DESTINATIONS INFORMATION COMPETITION AND WEB REPUTATION

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Destination managers are investing considerable effort (i.e., time, resources, and money) to market their destinations on the Internet. In addition to official destination websites, many unofficial websites are populating the results pages of search engines, diffusing almost the same contents as official destinations websites. The aim of this study is to investigate the information market available to the traveler searching for destination-related information in the so-called online tourism space. Search engines are indexing not only official websites, but also any other websites such as blogs, review websites, wikis, reviews, etc., which are available online. Starting from a log file analysis for a given destination, a set of nine keywords was used to perform search activities on two major search engines (Google and Yahoo!). Search results were first organized and described in order to describe the destinations’ information competitors. Second, a content analysis study was performed in order to examine topics and arguments of the retrieved results that are shaping the Web reputation of destinations. The article shows that unofficial sources of information are equally important with respect to officially provided information. Hence, destinations need to manage their brand and online reputation holistically by attempting to coordinate the players offering information about themselves and also amalgamating the entire range of information and service providers on platforms of experience creation.

Key words: Search engines; Internet; Destination marketing; Log file analysis; Reputation analysis

Introduction

The World Wide Web continues to grow with thousands of players entering the information market everyday (eBusiness Watch, 2006; Internet World Stat, 2007). A wide range of information and resources is just a click away from the user’s computer. This means that geographical and linguistic boundaries are becoming less important obstacles for global communications and for the global market. For example, users can compare prices of a given product that is sold on the Web by European, American, and Asian vendors because their offers appear on the same page of search results of a given search engine. Moreover, Web 2.0 (O’Reilly, 2005), which enables individual users to produce user-generated content (UGC), is contributing significantly to the growth of infor-
mation on the Web (be it relevant for the end-user or not). The Internet is becoming the primary source of information for many people (Cole, Su-
man, Schramm, Lunn, & Aquino, 2003; Fox, 2002); indeed, recent studies indicate that over 80% of Web searchers use Web search engines to locate online information (Nielsen Media, 1997). Hence, the role of search engines as preferred gates to access and organize online information becomes crucial.

The increasing amount of information on the Internet creates problems to end-users in finding the right information (Santosa, Wei, & Chan, 2005). Recent studies (Cilibrasi & Vita´ny, 2007) indicate that as of 2007 the total number of Web pages indexed by Google approached the dramatic number of $10^{10}$. This huge amount of Web documents comes both from official sources and unofficial sources (Anderson, 2004). The need to locate the right information becomes fundamental, especially in the information-intensive tourism domain (Buhalis, 2000; Gretzel, Yu-Lan, & Fesenmaier, 2000) where information availability and gathering represent a crucial issue (Poon, 1993). Different experiments both from academia and from the business arena are trying to tackle this issue. Travel search engines (TSE), thus, arise as one of the possible answers to the tourists’ information needs. For example, Kayak.com and Kelkoo.
com/YahooTravel have emerged as specialized metasearch engines. Besides, the success of UGC is opening new opportunities and challenges as social media websites such as blogs, virtual communities, wikis, social networks, review sites, collaborative tagging, and media sharing websites (e.g., blogspot, facebook, tripadvisor, YouTube, and Flickr) have gained substantial popularity.

These media are increasingly used by travelers that use the Internet to search information about destinations as well as to share information, images, and images after their visit (Gretzel, 2006; Pan, MacLaurin, & Crotts, 2007). Increasingly UGC content is regarded as more relevant to the real experience people have at the destination as well as a more honest approach to the real conditions, in comparison to the carefully selected images or the artificially boosted descriptions that are often put forward by marketers. Finally, UGCs are populating the Web, penetrating search engines results and acquiring relevant positions in search results ranking, due to their “search engine friendliness” (Gretzel, 2006). This is particularly the case when the platform is associated with a search engine, as for example BlogSpot is owned by Google. Destination management organization (DMO) managers should be aware of the dramatically increasing range of information providers that travelers may come across and the range of different types of websites, while browsing the Web (Inversini & Buhalis, 2009). It is now evident that these websites containing personal views and experiences have a great influence on the reputation of the destination. Therefore, it is important for online tourism managers to be aware of what sites are effectively competing with their website to provide travel information and how their destination is portrayed online.

