

Eno-Olivotourism in Douro (Portugal): Assessing the Maturity of Websites Information in Wine Tourism Estates

Eno-Olivoturismo no Douro (Portugal): Avaliação da
Maturidade da Informação nos *Websites* das Quintas
de Enoturismo

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Abstract

Wine and olive oil are fundamental elements of the Douro region's food and cultural heritage, reflecting ancestral production and consumption practices. The integration of olive oil into wine tourism experiences – Eno-Olivotourism – represents an innovative strategy that contributes to heritage valorisation, enhances tourism competitiveness, and strengthens communication narratives, fostering the development of distinctive content for digital marketing and social media. This study aims to measure the maturity level of the information available on the websites of Douro wine estates engaged in wine tourism. To achieve this, a mixed-methods approach was adopted, leading to the development of a Website Evaluation Model inspired by the eMICA methodology (Extended Model of Internet Commerce Adoption). The digital content of 35 wine estates was analysed, evaluating the following dimensions: Organizational, Informational, Promotional, Relational, Transactional, Interactivity, Multimedia and Design, and Social Media. The results highlight the need to improve the quality of the information provided, as well as to enhance digital interaction strategies with visitors to offer more engaging experiences aligned with the expectations of the target audience.

Keywords: Wine & olive oil food heritage. Eno-olivotourism. Website evaluation. Douro.

Resumo

O vinho e o azeite constituem elementos fundamentais do património alimentar e cultural da região do Douro, refletindo práticas ancestrais de produção e consumo. A integração do azeite nas experiências de enoturismo, o Eno-Olivoturismo, configura uma estratégia inovadora que contribui para a valorização patrimonial, o reforço da competitividade turística e a amplificação das narrativas comunicacionais, potenciando a construção de conteúdos

Cadernos de
Geografia

doi: https://dx.doi.org/10.14195/0871-1623_51_7

Received on:
02 de junho de 2024
Accepted on:
14 de maio de 2025

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diferenciadores para o *marketing* digital e redes sociais. Este estudo tem como objetivo analisar o nível de maturidade da informação constante nos *websites* das quintas de enoturismo do Douro. Para isso, adotou-se uma abordagem metodológica mista, desenvolvendo-se um Modelo de Avaliação de *Websites* inspirado na metodologia eMICA (*Extended Model of Internet Commerce Adoption*). Foram analisados os conteúdos digitais de 35 quintas, avaliando os domínios Organizacional, Informacional, Promocional, Relacional, Transacional, Interatividade, Multimédia e *Design* e Redes Sociais. Os resultados evidenciaram a necessidade de melhoria da qualidade da informação comunicada, bem como do reforço das dinâmicas de interação digital com os utilizadores, a fim de proporcionar experiências mais informadas, envolventes e alinhadas com as expectativas dos visitantes.

Palavras-chave: Património alimentar vinho & azeite. Eno-olivoturismo. Avaliação de *websites*. Douro.

1. Introduction

Local tourism development is strongly oriented towards policy development based on the combination typical product-territory, in particular extra virgin olive oil (and wine), which assigns value to identity, social capital and indigenous cultural heritage. [...] This could also help promoting a quality tourism in the awareness that local products contribute to the implementation of a multiplicity of local initiatives (such as tourist paths, markets, educational initiatives, community events) able to encourage and support new social relations.

De Salvo et al. (2013, p. 23)

In the context of an increasingly competitive global market, the tourism sector quickly realized that Food Heritage (FH) can also constitute an element of cultural differentiation, and be a symbol of a national or regional identity (Hall & Sharples, 2003). In this regard, Enotourism (or wine Tourism) and Olivotourism (or Olive Oil Tourism, or Oleotourism) are emerging as SIT (Special Interest Tourism) linking several GIT (General Interest Tourism) segments of rural, cultural and nature-based tourism, with new ways for experience-escapism (Pulido-Fernández et al., 2019). SIT can be linked to various GIT segments by combining elements of rural, cultural, and nature-based tourism with new forms of experience and escapism. In other words, special interest tourism can coexist within a broader tourism offer, providing differentiated experiences within more general contexts. As seen in Figure 1, the Eno-Olivotourism can be integrated with all the 3 main GIT (Rural, Nature-based and Cultural Tourism).

This study adopts a supply-side perspective to explore how wine tourism estates in the Douro region integrate wine and olive oil as part of their visitor experiences, fostering the emergence of eno-olivotourism. Conceptually, Pyo (2015) and Kotler et al. (2006) integrative approach must be followed. For Pyo,

Integrating functions of tourist market Segmentation, Targeting and Positioning (STP) can be beneficial to destination marketing. Integration

