INTRODUCTION
Tourism is one of the sectors that provides the largest contribution to the economic development of countries. It contributes to income and employment generation in society, as well as to the enrichment of many related industries. It already accounts for 5 per cent of the world’s GDP,¹ and competence in the sector is more and more intense. Effective management of tourist destinations may have a bearing on the image and on the regeneration process of a particular area, attracting visitors and investment, which ultimately translate to greater economic wealth for the region.² Destinations very much compete based on

Town centre management
How web interactivity influences the image of a tourist destination

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Abstract The importance of the internet in the image formation process has been widely recognised by both academics and practitioners. Previous research has shown that it influences the cognitive and the affective dimensions of image, although most previous research has focused only on the cognitive part. Research on the influence that this medium has on image, especially through its most expressive and relevant vehicle, the website, still lacks empirical support. This lack of research is especially noticeable in the tourism sector, where the industry has witnessed fundamental changes in recent years. Destination sites have emerged for many cities and regions. The intention to travel to each particular destination may be then determined by the destination site characteristics such as ease of navigation, text and visual contents and accessibility (downloading time). Some website features may also influence the perceptions of website usefulness in planning the trip. This research focuses on a basic aspect of destination websites: interactivity. From the receiver perspective, the paper analyses how perceived interactivity affects the cognitive and affective dimensions of destination image. The relationships between the overall perceived image and tourist intentions to visit and recommend the destination are also evaluated. The results of this study extend previous research on the offline context by demonstrating how websites affect the image of a tourist destination.

Keywords: interactivity, internet, destination image, tourist destination
their perceived images relative to competitors in the marketplace. Therefore, it is necessary to develop a positive image of the destination in target markets to achieve a real competitive advantage.

The image of a tourist destination is one of the most explored fields in tourism research. Its importance has been widely supported by empirical studies. There are many possible approaches to studying destination image, because it has many implications for human behaviour, as seen through disciplines such as anthropology, sociology, geography and marketing, with respect to the understanding of tourism consumer behaviours.

In the interdisciplinary study of marketing, given the current and potential importance of the internet as an information source in the tourism sector, Doolin et al. highlight that the content of tourism destination websites is particularly relevant because it directly influences the perceived image of the destination and creates a virtual experience for the consumer. But research on the influence that this medium has on image, especially through its most expressive and relevant vehicle, the website, still lacks empirical support. This lack of research is especially relevant in an industry that has witnessed fundamental changes in the last few years. Few researchers have examined how destinations use the internet as an image formation agent to promote its development or the function that these websites develop in the promotion and image of a tourist destination.

In order to cover this gap in the literature, this paper analyses the effect of a destination website on its image, and how image, in turn, affects destination effectiveness. From the receiver perspective, it analyses how perceived interactivity affects the cognitive and affective dimensions of destination image. The relationships between the overall perceived image and tourist intentions to visit and recommend the destination are also evaluated.

### CONCEPTUAL BACKGROUND

The internet has changed tourism consumer behaviour dramatically. Prospective travellers have direct access to a much greater wealth of information provided by tourism organisations, private enterprises and increasingly by other consumers. The internet provides a new type of information source that is more dynamic, interactive and richer in content.

For destination sites, information gathering is the result of the interrelationship of several features, such as navigation, accessibility, content, usability and interactivity, which can directly or indirectly influence intentions to travel to the destination (Table 1). Website features

<table>
<thead>
<tr>
<th>Features</th>
<th>Definition</th>
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<tr>
<td>Navigation</td>
<td>Ease of getting to the information the users want.</td>
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<tr>
<td>Accessibility</td>
<td>The ability of the user to easily find a website in the World Wide Web as well as the speed with which the home page and subpages of the website download.</td>
</tr>
<tr>
<td>Content</td>
<td>The combination of functional information text and motivating visuals.</td>
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<tr>
<td>Usability</td>
<td>The ease with which the user is capable of learning to manage the system, the ease of memorising the basic functions, the grade of efficiency with which the site has been designed.</td>
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<tr>
<td>Interactivity</td>
<td>Two-way communication with other individuals or with the message itself.</td>
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Source: Compiled by the authors.
may also influence perceptions of usefulness in planning the trip. Previous studies have explored the degree to which certain website features are present in the webs of tourist destinations. These studies have concluded that most websites have adequate navigation structure, design and accessibility, but inequality in the use of interactive resources. According to recent research, interactivity is a key element in the differentiation of a destination, and it has a crucial role in developing its image. Interactivity allows consumers to participate actively in the persuasion process by controlling advertising messages, the amount of information and the order of presentation at any time, according to their needs and preferences. In order to evaluate behaviour during the visit, the concept of intention to interact may be very useful. It is defined as the degree to which people engage in processing by actively interacting with the website and with other consumers. Intention to interact may be an important antecedent of the intention to visit the destination. In this sense, when the consumer decides to interact actively with the destination site, he/she will be more inclined later to visit or recommend the destination.