Background

The World Wide Web is facing its first (r)evolution: Web 2.0. This term has been introduced by O’Reilly (2005) and indicates a “second generation of web-based communities and hosted services . . . which aim to facilitate collaboration and sharing between users.” In this “read/write web” the end-user has become not only the information consumer, but indeed, the information player and provider (Nicholas, Huntington, Jamali, & Dobrowolski, 2007). Because it is fairly easy for users to add multimedia information without either owning an Internet domain or knowing how to write and edit in html, Web publishing has effectively become accessible to everybody. Information not only go in one direction, from the website to the user, but also from the users, who are able to upload multimedia information to the Web and this is made available for all other users instantly. The Internet arena, therefore, is populated by a variety of information competitors (Cantoni, Faré, Bolchini, Inversini, & Giuliani, 2007) who present information with different forms and strategies and compete with official websites to attract end-user’s attention. Users are empowered to post comments, reviews, pictures, and even videos on the Web regarding any subject they choose (O’Connor, Höpken, & Gretzel, 2008). One example of such Web 2.0 applications are web-logs
blogs), originally born as writing tools for users to keep track of their own records; they quickly turned into a key part of online culture (Hsu & Lin, 2008). According to Sirfy (2007), the blogosphere—the vast, dynamic complex network of blogs (Xiaolin, Belle, & Lada, 2007)—is now composed of more than 70 million blogs; and 120,000 new blogs are created and 1.5 million posts are published per day (Thevenot, 2007). Blogs have become a new and significant source of information distribution (Hsu & Lin, 2008), but they are only one of many information sources on the Internet.

As increasingly people carry with them Internet-connected mobile phones empowered with photo and video cameras, instant publishing of multimedia is becoming easy and a regular practice for a large number of consumers. This was demonstrated clearly on the recent coverage of the emergency landing of a plane in the Hudson River in New York on January 15, 2009. Janis Krums, who was riding on the ferry that approached first the US Airways Flight 1549 that had crash landed in the river, took a photo on his iPhone and shared the photo on Twitpic. “There’s a plane in the Hudson. I’m on the ferry going to pick up the people. Crazy,” Krums wrote when posting the photo online at TwitPic.com. Within the hour, Krums (or “jkrums” on Twitter) was talking to MSNBC about the rescue and photo, which attracted nearly 40,000 views in the first 4 hours after the crash. Krums’ instant fame came less than a month after passenger Mike Wilson used Twitter—a free micro-blogging service that allows users to send and read short text updates—to tell of his adventure aboard Continental Flight 1404, which skidded off the runway in Denver on December 20 and burst into flames. Wilson (or “2drinksbehind” on Twitter) became a national news phenomenon after telling—via “tweets” in Twitter parlance—of his escape, then of his annoyance at being refused a cocktail after the ordeal. Krums’ and Wilson’s tweets from the accidents and the instant celebrity they gained highlight a service that many road warriors increasingly are turning to as they travel (Heslin, 2009). It also demonstrates the power of the media, the hardware and software accessibility, and the opportunities and challenges that this dynamic environment is bringing.

Anderson (2004, 2006) recently introduced the concept of the Long Tail: institutional websites and official websites of organizations represent only the 20% of the public websites on the Internet, while blogs, social networks, and small personal websites represent the remaining 80%. Anderson underlined some basic concepts that contribute to the understanding and shaping of the actual World Wide Web in the future. He remarked that besides official websites, there is almost everything in the long tail: the information is present, but spread in a galaxy of small websites, blogs, communities, and personal websites. As travel and tourism are experience-based activities (e.g., Tussyadiah & Fesenmaier, 2008), such experiences need to be communicated. Communities, blogs, travel review websites, and social media in general help information sharing among users (Arsal et al., 2008). These websites increasingly gain substantial popularity in online travelers’ use of the Internet (Gretzel, 2006; Pan et al., 2007). It is clear that relevant tourism information is spreading in a galaxy of different websites (e.g., Baggio, Antonioli Corigliano, & Tallinucci, 2007). Besides official websites, many unofficial websites appear every day competing to reach the traveler’s attention on the Internet. As noted by Henzinger (2007), the amount of information potentially available online is incredibly huge and diverse in nature. Hence, the appearance and the rise of these websites in the tourism domain are dramatically changing the domain itself and inevitably alter dramatically both information search and online marketing strategies (Gretzel, 2006).

