

Article

Industrial Heritage 2.0: Internet Presence and Development of the Electronic Commerce of Industrial Tourism

Eduard Cristobal-Fransi , Natalia Daries , Eva Martin-Fuentes *  and Yolanda Montegut-Salla

Business Management Department, University of Lleida, 25001 Lleida, Spain; ecristobal@aegern.udl.cat (E.C.-F.); ndaries@aegern.udl.cat (N.D.); ymontegut@aegern.udl.cat (Y.M.-S.)

* Correspondence: eva@aegern.udl.cat; Tel.: +34-973-703216

Received: 23 June 2020; Accepted: 21 July 2020; Published: 24 July 2020



Abstract: The role that information and communication technologies (ICTs) play in business management is currently a topic of increasing interest. Web 2.0 has emerged as an important source of innovation that contributes to organizational performance and improving the competitiveness of the tourism industry. However, evidence has been found that the tourism industry encounters difficulties when it comes to adopting these technologies and effectively applying them to e-commerce. The aim of this study is to analyze whether the websites belonging to industrial tourism facilitate effective communication with their target audiences. To this end, we propose and implement a model for analyzing websites based on the content analysis technique, considering the dimensions of information, communication, e-commerce, and additional Functions. This model is applied to 128 tourism resources in Catalonia with the aim of identifying opportunities arising from the use of Web 2.0 tools and addressing identified weaknesses and thus enabling more competitive management in the industry.

Keywords: industrial heritage; ICTs; electronic commerce; industrial tourism; web content analysis; Web 2.0

1. Introduction

Despite destinations becoming standardized as a result of technological advances and globalization, tourists are increasingly seeking out differentiation and personalized services [1]. This, in turn, has led to the proliferation of new types of tourism in which new technologies play a huge role [2], allowing small companies, resources, or destinations to be able to compete, and influencing aspects related to the economy, society, and culture [3].

Industrial tourism has become an alternative form of tourism with its own cultural identity [4,5]. Given the situation of crisis in which the industrial sector is immersed and the economic and financial difficulties facing many companies, industrial tourism represents one possible viable strategy for communities or regions forced to make a major effort to diversify and plan other kinds of economic activity [6]. This involves an entirely different focus than that of traditional mass tourism, since in most cases, the conversion of industrial heritage into a tourism resource takes place in areas with little history of tourism, making it a completely new source of income and generator of employment [7].

Industrial tourism targets a highly specialized segment of visitors with a high level of culture and an interest in historical heritage. The conversion of the secondary sector into the tertiary sector is considered a possible solution to the current process of population decline in certain areas and a means of supplementing the income of the area's inhabitants [5].

However, it must be borne in mind that the success or conversion of a certain area is not achieved through the mere appearance of a different type of activity or an alternative kind of tourism. There is

also a need to carry out the necessary promotion and distribution activities through the appropriate channels in order to publicize it and reach the market [8].

Today's tourists obtain their information through the Internet and websites must therefore meet the expectations and needs of their customers if they are to reach their target audience and achieve their proposed objectives [9]. This means it is vitally important to integrate social networks into the marketing strategies that are to be implemented [10], since they help to create links, increase customer satisfaction and loyalty, and generate greater trust [11]. In relation to the use of social networks, The authors of [12] stated that they have a considerable impact in the tourism sector with respect to other sectors and are one of the first sources of information for potential tourists.

ICT can help destinations prepare to be 'smart' and responsive to co-participative tourism planning, and they can influence attitudes towards tourism and residents' involvement [13]. Therefore, sustainable and smart cities are the new objective for urban and tourism development. ICT helps its managers to identify and develop new strategies to increase the performance of the city and ensure that it endures over time as a tourist destination [14]. In view of the significant influence ICTs exert on the management of tourism companies and the behavior of consumers of tourism products and services, we consider there to be a need to assess Internet presence and use in such a territorially and economically important and strategic sector as industrial tourism. We also believe this should be achieved by analyzing the Web content offered by these resources. Therefore, the main objective of this work is to use a website analysis model to determine whether these industrial tourist destinations are taking advantage of the possibilities of the Web and of the web 2.0.

This exploratory research will provide us with in-depth information regarding the current situation of websites belonging to this type of tourist facility. In Spain, few studies have identified these aspects from a marketing perspective and in this level of detail, applied to the domestic and industrial tourism sector [7,15,16]. The study therefore aims:

- To formulate a model to evaluate the content of websites belonging to the industrial tourism sector based on the following four categories: Information, communication, electronic commerce, and additional functions.
- To evaluate websites from a sample of establishments offering industrial tourism in Catalonia.
- To improve the online management of these types of establishments by offering practical recommendations for more effective communication with their publics through their websites.

2. Industrial Tourism

Industrial tourism can be defined as any tourist activity that relates tourists to different local industries, whether they are in operation or not, according to their industrial activity [7].

Abandoned industrial facilities and the infrastructure related to this economic activity often become a resource of interest not only to experts but, thanks to their uniqueness, also to another type of public, namely tourists [17]. The result is a highly specified tourism sector of great interest, usually referred to as industrial tourism. This form of tourism offers visits to all types of industrial sites and allows tourists to familiarize themselves with the typical industrial environment and development of industry in the area [6]. The conclusion to be drawn from this is that even if industrial production has finished in the area, there is no need to destroy the production facilities and manufacturing equipment. At a time when outsourcing is becoming prevalent in the economy and society and people are gradually losing contact with production, such technical facilities not only become a source of knowledge, but also important evidence of human technological development and the creative work of our ancestors [18]. Therefore, preserving this heritage should not be considered as an activity exclusive to the institutions that preserve monuments, but also an important task for society as a whole. That said, maintenance is only the first phase and must be followed by a second phase in which conservation and renovation lead to reclaiming these industrial monuments. Subsequently, the third phase is characterized by activities aimed at making these historical buildings accessible to the public [17,19]. It is here that efforts to

preserve heritage meet with tourism, since these types of monuments become an important attraction for visitors to a destination.

Industrial heritage serves as an interesting demonstration of the skills and ingenuity displayed by our ancestors. This type of heritage includes industrial buildings, transport, wood, energy engineering, electrical engineering, mining, metallurgy, foundry, mechanical engineering, chemical product equipment, ceramics, leather, paper, the food and textile industries, the gas industry, glass, water, and military facilities [17]. However, not all types of heritage are equally attractive, and it is not always easy to classify places by heritage type because some do not fit perfectly within a defined field of industrial activity. In this particular case, among many others, there is a wide range of facilities as cooperatives and farms, industrial museums, warehouses, hydroelectric power plants, mining facilities, ceramics workshops, ecomuseums, textile factories, breweries, and flour mills.

Industrial tourism is a type of tourism dedicated to developing sustainable tourism strategies [20]. Tourism resources related to industrial tourism link local inhabitants and visitors with the environment [21]. These resources are made up of places, landscapes, historical memory, nature, and the traditions and heritage of each local community that help the sustainable development of the destination [22].

In summary, industrial tourism is a sustainable and comprehensive tourism product that brings together the activities offered, the participation of local inhabitants, and the preservation of the cultural and natural heritage of the region [21]. Consequently, industrial tourism resources are cultural resources that serve to advance sustainability objectives [5]. Therefore, industrial tourism can be a key instrument to protect the cultural, historical, and natural heritage of a region. Therefore, the way to communicate the activities carried out related to industrial heritage is key when choosing the destination and the decision to visit the industrial touristic resource.

3. Methodology

Websites have become companies' calling cards and are an excellent means of communicating and representing an organization. Therefore, we consider it to be of great interest to create a method for analyzing and evaluating websites belonging to industrial tourism resources. A literature review revealed how various authors agree that there is no universally recognized methodology for evaluating websites [9,23,24].

The most frequent research methods used in the evaluation of websites are fundamentally based on surveys, experimental evaluation, and content analysis [25]. According to [24], the most commonly used methodological approaches in research on tourism website measurement can be divided into five types: (1) The accounting method; (2) the automatic method; (3) the numerical computing method; (4) the user opinion method; and (5) the combined method. The accounting method will be used for the present investigation.

Regarding the analysis itself, a large number of studies refer to a series of indicators that can be grouped into four major types: Technical, commercial, content-related, and design-related [25,26]. From the perspective of market orientation, websites are evaluated by identifying users as potential clients, leading the evaluation to focus more on aspects related to the promotion of activities, online transactions, and details of products and services [27]. We have chosen to use this research perspective in the present work.