An increasing number of researchers have directed their attention to identifying what constitutes destination image. Much empirical research supports the premise that destination image is composed of two dimensions: cognitive and affective. The cognitive component refers to the beliefs or knowledge that a person has about the characteristics or attributes of a tourist destination, while the affective dimension is represented by the individual’s feelings towards the tourist destination. According to recent studies, the coexistence of both components may explain better the image a tourist has of a destination. Yet, with some exceptions, the majority of destination image studies focus exclusively on the cognitive dimension and overlook the affective dimension.

In the past, the cognitive dimension of destination image has been examined extensively in the tourism literature. Only recently, several studies proposed the cognitive–affective nature of destination image. This concept is integrated not only by the individual’s cognitive evaluations, but also by their affective evaluations of a tourist destination. Kim and Richardson posit that, in tourism contexts, evaluation of affective qualities of places might become even more important than objective, perceptible properties of places. In line with recent research, the cognitive–affective nature of destination image is explored in this study.

Finally, the attraction of tourists is crucial for the success of the development of destination tourism. Much research has been conducted on the relationship between destination image and tourist behaviour. As the tourism industry provides so much potential for destinations, it is imperative that marketers understand the reasoning behind intention to visit. A number of studies have been conducted regarding the relationship between image and consumers’ intentions. Intention to recommend the destination has been also considered as a good indicator of behaviour in this context, because most tourist decisions are based on word of mouth. Therefore, behavioural intention is conceptualised in this paper as the intention to visit the destination and to recommend it to other people.

PROPOSED MODEL

Figure 1 shows a summary of the proposed model. The main novelty of this
model is the consideration of both the cognitive and the affective dimension of image. Moreover, the interactivity is considered a key antecedent for enhancing destination site effectiveness.

Interactivity can affect the behaviour of the individual during the visit to the web. Therefore, the perception that a website is interactive can motivate the individual to interact more with it, as long as the individual is comfortable with the process of interaction. Similarly, when perceived interactivity is high, it is more likely that the individual will be motivated to express his/her opinion on the web as well as to ask questions to others about their experience with the destination.

Thus, the proposed model suggests that perceived interactivity will positively affect the individual’s intention to interact with the destination site and with other consumers.

Regarding image, many researchers have explored the connections between the use of traditional information sources and image formation. For example, Woodside and Lyonski asserted in their model that information sources influenced the cognitive evaluation of a destination, but not its affective image. In general, most researchers seem to agree that the affective aspect of image is harder to change via external information. But this consensus between researchers may be incorrect in the current context. Biswas has argued that, since acquisition of online information is drastically different from that occurring in offline settings, all the consumer theories need to be re-evaluated in online settings. The image development process is no exception. Li et al. explore the potential effects of online information search on tourists’ destination image development, and Chiou et al. how different sources of information affect the image of the destination. These studies, however, do not offer the possibility that the website and, in particular, its interactivity could affect the image of the destination. The proposed model does offer such possibility.

The dynamic and interactive nature of the internet allows tourism sites to deliver affection-related information more effectively than traditional offline information sources. In other words, offline information sources, such as brochures and print advertisements, are comparatively limited in their ability to present emotion-related messages. Online sources may be more effective in terms of eliciting affective responses. Therefore, as the interactivity is a key feature of websites, this research proposes that perceived interactivity will positively affect both the cognitive and the affective

![Proposed model](image_url)
dimensions of image destination. Recently, several studies have included cognitive and affective attributes in the measurement of destination image. However, these studies were done in a context of traditional information sources. In line with this new approach, destination image should be considered a multidimensional phenomenon that includes not only beliefs or knowledge about the place’s attributes, but also the individual’s feelings toward the tourist destination. Therefore, this research proposes that the cognitive and affective dimensions of image are positively related to overall destination image.

