# The Use of Internet as a Marketing Tool Evaluating the Websites of Spain's Top Restaurants

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Abstract: The haute cuisine catering sector in Spain is faced with two facts that underscore the importance today of

their presence on the Internet. On the one hand, the quality and recognition of Spanish cuisine are fostering the development of culinary tourism, both domestic in origin and from abroad. And on the other, an ever greater proportion of tourists are using the Internet to obtain information and make decisions about activities to include in their trips. Given this context, the present work describes a comparative analysis of the Websites of Spanish restaurants which have at least one Michelin star in order to assess the quality of those Web pages and provide some guidance to their designers to facilitate their use as a marketing tool. The instrument used is the Web Assessment Index (WAI). This has been validated in other studies in the literature, and measures the quality of a Website based on 4 dimensions: visibility, speed, navigability, and content. The results showed the quality of the Website to be positively correlated with the category of the

corresponding restaurant.

#### 1 INTRODUCTION

Gastronomy has become a major tourist attraction, and is becoming one of the primary reasons that tourists choose the destination of their trip. According to data of the Tourism Institute of Spain (Turespaña), of the 52 million tourists who visited Spain in 2009, 6 million declared Spanish food and wine as their main reason for visiting the country. With the widespread use of Internet by the population, Internet Marketing and Social Media Marketing have taken on great importance for the promotion of culinary tourism. A specific study conducted by Spain's Ministry of Industry, Trade, and Tourism (Ministerio de Industria, Comercio y Turismo, 2010) showed that already 11% of tourists use Websites as a way to select the restaurants they will eat at on their trips, and 14% make their selection after consulting blogs and social networks. In addition, 15% of tourists make restaurant reservations through Webpage forms and another 12% through e-mail available on the Website of the restaurant they have chosen. A restaurant's presence on the Internet can therefore be a positive instrument for attracting customers.

Likewise, there have been many studies on the

use of the Internet as a marketing tool in the tourism sector, but they have mostly been restricted to the analysis either of hotels (Chan and Law, 2006; Chiang and Jang, 2007; Dabas and Manaktola, 2007; Kaplanidou and Vogt, 2006; Law and Cheung, 2006; Morosan and Jeong, 2008; Noone and Mattila, 2009; Rong et al., 2009; Schmidt et al., 2008; Vermeulen and Seegers, 2009; Ye et al., 2009, 2011) or of tourism destinations (Kim et al., 2007; Law and Bai, 2008; Law et al., 2010; Lee et al., 2007; Litvin et al., 2008; Park et al., 2007; Tsang et al., 2010; Vrana and Zafiropoulos, 2006; Wang et al., 2007; Wen, 2009). In this context, it is interesting to evaluate the quality of restaurant firms' Websites to shed some light on how companies are adapting to today's tourist, and to determine whether there is a relationship between this quality and the firm's performance or prestige.

But a mere presence on Internet is not in itself sufficient to attract tourists. Also important is the quality of the Websites, as has been shown by various studies applied to firms in the tourism sector. While it seems clear that a restaurant's Website design has a direct impact on its customers' expectations and satisfaction (Wang et al. 2004), few studies have analyzed restaurants' use of the Web as

a marketing tool (Gregory et al., 2010).

Thus, the objective of the present study was to conduct a benchmarking analysis of the Websites of Spanish restaurants included in the 2011 Michelin Guide, and to see if the number of stars a restaurant received in the Guide is correlated with the quality of its Website.

The rest of this communication is organized as follows. Section 2 discusses the principal Website evaluation tools that one finds in the literature, and then describes the construction of the instrument used in the present work which is based on the WAI (Buenadicha et al., 2001) adapted to the restaurant sector. Section 3 presents the results, and this is followed by a discussion of these results and their relevance to the sector in Sec. 4.

# 2 WEBSITE EVALUATION METHODS

In recent years, there have been several important contributions to the field of Website evaluation. For instance, the recent review of Chiou et al. (2010) of the literature on Website evaluation identifies 83 papers in 23 journals in the period 1995-2006. Of particular interest for the purposes of the present work is the classification made by Totz et al. (2001) distinguishing between attribute-based and process-based methods:

- 1) Attribute-based Methods assume that the quality of a Website can be evaluated from the quality of the various individual attributes into which it can be decomposed. The methods may be objective or subjective. The former seek objectivity in the evaluation using independent judges who value the various attributes after visiting the different Websites. Most of these works (see Shchiglik and Barnes, 2004; Blanca Hernández et al., 2009) focus on the core content of the pages of the site or on some specific aspect of the site's design. The latter methods seek to identify variables reflecting the quality perceived by the user. Their essential assumption is that, in these times of intense competition, the importance of the user's opinion is the key to assessing the richness and quality of the content of different Websites (Liang and Cheng, 2009; Liu et al., 2009).
- 2) Process-based Methods evaluate the user's perceived quality of a Website in terms of a series of processes and events that occur in his or her interaction with the site. These methods necessarily involve direct observation of the user's behaviour.