To analyze whether the websites of the industrial tourism resources used the marketing advantages of the Internet, content analysis was proposed to determine the features provided on the websites. Following the authors of [28], we designed the process of content analysis through the following eight stages:

Stage 1. Formulating research questions or hypotheses: We uncovered that industrial tourism represented a significant tourist attraction and was vital to an economy based largely on tourism.

Stage 2. Identifying variables: We identified variables related to the information, communication, e-commerce, and additional functions that industrial tourism websites provided.

Stage 3. Defining categories and units of measurement: We analyzed all the pages for each industrial tourism resource's website (not just the home page). We chose all the web pages as the unit of analysis because they contained all the elements we wanted to examine.

Stage 4. Creating a coding scheme: A codebook that contained the categories and their measurements was created. All items were included in the following dimensions: Information, communication, e-commerce, and additional functions.

Stage 5. Sampling: We selected the industrial tourism websites from Catalonia (Spain). A total of 127 websites were analyzed.

Stage 6. Training coders: By using the codebook, two trained coders evaluated the industrial tourism websites. Training sessions were used to reconcile the coding differences between the coders.

Stage 7. Coding: Coding of the sample was processed independently, based on the codebook.

Stage 8. Data analysis: Data analysis was conducted by assessing the presence or absence of certain features and aggregating data into tables and charts.

With a view to developing a model that tailors the web content analysis specifically to the industrial sector, a review of the existing literature was carried out [29–34], resulting in the following model being proposed (see Table 1 below). The model provides us with an overview of the resources that websites belonging to industrial tourism establishments make available to their users so they can obtain the information required or interact with them, whether to perform electronic commerce activities or to raise issues on a secure platform that ensures compliance with the quality standards of a website.

Table 1. Proposed model for industrial sector web content analysis.

Dimensions	Definition	Authors
Information	This dimension assesses the information available on the websites of industrial tourism establishments and ease of finding it.	[25,29–39]
Communication	This dimension measures the website's capacity to interact with customers, either through communication mechanisms, Web 2.0 resources or the availability of information in different languages.	[25,29–34,36–44]
Electronic commerce	This dimension assesses the website's capacity to conduct secure commercial activities.	[25,29,32–34,36,37,45]
Additional functions	This dimension measures the website's capacity to convey security through data protection elements and certifications and the use of new media such as the mobile version of the website or its applications.	[29,38,42,45,46]

Source: authors' own data.

3.1. Information (I)

Tourism is a sector that makes intensive use of information as the service cannot be tested before purchasing [47]. As a consequence, it is essential to establish adequate communication channels to convey the necessary information about the specific destination to tourists. Therefore, the dissemination of information becomes one of the main objectives of websites promoting tourism. Hence, the inclusion of this information variable, which evaluates the presence of aspects related to the information available based on four categories: (1) Information on the industrial tourism resource; (2) facilities and services; (3) environment; and (4) promotion (see Table 2).

3.2. Communication (C)

This dimension is significantly important because it measures the level of adoption of Web 2.0, clearly defined by interactivity. The opportunity for communicative interaction between the customer and the company or the tourist destination is key when designing Web presence [48,49], since it entails advantages such as: Longer time spent on the website, greater processing and impact of information, and the creation of a customer relationship [40]. Given the intangible nature of tourist services and

the widespread use of social networks, personal recommendations become a highly influential factor when making a purchasing decision [11,50]. Moreover, with the Internet, the recommendations through the web 2.0 known as electronic word of mouth (eWOM) are becoming more important because these recommendations influence other customers [51–53]. It is therefore vitally important for companies and tourist destinations to include on their websites applications that foster feedback with the customer and in which the tourist plays an active role [30]. This is especially true of social networks, which are characterized by their inherent interactivity [40,54]. This variable consisting of three categories will measure the availability of web tools to communicate with the customer on the industrial tourism resource's website (see Table 3). Additionally, it will also check for versions of the website in other languages.

Table 2. List of items for the Information variable (I).

Categories	Items
1. Information	I.1.1. Description of location (which economic activity it belongs to, address, origin, history, etc.)
	I.1.2. Location images
	I.1.3. Visual information regarding visits: duration, price, whether guided or not, etc.
	I.1.4. Communication of news or events
	I.1.5. Links to websites evaluating tourist services (Booking, Trivago, Tripadvisor, etc.)
	I.1.6. Schedules for visits, opening times, vacation schedule
2. Facilities and services	I.2.1. Information regarding the area to be visited
	I.2.2. Information on how to get there (maps or Google maps)
	I.2.3. Information on the processes involved in carrying out the economic activity
	I.2.4. Information on the different operational areas of the company
	I.2.5. Information regarding the final distribution channels
3. Environment	I.3.1. Links to different tourism information websites for nearby areas
	I.3.2. Links to other businesses related to the economic activity
4. Promotion	I.4.1. Promotion of events, advertisements, etc.
	I.4.2. Economic incentives: vouchers, coupons, discounts (for groups, for example), exclusive offers, product promotions, etc.

Source: Authors' own data.

Table 3. List of items for the communication variable (C).

Categories	Items
1. Interaction with customers	C.1.1. Contact: telephone, fax, e-mail
	C.1.2. Possibility of receiving comments online
	C.1.3. Instant messaging
	C.1.4. Online surveys
	C.1.5. Frequently asked questions section (FAQs)
	C.1.6. Section to subscribe to the newsletter and offers (Newsletter)
	C.1.7. Customer registration area
	C.1.8. Possibility for customers to vote on services received and visits made
2. Resources Web 2.0	C.2.1. Content syndication (RSS)
	C.2.2. Podcast/Vodcast
	C.2.3. Applications that allow the user to publish content
	C.2.4. Possibility for customers to share content (retweet, share, etc.)
	C.2.5. Link to Twitter
	C.2.6. Link to company blog
	C.2.7. Links to external image and video platforms (YouTube, Flickr, Instagram, Pinterest, etc.)
3. Language capabilities	C.2.8. Links to company's social networks (Facebook, LinkedIn, Google+, etc.)
	C.2.9. Link to Wikipedia
	C.2.10. Other 2.0 platforms (Technorati, Netvibes, etc.)
	C.3. Website available in more than two languages (Catalan, Spanish and a third language)

Source: Authors' own data.

3.3. Electronic Commerce (EC)

This dimension refers to the capacity to distribute and market tourism products [29]. This indicator assesses aspects related to mechanisms for booking, payment, and secure payment of services, as can be seen in Table 4. We can consider this dimension as a key aspect to analyze industrial tourism maturity when adopting the Internet in general and e-commerce in particular [55].

Table 4. List of items for the electronic commerce (EC) variable.

Categories	Items
Reservation services	EC.1.1. Possibility of making a reservation online
	EC.1.2. Discount vouchers
Pay online	EC.2.1. Possibility of paying online
	EC.2.2. Guarantees of secure payment

Source: authors' own data.

3.4. Additional Functions (AF)

Following the work conducted by [29], we decided to add a series of additional aspects taking into account regulations on electronic commerce in Spain, such as data protection and quality certifications. Nowadays, functionality and accessibility are becoming of critical importance to users [56,57], as can be seen in Table 5. Furthermore, and taking into account the increasing use of mobile technology, it was also considered appropriate to include the existence of a mobile version on the website in our analysis. According to some research [46,58], mobile devices are set to become, or are already, one of the main tools for seeking information and paying for purchases in the tourism sector.

Table 5. List of articles for the additional functions variables (AF).

Categories	Items
1. Data security	AF1.1. Privacy policy or legal notice
	AF1.2. Data Protection Act
2. Certifications	AF2.1. ISO9000 or EFQM quality certificates
	AF2.2. Q Quality Tourism Certification
	AF2.3. Environmental certifications (ISO14000 or EMAS)
	AF2.4. Other certifications (SICTED, D.O., etc.)
3. Mobile version	AF3.1. Web link to website's mobile version
	AF3.2. Availability of apps

Source: authors' own data.

As mentioned previously, to achieve our objective we opted to evaluate websites from a marketing perspective, which involved identifying contents and services offered online. Analysis entailed identifying a number of possible informative content and interactive services that are considered useful for or attractive to a user of a tourism website [24,29,32,33]. Each of the items was chosen on the basis of the literature review, adding new elements to specifically adapt them to industrial tourism resources.