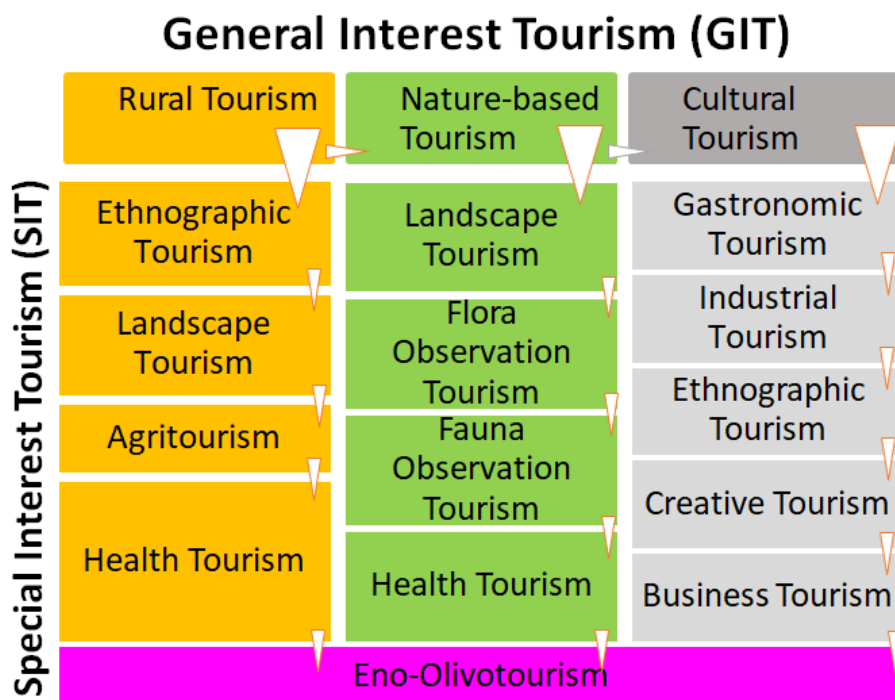


Figure 1. Eno-Olivotourism: Synergies from GIT to SIT.

Source: Own production based on Pulido-Fernández et al. (2019).

of these functions could be possible by establishing an integrative linkage between destination attributes (as wine & olive oil) and tourist needs and wants, and by recognizing the systematic contribution of each function, while considering the interrelationships between them (Pyo, 2015, pp. 253–254).

In Kotler et al. (2006) opinion, STP should be based on integrated information, because it can generate a great insight in a more efficient way, than considering them as independent tasks (Natter et al., 2008). So, the integration of wine and olive oil (as territorial endogenous resources and unique FH experiences) with tourism, can ensure destination competitiveness, visitors attractiveness and experience differentiation. To explore more deeply this issue, a deep **Literature Review** was conducted in **section 2**. we found a very complex and multifaceted eno-olivotourism concept, seen as a subcategory of gastronomic tourism. It exposes a huge potential for product-level cross-selling (Alonso, 2010), combining two food heritages (wine & Olive oil), where the first one is anchored “around the culture of wine and vineyards, starting a form of cultural dissemination with a combination of culture, traditions and territories” (Costa, 2020, p. 23), and the second “a form of tourism which includes experiences such as: visiting to olive oil production sites and staying at local accommodations, attending culinary courses on olive oil-based, buying olive oil, trekking on olive oil routes” (Manisa et al., 2013, pp. 12, 16). According to Hwang & Quadri-Felitti (2022, p. 13), “Since vineyards and olive groves share geographical areas, pairing

wine tourism programs with olive tourism programs might result in synergy in a local economy. So, olive oil tourism and wine tourism managers may need to work closely together”.

The **section 2 – The methodology** outlines the techniques and processes used for collection and processing data. To effectively promote online products, services, experiences, and territories, it is essential developing an Integrated Marketing Communication strategy (IMC) (Jurado et al., 2018; Meroño & Arcas, 2006). In this context, the internet has become a key source of high-quality tourism information, with an increasing number of tourists turning to it to explore the variety of products and services offered (Cristóbal-Fransi et al., 2013). From a supply-side perspective, Chung & Buhalis (2008) emphasize the importance of websites and social networks as essential tools for information, communication, and marketing, as well as for reputation building and influencing consumption. Similarly, Zhang & Dran (2002) and Chen & Macredie (2005) argue that websites serve as the primary reference through which customers form initial impressions of a company.

With the Douro region in northern Portugal as the geographical context, a qualitative methodology was adopted. The first step involved analysing the online presence of 290 wine farms, as listed by TPNP (Tourism of Porto and Northern Portugal), revealing that only 146 had websites. Among them, just 35 produced both wine and olive oil, which became the primary focus of this study.

To assess the information maturity level of eno-olivotourism inside the wine tourism farms websites, we developed Website Evaluation Model (WEM) inspired by the eMICA (Extended Model of Internet Commerce Adoption) methodology (Burgess & Cooper, 2002, 2000, 1998; Ting et al., 2013), considering eight domains: Organizational, Informational, Promotional, Relational, Transactional, Interactivity, Multimedia & Design, and Social Media. The discussion is then accessible in **section 3 – Results Discussion**, while in **section 4 – Conclusions and Future Research Directions** are presented.

2. Literature review

The literature review showed Eno-Olivotourism as a SIT (Special Interest Tourism) fitting in with several General Interest Tourism (GIT) branches, such as Rural Tourism, Nature-based Tourism and Cultural Tourism (Pulido-Fernández et al., 2019). The FH culture and its culinary practices are the most obvious and the easiest way of contact with the stay in societies and their cultural alterities. As Lucy Long state,

[...] food seems to provide us with a sense of the ‘realness’ of things. Because of food’s commonality to all cultures, it allows us to experience the diversity within that commonality, providing us with groundedness from which we can embark on adventures into otherness (Long, 2004, p. 15).

In this scenario, our leading perspective was anchored on Terry Clark’s Integrative Theory (*apud* Pyo (2015)), that emphasizes the direct and indirect influences of

national cultures and microcultures on tourists' buying behaviour. De Salvo et al. (2013) and Thach et al. (2019) corroborate the previous cross-selling perspective, arguing that the expansion of wine tourism in countries such as France, Spain, Germany, Italy, the United States, South Africa, Australia, New Zealand, Austria and Chile, was due to the combination of activities aimed at gastronomic tourism, rural tourism and ecotourism in wine producing regions.