In the present study, it was decided to employ an

objective attribute-based method using independent judges. In order to avoid the shortcomings of previous models of this type, Buenadicha et al. (2001) developed a new quantitative evaluation index, the Web Assessment Index (WAI), for use in evaluating how organizations of different types currently use the Internet. This index has been used successfully to assess the sites of different types of organizations (Miranda and Bañegil, 2004; Miranda et al., 2006, 2009, 2010). For the present work, this index was adapted to the restaurant sector after consultation with various experts on the Internet and on tourism.

While there have been some previous studies evaluating the Websites of tourism organizations (Benckendorff and Black, 2000; Sigala, 2001; Wan, 2002; Baggio, 2003; Kozac et al., 2005; Baloglu and Pekcan, 2006; Baggio et al., 2007), the present work represents the first time that an objective attribute-based method such as the WAI has been applied to the restaurant sector. The use of a method such as the WAI that has been extensively validated in other sectors endows the conclusions that can be drawn from the results with greater rigour.

The WAI is based on four essential categories for the assessment of a site's quality: visibility, speed, navigability, and content. With this model as a basis, the key factors in each category reflect the variables and attributes of a Website that its users consider important. The weights used for each category were obtained as recommended by a Delphi study (Miranda et al., 2006) conducted with 12 independent experts (advanced Internet users and experts in tourism). Specifically, these weights were: visibility (30%), speed (10%), navigability (10%), and content (50%). In the following subsections, we shall examine these four categories separately.

## 2.1 Visibility

The quality of a Website is greater if the site is easily identifiable and accessible to users. A privileged position in the order of presentation of a search engine will in general result in increased traffic, and consequently an improvement in the site's visibility. A search engine usually provides its users with the information they are looking for directly and efficiently in response to their entering appropriately related keywords (Liu et al., 2009).

The simplest measure of a site's visibility is its popularity as determined by the number of hits it receives. One of the novelties of the present study is that it complements the measure of popularity used in previous studies with four of the new "ranking implementers" – Google PageRanking, Alexa, Emezeta, and Yahoo Ranking.

In the present work, the importance of each of these tools was weighted, taking into account the views of international experts on the Internet. The weights used were the following: Google PageRanking (25%), Alexa (25%), Emezeta (30%), and Yahoo Ranking (20%).

## 2.2 Speed

The second category is based on access speed and response time. The significance of these variables is that the time required to access information is critical factor for Web users seeking information. Several studies have found that the individual's attention can only stand ten seconds of inactivity, after which the user will begin to perform other tasks, redirect the search to another site, or simply stop browsing (Cao et al., 2005). Indeed, Muylle et al. (1998) and Hoffman and Novak (1996) already noted in the 1990s that there was a significant correlation between a page's loading speed and user satisfaction.

The tool used to perform the speed test was PingDom, which provides measurements of the loading speed of an HTML page including all its objects (images, CSS, Java scripts, RSS, Flash, and frames/iframes), mimicking the form in the page is loaded in a Web browser.

### 2.3 Navegability

When visitors access a restaurant's Website, they are usually seeking specific information. An inappropriate design of the site may adversely affect the number of visits if users fail to find what they want, because the result may well be the loss of potential future visits due to that negative initial experience.

Given this context, the factors used to evaluate this category were: a permanently displayed menu allowing quick access to the different sections from each page; a site map showing schematically the various sections to aid users in accessing a specific point that they want to reach and in knowing where they are at all times; a keyword search function, allowing users to locate the information that is available on the restaurant's site.

In the present study, the judges just had to note whether or not these indicators appeared on the Website they were analyzing. All three indicators were assigned equal weight in evaluating the site's navigability.

#### 2.4 Content

The fourth category is the quality of the site's content. This is measured by assessing the presence of information relevant to the needs of users. The factors used in this assessment were identified from an analysis of previous studies (Huizingh, 2000; Buenadicha et al., 2001; Miranda and Bañegil, 2004; Kozac et al., 2005; Miranda et al., 2006), together with the opinion of experts on the Internet and tourism, and taking into account the experience of the research team. 31 items were studied for each of the restaurants' Websites.

# 3 RESULTS OF APPLYING THE WAI TO SPAIN'S RESTAURANT SECTOR

To achieve our objective, we analyzed the Websites of the 138 Spanish restaurants included in the 2011 Michelin Guide. Figure 1 shows the restaurants scoring highest on the WAI. But the most interesting contribution of the study lies not in identifying the best Websites, but in comparing them and being able to make suggestions on ideas and practices that may improve each restaurant's Web presence with a view to its use as a marketing tool.