To conduct the fieldwork, a template was developed following the previously proposed model, identifying the different aspects that were to be taken into consideration from the review of the literature on the subject. In order to ascertain the websites' online presence, level of information, and interaction on the Internet, we decided to adopt the content analysis technique from a quantitative perspective [29,33,59]. This entailed using a template with 46 indicators related to the dimensions of information, communication, electronic commerce, and additional functions for each of the websites of the industrial tourism resources analyzed, in line with the previously proposed model.

The analysis focused on websites belonging to industrial destinations and tourist resources in Catalonia, related in the Appendix A. Of the 188 resources selected, 127 had a website. Some tourist resources are small in size and do not have the resources to manage a website; others are managed by public entities such as councils or local authorities. For that reason, information on the industrial tourism resource is often included as a section on the websites of these institutions. The fieldwork was carried out during the period January to April 2017.

4. Results

In addition to the analysis and comparisons among types of establishments, the results displayed represent the percentage of resources used by each tool according to the type of tourism resource it belongs to.

4.1. Information Dimension

The first of the dimensions analyzes the mechanisms that towns with industrial tourism resources in Catalonia have established to inform potential customers about their main features, facilities, environment, and promotions for tourist activities and visits. As Figure 1 shows, the contents related to information regarding location (I.1) and facilities and services (I.2) are better represented than those related to the environment (I.3) and promotion (I.4).

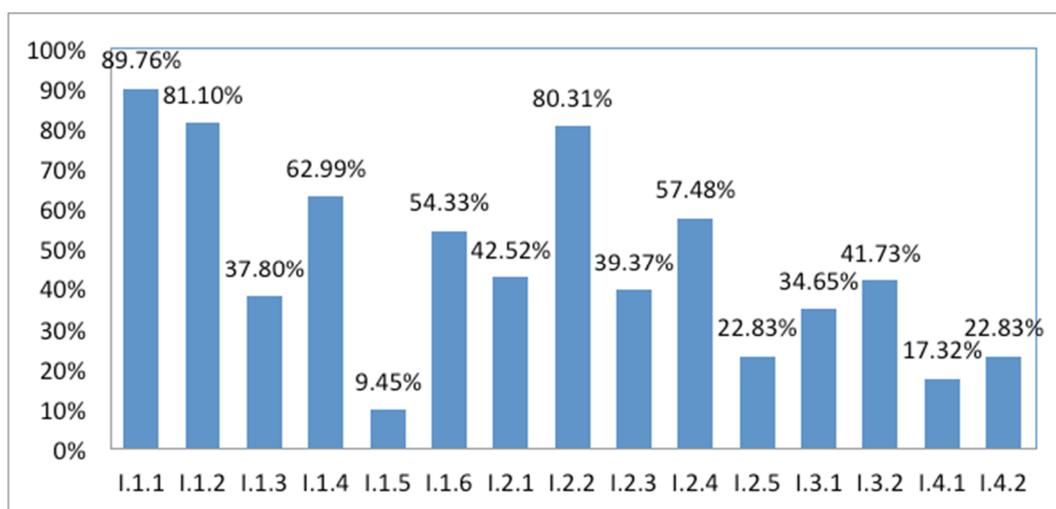


Figure 1. Information indicators.

The items most frequently used by these tourist locations to provide information are: A description of the location (economic activity, address, origin, history . . .) (I.1.1) and location images (I.1.2), information on the location and how to get there (maps or Google maps) (I.2.2), and facilities. These are found in more than 80% of cases.

Those informative aspects that are present in 50% to 80% of cases belong to the items: Communication of news or events (I.1.4) and visiting schedule, opening times, vacation schedule (I.1.6), and information on the different operational areas of the company (I.2.4) corresponding to facilities and services.

It is worth highlighting the absence of information in the categories of promotion of activities and visits (I.4) and web links evaluating tourist services (Booking, Trivago, TripAdvisor . . .) (I.1.5), since less than 25% of the websites analyzed contain information regarding these aspects.

Therefore, website managers for these Catalan tourist locations should strengthen the attributes of promotion (I.4) and visual information about the visit, duration, price, guided visit or not, schedule, etc., (I.1.3) and take greater advantage of web links evaluating tourist services (Booking, Trivago, TripAdvisor, etc.) (I.1.5), since these elements can be crucial in a tourist's decision to visit or not.

4.2. Communication Dimension

The Communication dimension includes those tools that favor interaction with the customer via the website, using Web 2.0 resources and offering all content in more than two languages (Catalan, Spanish, and a third language).

As Figure 2 shows, the results for items related to the relationship with the customer are significantly lower than those for the Information dimension. One finding of note is that over 90% of the tourist establishments provide an email address and telephone number (and in some cases even fax) (C.1.1).

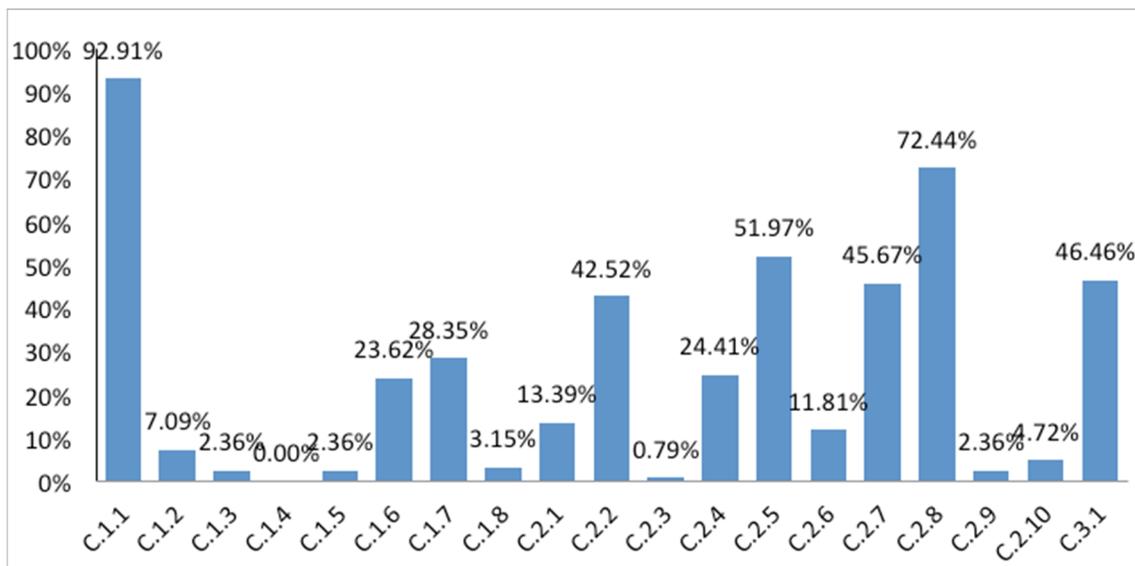


Figure 2. Communication indicators.

Regarding the use of Web 2.0, those links that stand out are Facebook, LinkedIn, and Google+ (C.2.8). More than 50% of the establishments use Twitter (C.2.5). Another surprising result is that more than 45% of the analyzed websites incorporated podcasts/vodcasts (C.2.2). This is explained by the cultural content that these types of resources have, where consumers can subscribe to videos or audios of the activities or exhibitions that take place regularly, like podcast tours [60].

Finally, to fulfill the requirements of the language item, websites had to be available in at least three languages, given that the study was carried out in Catalonia, where the official languages are Catalan and Spanish. A third language would be required since we are dealing with the tourism sector, where international customers may also be targets. In this case, 46% of the websites were available in a third language, mainly English. Other languages also used on the websites include French and German. This situation acquires greater importance if we consider that according to the FRONTUR report, the main countries that sent tourists to Spain in 2018 were the United Kingdom, France, and Germany, which together accounted for around 48.7% of tourists received [61].

4.3. Electronic Commerce Dimension

The e-commerce dimension analyzes mechanisms put in place to make reservations at industrial tourist destinations and secure online payment for tickets.