One of the main issues related to information is overload (e.g., Rogers & Agarwala-Rogers, 1975) and information entropy (e.g., Jones et al., 2004). To manage this situation search engines are used as preferred gateways to access online information (Nielsen Media, 1997). Hence, a large amount of websites, official or unofficial, social or not, compete to reach the end-user. Studies (mainly in the information retrieval field) have focused on the importance of the Web search activity as the primary way for the end-users to achieve their informative goals (Rose & Levinson, 2004). They describe how users look for information online (Jansen, Sprink, & Saracevic, 2006) and propose new ways to optimize the Web search (Ma, Pant,
& Sheng, 2007). As the Web is the primary source of information for many people (Cole et al., 2003; Fox, 2002), search engines such as Google and Yahoo! have become very popular among prospective travelers in order to obtain suitable information before, during, and after their visit (Gretzel, Fesenmaier, & O’Leary, 2006). Focusing on the travel and tourism domain, information search is a critical activity as the Internet is becoming one of the most important sources for information acquisition (Pan & Fesenmaier, 2006). A recent study by HitWise (Hopkins, 2008) confirms the importance of this research field, underlining the growing importance of search engine referrals in the travel and tourism market. Search engines are the largest source of traffic for travel websites as in April 2008, for example, search engines counted for one third of upstream visits to the industry as a whole. This trend is growing at a rate of 8% every year.

Schmoll (1977) presented a model for describing tourism behaviors based on Howard and Sheth (1969) and Nicosia (1966). According to Schmoll, the decision to travel is the result of a distinct process involving: (i) travel stimuli, (ii) personal determinants, (iii) external variables, and (iv) destination characteristics. In the model there are some activities underpinning tourist behavior: (i) travel desires, (ii) information search, (iii) assessment/comparison of travel alternatives, and (iv) decision (Cooper, Fletcher, Gilbert, Shepherd, & Wanhill, 2005). The Internet revolution has not changed that but it provided a much wider range of providers who are supporting this process. In recent years studies extended and refined this model, adding interesting concepts such as the mental models (Fig. 1). A mental model is the travelers’ perception and representation of the information she/he is looking for (i.e., destination). Pan and Fesenmaier (2006) argued that the tourist planning process and information search on the Internet can be viewed as an interaction among (1) the tourist, (2) the interface, and (3) the online space (Fig. 1). More recently Kim and Fesenmaier (2007) integrated the mental model (as the first step of search activity) in a global four-stage model to describe tourists’ use of the Internet for trip planning.

This article investigates the nature of online tourism space. According to the long tail theory by Anderson (2006), the online space is a collection of official and unofficial websites that concur to gain the users’ attention for a given search term. Information is present but spread in a galaxy of websites (Anderson, 2006). This is especially true for the tourism domain where relevant information that may help the traveler in each stage of the tourism goods consumption is spread in a galaxy of different websites (e.g., Baggio et al., 2007; Gretzel et al., 2006). A recent study from Xiang, Wöber, and Fesenmaier (2008) defined the “online tourism domain” accessible via search engines. Based on previous work from Pan and Fesenmaier (2006), Wöber (2006), and Xiang, Kim, Hu, and Fesenmaier (2007), this study conceptualized and defined the so-called “online tourism domain” as it could be accessed from the users’ preferred gate to the Internet: search engines. The online tourism domain conceptualization is based upon four different perspectives, namely (i) the tourism industry perspective; (ii) the tourism symbolic representation perspective; (iii) the travel behavior perspective; and (iv) the travel information search perspective.

Xiang et al. (2008) found that only a tiny part of pages indexed by the popular search engine Google are accessible for users, among these pages a lot of websites (domain duplicates) are dominating the results. A study by Xiang and Gretzel (in press) describes the presence of UGC within the online tourism domain. The study describes the results of ten different searches performed with the popular search engine Google in nine US cities. The relevant results for each query were the ones contained in the first 10 pages (10,383 results). The findings demonstrated that there is a great amount of UGC populating the organic results of the popular search engine Google: 11% of search results are social media, distributed in the following categories: virtual communities 40%, review sites 27%, blogs 15%, networking site 9%, media sharing 7%, others 2%. One other interesting finding regards the fact that different keywords generate different social media (Xiang & Gretzel, in press). This study also confirmed what Gretzel (2006) and Pan et al. (2007) found in previous studies that social media gained substantial popularity within the online tourism domain.
Since social media was created and used for the purpose of sharing personal experiences, images, videos, thoughts, and feelings, they represent “a mixture of fact and opinion, impression and sentiment, founded and unfounded tidbits, experiences, and even rumor” (Blackshaw & Nazzaro, 2006). Marketing managers and researchers are exploiting new ways to adopt social media in the marketing and promotion arena to take advantage of “electronic word of mouth” (Litvin, Goldsmith, & Pan, 2008). Schmallegger and Carson (2008) suggested that the strategy of using blogs as an information channel encompasses communication, promotion, product distribution, management, and research. In tourism, some hotel chains and destination management organization websites are incorporating UGC as a part of their site content (e.g., Sheraton.com and visitlondon.com). These UGC websites can be viewed as an aggregation of online feedback mechanisms that use Internet bidirectional communication to share opinions about a wide range of topics, such as: products, services, and events (Dellarocas, 2003), creating a network of digitized word of mouth (Henning-Thurau, Gwinner, Walsh, & Gremler, 2004). The aggregation of the entire range of online representations creates the web reputation of organizations (Bolton, Katok, & Ockenfels, 2004; Dellarocas, 2003, 2005). Managing the increasingly diverse range of sites and content that build the Web reputation requires using a cross-disciplinary approach that incorporates ideas from marketing, social psychology, economics, and decision science (Malaga, 2001).

