Destination Web reputation: Combining explicit and implicit popularity to build an integrated monitoring system

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Abstract

Reputation is an essential component of destination competitiveness. The analysis of UGC ("explicit" popularity) and of the engagement generated by these comments ("implicit" popularity") is usually conducted separately. Monitoring the online performance of a destination require a more comprehensive approach, which combines the capacity to attract tourists' reviews and to enhance potential visitors' engagement. The paper presents a prototype of an integrated monitoring system, PlaceRank, aimed at analyzing both explicit and implicit reputation. Built on the database of the PaesiOnLine tourist community, the system transforms qualitative information into quantitative indices and map destinations according to the combined intensity they take on a three-level scale. A preliminary test with a set of popular European cities confirms the validity of the methodology, showing the cities that are highly appreciated and/or whose reviews are shared by many people and, viceversa, those that are less appreciated and/or characterised by a low virality of their contents.

 Keywords: Tourism destination, online reputation, explicit and implicit popularity..

1   Introduction

In the current market scenario, a good reputation undoubtedly represents a competitive advantage for a destination (Reputation Institute, 2013). The digitization of tourism has enhanced the value and impact of "reputational capital" among competitive factors. Measuring these aspects is a big issue, which requires the integration of quantitative and qualitative data.
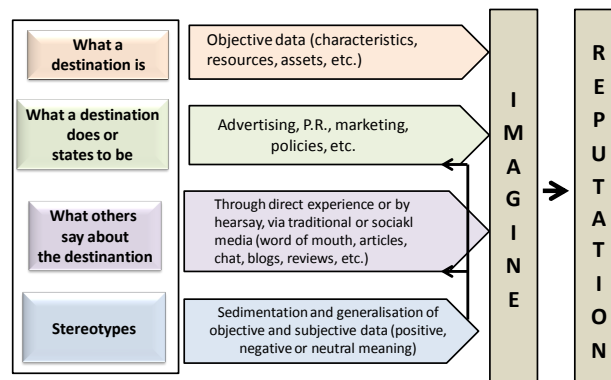
Currently, many studies and empirical research carried out at international level focus the attention on "explicit" web reputation, i.e. on User Generated Contents (UGC) published on different Web sources (communities, blogs, social networks, etc.) in order to understand how positive or negative opinions and narratives can affect visits to a destination (see, for example, Marchiori et al. 2013; Tussjadiah et al. 2011; Xiang and Gretzel, 2010). "Implicit" reputation, i.e. the level of virality and engagement generated by these comments (no. of comments posted in a time span; no. of likes and sharing, etc.), is generally used by destination managers to check the effectiveness of online editorial strategies. However, both aspects are important to assess the performance of a tourism destination on the online market. Understanding their different impact would help researchers and destination managers to better evaluate the destination reputation and check its positioning vs. potential competitors. The paper presents a prototype of an integrated monitoring system, PlaceRank, aimed at analyzing both explicit and implicit reputation of tourism destinations. The project, developed in co-operation with the tourist portal PaesiOnLine.it (www.paesionline.it)

combines different aspects (sentiment, topics, virality, reach, etc.) in order to assess the overall Web popularity of a destination.

2 Destination image, reputation and competitiveness: Literature review

Reputation is an essential component of destination competitiveness (Vengesayi, 2003) and it is linked with image (Fig. 1). Whether the identity of a destination means how it presents itself to the public and what it says about itself (intrinsic characteristics), the image is the idea, the feeling that the destination arouses in the public (mental perception by potential visitors). In this context, the reputation of a destination is the result of the social assessment the public expresses on the place: it derives from the image every person has of the destination identity and then depends on the alignment between identity and image (Prado and Trad, 2012).

If identity and image can be built *a priori*, reputation requires the active participation of the message recipient. Unexpected bad news or negative judgments expressed by an opinion leader can suddenly undermine the fortunes of even the most popular place, moving the interest of tourists and other stakeholders towards other destinations.

What a destination is	Objective data (characteristics, resources, assets, etc.)	
What a destination does or states to be	Advertising, P.R., marketing, policies, etc.	**I M A G I N E** → **R E P U T A T I O N**
What others say about the destinantion	Through direct experience or by hearsay, via traditional or sociakl media (word of mouth, articles, chat, blogs, reviews, etc.)	
Stereotypes	Sedimentation and generalisation of objective and subjective data (positive, negative or neutral meaning)	

Source: adapted from Prado and Trad, 2012

Fig. 1. The four main pillars of destination reputation

In this context, the experience of a place can debunk stereotypes and change the perception the tourist has before the visit, which is mediated by the cultural filters provided by others (e.g. friends, literature, movies) or by the communication made by the destination itself. The experiences lived by different stakeholders and the extent to which they interact with the four pillars, form their destination image and reputation.

3 Explicit vs. implicit reputation: The new PlaceRank system prototype

3.1 Measuring reputation: the KPI metrics

Generally, the social media metrics used to analyse what people say about a destination are based on the following aspects: *Sentiment* (the tone people use: positive, negative or neutral); *Topics* (main themes); *Strength* (share of buzz); *Virality and Reach* (no. of people reached by the message); *Source* (where people talk and its value); *Influence* (identification of the influencers).