The same happened with Canada, twining wine with golf and culinary specialties (Pina, 2010). Also, López-Guzmán et al. (2016, p. 57), stated that "given the importance of wine and food tourism in recent years, there is a potential commitment to the development of olive tourism". Nunes (2014) believes that this kind of synergy, boosts business competitiveness, territory development and experience authenticity. In relation to digital presence, Carlisle et al. (2023, p. 240) identify the most critical digital competencies for the future as including online marketing and communication, proficiency in social media, operational knowledge of computer systems, and the ability to monitor and respond to online reviews.

2.1. The connection points between Wine and Olive Oil Tourism segments

In recent decades, the vineyard/olive grove and wine/olive oil, as cultural landscapes and sustainable products, have become one of the main themes in tourism development. Wine (and also Olive Oil) tourism experiences involve "a complex interaction of natural setting, wine, food, cultural, and historical inputs and above all of the people who service them" (Charters, 2006, p. 214). Wine tourism (and also olive oil tourism) offers customers leisure activities, educational opportunities, and novel experiences via visiting wine regions (Charters & Ali-Knight, 2002). For all these reasons, we can say that wine & Olive Oil tourism are similar ecosystems integrated in Rural, Natural and cultural tourism, encompassing a strong creative dimension and adding a complex interconnectivity between stakeholders, resources, and organizations, which extend across different spatial and sectoral scales.

The trinomial "eat, drink, stay" and "play", leads to the integrated vision that wine/olive oil tourism assumes, mixing a set of sensory and creative experiences that provide tourists contact with the landscape, communities, historical foodstuff, gastronomy and cultural heritage. In Portugal the Tourism around Olive Oil product, is called as Olivotourism, or Olive Oil Tourism, but in Spain is Oleotourism, following the Latin prefix of the olive tree "*Olea Europaea* L." (Fernandez et al., 2019). The Olivotourism is defined as a form of tourism based on activities linked to olive groves and olive oil, combining culture, nature, heritage and gastronomy.

This form of tourism stands out as an alternative to traditional tourism, considered as "a form of tourism that includes activities such as visits to olive oil production sites and accommodation in these places, cooking courses on olive oil-based dishes, purchase of olive oil, trekking and rest on olive oil routes, and information visits that provide information about olive oil culture and production techniques from the past to the present" (Manisa et al., 2013, pp. 12, 16). Hwang & Quadri-Felitti (2022) define olive oil tourism as a sustainable tourism activity that supports the local econ-

omy by balancing the interests of visitors, the environment, and the community. They also note the potential synergistic effect between olive oil and wine tourism, suggesting that managers of both sectors should collaborate.

Parrilla-González et al. (2020) view olive oil tourism as an intangible, sustainable element, rooted in agricultural activities that promote environmental respect and societal values connected to the land. Millán et al. (2014) discuss the importance of marketing olive oil tourism through designations of origin, offering tourist routes that educate about the oil and its production. They also point out the similarities and differences between wine tourists and olive oil tourists, particularly in terms of their economic profiles and satisfaction determinants.

On the same line, Hwang & Quadri-Felitti (2022, pp. 3–13) advocate “Olive oil tourism can be considered sustainable tourism due to its contribution to the local economy by synchronizing the interests of visitors, the environment, and the local community” also “Since vineyards and olive groves share geographical areas (...) olive oil and wine tourism may create a synergistic effect in the local economy” and “olive oil tourism and wine tourism managers may need to work closely together”. Millán et al. (2014, p. 184) reinforce the above ideas, by saying “Both in wine tourism and in oleotourism tourists complain of the lack of complementary activities”.

2.2. Vineyards and Olive groves: twined geographical areas

According to the OIV (International Organization of Vine and Wine), in 2020, the three largest wine producing countries were Italy, France and Spain, followed by the United States, Australia, Chile, Argentina and South Africa. The ranking with ten great wine producers continues with Germany and Portugal (Dino, 2023). In terms of olive oil production, Murgado (2013), Spain is the largest producer of olive oil in the world, giving this country a privileged position to exploit this product in the tourism field. The same author considered that on a scientific level, very few studies have highlight on this tourism activity since it is still in the early stages of development.

In the Portuguese territory wine and olive oil were deeply rooted to the bases of food and with health benefits, as well as for other purposes Paquete (2013). Vineyards are spread across 14 wine regions and olive groves in 7 regions, with overlapping wine and olive oil producing territories. Olive oil production is more concentrated on the right bank of the Tagus River, towards the south of Portugal (Alentejo region) appearing around villages, and mills were installed close to water courses (Caldas, 1998). In Portugal the Table 1 shows the volume of wine and olive oil production (hl- hectolitres) in 2023 where Trás-os-Montes accounting with 8% of olive oil and 22% of wine (Instituto Nacional de Estatística, 2023).

Recognizing the Douro Demarcated Region (a well-known wine landscape), we have been witnessing (in recent decades) a landscape in modification, with old olive groves reconversion for producing Extra Virgin Olive Oils, showing positive impacts for tourism and territory sustainable development. So, olive groves are vital for regional development and contribute to the territory cohesion, with implications for

the local economy, generating employment and playing an important role in cultural landscape safeguard and identity (Fleskens et al., 2009).

Table 1. Portugal – Wine and Olive Oil production (2023)

Geographical location (Agrarian region)	Olive oil produced (hl) by Geographic location; Annual	Wine production declared in wine (hl) by producers by Winemaking location (Agrarian region); Annual
Portugal	1 755 289,00 %	7 542 060,00 %
Entre Douro e Minho	2 158,00 (0%)	925 565,00 (12%)
Trás-os-Montes	144 534,00 (8%)	1 686 241,00 (22%)
Beira Litoral	30 470,00 (2%)	510 156,00 (7%)
Beira Interior	39 369,00 (2%)	244 190,00 (3%)
Ribatejo e Oeste	65 703,00 (4%)	2 851 592,00 (38%)
Alentejo	1 466 458,00 (84%)	1 261 894,00 (17%)
Algarve	6 598,00 (0%)	16 613,00 (0%)
Açores	0,00 (0%)	8 007,00 (0%)
Madeira	0,00 (0%)	37 800,00 (1%)

Source: Own production base on INE data for wine and olive oil.