Figure 3 reveals that these items are present in less than 37% of the industrial tourist resources analyzed. However, these data are not alarming as many such establishments have free entry. This is the case with buildings owned by the town or city council, libraries, civic centers, or private companies aiming to promote their products through visits to their facilities. Therefore, payment for these visits is irrelevant (EC.2) and it is sometimes not even necessary to book in advance (EC.1). Bookings are usually made by phone or text message.

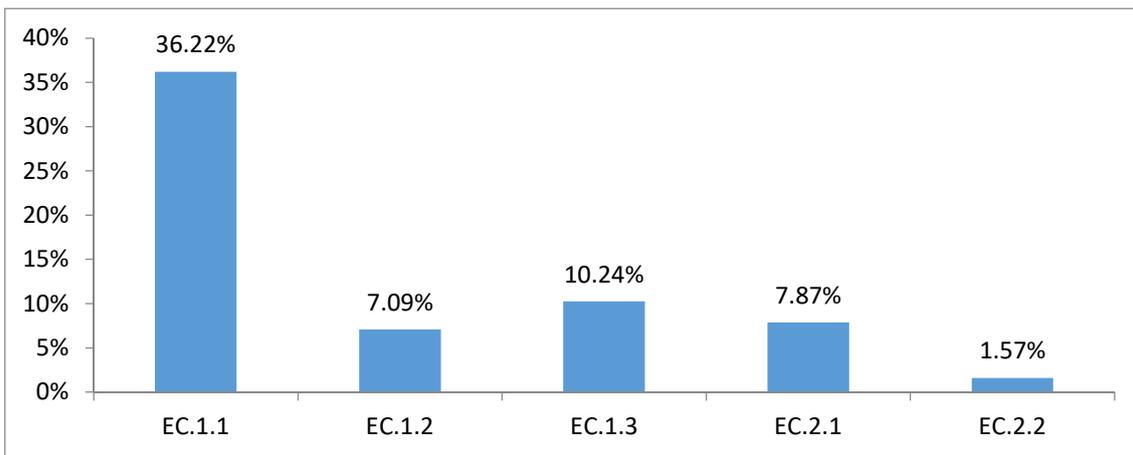


Figure 3. Indicators on electronic commerce.

For items in the online payment category, we observe that only 7.87% of the tourist establishments allow payment for tickets through their website (EC.2.1), with 1.57% allowing payment by PayPal (EC.2.2) and the others allowing payment by credit card, and to a lesser extent, bank transfer.

4.4. Additional Functions (AF) Dimension

The fourth dimension that was the subject of analysis, related to additional functions, analyzes additional information that may be of interest to visitors. Within this dimension, we find the categories of data security, certificates, and mobile versions.

As indicated in Figure 4, and as we have seen in the previous dimension, this additional information is at times not available. Almost 50% of the websites analyzed have a privacy policy or legal notice (AF.1.1), followed by data protection information (AF.1.2), which is present in 37.80%.

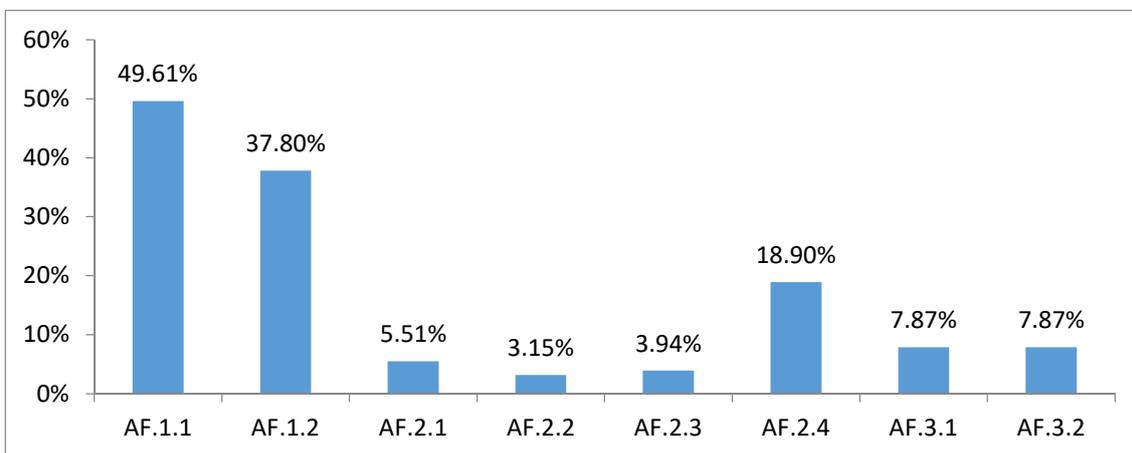


Figure 4. Additional functions indicators.

Although Figure 3 reveals that the item customer registration (C.1.7) is present on 28.35% of the websites analyzed and data protection information (AF.1.2) is found to have an even higher percentage, not all of the websites that allow customers to register comply with data protection regulations. However, these are a minority within the 28.35% that do allow customers to register.

Few of the websites analyzed have certifications (AF.2), with “other” certifications (AF.2.4) predominating among those that do (18.90%). The most common certification is designation of origin, which is held by wine and cava cooperatives, and those producing oil. The remaining qualifications differ greatly from one another.

Regarding mobile versions, only 7.87% of the websites analyzed have links to one, while these also have mobile applications (AF.3.1 and AF.3.2).

This result may be especially significant if one takes into account that, according to a market study of tourism apps [62], two out of every three travelers tend to buy, search for, and book their tourist activities via their mobile phone, and three out of every four regular travelers use their smartphone during their stay at the destination. Furthermore, established websites in this market, such as Facebook and YouTube, have already implemented a mobile version of their websites, achieving positive results [63]. In this environment and given the increasing use of mobile devices by tourists, companies should adapt their websites to these devices, especially those related to the tourism industry.

From the analysis of these four indicators, we deduce that a significant number of industrial tourism facilities in Catalonia have only a basic and often static online presence. These results are consistent with other studies in Spain, which indicate that websites are static showcases of products and services that do not make use of their dynamic and collaborative capacities to promote a bilateral relationship with their users when it comes to content [29]. A study on websites belonging to hotels in Spain conducted by [32] found that, in general, these tourism websites had not adopted strategies that favored customer interaction or the recommendation of their products or services on the Internet.

5. Conclusions

The main aim of this work was to study the effectiveness of websites belonging to industrial tourism resources in Catalonia. To this end, we analyzed whether the content of these websites facilitates interactive communication with customers and proposed a comprehensive model for analysis that may be useful for studying the online communication of not only industrial tourism establishments, but also other types of tourism and service companies. This was done by adopting the theoretical approach to the concepts of industrial tourism and ICT in the design of websites and subsequently applying a content analysis following the proposed model.

This research has identified a series of results for each of the aspects analyzed: Information, communication, electronic commerce, and additional functions. First and foremost, the websites belonging to this type of tourist facility have been observed to offer a significant amount of information.

Although in some cases there is a lack of data on some of the services offered by companies linked to industrial tourism or the destination, the results confirm that this type of establishment generally fulfills users' basic information needs when choosing their industrial tourism destination, which helps to reduce the uncertainty generated before a trip.

Secondly, and focusing on the communication dimension, we have confirmed that the websites analyzed mainly employ traditional means of communication with their users, such as email or telephone. They also employ more interactive resources such as social networks, blogs, or image and video exchange platforms, though to a lesser extent. Given the importance of personal recommendations when making a purchasing decision in this industry [11,50], we believe it advisable to encourage further use of social media to foster communication with users and capture their opinions.

Thirdly, with respect to the E-commerce dimension, which is related to the website's capacity to distribute and market tourism products [29], we conclude that the establishments analyzed still have a long way to go, with the implementation of online booking and payment mechanisms still being at rather low levels and with much room for improvement.

Finally, regarding the additional functions dimension, although the industrial tourism websites analyzed do contain information regarding their privacy policy and quality certifications, they still fall short in this regard. The same can be said of their adaptation to mobile devices, a greater awareness of their importance being needed due to their increasingly extensive use among potential customers.

The effectiveness of the websites analyzed can only be regarded as average, since they do not incorporate all the items necessary to provide a sufficient level of information and adequate interactive communication with users. This could be due to the fact that investment earmarked for the design of these applications to take advantage of market opportunities, such as the generation of relationships

with both customers and new users through the Internet, is still not sufficient. As suggested by [10], it would be useful for these websites to integrate social networks into the marketing strategies they wish to implement.