The overall destination image that tourists receive through the website can directly affect their behaviour. Several studies have illustrated that destination images do, indeed, influence tourist behaviour. In essence, the extant research suggests that those destinations with strong and positive image are more likely to be considered and chosen in the travel decision process than destinations with a less positive image. It has been generally accepted that destination image influences tourist behaviour. Research has demonstrated that image is a valuable concept in understanding the destination selection process of tourists. The present model proposes that overall destination image is positively related to behavioural intentions. Therefore, the better the overall destination image, the higher the intention to visit and to recommend the destination.

**METHODOLOGY**

In order to develop the present research, Cehegín (located at the southeast of Spain, in the Region of Murcia) was chosen as a tourist destination. In January 2010, Cehegín was elected winning town of the ‘Electronic Digital Town’ development programme. This selection allowed the authors to undertake the field study. A pre-test was performed first on 30 tourists in the Cehegín Tourist Office. This pre-test served to ascertain the website that tourists had used the most to visit the city. The resulting website (http://www.turismocehegin.es/) was the one used in the empirical research (Figure 2).

Participants were recruited through advertisements in return for small gifts. The survey population consisted of travellers over the age of 18 who had not previously visited the destination and who did not belong to that area. The authors collected 128 valid questionnaires.
Participants visited the Cehegin website for a few minutes (five to ten minutes), as if they were looking for a weekend trip. After website exposure, individuals responded to the questionnaire, which included the variables of the proposed model.

In order to ensure content validity, selected items for the constructs were primarily revised from prior studies in the tourism context. All the constructs, except for the image, behavioural intention and demographic variables, were measured on five-point Likert scales. Image scales are based on five-point semantic differential scales. Affective image was measured by Russell’s four bipolar affective items: ‘pleasant/unpleasant’, ‘relaxing/distressing’, ‘arousing/sleepy’ and ‘exciting/gloomy’.

The use of these scales in destination studies has also been reported by other authors. For the cognitive image dimension, items were borrowed from Ong and Horbunluekit. The present authors chose not to use the full scale, because some adjectives were not truly bipolar, and some were not representative of the cognitive image dimension. The final set of bipolar adjectives retained in this study to capture cognitive image included ‘isolated/accessible’, ‘cold/friendly’ and ‘quiet/noisy’.

Behavioural intention was measured by asking the respondent whether he/she would recommend the destination to family and friends and whether he/she would consider visiting the destination. This measurement is inspired in Kneesel et al., with an anchor of 1 being ‘not recommend at all’ and 10 being ‘definitely recommend’, and with 1 being ‘definitely not consider visiting’ and 10 being ‘definitely will’, respectively. Previously established scales were used to measure perceived interactivity and intention to interact. Moreover, prior attitude to destination was measured, since it could affect the results, and it was considered necessary to control for this possibility. Items were borrowed from Mackenzie et
At the end of the questionnaire, individuals also provided some demographic information.

**ANALYSIS AND RESULTS**

Confirmatory factor analysis (CFA) was used to test the measurement of the concepts included in the model. On the basis of several established criteria, it was concluded that the measures in the study exhibited sufficient evidence of reliability, convergent and discriminant validity.

Once the measurement had been checked, the proposed conceptual model was tested using structural equation modelling with EQS 6.1. The results indicate that the data fit the conceptual model acceptably. The empirical estimates for the main-effects model are shown in Figure 3. All proposed relationships are statistically significant and in the expected positive direction.

Standardised coefficients or beta coefficients (β) are the estimates resulting from an analysis carried out on variables that have been standardised so that their variances are fixed. Standardisation of coefficient β is usually done to answer the question of which of the independent variables has a greater effect on the dependent variable. The higher the standardised coefficient, the higher the expected effect. For example, in the proposed model, the highest β corresponds to the effect of perceived interactivity on the affective dimension of image.

The results of the structural model are as follows. Perceived interactivity has a significant direct effect on the intention to interact (β = 0.400; p < 0.001). Perceived interactivity has also a significant direct effect on both cognitive image (β = 0.701; p < 0.001) and affective image (β = 0.719; p < 0.001). In addition, both the cognitive dimension of image (β = 0.412; p < 0.05) and the affective dimension (β = 0.312; p < 0.05) have a significant effect on the overall image of the destination. Finally, the overall image and the intention to interact have a significant impact on the behavioural intentions, that is, on the intention to visit and on the intention to recommend the destination. As a result, the present model satisfactorily explains how interactivity influences the image of tourist destination and tourist behaviour.