Sentiment and Topics measure the "explicit" popularity of a destination. Their collection over the Web requires ad-hoc tools to clean, select and rank data, given the ambiguity of language. Secondly, it often disregards the purpose of the comment, the nature of the reporter and his/her relationship with the destination (tourist, resident, etc.). Thirdly, it mainly provides qualitative judgements, which are often not detailed (e.g. they do not deal with different aspects of local tourism supply). Finally, the quality of the text analysis is influenced by many factors, such as: the level of logical structures, the nature of the information source; the domain precision; the language. According to recent studies (Piskorski e Yangarber, 2013), the precision of these analyses is about 60-70% Consequently, the results obtained can be generic and not contextualized on specific tourism-related aspects.

As concerns the other metrics (Strength, Virality & Reach and Influence), they analyze the "implicit" popularity, i.e. the degree of interest Internet users show about the destination, even without leaving a specific comment (i.e. by reading and sharing other users' reviews). It can be measured using four main KPIs: *Conversion rate* (no. comments to posts)); *Amplification rate* (no. sharing of the same post); *Applause rate* (no. likes to posts); *Growth rate* (no. new followers).

All metrics discussed are used to assess the effectiveness and efficiency of the social media strategy adopted by a tourism destination. Consequently, the analysis of different aspects is usually conducted separately or through a dashboard, in order to highlight strengths and weaknesses of each decision taken.

However, monitoring the online performance of a destination, in comparison to competitors, would require a more comprehensive approach that combines the evaluation of both explicit and implicit reputation, i.e. the capacity of the destination to attract comments and to enhance potential visitors' engagement. The output should allow researchers to identify the destinations that are highly appreciated, and/or whose scores/reviews are read and shared by many people on the Web, and those that are little appreciated and/or characterised by a low virality of their contents (Fig. 2) .
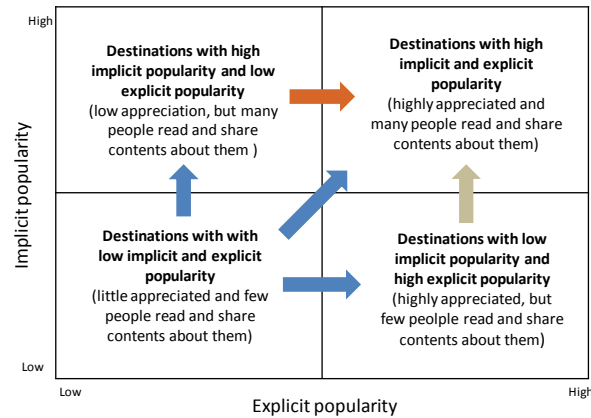
Fig. 2. Explicit vs. implicit reputation: Mapping tourism destinations

3.2 PlacesRank prototype: the project

Starting from this framework, the project developed by PaesiOnLine (POL) tourist community (www.paesionline.it) in co-operation with the authors aims at enhancing the monitoring system currently in use (PlacesRank) by assessing the performance of a destination through the combination of its explicit and implicit popularity. PlacesRank is an assessment model developed by POL that uses editorial and user data to evaluate the popularity of a destination. User data include judgments (scores) on the destination as a whole and on different aspects of local tourism supply and comments/reviews posted directly by users. The evolution of PlacesRank was aimed at integrating the scores and comments given by POL community members with the engagement generated by these judgments. The main advantages of building a monitoring system on a definite participative tourism community are as follows: higher focus on the main discussion domain (the destination and its services); clear identification of the reviewer's profile and of his/her relationship with the destination (e.g. visitor vs. resident); combination of qualitative and quantitative assessments; qualitative reviews divided by topic (transports, etc.), so as to enhance the information collected.

In detail, the explicit reputation was measured by using a composed "*Explicit Social Appreciation Index*", derived by the *"emotional" score* (i.e. the score a tourist gives by instinct to a destination on a 1-10 scale) and the *service score* (as mean of scores given by tourists to thirteen elements characterizing the destination tourism supply: accommodation, transports, food and beverage, accessibility for all, activities, entertainment, attractions, shopping, prices, information, welcoming, cleanliness and security).

As regards implicit reputation, different indicators were considered: no. destination unique pageviews/ unique pageviews home; no. downloads of destination guide; no. scores; no. comments posted; no. like/dislike. The first two indicators measure the level of "passive" engagement (how many times the homepage was viewed and the tourist guide downloaded, no matter if members posted any comment or not); the last three indicators assess the level of "active" engagement (how many members voted

the destination and/or left comments and/or put a like on posts). The "*Implicit Social Appreciation Index*" or "Engagement Index" was calculated by combining passive and active engagement indicators, whose values were normalized and translated into a 1-10 scale.

4   Preliminary results, limitations and future research

A preliminary assessment was conducted with a group of popular European cities reviewed on the POL portal over a three year period (2011-2013: Paris, London, Copenhagen, Barcelona, Prague, Rome, etc.). The popularity of each city was analysed by calculating its Explicit and Implicit Social Appreciation Indices and putting their values on a XY graph. The intensity of each indicator was measured on a three level scale: low-medium-high.

The results obtained confirm the validity of the methodology in providing a comprehensive and dynamic assessment of destination positioning. For example, among the cities analysed, Paris shows a high explicit and implicit popularity, while other four cities (Barcelona, London, Rome and Prague) present a high explicit popularity but a medium engagement index (implicit popularity). These results can be influenced by different factors (e.g. the fame of the city or a new online advertising campaign). In addition, the size of the community and the members' profile can impact on the destination performance. These limitation will be addressed thoroughly in the continuation of the project. Future research will also study how to integrate members' narratives into the evaluation of explicit popularity.

Finally, there is a high potential usefulness/applicability of the prototype also in the tourism industry (e.g. to check and monitor the performance of a hotel within a tourist portal community, like Booking, com or Tripadvisor.com).

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