An analysis of the Websites by restaurant category (as measured by the number of Michelin stars) showed them to differ significantly in the total value of the WAI and in their visibility, but not in speed, navigability, or content. The results therefore confirm that the restaurants with more Michelin stars are those with the best Websites and with the highest values of visibility (i.e., of popularity).

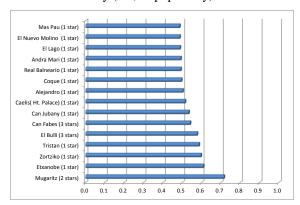


Figure 1: Values of the WAI.

As a general rule, the pages whose content downloaded rapidly were also easily navigable. The download speeds ranged between 0.1 seconds and 11.4 seconds, and, predictably, there was a negative correlation between speed and content. The tests showed no statistically significant differences in this parameter between different categories of restaurant.

With respect to the navigability of the Websites, 96.4% of them had a permanent menu facilitating navigation. But a keyword search function was present on only 5.1%, and only 7.2% had a site map.

The commonest informational content of the sites corresponded to a map locating the restaurant, the menu, and photographs of the premises. These appeared on more than 70% of the Websites (fig 2).

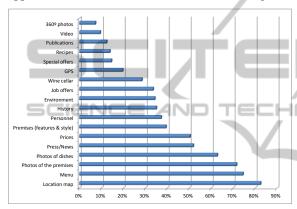


Figure 2: Informational content.

More than 40% of the sites contained information on prices, press items relating to the restaurant, and photographs of the most significant dishes on the menu. A third of the sites offered information on the features and style of the premises, the restaurant's history and its personnel, the characteristics of the natural and cultural environment in which it is located, and job offers or the possibility for candidates to present their job applications for work in the restaurant.

With respect to communications content, practically all the sites included contact information, whether telephone or postal address, and some 75.9% also included an e-mail address. Surprisingly, however, there were still 35.8% of the sites which did not include multilingual support or the possibility of displaying the site in various languages. The ability to make reservations online was provided by 52.6% of the sites, and e-mail reservations by 10.9%.

Recent years have seen an evolution of Website design towards the Web 2.0 approach. This is aimed at fostering user participation and collaboration to

facilitate the provision of information on the Web. In this sense, the so-called Tourism 2.0 concept is characterized by total user involvement by means of encouraging them to provide feedback with their opinions, suggestions, and comments concerning tourism products and services, sharing this information through videos, photos, and blogs so as to form a content that can influence other potential customers in deciding on their destinations, activities, etc. Such interactive elements should therefore clearly be playing a key role in the restaurant sector's Web designs. However, the actual interactive capability of most of the sites analyzed was still of little relevance. Only 14% included a blog, and 10% some other tool for user participation (newsletters, the option of making a recommendation to a friend, etc.). The present study found that only 20.4% of the Michelin star restaurants had a presence in social networks (primarily in Facebook and Twitter).

# 4 DISCUSSION AND CONCLUSIONS

In the promotion of this culinary tourism, the use of new technologies, specifically of the Internet, has a crucial role to play as a means by which these tourists can consult and select the activities to include in their trips. In this sense, various studies of tourism firms have examined the relevance of their Internet presence and the quality of their Websites in attracting customers and affecting visitors' purchasing decisions. In concordance with this line of research, the present study has sought to examine the quality of the Websites of Spanish restaurants included in the 2011 edition of the Michelin Guide, and to determine whether there is a relationship between that quality and the number of stars they received as a measure of their prestige and recognition. Indeed, these establishments can be considered as sources of attraction of culinary tourism for the country.

The website assessment index (WAI) used in the study has been extensively validated in other sectors. The results showed there to be significant differences in both the overall value of the WAI and the visibility score (essentially reflecting the site's popularity). This seems reasonable a priori, since one would expect the Websites of the top-ranked restaurants to be more appealing to the culinary tourist, and hence their visibility would be correspondingly greater than that of establishments

with fewer stars.

As was noted at the beginning of Sec. 3, the most interesting contribution of the present work is to be able to make suggestions about ideas and practices that could improve a restaurant's Website in terms of its potential as a marketing tool. In this sense, we would highlight the finding that the Websites of the restaurants surveyed make limited use of social networks.

As in all academic work, there are clear future lines of work to deepen and complement the present results. Of particular interest is the possibility of determining whether culinary tourists visit a restaurant's Website before actually making their decision to eat there. This information would shed some light on the capacity of Websites to influence the purchasing decision process. Another line of clear interest would be to evaluate the potential commercial benefits these restaurants might expect to derive from the use of the Internet, social networks, etc.

In agreement with other authors, we find that the present results provide evidence that the quality of a restaurant's Website can have a significant positive impact on its customers' satisfaction. It is therefore advisable to invest in increasing that quality in order to improve customers' virtual experience and facilitate their purchasing decisions.

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