Inevitably these developments are influencing travel and tourism as increasingly organizations and destinations need to manage their online reputation and branding by dealing with the entire range of online providers rather than simply their own website. These issues must be taken into account by the destinations’ or hotels’ managers while planning and delivering online activities. “The impact on the seller’s reputation is crucial, and from defection greater than the impact to the buyer’s reputation”; due to the buyer’s ability to choose whom to play the game with (Malaga, 2001). Online reputation can be considered as an asset that requires investment to create and maintain and it reflects the branding and marketing proposition in general. As an asset, online reputation need to be developed, managed, and protected in an increasingly volatile environment (Mailath & Samuelson, 2001).

Objectives and Research Hypothesis

The main objective of this exploratory research is to investigate the online tourism domain accessible from search engines in the long tail era. The online tourism domain (Xiang et al., 2008) seems to be perceived as a whole, a kind of black box where different players are competing to both reach a higher ranking within the search engine and to satisfy users’ needs. The extreme vitality of social software as well as the diffusion of personal websites should help destination managers target their online communicational efforts. Social media can support a variety of activities on the Internet tourism domain (e.g., marketing intelligence, travel decision making, travel experiences), and destina-
tion managers as well as marketing researchers in the academic field and tourism industry need to explore different strategies to exploit social media for online promotion. This study proposes a different approach to the social media presence and exploitation within search results for a given destination. It takes into consideration social media presence and relevance within the online tourism domain, the importance of recent online marketing, and promotion strategies and their peculiar characteristics of informal communication. Hence, the study investigates how these online resources can shape the reputation of a given destination. The main research objectives are: (i) to assess how the long tail shapes the Web reputation for a given destination; (ii) to develop a measurement for Web reputation; and (iii) to give recommendations to destination managers to improve destination Web reputation.

DMOs are in this work considered as the head of the long tail, because they are generally entrusted (usually by public authority) with the promotion of the destination and DMO websites. They are committed to destination marketing, trying to attract more prospective travelers to the website and convert them to travelers to the destination (Buhalis, 2003). Their role is very important in the tourism value chain: they spread institutional destination information on the Internet, highlight attractions, events, accommodation, and services (Choi, Lehot, & O’Leary, 2007). DMO managers gradually appreciate that if managed properly, ICTs can generate a tremendous added value for organizations (Lee, 2001). DMO websites are official communication sources and therefore can be considered as a point of reference in the tourism online domain, mainly as regards the authority, accuracy, objectivity, conciseness, and coverage of the content (Inversini & Buhalis, 2009). However, new players are entering the online info-market (Cantoni et al., 2007) and the long tail players generate content that is growing at an astronomical rate (Inversini & Buhalis, 2009).

The DMO online communication strategy should reflect the institutional nature of the organization, being more informative than emotional, as well as expressing a positive sense with all destination aspects. Hence, the first and second research hypotheses concentrate on these aspects:

H1. DMO communicates the destination experience mainly with factual arguments.
H2. When DMO websites uses emotional arguments, it uses positive value judgments to market the destination online.

In contrast, long tail players do not have to submit to strict editorial or institutional rules and they can be more sensational about a given topic. They essentially provide personal opinions, attitudes and perspectives. With the rise of Web 2.0, end-users are both information generators and consumers at the same time, as they review products, express opinions, contribute photos and videos, and comment about services. This is primarily happening in the tourism field where travelers are reviewing hotels, attractions (O’Connor et al., 2008) and commenting about their holidays as well as other experiences. Hence the following two hypotheses:

H3. Unofficial players’ communications are based more on emotional arguments.
H4. Unofficial players’ communications express different value judgments about the destination.