Besides the production numbers, showing that “vineyards and olive groves share geographical areas”, as referred by Hwang & Quadri-Felitti (2022, p. 13), the socio-cultural value is the main attribute to characterise the region (Campón-Cerro et al., 2014; López-Guzmán et al., 2016). Wine and Olive Oil, when assimilated by tourism (Eno-Olivotourism) enables “(...) series of unique experiences, which include territory, atmosphere, landscape, culture, gastronomy, lifestyles and varieties of local wines” (Williams & Kelly, 2001, p. 9), being able to assert itself as a regional development tool, by integrating the primary (agriculture), secondary (wine industry) and tertiary (tourism) sectors.

As a result of the tourism evolution, new types of experiences and stakeholders emerge, integrating olive farming and olive oil production in this business (Alonso, 2010). Palacios-Zamora & Lovelle (2023) see the usability in tourism websites, as increasingly important, as due to the existing competition and the high demand from customers for an intuitive and efficient user experience, including a group of basic features connected to information, communication, e-commerce and social media dimensions (Cristobál-Fransi et al., 2013).

3. Methodology

3.1. Methodological process

As referred in the Introduction, this study aims to measure the maturity level of the information available on the websites of Douro wine estates engaged in wine tourism. The growing impact of globalization, supported by Information and Communication Technologies (ICT) and the Internet, has significantly simplified and facilitated the travel research process. Today, the Internet serves as one of the most widely used and effective tools for organizations to connect with their audiences through their websites. As Cebi (2013, p. 1030) notes, "Nowadays, the internet is the most widely used and an effective tool for firms/organizations to reach their customers by their websites. Hence, effective design of websites helps firms/organizations to reach their aim. There are lots of design parameters that play an effective role on website design." The objective of this article is to assess the maturity level of eno-olivotourism information presented on the websites of wine tourism farms in the Douro region. To achieve this, it is essential to apply Integrated Marketing Communication (IMC) tools (as illustrated in Figure 2 and 3, enabling the development of a cohesive communication strategy.

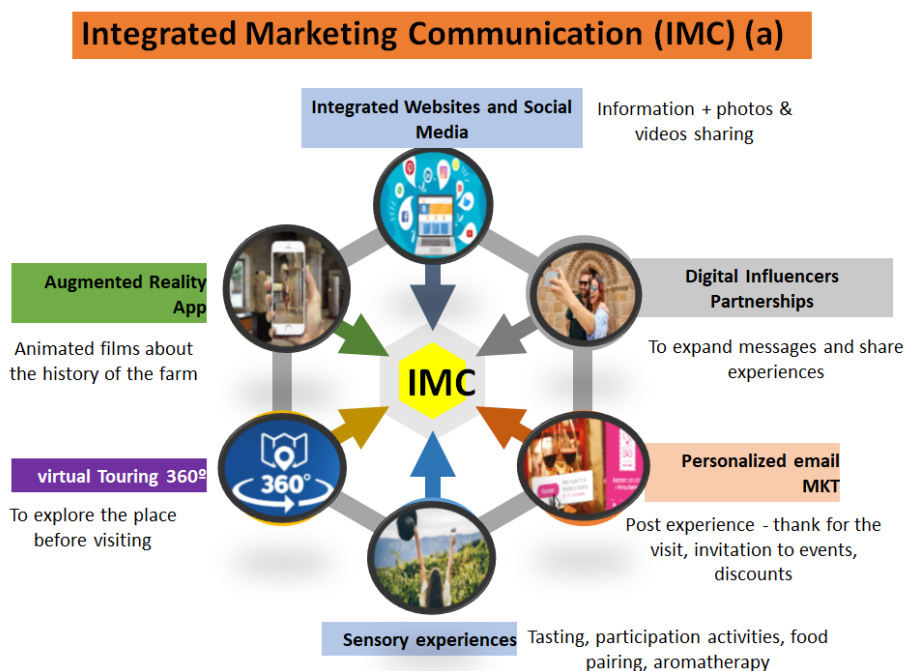


Figure 2. Integrated Marketing Communication (IMC) tools for Wine & Olive Oil Tourism farms.

Integrated Marketing Communication (IMC) (b)

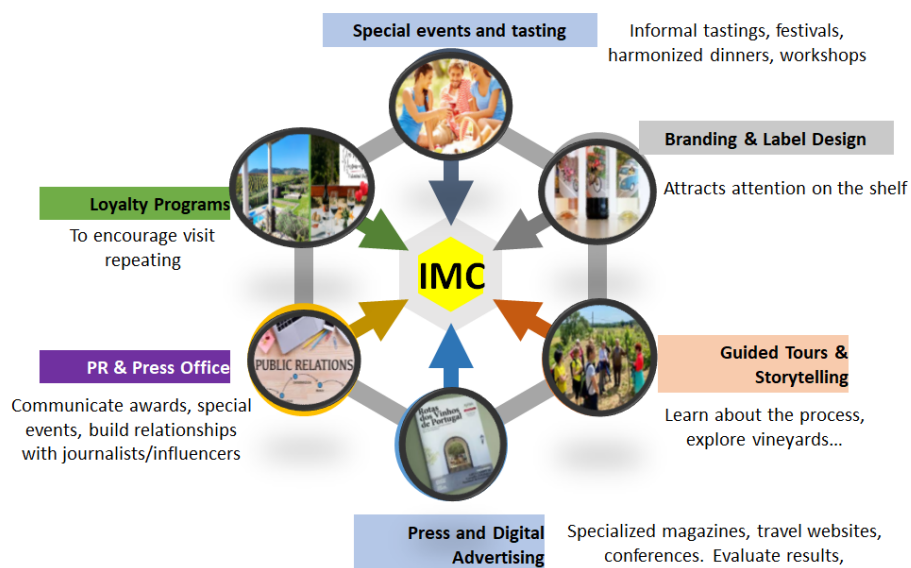


Figure 3. Integrated Marketing Communication (IMC) tools for Wine & Olive Oil Tourism farms.