Taking into account the situation of crisis in which the industrial sector is immersed and that industrial tourism may be viable for communities or areas forced to make an effort to diversify and approach other types of economic activities [6], we believe that this type of tourism should be taking greater advantage of information technologies by creating more complete websites with a higher degree of functionality, not just to inform the potential customer but also as a viable medium for electronic commerce.

Some of the websites analyzed lack information regarding the possibility of visiting the establishment, the duration of such visits, and the number of people who can visit at the same time (conditioned by the size of the facilities). This type of information would help the planning of visits and enhance these locations as tourist destinations for a more diverse public, which in turn would contribute to their development as destinations, especially since industrial tourism is also a source of income and a generator of employment in areas that do not have a long tradition of tourism [7]. In this way, they can also contribute to supplementing the income of inhabitants of the area [5].

The websites analyzed display a low level of interactivity, and as mentioned previously, most of them are only informative in nature. Thus, using Web 2.0 resources and proposing strategies and quick response channels for the customer (frequently asked questions, online comments, etc.) would turn static websites into dynamic ones. This would help the websites obtain recommendations from other users and serve as a source of inspiration for potential travelers. Although many of these tourist locations can be visited free-of-charge, others cannot, and offering the opportunity to purchase tickets on the website would help tourists plan their trip and avoid the inconvenience of standing in line at the ticket office upon arrival.

The results obtained allow us to make recommendations regarding aspects for possible future actions that may help transform these types of tourist resource into organizations with a strong customer orientation. Industrial tourism establishments must incorporate a series of elements on their websites that provide greater connection with the users who access them. These entities must seek to generate feedback between themselves and their visitors, which will contribute to improving the management of the organization. It is also advisable to incorporate more informative content, regarding both the services offered and the tourist resources in the area. This would make the website content more suitable to the demands of their target audience.

Finally, we can state that the data deriving from this research represent an added value in relation to both marketing strategies in general and developing the online presence of companies and entities in the industrial tourism sector. The managers of these organizations must take into account the dimensions analyzed here in order to interact more optimally with their target audience. Thus, in relation to practical management implications, those responsible for industrial tourism companies should use their websites to improve links with consumers, since a good online presence will have a positive impact on the image of the organization.

In addition, from a global point of view, we recommend the destinations to promote this type of tourism, as it has been proved that industrial heritage is compatible with sustainable development goals (SDGs) and helps to improve a destination's image [64].

When designing the website of the resource or tourist destination, we therefore recommend that a series of guidelines be followed and a set of fundamental elements included in relation to the four proposed dimensions: Information, communication, electronic commerce, and additional functions. An effective Internet presence will yield better results, since an increased number of visits to the website may in turn translate into bookings.

As with all investigations, ours is not exempt from limitations. In this respect, we would note that the present research has analyzed the Internet presence of this type of entity on the basis of items obtained from a review of the relevant literature, but without having taken into account other factors,

such as the size or the dimension of the tourist resource or establishment. Another limitation is the transversal nature of the research, which does not allow the evolution of these websites to be studied, and more, if we take into account that the data collection in this study is from 2017. Thus, this study is a snapshot of the Internet presence of industrial tourism resources at a particular moment in time. It is important to keep in mind that Web 2.0 is dynamic and constantly changing. To address this, and as a future line of research, a cross-sectional study could be designed to analyze the development of the online presence of this tourism sector over time.

As another future line of research based on the results presented, we propose expanding the websites analyzed to include those located in other regions or countries so as to obtain more data and enable a comparison of results. In addition, another qualitative analysis (such as personal interviews) could be conducted with the managers of these facilities or a questionnaire administered to users to determine which elements of the website to evaluate and study the causes for the informative and interactive shortcomings of these sites.

Author Contributions: All authors collaborated equally. Conceptualization: E.C.-F. and Y.M.-S.; Methodology: N.D., E.C.-F. and E.M.-F.; Software: E.M.-F.; Validation: Y.M.-S.; Formal Analysis: E.M.-F. and N.D.; Investigation: Y.M.-S.; Data Curation: N.D. and E.M.F.; Writing—Original Draft Preparation: E.M.-F. and N.D.; Writing—Review & Editing: E.M.-F.; Supervision: E.C.-F. and Y.M.-S.; Project Administration: E.C.-F. and Y.M.-S. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Acknowledgments: The authors thank to the Ministry of Economy, Industry and Competitiveness for the granting of the TURCOLAB project (ECO2017–88984–R).

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A List of Industrial Tourism Resources Analyzed

Industrial Resource	Website
Aguas Minerales Caldas de Boí—Lleida	http://www.aguadecaldesdeboi.com/
La casa del agua, trinitat nova—Barcelona	http://museuhistoria.bcn.cat/ca/node/594
Fundació Aigües de Manresa, Junta de la Sèquia—Barcelona	http://parcdelasequia.cat/
Transalfals & la Vispesa, SCL—Lleida	http://iberalfa.es/
Estació Termal Caldes de Boí—Lleida	http://www.caldesdeboi.com/
Vapor vell—Barcelona	http://ajuntament.barcelona.cat/biblioteques/bibvaporvell/ca
Edifici de les Aigües—Barcelona	https://www.upf.edu/campus/es/ciudadella/aigues.html
Can Saládrigas—Barcelona	http://ajuntament.barcelona.cat/biblioteques/bibpoblenou/ca
Associació Shalom—Lleida	http://www.shalomtaller.net/
Agro-Massot, S.A.—Lleida	http://www.agromassot.com/home.html
Cárnicas Ordóñez, S.A.—Lleida	http://www.carniceriaordo-nez.es/
Corporació Alimentària Guissona, SA—Lleida	http://www.cag.es/default.asp?id=1
Mafriseu, SA—Lleida	http://mafriseu.com/
Peguera Pallas, SL—Lleida	https://www.Carnisseria-Peguera-Palla.com
Central Hidroelèctrica de Canelles—Lleida	http://www.patrimonihipdroelectric.com/ca/calaix-historic/c-dinterpretacio-de-laigua-de-canelles#
Central Hidroelectrica de Tavascan—Lleida	http://www.tavascan.net/central-hidroelectrica-de-tavascan/
Cal Balsach—Sabadell, Barcelona	http://www.sabadell.cat/ca/ccivics/centre-civic-de-la-creu-alta-cal-balsach

Industrial Resource	Website
La sedeta—Gracia, Barcelona	http://ajuntament.barcelona.cat/ccivics/lasedeta
Manufacturas Serra Balet, fàbrica de Sants—Barcelona	http://mediterrani1931.com/#
Can Ricart del Raval, Fàbrica—Barcelona	http://www.canricart.com/
Ceres roura—Figueres (Girona)	http://www.cerasroura.com/
Ceràmica Roca Caus—Lleida	http://ceramicarocacaus.com/
Fàbrica de Cerveses San Miguel—Lleida	https://www.sanmiguel.es/
Poch's microcerveceria—Girona	http://www.cervesapochs.com/
Moritz, fàbrica de cervesa—Barcelona	http://moritz.com/ca
Polígon industrial Riu Clar—Tarragona	http://poligons.tarragona.cat/
Antigua Fàbrica de Cervesa Damm "La Bohemia"—(Camp de l'Arpa) Barcelona	https://www.estrelladamm.com/ca
La tèrmica de roca umbert fàbrica de les arts—Barcelona	http://rocaumbert.com/
La tabacalera—Tarragona	http://www.tarragona.cat/lajuntament/equipaments/latabacalera
La fàbrica de farina "Sant Jaume" o "farinera del clot"—Barcelona	http://www.farinera.org/
La estació de França—Barcelona	http://www.trenscat.com/renfe/estaciodefranca_ct.html
El Parc de la Pegaso—Barcelona	http://lameva.barcelona.cat/ca/aprofito-la/parcs-i-jardins/parc-de-la-pegaso_92086017159.html
A.D. tramontana—Emporda—Girona	http://tramontanacorp.com/
Myrurgia, edifici—Barcelona	http://www.grupohotusa.com/
La chartreuse—Tarragona	http://www.eoitarragona.cat/
La fàbrica samar't—Vilafant—Girona	https://www.samart.com/
Fàbrica de motocicletes rieju—Figueres (Girona)	https://www.rieju.es/es
La fàbrica can Batlló de "la bordeta"—Sants, Barcelona	https://www.canbatllo.org/
Instal·lacions garcia de pou—Girona	http://www.garciadepou.com/es/
Harinera Albareda—Barcelona	http://www.farinera-albareda.com/
Fruits de Ponent, SCCL—Lleida	http://www.fruitsponent.com/
Fet a Casa—Lleida	http://www.fetacasa.cat/
La torre Jaume I y la torre San Sebastià—Barcelona	http://www.telefericodebarcelona.com/ca/home/
Pallarès Ganiveteria—Lleida	http://www.pallaressolsona.com/?page_id=21170&lang=ca
Herboristeria Nogue—Lleida	https://www.herbesdossier.com/
La maquinista terrestre y marítima de Sant Andreu—Barcelona	http://link.bcn.cat/cPdIMdSA
Escuela Municipal de Artes y Oficios de Barcelona	http://agora.xtec.cat/iesm-jmzafra/
Lactic Ermengol—Lleida	http://www.granjaermengol.com/
Formatge Baridà—Lleida	http://www.formatgebarida.com/
Formatgeria Mas d'Eroles—Lleida	https://www.masderoles.com/
Formatges Monber—Lleida	http://formatgesmonber.blogspot.com.es/2007/06/formatges-monberelaboraci-artisanal.html
Tros de Sort, S.L.—Lleida	http://trosdesort.cat
El Pastoret de la Segarra, S.L.—Lleida	http://pastoret.com/
Distribucions Portet, SA—Lleida	http://www.licorsportet.cat/
Licorera de la Segarra, S.L.—Lleida	http://www.licoreradelasegarra.cat/
Ilemo Hardi, S.A.—Lleida	http://www.hardi.es/
Gràfiques Montserrat—Figueres (Girona)	http://www.grafiquesmontserrat.com/
Mines de la sal de Cardona—Barcelona	http://cardonaturisme.cat/ca/que-fer-hi/parc-cultural-muntanya-de-sal/