Finally, a destination’s Web reputation can be investigated at different levels. Each level can give important feedback to the destination managers, creating general and detailed recommendations, useful to improve the reputation shortcomings.

H5. Different levels of analysis give general or detailed recommendation to destination managers.

Research Design

In order to explore this topic and to verify the proposed hypotheses, an exploratory research methodology was designed, to take advantage of both qualitative and quantitative research. The Roman city of Bath (UK) was selected to serve as a case study. The log files for 1 year of the official DMO website of the city of Bath, UK (visitbath.co.uk) were analyzed in order to extract nine relevant keywords. This allowed researchers to create a hypothetical environment that Web searchers are confronted with while looking for relevant information about the city of Bath. Then researchers studied the results that search engine would retrieve for real users. The nine most popular keywords used to reach the visitbath.co.uk website
were used to perform nine search activities on two of the most popular search engines, namely google.com and yahoo.com (Comescore, 2008). The first three results pages were considered useful for the study. Studies in this field sometimes concentrate on more than three pages of results (e.g., Xiang & Gretzel, in press; Xiang et al., 2008), but researchers decided to focus only on the first 30 results for each Web search (normal search engine setting is 10 results per page) as they are considered relevant for end-users both from academia and industry (iProspect, 2006).

Once the 540 search results were selected and the unique results (i.e., single occurrences) isolated, the problem of distinguishing between “official” and “unofficial” websites was evident (Anderson, 2006; Inversini & Buhalis, 2009). Although the DMO websites could be clearly identified, the other players were indistinguishable, making classifying them in the two categories quite subjective. The results were distinguished into two categories consistent with Anderson’s (2006) typology: 1) BMOW (“Brick and mortar” organizations’ websites, including all players that are doing business also in the offline world; most of these organizations were doing business long before the Internet was developed; and 2) MOOWAI (Mere online organizations’ websites and individual websites), including all individual websites—mainly blogs—and those organizations doing business (almost) exclusively online; these providers wouldn’t be even conceivable without the infrastructure that the Internet provided. BMOW were considered as “official” websites and examples include official and institutional websites (e.g., official destination websites), traditional tourism-related business (e.g., car rental, hotels), traditional travel agents (e.g., Thomas Cook). In contrast, MOOWAI were considered as “unofficial” websites when they host UGCs (such as Wikipedia.org, Wikitravel.org, Facebook, IgoUgo.com, Tripadvisor.com) or personal websites (e.g., blogs). The last created category was NR/NW (not relevant/not working) websites: they are the websites with content that is irrelevant to the city of Bath in England. Examples of these websites are the Bath (Maine, USA), Cosmetics websites, bath components websites, and so on. Figure 2 shows the classification flow of the websites. Given the high complexity of the domain, and the unique characteristics of the tourism information, in this study it is postulated that BMOW refer to what Anderson (2006) called official websites (i.e., 20% of the tail), while MOOWAI refer to unofficial ones (i.e., 80% of the tail, namely the long tail).

Finally, a tentative codebook for reputation analysis was created. The codebook was used as an instrument for content analysis (Riffe, Lacy, & Fico, 1998), in order to describe the reputation of Bath as a destination, based on the MOOWAI (or unofficial) websites. Websites were chosen as targets for the analysis mainly for two reasons: (i) they are part of the so-called long tail (Anderson, 2006) and they host a variety of information about different aspects of the destination, and (ii) they have no strict political or editorial rules to follow. The Web reputation, writing style, and arguments of the content found in the MOOWAI category were compared to the retrieved results from visitbath.co.uk. The codebook created for analysis was basically composed of two sections: (i) the first section concerned item descriptions such as the medium, the type of website (Xiang & Gretzel, in press), the item type, its size, and topic; and (ii) the second section concerned the arguments used as well as the value judgments and feelings expressed.

Three coders were used for the study. Inter-coder reliability (Riffe et al., 1998) was checked after an extensive training with the coders (4 hours of coaching) using the Fleiss Kappa method (Fleiss, 1971; Sim & Wright, 2005) and the reliability result was 0.92. The training was important for two reasons: (i) the different background of the coders and (ii) the emotions-based codebook that gave a lot of interpretation freedom to the coders. The information unit used for analysis is the item. Hence, the content analysis study did not consider all statements that appear in the websites but the overall content of the item (see Fig.3).