This strategy should integrate various communication channels to deliver a unified message – specifically, the promotion of combined wine and olive oil tourism experiences. To do so, is crucial adopting Integrated Marketing Communication (IMC) tools in order to create a cohesive strategy that combines various communication tools to deliver a unified message (in this case, promoting Wine & Olive Oil experiences).

IMC refers to the process of integrating and coordinating the various communication elements commonly known as the ‘promotional mix’ (Van Zanten & Bruwer, 2002). This concept usually consists of advertising, sales promotion, personal selling and public relations, publicity, direct marketing or sponsorship as major components.

The IMC perspective for wine and olive oil tourism experiences consider 12 (twelve) tools: Integrated Websites and Social Media; Digital Influencers Partnerships; Personalized email MKT; Sensory experiences; virtual Touring 360º; Augmented Reality App; Special events and tasting; Branding & Label Design; Guided Tours & Storytelling; Press and Digital Advertising; PR & Press Office and Loyalty Programs. Among all these IMC tools we choose the “Integrated Website and Social Media” to explore more deeply the ways to interact with visitors. Nielsen & Tahir (2002) advocate that a website, also known as a site, is a structured collection of Web pages, various files and hyperlinks, which can be internal and external, representing an entity (company, organization, group) or someone (a person).

The Internet is an increasingly important part of the day to day becoming a vehicle element that unites everyone and everything. If you are not on the internet, you will hardly reach the consumer. So, as said by Bill Gates “If your business is not on the Internet, then your business will be out of business” (Goldsmith, 2005). The

rapid growth of the internet presents a new perspective to business and organizations. This important network can easily connect managers and customers providing not only general information about products or services but also the opportunity for performing interactive business transactions (Aladwani & Palvia, 2002; Hasan & Abuelrub, 2011).

Farm websites can offer high levels of customer services during and after sales transactions, as they are a useful tool to compare prices, to purchase services and to communicate with the service providers (Camilleri & Kozak, 2023). According to Jurado et al. (2021, p. 80) “A company website has become a basic tool for interacting with customers, supporting the Direct-To-Consumer (D2C) strategy”. After consulting several companies’ websites we found a set of elements, as: “Menu” with essential links to access the rest of the information on the site (it may not appear on the homepage, but it facilitates the user’s interaction with the site); “E-mail” presented explicitly or implicitly; the “responsible for the site”, distinguishing the promoter (or funder), from the webmaster (manages the information) and the web designer (produces the graphics and interaction); “Website creation” and update dates; “Site optimization” for a given monitor resolution and for a given browser version or browsers; “News” section ordered by dates and/or subjects (small summaries of recent or changed information); “Trusted accountant” (cumulative number of daily users) and “Internal search engine”.

Also a lot of other attributes are required, such as “Frequently answered questions (FAQs)”, (users can search for answers for themselves) (Camilleri & Troise, 2022); “Live Chat services” that may be operated by human agents and/or through AI chatbots/dialogue systems (Adam et al., 2021; Camilleri & Troise, 2022; Thomaz et al., 2020; Tsai et al., 2021) or even “Software to respond to consumers’ queries” in real time, via social media networks, including Facebook Messenger or WhatsApp, among others (Smutny & Schreiberova, 2020).

Klaus & Zaichkowsky (2020) and Zaki (2019) advocate that online users are continuously evaluating the attributes and features of electronic commerce websites before committing themselves to a purchase decision. “The Internet is one of the most used information sources for planning tourism trips. However, the level of accessibility of information disseminated by the tourism industry through websites is still very low” (Teixeira et al., 2021, p. 253). Based on the above considerations three goals were defined:

- 1. Seek out which Enotourism farms have a website and produce wine and also olive oil.**

To achieve the first objective, a web site survey took place between March and April 2023 (Table 2) on 290 Wine Tourism farms (according to the list provided by TPNP, in 2018). The numbers show that 146 (50,3%) have online presence, 35 (12,1%) farms promote online their wine and olive oil production, but only 11 (3,8%) communicate the development of olivotourism activities. So, digital environments can provide a competitive atmosphere for tourism business improvement and create a vast range of chances to strengthen destinations image (Jurado et al., 2018, 2021). In the olive oil sector, Jurado et al. (2018) analysed the dig-

ital presence and performance of olive oil companies' websites using a website evaluation model to assess their effectiveness and impact on corporate success.

Table 2. Douro farms survey: online presence (wine & Olive oil production) and Tourism experiences

	Douro		Production		Tourism	
Countys	Nº farms	website	wine	olive oil	wine tourism	Olivotourism
Alijó	45	25	21	9	10	3
Armamar	10	2	2			
Carrazeda de Ansiães	12	5	5	1		
Figueira de Castelo Rodrigo	2	1	1			
Freixo de Espada à Cinta	4	2	2			
Lamego	36	24	21	6	14	
Mesão Frio	17	10	9		6	2
Murça	3	1	1			
Peso da Régua	37	15	15	4	7	1
Sabrosa	37	15	15	4	7	
Santa Marta de Penaguião	18	9	9		6	
São João da Pesqueira	13	7	7		4	1
Tabuaço	8	5	5		5	
Torre de Moncorvo	13	5	5	2	2	
Vila Nova de Foz Côa	16	7	9	4	5	
Vila Real	19	8	7	5		4
Total	290	146	129	35	70	11
% considering nº of farms	100%	50,3%	44,5%	12,1%	24,1%	3,8%

Source: Own production.