Industrial Resource	Website
Mina de plomo—bellmunt del priorat (Tarragona)	http://minesbellmunt.com/
Molino de agua—l'aleixar (Tarragona)	http://www.aleixar.altanet.org/molins-fariners
Ecomuseu de les Valls d'Àneu—Lleida	http://www.ecomuseu.com/
Ecomuseu Hidroelectric de la Vall Fosca—Lleida	http://www.vallfosca.net/ca/coses-per-fer-i-veure/museu-hidroelectric-de-capdella/
Sala de màquines del Vapor Buxeda Vell—Sabadell, Barcelona	http://visitmuseum.gencat.cat/es/el-vapor-buxeda-vell-del-vapor-a-l-electricitat/
Colonia Vidal—El Berguedà, Barcelona	https://www.museucoloniviadal.org/
Museo industrial del Ter—Manlleu—Barcelona	http://www.museudelter.cat/
Museo molino papelerero de Capellades—Barcelona	http://www.mmp-capellades.net/
Museu de la ciència i la tècnica de catalunya—Terrassa, Barcelona	http://mnactec.cat/ca/
Museu del ciment—Barcelona	http://museuciment.cat/es/inicio/
Museu del coure—Barcelona	https://www.lafarga.es/ca/el-grup/museu-del-coure/presentacio
Museu del gas—Barcelona	http://www.fundaciongasnaturalfenosa.org/museo/
Museu Agbar de les aigües—Barcelona	http://www.museuagbar.com/index.php#
Museu del suro de Palafrugell—Girona	http://museudelsuro.cat/
Granollers Turisme—Barcelona	http://www.museugranollers.org/
El poble espanyol—Barcelona	https://www.poble-espanyol.com/
Antiga Fàbrica Casaramona—Barcelona	http://agenda.obrasocial.lacaixa.es/buscador?texto=fabrica%20casaramona&centro=&fecha=0
Colonia Güell—Barcelona	http://www.gaudicoloniaguell.org/
Los almacenes generales de comercio—Palau de Mar, Barcelona	http://www.mhcat.cat/
Edificio de la Antigua Editorial Montaner y Simón—Barcelona	https://www.fundaciotapies.org/site/spip.php?rubrique65
Torre de l'amo de Viladomiu nou, centre d'interpretació de les colònies tèxtils—Barcelona	http://berguedareserves.cat/actividades/turismo-industrial/visita-guiada-a-la-torre-de-l-amo-de-viladomiu-nou-centro/70
Cooperativa vi i oli—l'Espluga de Francolí (Tarragona)	http://www.espluga.altanet.org/turisme/celler.php
Masia Freixa—Terrassa, Barcelona	http://visitaterrassa.cat/
Agrícola de l'Albi, SCCL—Lleida	http://www.agricolaalbi.es/index.php/ca
Agrupació del Camp Sant Isidre Llauredor, SCCL—Lleida	http://www.agrpobla.com/indexcat.php?lang=Catal%20C3%A0
Agrupació Olearia Lleidatana, SCL—agroles, Lleida	http://agroles.com
Cooperativa Agrícola el Soleràs, SCCL—Lleida	http://www.coopelsoleras.es/index.php/ca/
Cooperativa del Camp Foment Maialenc, SCCL—Lleida	www.barodemaials.cat/cast/cooperativa.html
Fundació Parc Temàtic de l'Oli—Lleida	http://www.grupsalat.cat/
Molí de la Vall Major, SL—Lleida	http://www.molidelavallmajor.es/
Sant Isidre de les Borges Blanques, SCCL—Lleida	http://terrall.es/ca/
SCCL del Camp de Vinaixa—Lleida	http://www.cooperativadevinaixa.cat/site/ca-es/inici.aspx
Oli Migjorn—Barcelona	http://olimigjorn.com/es/
cooperativa agrícola i Cellers Domenys—Pira (Tarragona)	http://www.cellersdomenys.com/
Pafi, panificadora (Girona)	http://www.pafi.es/inici.asp
Talleres gràfics m. y r. Gilabert—Barcelona	https://www.myrga.com/
Pastes sanmartí—Barcelona	http://www.pastes-sanmarti.com/pastes-sanmarti/SANMARTI_LLOC_OFICIAL.html

Industrial Resource	Website
Pa de Pessic Pastisseria—Lleida	http://www.lleidatur.com/Turisme/Visita/Pa-de-Pessic-Pastisseria-patisserie/4521.aspx
Pastisseria Forn Reig—Lleida	http://www.pastisseriafornreig.com/
Pelleteria Ribalta, S.L.U.—Lleida	http://www.ribaltapelleters.com/
Truites de Riu de Tavascan—Lleida	http://tavascanpescatruites.com/index.php/ca/
La torre de las aguas de “la dreta de l’Eixample”—Barcelona	http://www.ae-eixample.cat/index.php?option=com_content&view=article&id=148&Itemid=568&installacio=3&lang=ca
Diari de Ponent, S.A.—Lleida	http://www.lamanyana.es/
Grup Segre—Lleida	http://www.segre.com/
Centre Especial de Treball Amisall—Lleida	http://www.femarec.cat/cet/cet1_cat.html
La Paloma. Sala de Fiestas—Barcelona	http://lapaloma.com/
Antigua fábrica de moneda—la Seca, Barcelona	http://www.laseca.cat/
Torrans Vicens—Lleida	http://www.vicens.com/
Turrone Roig, S.A.—Lleida	http://www.torroneiroig.com/
Los trenes de vapor del part del castell de l’oreneta—Barcelona	www.trenoreneta.com/
Castell del Remei, SL—Lleida	www.castelldelremei.com
Celler Comalats—Lleida	http://www.comalats.com/
Cellers Vila Corona—Lleida	http://vilacorona.cat/
Casa Pardet—Lleida	https://casapardet.blogspot.com.es/
Celler de muller—Tarragona	http://www.demuller.es/
Adernats, cooperativa agrícola—Nulles (Tarragona)	http://www.adernats.cat/
Bodegas Albet i Noya, Sala de Barricas—(Subirats) Barcelona	http://www.albetinoya.cat/
Vinícola Mestre, S.A.—Tarragona	http://www.lavinicolamestre.com/es/
Codorniu, S.A.—Lleida	http://www.codorniu.com/ca/
Agrícola de Barberà S.C.C.L, cooperativa—montblanc (Tarragona)	http://www.coop-barbera.com/ca/
Celler—rocafort de queralt (Tarragona)	http://www.doconcadebarbera.com/node/122
Celler el Molí—Collbaix, Barcelona	http://www.cellermoli.com/
Cooperativa agrícola—Llorenç del penedés (Tarragona)	http://coopllorenc.cat/es
Cooperativa agrícola—Cornudella de Montsant (Tarragona)	http://www.cornudella.net/
Cooperativa agrícola—Falset (Tarragona)	http://www.etim.cat/
l’Art del Vitrall -Sabadell, Barcelona	http://www.artdelvitrall.com/
Las Tres Chimeneas FECSA—Barcelona	https://sites.google.com/site/3xemenies/
Xocolateria Jolonch—Agramunt, lleida	http://www.xocolatajolonch.com/ca/comestibles/xocolatajolonch
Xocolateria Simon Coll—Barcelona	http://www.simoncoll.com/ca/Portada