A second information level was defined for each unit and, therefore, the information unit (item) could also be split into subitems. Subitems are usually just a click away from the result page. For example, considering the example of a blog, the blog post about the City of Bath would be the item for content analysis, while the comments to the post would be the subitems.
Results

There were nine extracted keywords (Table 1) that generated 39.7% of the traffic to the website (log files analysis). A positioning analysis was performed in order to understand the ranking of visitBath.co.uk within the result pages of Google and Yahoo search engines (Table 1) for the nine keywords. The positioning analysis was performed with the help of the popular software WebCeo (http://www.webceo.com, free version).

Despite the fact that the keywords used are the most popular ones used by real users to reach the official DMO website and they correspond to the general users’ image of the destination (the so-called mental model), visitbath.co.uk has problems with the two keywords “bath spa” and “hotels in bath” (14th and 7th, respectively, in Google.com and not present in Yahoo.com). The keywords “bath england” and “things to do in bath” were also problematic in Yahoo.com (10th and 19th, respectively). However, in most of the cases, the official DMO website is present in the first page of search engine results (13 times out of 18). This means that when the DMO website is not ranked in the very first positions, its information competitors outperform it on the Search Engine Optimization. Hence, there is space for its information com-
petitors to “sell” the destination and to reach the end-user first.

In order to understand the range of competitors of the Bath DMO website in the online tourism space, 18 search activities (nine key words for each of the two search engines) were performed. The first three results per page were considered as of key relevance. The 540 search results (270 for each search engine) were qualitatively organized and classified in order to have a clear understanding of the websites galaxy around the destination. Unique results were isolated and divided in three (2 + 1) categories, namely: (i) BMOW, (ii) MOOWAI, and (iii) NR/NW.

Among the first group (BMOW), the visitbath.co.uk websites were highlighted and among the second website group (MOOWAI) the ones with UGC were isolated.

Table 2 shows the classification of unique results retrieved from the two search engines for the given set of keywords. The table shows the numbers of retrieved websites on the basis of unique results (column 1); similar results have been considered only once, for all of the search activities in each search engine. Google.com retrieved 205 unique results over 270 results in total. Among these results 69 websites belong to the BMOW category (official; nine websites belong to the Bath DMO), 83 belong to the MOOWAI category (unofficial; 20 host UGC), and 53 NR/NW. Yahoo.com retrieved 222 unique results over 270; among these results 28 websites belong to the BMOW category (official; four websites belong to the Bath DMO), while 93 belong to the MOOWAI category (unofficial; 38 host UGC), and 101 NR/NW. These results demonstrate how the long tail is already becoming mainstream in the information search process and the fact that prospective tourists need to go through a wide range of unofficial websites to reach the official information. It is clearly obvious that out of the 427 unique results only 13 belong to Visit Bath, demonstrating that the online information, promotion, and branding of the destination online is undertaken by a plethora of websites, all with different objectives, orientations, and policies. Two additional conclusions can be drawn from these results: Google.com considers more relevant official (brick and mortar) websites than Yahoo.com (69 and 28, respectively); while Yahoo.com considers more important unofficial (MOOWAI) websites than Google.com (93 and 83, respectively). Among mere online results, the cumulative percentage of Web 2.0 websites among those retrieved by the studied search engines and presented in the first three results accounts for 32.9%, while most of the DMO official website information competitors are Web 1.0 sites (66.1%).

The websites belonging to the MOOWAI category (as well as VisitBath official websites) were used as input for the next phase of the study: the reputation analysis. Among the 540 retrieved results (427 unique results), only the websites belonging to the MOOWAI category were considered for reputation analysis (together with the official Bath website results to investigate H1 and H2). Hence, the content analysis corpus was composed of 176 websites, plus 13 VisitBath.co.uk
websites that emerged as unique search engine results.

**Coding Results**

The items analyzed in the VisitBath official website present mostly factual arguments (86.4%), which express a positive value judgment about the destination (63.6%). In contrast, the MOOWAI category presents both factual arguments (33.1%) and also emotional arguments (55.6%). Emotional arguments are dominant (i.e., “the item presents only emotional arguments”) only in a small part of the analyzed items (16.7%). In most cases (38.8%), emotional arguments are present but not dominant (i.e., “the item presents factual arguments as well as emotional arguments” and “the item presents more factual arguments than emotional arguments”). Moreover, in the case of websites belonging to the MOOWAI category, the general evaluation of the destination is good: 54.2% of arguments express an overall positive judgment.