The study considered key factors such as usability, accessibility, interactivity, and social media presence. The findings revealed that the online presence of olive oil companies remains limited and, in many cases, underdeveloped. Moreover, website quality and interactivity play a crucial role in enhancing visibility and business performance. However, cooperatives and small olive oil enterprises face significant challenges in utilizing digital tools to promote their products and expand into global markets. In the wine sector, Jurado et al. (2021) analysed the relationship between online popularity and the performance of wine cooperatives, using metrics of digital visibility and social media engagement. Data were collected from various online platforms to assess the digital relevance of cooperatives. The results demonstrated that online popularity significantly influences the competitiveness and growth of wine cooperatives. Additionally, adopting digital marketing strategies can enhance brand image, boost sales, and expand market share. Furthermore, active social media engagement and a strong online presence are essential for the sustainable development of wine cooperatives. These studies highlight the importance of digital marketing for the olive oil and wine sectors, emphasizing that an effective online presence can boost visibility, competitiveness, and business performance in these markets. So, Websites can generate symbi-

otic opportunities between the tourist experiential needs and the socio-economic aspirations of local communities

2. **Propose a “Eno-Olivotourism Website Evaluation Model”.**

In order to help customers to find and buy integrated eno-olivotourism experiences, farms need to strengthen their presence in the internet, making their websites more informative, attractive, safe and interactive.

The above considerations justified the chosen a qualitative methodology, anchored on eMICA construct (extended Model of Internet Commerce Adoption), Correia & Dias (2003), Nielsen (2000), Richmond (1996), Tognazzini (1998) e W3C (1999). According Burgess & Cooper (2002, 2000, 1998), the core rationale of eMICA is to understand the progression of a company's online presence and how well digital tools are integrated into business models. The framework recognizes that businesses typically evolve in their digital engagement, moving from basic online visibility to full-fledged e-commerce functionalities. Our Model is composed by 8 domains (organizational, informational, Promotional, Relational, Transactional, Interactivity, Multimedia & Design and social media)

3. **Identify and evaluate the maturity of most relevant attributes of farm websites.** Following data collection and content analysis of the farms' website information, the findings were systematically compiled into an Excel table. The presence of attributes was evaluated using a binary scale, where “0” indicated the absence of the attribute and “1” signified its presence, following a methodology similar to that of Platania et al. (2016). Descriptive statistical analysis was conducted using Microsoft Excel to interpret the data, presenting the results in absolute and relative frequencies.

3.2. **Eno-Olivotourism Experience “Website Evaluation Model”: a proposal**

After exploring general information about websites main elements, we studied their quality valuation model. The eMICA (extended Model of Internet Commerce Adoption) was our main guidance model, being an excellent starting benchmark for wine tourism sector because Doolin et al. (2002) used it to study 3 web sites of regions tourism organizations. For travel industry Ting et al. (2013, p. 54) summarized other important elements (in Table 3). As stated by Kabassi (2019, p. 544), “(farms) websites play an important role in attracting visitors, both physically and online. Therefore, these websites must be evaluated to ensure that their goals are met. However, the evaluation of a website is complex and is often omitted during the website's life cycle, despite its importance”. In the opinion of Qi (2022, p. 797), reinforce, saying that “over the last two decades, website evaluation methods and research priorities have changed: early website evaluation studies focused more on features, functions, and the content of the traditional provider website, and recent studies have focused more on the richness of website content and interaction with users or compare the content of different types of websites”.

Table 3. Main Travel industry Website attributes

Website inputs	Detail elements
Interactivity	Online availability, online reservation, worldwide reservation phone number, special request forms, general description/history, map, transport information, travel guides, awards, the latest news, address, fax, phone, e-mail, conduct or feedback form, guest book, tips, chat or discussion forum, newsletter, press releases, facility for interactive brokering, RSS, FAQ, privacy policy;
Navigation	Organizational e-mail hyperlink, sitemap, tourism search engine, keyword search;
Functionality	Organization contacts, currency converter, flash animation, membership system, download facilities;
Marketing	Prices or cost of products and services, packages and promotions, dining, bars, photos or photo album, video, itineraries information, awards, special offers, e-brochure;
Service	Check-in and check-out time, hotel rooms and suites, activities and entertainment, dining, bars, conference and meeting facilities, online purchase or gift store, map, itineraries information, e-brochure;
Innovation	Digital signature and encryption, view or cancel reservation, virtual tours, travel schedules and plans, Web 2.0 tools
Online processing	Online availability, online reservation, currency converter, view or cancel reservation, payment options, special request forms, online purchase or gift store, weather, local time, Multilanguage support, travel schedules and plans, membership system, chat or discussion forum, press releases, facility for interactive brokering, RSS, Web 2.0 tools.

Source: Own production based on Ting et al. (2013, p. 54).

Online technologies contribute to performance in terms of better productivity, profitability, process development, market value and sustainability (Can & Alatas, 2017; Dedrick et al., 2003). Kaplan & Haenlein (2010) suggest the use of ICT in an efficient manner. Based on all these contributions, our **Eno-Olivotourism website evaluation model** (Table 4) show 8 domains/stages: Organizational (Stage A) informational (Stage B), Promotional (Stage C), Relational (Stage D), Transactional (Stage E), Interactivity (Stage F), Multimedia and Design (Stage G) and social media (Stage H) and their subsections.