References

1. Morgan, N.; Pritchard, A. Destination reputations and brands: Communication challenges. *J. Destin. Mark. Manag.* **2014**, *3*, 1. [[CrossRef](#)]
2. Marine-Roig, E.; Martin-Fuentes, E.; Daries-Ramon, N. User-Generated Social Media Events in Tourism. *Sustainability* **2017**, *9*, 2250. [[CrossRef](#)]
3. DiPietro, R.B.; Wang, Y.R. Key issues for ICT applications: Impacts and implications for hospitality operations. *Worldw. Hosp. Tour. Themes* **2010**, *2*, 49–67. [[CrossRef](#)]
4. Peng, K.-H.; Tzeng, G.-H. Exploring heritage tourism performance improvement for making sustainable development strategies using the hybrid-modified MADM model. *Curr. Issues Tour.* **2019**, *22*, 921–947. [[CrossRef](#)]

5. Vargas-Sánchez, A.; Plaza-Mejía, M.D.L.Á.; Porras-Bueno, N. Understanding residents' attitudes toward the development of industrial tourism in a former mining community. *J. Travel Res.* **2009**, *47*, 373–387. [[CrossRef](#)]
6. Yamori, N.; Sun, J.; Zhang, S. The announcement effects of regional tourism industrial policy: The case of the Hainan international tourism island policy in China. *Tour. Econ.* **2017**, *23*, 200–205. [[CrossRef](#)]
7. Rodríguez-Zulaica, A. Redefiniendo el concepto de Turismo Industrial. Comparativa de la terminología en la literatura castellana, francesa y anglosajona. *PASOS Rev. Tur. Patrim. Cult.* **2017**, *15*, 311–318.
8. del Águila Obra, A.R.; Moreno, A.G.; Meléndez, A.P. Creación de valor online y redes sociales en el contexto del turismo cultural: El caso de los museos. *Estud. Turísticos* **2010**, *185*, 101–119.
9. Cristobal-Fransi, E.; Daries-Ramon, N.; Mariné-Roig, E.; Martín-Fuentes, E. Implementation of Web 2.0 in the snow tourism industry: Analysis of the online presence and e-commerce of ski resorts. *Spanish J. Mark. ESIC* **2017**, *21*, 117–130. [[CrossRef](#)]
10. Hjalager, A.-M. A review of innovation research in tourism. *Tour. Manag.* **2010**, *31*, 1–12. [[CrossRef](#)]
11. Xiang, Z.; Gretzel, U. Role of social media in online travel information search. *Tour. Manag.* **2010**, *31*, 179–188. [[CrossRef](#)]
12. Cristobal-Fransi, E.; Hernández-Soriano, F.; Ferrer-Rosell, B.; Daries, N. Exploring service quality among online sharing economy platforms from an online media perspective. *Sustainability* **2019**, *11*, 3690. [[CrossRef](#)]
13. Lalicic, L.; Önder, I. Residents' involvement in urban tourism planning: Opportunities from a smart city perspective. *Sustainability* **2018**, *10*, 1852. [[CrossRef](#)]
14. Briciu, A.; Briciu, V.-A.; Kavoura, A. Evaluating How 'Smart' Braşov, Romania Can Be Virtually via a Mobile Application for Cultural Tourism. *Sustainability* **2020**, *12*, 5324. [[CrossRef](#)]
15. Perfetto, M.C.; Vargas-Sánchez, A. Towards a Smart Tourism Business Ecosystem based on Industrial Heritage: Research perspectives from the mining region of Rio Tinto, Spain. *J. Herit. Tour.* **2018**, *13*, 528–549. [[CrossRef](#)]
16. Prat Forga, J.M.; Canoves Valiente, G. Cultural change and industrial heritage tourism: Material heritage of the industries of food and beverage in Catalonia (Spain). *J. Tour. Cult. Chang.* **2017**, *15*, 265–286. [[CrossRef](#)]
17. Klempa, M.; Bujok, P.; Porzer, M.; Skupien, P. Industrial complexes and their role in industrial tourism—example of conversion. *Geosci. Eng.* **2016**, *62*, 45–50. [[CrossRef](#)]
18. Buiok, P.; Rodriguez, M.A.; Klempa, M.; Ielinek, Y.; Porzer, M. Industrial tourism and the sustainability of the development of tourism business. *Tour. Educ. Stud. Pract.* **2014**, *88*–97. [[CrossRef](#)]
19. Orsillo, N. On the Concept of Cultural Landscape and Methods for Protectings Ostrava s Post-Industrial Mining Cultural Landscape. *Sborník příspěvků z mezinárodního kolokvia a Odb. Semin. TECHNÉ OSTRAVA* **2007**, 36–40.
20. Sutter, G.C.; Sperlich, T.; Worts, D.; Rivard, R.; Teather, L. Fostering cultures of sustainability through community-engaged museums: The history and re-emergence of ecomuseums in Canada and the USA. *Sustainability* **2016**, *8*, 1310. [[CrossRef](#)]
21. Simeoni, F.; De Crescenzo, V. Ecomuseums (on clean energy), cycle tourism and civic crowdfunding: A new match for sustainability? *Sustainability* **2018**, *10*, 817. [[CrossRef](#)]
22. Bae, E.S.; Lee, S.Y. Smart ecomuseum app for efficient management of local resources. *Int. J. Multimed. Ubiquitous Eng.* **2014**, *9*, 41–50.
23. Daries, N.; Cristobal-Fransi, E.; Ferrer-Rosell, B.; Marine-Roig, E. Maturity and development of high-quality restaurant websites: A comparison of Michelin-starred restaurants in France, Italy and Spain. *Int. J. Hosp. Manag.* **2018**, *73*, 125–137. [[CrossRef](#)]
24. Law, R.; Qi, S.; Buhalis, D. Progress in tourism management: A review of website evaluation in tourism research. *Tour. Manag.* **2010**, *31*, 297–313. [[CrossRef](#)]
25. Chiou, W.-C.; Lin, C.-C.; Perng, C. A strategic framework for website evaluation based on a review of the literature from 1995–2006. *Inf. Manag.* **2010**, *47*, 282–290. [[CrossRef](#)]
26. González López, Ó.R.; Bañegil Palacios, T.M.; Buenadicha Mateos, M. El Índice Cuantitativo De Calidad Web Como Instrumento Objetivo De Medición De La Calidad De Sitios Web Corporativos/Quantitative Web Quality Index: An Objective Approach To Website Quality Assessment. *Investig. Eur. Dir. Econ. Empres.* **2013**, *19*, 16–30.
27. Gonçalves, R.; Rocha, T.; Martins, J.; Branco, F.; Au-Yong-Oliveira, M. Evaluation of e-commerce websites accessibility and usability: An e-commerce platform analysis with the inclusion of blind users. *Univers. Access Inf. Soc.* **2018**, *17*, 567–583. [[CrossRef](#)]