Table 3 confirms the first four hypotheses. Official DMO websites (i.e., visitbath.co.uk) tend to perform the marketing function for the destination with factual arguments, even though some emotional arguments are present in several items (H1). The value judgments expressed by DMO websites are mostly positive or at least neutral (H2). In contrast, MOOWAI players’ communication is based more on emotional arguments, but also factual arguments are relevant (H3). Value judgments of MOOWAI sources are different from official sources (H4); in most cases they are positive or at least neutral. Only a small percentage of items express negative value judgments. This first group of results helps to understand that the city of Bath is in general well considered on the Web and its reputation is in general supported by many statements online. The next results were compiled regarding the coding activity for MOOWAI items and subitems. The analysis was intended to respond to H5, because items present more descriptive and factual information from an empirical observation while subitems often highlight emotional comments. Due to the research keywords used, the following topic category of items and subitems (Table 4) were incorporated into the codebook. The item column (Table 5) represents percentages of items found for each topic, and the subitems column represents percentages of subitems found for each topic.

With regards to the first-level items, accommodation is the most relevant topic (34.7%), then the destination (25.9%) and attractions (20.6%); the subitems refer mostly to accommodation (48.6%), attractions (17.7%), and amenities (restaurants, pubs, and social life places) (10.9%).

The items as a whole present a comparable amount of factual arguments (41.3%) and arguments with an emotional connotation (46.9%). The value judgments are distributed as shown in Figure 4.

Accommodation, travel experiences, and attractions are the most critical topics. The destination as a whole presents a small number of (almost) negative judgments. Although the “item level” gives important information to the destination managers, this level of analysis is not sufficient to identify the real reputation shortcomings because emotional arguments have the same percentage as factual arguments. Therefore, a more detailed analysis has to be carried out. The last and final

Table 3
Argument Results Classification Official DMO and MOOWAI (Unofficial) Websites

<table>
<thead>
<tr>
<th>Arguments</th>
<th>Official DMO</th>
<th>MOOWAI</th>
</tr>
</thead>
<tbody>
<tr>
<td>No arguments</td>
<td>0.0%</td>
<td>11.3%</td>
</tr>
<tr>
<td>Factual</td>
<td>90.9%</td>
<td>53.8%</td>
</tr>
<tr>
<td>Emotional</td>
<td>9.1%</td>
<td>34.8%</td>
</tr>
<tr>
<td>Positive</td>
<td>63.0%</td>
<td>54.2%</td>
</tr>
<tr>
<td>Neutral</td>
<td>37.0%</td>
<td>37.9%</td>
</tr>
<tr>
<td>Negative</td>
<td>0.0%</td>
<td>7.9%</td>
</tr>
</tbody>
</table>

Table 4
Item and Subitem Topic Distribution

<table>
<thead>
<tr>
<th>Topic</th>
<th>Item</th>
<th>Subitems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Destination</td>
<td>25.9%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Travel experience</td>
<td>4.2%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Accommodation</td>
<td>34.7%</td>
<td>48.6%</td>
</tr>
<tr>
<td>Restaurant/pub/social life</td>
<td>3.4%</td>
<td>10.9%</td>
</tr>
<tr>
<td>Attraction</td>
<td>20.6%</td>
<td>17.7%</td>
</tr>
<tr>
<td>Event</td>
<td>2.8%</td>
<td>3.6%</td>
</tr>
<tr>
<td>News</td>
<td>0.9%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other</td>
<td>7.5%</td>
<td>9.3%</td>
</tr>
</tbody>
</table>
level is the subitem level. Subitems are just a click away from the result page and its items. To consider the example of a blog: the blog post about the city of Bath would be the item for the content analysis, while the comments of the post would be its subitems. Subitems have a strong emotional connotation: 63.2% of them have emotional connotations while 28.6% are factual. Subitems may help destination managers to focus more on the problems of the destination as a whole. As described in Figure 5, the real reputation shortcomings from the travelers’ perspective lie in the accommodation and in the general perception of the destination. From these last two analyses it is now possible to present recommendations for destination managers to raise the destination’s Web reputation: shortcomings for Bath’s Web reputation are primarily concerned with (i) accommodation, (ii) the overall perception of the destination, and (iii) attractions.