Table 4. Website Evaluation Model dimensions

Domain typologies			
A – Characterization of the Wine Tourism Farm		D – Relational Area	
A1	Counties of Douro	D1	Products, Services & Experiences using conditions
A2	Parish	D2	Accessibility conditions informations (for citizens with special needs)
A3	Name of the Farm	D3	Regional amenities & other customer information
A4	Site of the Farm	E – Product/Services & Experiences Transaction	
A5	Developed Activities	E1	Online booking
A6	Olivotourism and/or Wine Tourism Activities	E2	Online payment
A7	Offering Experiences in collaboration with partners	E3	Booking/purchase tracking
A8	Do you sell products / services on NET?	F – Interactivity Area	
B – Information Area on the website		F1	Stakeholders' Relationships (community)
B1	Vision and Mission	F2	Promote customers and visitors ideas exchange
B2	Location of the wine tourism farm	F3	Interactivity in real time
B3	GPS Location	G – Multimedia and Design Area	
B4	Organizational Image Communication	G1	Audio Information
B5	Advertising Campaigns	G2	Video Information
B6	Communicates Accomplishments or Events	G3	Augmented Reality
C – Promotional Area		H Co-Creation Area	
C1	Information Policy	H1	Social Networks Presence
C2	Presents a list of Products / Services	H2	Places ads/promotions on Social Media
C3	Refer Partners' links	H3	FAQs
		H4	Structured Online Surveys

Source: Own production based on eMICA construct (extended Model of Internet Commerce Adoption) and also on Correia & Dias (2003), Nielsen (2000), Richmond (1996), Tognazzini (1998), and W3C (1999).

As said above, in each website, a content analysis was done, looking for evidences (references) of each one dimension, following Jurado's eMICA strategy Jurado et al. (2018, p. 4), such as, "each layer consists of items that take the value 1 (indicating presence) or 0 (indicating absence)".

4. Results Discussion

The 8 Dimensions/stages of Douro's Wine & Olive Oil Tourism Websites were studied in detailed according their characteristics, and the results are as following. The importance given to wine experiences and less to those related to olive oil

is notorious. Companies are aware about natural and cultural heritage attributes, integrating them into tourism experiences and also publish their products, services and experiences in the Internet.

Stage 0: A – Organizational Area

The characterization of the Wine Tourism Farms showed that municipalities with the highest number of Enotourism farms are Alijó (25%), Peso da Régua (21%) and Lamego (17%). The farms produce mainly wines [still wines (22%), Port wine (20%)] and olive oils (30%). The most popular activities are related with wine tourism (14%) and both Wine-Olive Oil Tourism (12%).

In terms of other own resources available, 10% have accommodation and 5% restaurants. They offer several experiences, as: tasting [wine (13%), olive oil (6%)]; guiding tours to [wineries (8%), mills (3%), vineyards (9%) and Olive groves (5%)]; events [gastronomic (5%) and workshops (2%)]; experiences with other partners [related to food heritage (25%), natural resources (22%), local customs/traditions (17%)], and 58% of farms have their own physical and online store.

The website “Home page” generally contains relevant information: company Logo (44%), Team (26%), Company History (30%) and also Location on Google (65%), Georeferencing (31%). In terms of static communication, we found Message from the CEO (42%), company mission & values (both 8%), Business Partners and Links (25%) and Team Information (17%). With regard to advertising campaigns, wine tourism farms publish articles in press (10%), advocates causes (social, ecological, environmental) (17%), announce their Trademarks (17%), diffuses News Letters (21%), but a large number (34%) do not explore this potential on their websites.

Stage 1: B – Informational Area

Farms take great pride in their achievements, showcasing their accomplishments through event communications (15%), customer testimonials (19%), and awards (27%). Additionally, they emphasize their commitment to quality by displaying certifications (23%), including those related to Quality, Food Safety, Environment, and Health and Safety at Work. A notable aspect is the promotion of biological certification products (15%), along with Protected Designation of Origin (PDO) and Protected Geographical Indication (PGI) products, reinforcing their authenticity, regional identity, and adherence to traditional production methods.

Stage 2: C – Promotional Area

The promotional area involves personal information policies (26%), revealing a concern for the issue, or allowing the user to register (22%), and remove the website link (11%). But a huge number of cases showed an absence of promotional policy (41%). The importance given to the website as a showcase for products and services is clear in this case study, particularly as to: Wine Portfolio (14%), Olive Oil Portfolio (13%), Product price list (13%), Information on wine varieties (11%). The website promotional area is only used as a product catalogue.

Stage 3: D – Relational Area

It would be crucial to invest in the promotion of regional products, food heritage and stakeholders' relationships. By providing online transaction services, companies can present promos and discounts that cater to target consumers. Furthermore, organizations can analyze the habits of their consumers when making digital transactions to create appropriate promos. This section highlights customer support and community relationships. Importance is given only to conditions for products good use (29%). There is a lack of information associated with regional amenities, accessibility conditions (for customers with special needs), discussion forums and accommodation/restaurant partnership. To mitigate this difficulty, a closer relationship with municipalities is suggested by creating links to their web pages.

Stage 4: E – Transactional Area

Online transactions have become more common in the digital age. The development of commercial websites highlights a weakness in this area, like online booking (only 8 companies have this facility) as well as online payment and voucher printing. In tourism is important providing practical payment system, because online transactions provide convenience for both consumers and business owners. By presenting online transaction services, consumers will not be limited to those who are around offline store. For companies, instant verification processes will certainly reduce the need for human resources. For customers, a trusted online transaction system will give a sense of security when making payments.