28. Neuendorf, K.A. Content analysis and thematic analysis. In *Advanced Research Methods for Applied Psychology*; Brough, P., Ed.; Routledge: Abingdon, Oxon, UK; New York, NY, USA, 2019; pp. 211–223. ISBN 9781138698895.
29. Alvarez Diaz, Y. La Orientación al Mercado en el Sector Turístico con el uso de las Herramientas de la Web Social, Efectos en los Resultados Empresariales. Available online: <http://hdl.handle.net/10902/5018> (accessed on 24 July 2020).
30. Bingley, S.; Burgess, S.; Sellitto, C.; Cox, C.; Buultjens, J. A classification scheme for analysing Web 2.0 tourism websites. *J. Electron. Commer. Res.* **2010**, *11*, 281.
31. Chung, T.; Law, R. Developing a performance indicator for hotel websites. *Int. J. Hosp. Manag.* **2003**, *22*, 119–125. [[CrossRef](#)]
32. Escobar-Rodríguez, T.; Carvajal-Trujillo, E. An evaluation of Spanish hotel websites: Informational vs. relational strategies. *Int. J. Hosp. Manag.* **2013**, *33*, 228–239. [[CrossRef](#)]
33. Lee, J.; Morrison, A.M. A comparative study of web site performance. *J. Hosp. Tour. Technol.* **2010**, *1*, 50–67. [[CrossRef](#)]
34. Schegg, R.; Steiner, T.; Frey, S.; Murphy, J. Benchmarks of web site design and marketing by Swiss hotels. *Inf. Technol. Tour.* **2002**, *5*, 73–89. [[CrossRef](#)]
35. Liao, C.; To, P.-L.; Shih, M.-L. Website practices: A comparison between the top 1000 companies in the US and Taiwan. *Int. J. Inf. Manage.* **2006**, *26*, 196–211. [[CrossRef](#)]
36. Schmidt, S.; Cantalops, A.S.; dos Santos, C.P. The characteristics of hotel websites and their implications for website effectiveness. *Int. J. Hosp. Manag.* **2008**, *27*, 504–516. [[CrossRef](#)]
37. Cantoni, L.; Faré, M.; Inversini, A.; Passini, V. Hotel websites and booking engines: A challenging relationship. In *Information and Communication Technologies in Tourism 2011*; Springer: Vienna, Austria, 2011; pp. 241–252.
38. Davidson, R. Five year longitudinal study of Australian winery websites. In Proceedings of the 13th Asia Pacific Management Conference, Melbourne, Australia, 18–20 November 2007; Monash University: Melbourne, Australia, 2007; pp. 1429–1437.
39. Heinze, N.; Hu, Q. The evolution of corporate web presence: A longitudinal study of large American companies. *Int. J. Inf. Manage.* **2006**, *26*, 313–325. [[CrossRef](#)]
40. Huertas, A.; Marine-Roig, E. Destination brand communication through the social media: What contents trigger most reactions of users? In *Information and Communication Technologies in Tourism 2015*; Springer: Berlin/Heidelberg, Germany, 2015; pp. 295–308.
41. Sigala, M. Exploiting web 2.0 for new service development: Findings and implications from the Greek tourism industry. *Int. J. Tour. Res.* **2012**, *14*, 551–566. [[CrossRef](#)]
42. Walcott, P.A. Evaluating the readiness of e-commerce websites. *Int. J. Comput.* **2007**, *4*, 263–268.
43. Ferrer-Rosell, B.; Martin-Fuentes, E.; Marine-Roig, E. Diverse and emotional: Facebook content strategies by Spanish hotels. *Inf. Technol. Tour.* **2020**, *22*, 53–74. [[CrossRef](#)]
44. Ferrer-Rosell, B.; Martin-Fuentes, E.; Marine-Roig, E. Do Hotels Talk on Facebook About Themselves or About Their Destinations? In *Information and Communication Technologies in Tourism 2019*; Springer: Berlin/Heidelberg, Germany, 2019; pp. 344–356.
45. Ting, P.-H.; Wang, S.-T.; Bau, D.-Y.; Chiang, M.-L. Website evaluation of the top 100 hotels using advanced content analysis and eMICA model. *Cornell Hosp. Q.* **2013**, *54*, 284–293. [[CrossRef](#)]
46. Kim, M.J.; Chung, N.; Lee, C.; Preis, M.W. Motivations and use context in mobile tourism shopping: Applying contingency and task–technology fit theories. *Int. J. Tour. Res.* **2015**, *17*, 13–24. [[CrossRef](#)]
47. Fernández-Barcala, M.; González-Díaz, M.; Prieto-Rodríguez, J. Hotel quality appraisal on the Internet: A market for lemons? *Tour. Econ.* **2010**, *16*, 345–360. [[CrossRef](#)]
48. Marimon, F.; Vidgen, R.; Barnes, S.; Cristóbal, E. Purchasing behaviour in an online supermarket: The applicability of ES-QUAL. *Int. J. Mark. Res.* **2010**, *52*, 111–129. [[CrossRef](#)]
49. Rondović, B.; Djuričković, T.; Kaščelan, L. Drivers of E-business diffusion in tourism: A decision tree approach. *J. Theor. Appl. Electron. Commer. Res.* **2019**, *14*, 30–50. [[CrossRef](#)]
50. Filieri, R.; McLeay, F. E-WOM and Accommodation: An Analysis of the Factors That Influence Travelers' Adoption of Information from Online Reviews. *J. Travel Res.* **2013**, *53*, 44–57. [[CrossRef](#)]
51. Boyd, D.E.; Clarke, T.B.; Spekman, R.E. The emergence and impact of consumer brand empowerment in online social networks: A proposed ontology. *J. Brand Manag.* **2014**, *21*, 516–531. [[CrossRef](#)]

52. Martin-Fuentes, E.; Fernandez, C.; Mateu, C.; Marine-Roig, E. Modelling a grading scheme for peer-to-peer accommodation: Stars for Airbnb. *Int. J. Hosp. Manag.* **2018**, *69*, 75–83. [[CrossRef](#)]
53. Martin-Fuentes, E.; Mateu, C.; Fernández, C. Are users' ratings on Tripadvisor similar to hotel categories in Europe? *Cuad. Tur.* **2018**, *42*, 305–316. [[CrossRef](#)]
54. Busalim, A.H.; Che Hussin, A.R.; Iahad, N.A. Factors Influencing Customer Engagement in Social Commerce Websites: A Systematic Literature Review. *J. Theor. Appl. Electron. Commer. Res.* **2019**, *14*, 1–14. [[CrossRef](#)]
55. Cristobal-Fransi, E.; Montegut-Salla, Y.; Ferrer-Rosell, B.; Daries, N. Rural cooperatives in the digital age: An analysis of the Internet presence and degree of maturity of agri-food cooperatives' e-commerce. *J. Rural Stud.* **2020**, *74*, 55–66. [[CrossRef](#)]
56. Buhalis, D.; Law, R. Progress in information technology and tourism management: 20 years on and 10 years after the Internet—The state of eTourism research. *Tour. Manag.* **2008**, *29*, 609–623. [[CrossRef](#)]
57. Daries-Ramon, N.; Cristobal-Fransi, E.; Mariné-Roig, E. Deployment of Restaurants Websites' Marketing Features: The Case of Spanish Michelin-Starred Restaurants. *Int. J. Hosp. Tour. Adm.* **2019**, *20*, 249–280. [[CrossRef](#)]
58. Kaplan, A.M.; Haenlein, M. Users of the world, unite! The challenges and opportunities of Social Media. *Bus. Horiz.* **2010**, *53*, 59–68. [[CrossRef](#)]
59. Chiou, W.-C.; Lin, C.-C.; Perng, C. A strategic website evaluation of online travel agencies. *Tour. Manag.* **2011**, *32*, 1463–1473. [[CrossRef](#)]
60. Kang, M.; Gretzel, U. Perceptions of museum podcast tours: Effects of consumer innovativeness, Internet familiarity and podcasting affinity on performance expectancies. *Tour. Manag. Perspect.* **2012**, *4*, 155–163. [[CrossRef](#)]
61. Instituto Nacional de Estadística. Tourist Movement on Borders Survey Frontur 2019. *Instituto Nacional de Estadística*, 1 October 2019.
62. SEGITTUR Estudio de Mercado de Apps Turísticas. Available online: www.segittur.es (accessed on 5 January 2020).
63. Nogueira Cortimiglia, M.; Ghezzi, A.; Renga, F. Social Applications: Revenue Models, Delivery Channels, and Critical Success Factors—An Exploratory Study and Evidence from the Spanish-Speaking Market. *J. Theor. Appl. Electron. Commer. Res.* **2011**, *6*, 18–19. [[CrossRef](#)]
64. Cole, D. Exploring the sustainability of mining heritage tourism. *J. Sustain. Tour.* **2004**, *12*, 480–494. [[CrossRef](#)]



© 2020 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).