzegovina, 3-6 October 2019, available at: URL http://agrosym.ues.rs.ba/agrosym/agrosym_2019/BOOK_OF_PROCEEDINGS_2019_FINAL.pdf?fbclid=IwAR0FszNGDBh6a5HOkE2aWOGYlUTccJToaMpM-4-DVBYNFlT0mdOB8xxW8tk

32. Neilson, L.; Madill, J. Using winery web sites to attract wine tourists: An international comparison. *International Journal of Wine Business Research* **2014**, *Volume* 26(1), pp. 2-26.

33. Canovi, M.; Pucciarelli, F. Social media marketing in wine tourism: winery owners' perceptions. *Journal of Travel & Tourism Marketing* **2019**, *Volume* 36(6), 653-664.

34. Westbrook, R.A.; Oliver, R.L The dimensionality of consumption emotion patterns and consumer satisfaction. *Journal of Consumer Research* **1991**, *Volume* 18(1), pp. 84-91.

35. Altamore, L.; Ingrassia, M.; Chironi, S.; Columba, P.; Sortino, G.; Vukadin, A.; Bacarella, S. Pasta experience: Eating with the five senses – A pilot study. *AIMS Agriculture and Food* **2018**, *Volume* 3, pp. 493-520.

36. Bruwer, J.; Prayag, G.; Disegna, M. Why wine tourists visit cellar doors: Segmenting motivation and destination image. *International Journal of Tourism Research* **2018**, *Volume* 20(3), pp. 355-366.

37. Byrd, E.T.; Canziani, B.; Boles, J.S.; Williamson, N.C.; Sonmez, S. Wine tourist valuation of information sources: the role of prior travel. *International Journal of Wine Business Research* **2017**, *Volume* 29(4), pp. 416-433.

38. Sortino, G.; Allegra, A.; Inglese, P.; Chironi, S.; Ingrassia, M. Influence of an evoked pleasant consumption context on consumers' hedonic evaluation for minimally processed cactus pear (Opuntia ficus-indica) fruit. *Acta Horticulturae* **2016**, *Volume* 1141, pp. 327-334.

39. Chironi, S.; Ingrassia, M. Study of the importance of emotional factors connected to the colors of fresh-cutcactus pear fruits in consumer purchase choices for a marketing positioning strategy. *Acta Horticulturae* **2015**, *Volume* 1067, pp. 209-215.

40. Ferrarini, R.; Carbognin, C.; Casarotti, E. M.; Nicolis, E.; Nencini, A.; Meneghini, A. M. The emotional response to wine consumption. *Food Quality and Preference* **2010**, *Volume* 21(7), pp. 720-725.

41. Ingrassia, M.; Altamore, L.; Columba, P.; Bacarella, S.; Chironi, S. The communicative power of an extreme territory–the Italian island of Pantelleria and its passito wine. *International Journal of Wine Business Research* **2018**, Volume 30(3), pp. 292-308, doi: 10.1108/IJWBR-06-2017-0039

42. Sung, Y.; Choi, S.M.; Lin, J.S. The interplay of culture and situational cues in consumers' Brand evaluation. *International Journal of Consumer Studies* **2012**, *Volume* 36(6), pp. 696-701.

43. Lazarsfeld, P.F. *Methodology and Sociological Research*, Publisher: Il Mulino, Bologna, IT, **1967**.

44. Lazarsfeld, P.F.; Merton, R. *Mass Communication Popular Taste and Organized Social Action*, Publisher: University of Illinois Press, Champaign, IL., **1949.**

45. Münch, R. *Theory of Action:Towards a New Synthesis Going Beyond Parsons*. Publisher: Routledge Revivals, London, UK, **2010**

46. Parsons, T. An outline of the social system. In *Theories of Society*; Parsons, T., Shils, E., Naegele, K.D., Pitts, J.R., Eds; Publisher: Free Press, New York, NY, **1965.**

47. Parsons, T. *Societies. Evolutionary and Comparative Perspectives*. Publisher: Prentice Hall, Englewood Cliffs, N.J., **1966**.

48. Martelli, S. *Multidimensional Communication: Websites of Public Institutions and Enterprises*. Publisher: FrancoAngeli, Milan, IT, **2002**.

49. Krueger, R.A.; Casey, M.A. *Focus Groups: A Practical Guide for Applied Research*. 5th ed. Published: Sage, Thousand Oaks, CA, **2015.**

50. Neuninger, R.; Mather, D.; Duncan, T. Consumer's scepticism of wine awards: A study of consumers' use of wine awards. *Journal of Retailing and Consumer Services* **2017**, *Volume* 35, pp. 98-105.

51. Chironi, S.; Bacarella, S.; Altamore, L.; Columba, P.; Ingrassia, M. Study of product repositioning for the Marsala Vergine DOC wine. *International Journal of Entrepreneurship and Small Business* **2017**, *Volume* 32(1-2), pp. 118-138.

52. Chironi, S.; Bacarella, S.; Altamore, L.; Ingrassia, M. Quality factors influencing consumer demand for small fruit by focus group and sensory test. *Journal of Food Products Marketing* **2017**, *Volume* 23(8), pp. 857-872.

53. Guest, G.; Namey, E.; McKenna, K. How many focus groups are enough? Building an evidence base for nonprobability sample sizes. *Field Methods* **2017**, *Volume* 29(1), pp. 3-22.

54. Pierdicca, R.; Paolanti, M.; Frontoni, E. eTourism: ICT and its role for tourism management. *Journal of Hospitality and Tourism Technology* 2019. DOI: 10.1108/JHTT-07-2017-0043

55. Moreira, A.C.; Fortes, N.; Santiago, R. Influence of sensory stimuli on brand experience, brand equity and purchase intention. *Journal of Business Economics and Management* **2017** *Volume* 18(1), pp. 68-83.

56. Sendra-Nadal, E.; Carbonell-Barrachina, Á.A. *Sensory and Aroma Marketing;* Publisher: Wageningen Academic, Wageningen, NL 2017.

57. Altamore, L.; Ingrassia, M.; Columba, P.; Chironi, S.; Bacarella, S. Italian Consumers' Preferences for Pasta and Consumption Trends: Tradition or Innovation? *Journal of International Food and Agribusiness Marketing* **2019,** Volume 31, DOI 10.1080/08974438.2019.1650865

58. Pomarici, E.; Lerro, M.; Chrysochou, P.; Vecchio, R.; Krystallis, A. One size does (obviously not) fit all: Using product attributes for wine market segmentation. *Wine Economics and policy* **2017** *Volume* 6(2), pp. 98-106.

59. Tempesta, T.; Giancristofaro, R. A.; Corain, L.; Salmaso, L.; Tomasi, D.; Boatto, V. The importance of landscape in wine quality perception: An integrated approach using choice-based conjoint analysis and combination-based permutation tests. *Food Quality and Preference* **2010**, *Volume* 21(7), pp. 827-836.

60. Lanfranchi, M.; Schimmenti, E.; Campolo, M. G.; Giannetto, C. The willingness to pay of Sicilian consumer for a wine obtained with sustainable production method: an estimate through an ordered probit sample-selection model. *Wine Economics and Policy* **2019**, *Volume* 8(2), pp. 203-215.