**CONCLUSIONS**

For both academics and practitioners, the increasing importance and prevalence of
the internet have challenged numerous well-established theoretical and business models.\textsuperscript{55} It is intellectually intriguing and practically crucial to examine the impact of the new technologies on consumer behaviour. The results of this study extend previous works in the offline context by demonstrating how websites affect the image of a tourist destination. Therefore, destination websites should be considered when trying to improve or enhance the destination image. Rather than considering the web as a mere information source,\textsuperscript{19,72} it should be considered as a channel from which to create and promote a positive image of the destination.

Results corroborate that perceived interactivity has an effect on the two image dimensions, cognitive and affective. The high impact that interactivity has on affective image is particularly emphasised, a dimension that had not been taken into account in previous studies. Moreover, the overall image of the tourist destination and the intention to interact have a positive impact on tourist behaviour. Therefore, managers are strongly recommended to strengthen the image of their destinations. To do so, they can work on the cognitive beliefs of the destination, trying to move the position of a destination in an individuals’ choice set. They can also have an impact on the affective dimension of image by using several interactivity features as potential contributors to the overall image.

The results obtained could help the public institutions responsible for the commercial management of destinations. Image change could be one of several outcomes of successful regeneration strategies. Cities can modify or create their own images through initiatives associated with their destination website. Destination management should use the website to project the most adequate image to the different targets it addresses through the right selection of its interactive features. Perceived interactivity arises as the main tool for promoting a better cognitive and affective image. Tourist managers are then encouraged to strengthen the interactive features of their sites as a means of enhancing affective experiences with the destination, which, in turn, motivate consumers to visit it and to recommend the destination to other people.

For potential tourists, the recommendation is an important information source in forming an image towards the particular destination. Thus, tourism destinations need to provide favourable experiences to tourists in order to create a positive image. The current study has analysed how interactivity influences the image of a tourist destination. Further research should be conducted to find out what results are produced by other destination sites, because the interactivity and the specific features may be different, depending on the website analysed.\textsuperscript{28,31} It would also be interesting to address platforms different from the official destination site. Many people are talking and spreading the word in social networks. It would be interesting to study how different social networks such as Facebook or Twitter contribute to image creation.

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References and Notes


70. The results of the final CFA suggest that the final measurement model provides a good fit to the data on the basis of a number of fit statistics \( S-B \chi^2=320.29, \text{df}=215, p=0.00; \text{root mean square error of approximation [RMSEA]}=0.060; \) Non-Normed Fit Index [NNFI]=0.88; Comparative Fit Index [CFI]=0.90; Fit Index [IFI]=0.90. As evidence of convergent validity, the CFA results indicate that all items are significantly \( (p<0.01) \) related to their hypothesised factors, the size of all the standardised loadings is higher than 0.60 (Bagozzi, R. P. and Yi, Y. (1988), ‘On the evaluation of structural equation models’, *Journal of the Academy of Marketing Science*, Vol. 16, No., pp. 74–94.) and the average of the item-to-factor loadings are higher than 0.70 (Hair, J. F., Anderson, R. E., Tatham, R. L. and Black, W. C. (1999) *Análisis multivariante*, 5th ed., Prentice Hall Iberia, Madrid). In each case, Cronbach’s alpha exceeded Nunnally and Bernstein’s recommendation of 0.70. Nunnally, J. and Berstein, I. H. (1994), ‘Psychometric theory’, 3rd ed., McGraw-Hill, New York. Composite reliability represents the shared variance among a set of observed variables measuring an underlying construct (Fornell, C. Larcker, D. F. (1981), ‘Evaluating structural equation models with unobservable variables and measurement error’, *Journal of Marketing Research*, Vol. 18, No. 1, pp. 39–50.). Average variance extracted (AVE) was also calculated for each construct, resulting in AVEs greater than 0.50 (Fornell and Larcker, *ibid*), except for the affective and cognitive image. This exception may be considered as a limitation of the study. Evidence for discriminant validity of the measures was provided in two ways. First, none of the 95 per cent confidence intervals of the individual elements of the latent factor correlation matrix contained a value of 1.0 (Anderson, J. C. and Gerbing, D.W. (1988), ‘Structural equation modelling in practice: A review and recommended two-step approach’, *Psychological Bulletin*, Vol. 103, No. 3, pp. 411–423.). Second, the shared variance between pairs of constructs was always less than the corresponding AVE (Fornell and Larcker, op. cit.).

71. \( S-B \chi^2=350.76, \text{df}=223, p=0.00; \text{root mean square error of approximation [RMSEA]}=0.060; \) Non-Normed Fit Index [NNFI]=0.86; Comparative Fit Index [CFI]=0.88; Fit Index [IFI]=0.88).