Discussion and Conclusion

Search engines are increasingly used as preferred gateways for online information. By re-creating end-users’ real environment and performing online searches using keywords used by real users to access the website as found in the log files analysis many conclusions can be drawn. Furthermore, search engines can play a strong role in shaping online reputation of a destination given the huge number of people who use them as preferred gateway to access the online information (Nielsen Media, 1997). As most users look mainly at the first three pages of the search results (e.g., Xiang & Gretzel, in press; Xiang et al., 2008), search engines can be considered as the primary layer that filters the online reputation of a destination (by given a defined set of results to the end-user).

This study examines the tremendous proliferation of online content and information contributed by both official and unofficial sources. The retrieved results were categorized into “brick and mortar” organization websites (BMOW) and “mere online organization websites and individual websites” (MOOWAI), in order to classify the different websites found in the tourism domain. Results show that VisitBath.co.uk (the official website of the destination) is only one of the information providers in the marketplace, competing with many players in the long tail for providing the right information to consumers. They market the destination with factual arguments (even though some emotional arguments are present). Most of the value judgments expressed by DMO websites are mostly positive or at least neutral. In contrast,
MOOWAI players’ communication is based more on emotional arguments (but also factual arguments are relevant). The emotional arguments are very important when Web 2.0 comes in: subitems (comments and reviews, or in general terms the information units that are a click away from the main result of the search activity item) are mostly emotional (63.2%) and express different value judgments for different aspects of the destination (e.g., travel experience, accommodation, restaurant pub and social life, attractions, and events). It is becoming more evident that it is the emotional connection that prospective travelers make with this content that can motivate or prevent prospective travelers in their purchase behavior and also in the way they consume the destination.

It is important for DMO managers to understand the reputation of their destination on the Web and how this is emerging through both official and unofficial content. Tourism managers can find interesting issues from this analysis, including the need for better search engine optimization, the need to provide the relevant content to meet the information needs of consumers, as well as the need to improve the communication flows within some specific sectors, such as the attractions and accommodation. The findings of this study are critical for a destination that needs constructive recommendations to act at the physical (hotel, event, attraction) and virtual (Internet, and in general online communication) levels. Once an understanding of what really concerns both information seekers and information providers should be a starting point for elaborating on the critical issues to be addressed in both the real and virtual worlds and to tackle the shortcomings that may affect its reputation and competitiveness. Reverse engineering work can help destination managers to find websites that are influencing the destination Web reputation and to try to create marketing (but also “physical”) initiatives to support, enhance, and perhaps correct them. Therefore, this study represents a first step for the destinations Web reputation analysis and provides a methodology for destinations to assess their reputation online. The online tourism domain must not be perceived as a black box, and the interactions that are constantly taking place should be followed and interpreted by destination managers in order to address criticisms and instigate improvements. Reputation recommendations are needed and should be given in detail to managers in order to let them operate both at offline and online levels. Hence, the Internet and Web 2.0 enable one to find reputation shortcomings at various levels, giving destination managers real data about tourists’ perceptions of a destination and an opportunity to address them in order to strengthen their competitiveness.
Biographical Notes

Alessandro Inversini received a Master in Communication Sciences and Communication Technologies in 2004 (USI, Lugano); his research activity primarily deals with usability, quality, Web 2.0, and new technologies of communication in cultural tourism. Alessandro visited Bournemouth University (UK) and Temple University (USA) for a 6-month period each, thanks to a grant of the Swiss National Research Foundation.

Lorenzo Cantoni graduated in Philosophy and holds a Ph.D. in Education and Linguistics. L. Cantoni is a full professor at the University of Lugano (Switzerland), School of Communication Sciences. He is vice-director of the Institute of Institutional and Educational Communication, director of the laboratories website lab, NewMiniLab, executive director of TEC-Lab, and scientific director of eLearning Lab. His research interests are where communication, education, and new media overlap, ranging from computer-mediated communication to usability, from eLearning to eGovernment.

Dimitrios Buhalis is Established Chair in Tourism and Deputy Director of the International Centre for Tourism and Hospitality Research (ICTHR) at the School of Services Management, Bournemouth University. Professor Buhalis is responsible for eTourism research and for incorporating eTourism in all aspects of tourism teaching and research. He has written or coedited a total of 10 books, including two books on the future of tourism. He has also published more than 80 articles in scholarly journals, books, conference proceedings, and consultancy reports.

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