Stage 5: F – Interactivity Area

The interactivity area focuses on a close connection with several stakeholders' or local communities, customers and the possibility of providing information in real time. In wine tourism website sample, 33% does not mention the local resources, but 15% promote traditional food and 12% cultural heritage. Sharing ideas with customers is undervalued (13%). In terms of real time interactivity, 40% allow to make online reservations and 20% agree with real time communication with customers. This important task to interact with customers on emerging channels, must be improved such as with self-service resources, messaging apps, social engagement, live chats, chatbots, SMS

Stage 6: G – Multimedia and Design Area

There is little maturity regarding the Multimedia and Design Area, in audio, video and augmented reality fields of information. The exponential increase in access to smart devices opens the door to a much more practical, secure shopping experience for customers and differentiated tourism experience.

Stage 7: H – Social Media Area

Connectivity is among the most significant benefits of social media. Social media for business is no longer optional. It's an essential way to reach a large range of customers, gain valuable insights, and grow companies' brand. So, "in the online environment, the positive network externalities, generated by ICTs make these plat-

forms more attractive as the number of users present on them, increases" (Kaplan & Haenlein (2010) *apud* Jurado et al. (2021, p. 83)), linking countless users at any time, everywhere. Also, information could be spread globally through social media and its connectedness, making it simple for customers to interact with organizations and others customers. As reported here, with regard to social networks, there is a presence of 51%, with emphasis on Facebook, using them in 33% to place advertisements and spread information about products (31%). As for FAQs and online surveys, these attributes are not valued. Social media, when used intelligently, can bring companies' success. Since it is the best form of direct contact with the target audience. So, in wine tourism sector is crucial to have direct contact with target customers, in order to promote wine and olive oil experiences, benefit businesses engaging influencers.

5. Conclusions

This paper shows the 35 wine tourism farm websites evaluation in terms of Enotourism in Douro region, under the supply-side lens, aiming to provide one of the first responses of the scientific literature regarding the wine tourism synergies in terms of Olivotourism experiences. Olivotourism as well as Enotourism have huge potential to involve communities, develop territories, and build co-creative experiences. Murgado-Armenteros et al. (2021) suggested a wide range of experiences in rural areas, (such as: oil mill visits, olive oil spa, olive oil tasting, purchase olive oil, enjoy olive routes, discover ancient olive trees, gastronomy, oil museums, speciality shops, popular festivals, fairs, landscape), since the most traditional ones until more creative and immersive. But to be successful, an online communication and promotion strategy will be necessary.

The assessments of the wine tourism website's attributes, displayed absence of content attractiveness and interactivity with stakeholders, claiming for more investment in several domains, considering a multi-product point of view: identity, content, services, Interactivity, usability, functionality, Navigation, reliability, Innovativeness and efficiency. This reality is in line with the conclusions of Carlisle et al. (2023), in the study carried out at European level, in 5 tourism sectors (accommodation establishments, tour operators and travel agents, food and beverage, visitor attractions and destination management organisations) in 8 European countries (UK, Italy, Ireland, Spain, Hungary, Germany, the Netherlands and Bulgaria).

The Eno-Olivotourism Website Model, exhibited a powerful Stage 1B-Informational Area with 39% references, followed by the Stage 2 C – Promotional Area with 27%, a medium website strength in Stage 7 H-Social Media Area with 16%, and a fragile quality related with Stage 5 F-Interactivity Area (7%) and also both Stage 3 D-Relational Area and Stage 4 E – Transactional Area accounting 5%.

The weakest Stage is G – Multimedia and Design Area with only 1%. Numerous farms does not have information, in several dimensions: Advertising Campaigns (34%), Promotional Policies (41%), Using Conditions (Products, Services & Experiences) (71%), Accessibility information (citizens special needs) (100%), Regional amenities & other customer information (45%), Online booking and purchasing

tracking (100%), Interactivity in real time (40%), Multimedia and Design Area (Audio Information, 100%; Video Information, 92%; Augmented Reality, 96%) and they do not use Structured Online Surveys (100%) to get customers information.

Our results are in line with Teixeira et al. (2021, p. 253) websites research, (a set of 40 papers obtained from relevant scientific databases) considering that “Low levels of diversity of Web accessibility were found in the different tourism activities analysed. The majority of studies published in this field are relatively recent and both manual and automated methods were employed. Web accessibility failures were mainly related to lack of connectivity with assistive technologies, complex layout, and navigation difficulties”.

The success of websites depends on their accessibility, Search Engine Optimization (SEO), performance and usability. For further investigation lines, identifying the impact of website quality on eno-olivotourism farm visitors' behavioural intentions is crucial for telling managers about how users (stakeholders) experience the level of website quality offered by companies.

The results provide strategic guidelines for private and public decision makers, to follow if they wish, to exploit the full potential of ICT. Regarding management implications, we recommend that eno-olivotourism companies pay more attention to the website, offering composite experiences (wine & olive oil), in order to create additional value for their visitors, empowering interactivity relationships with them.

The study offers a pioneering contribution to the intersection of wine tourism and olivotourism online presence, but presents a few limitations. The analysis focuses solely on the supply-side perspective by evaluating 35 wine tourism farm websites in the Douro region, not incorporating the demand-side view (tourists' perceptions, user experience, or behavioural responses to the website features).

Acknowledgment

Funding: The authors are grateful to the Foundation for Science and Technology (FCT, Portugal) for financial supported by the project “Olive4All – Olive Heritage for Sustainable Development: Raising Community Awareness of Living Heritage” [TTF#10478088] [#054] JPICH/0001/2020.

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