Measuring the Web reputation impact of events: preliminary evidence from a city brand listening project

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Abstract

This paper provides evidence on the impact of events on the Web reputation of a city. The marketing and tourism literature indicates that events represent an important lever to strengthen the brand of travel destinations. However, the impact of events on the Web reputation of a city is largely unexplored. This paper takes a first step in this direction by measuring the impact of two events on the Web reputation of Milan city: the September 2011 fashion week and the May 2011 arrival of the bike racing tour of Italy (*Giro d'Italia*). Impact is measured in terms of both growth of volumes and sentiment of Web conversations on Milan city. Findings seem to indicate that events can have a varying impact on the Web reputation of a city depending on their consistency with the city brand strengths.

Keywords: social media; web reputation; microblogging; city brand.

1 Introduction and state of the art

Over 80% of travellers use the internet for their travel planning (Funsherpa, 2012). There is little doubt that the Web plays a critical role in building the reputation of travel destinations. Organizing and marketing events seems an important lever to strengthen the brand of travel destinations. What takes place in a city represents the main driver of the city's ability to attract new visitors. However, the impact of events on the Web reputation of a city is largely unexplored. This paper provides insights on the Web reputation impact of events from a research project in cooperation with the Directorate of Tourism of Milan City. Milan hosts roughly 4 million visitors every year with an 18% average growth over the past ten years. Despite these figures, the majority of these guests are business visitors, while leisure tourists account for less than 30% (Provincia di Milano, 2012). The goal of the project is to change this ratio towards a greater percentage of leisure tourists by repositioning Milan within the short-break tourism market.

In the last years, cities are increasingly using events to improve their image and attract visitors and investments. The importance of studying the impact of an event has been recognized by several studies (Johnston, 1999; Robertson & Guerrier, 1998; Schuster, 2001; Waitt, 2003). Overall, previous research is important to support events as an opportunity to strengthen the brand of a tourism destination. However, it also highlights how the actual impact of events is difficult to measure. According to

(Paddison, 1993), one of the main problems is related to the complexity of the concept of a location's brand image that is multifaceted and highly subjective.

In this paper, we analyse the impact of two events on the Web reputation of Milan city: the September 2011 fashion week and the May 2011 arrival of the bike racing tour of Italy (*Giro d'Italia*). While the fashion week is consistent with the strengths of Milan city brand, the arrival of the bike racing tour of Italy is not. In this paper, we put forward the hypothesis that events have an impact on the Web reputation of a city only if they are consistent with the city brand strengths. The comparison of two contrasting events is meant to provide preliminary evidence to support this paper's hypothesis.

2 Research hypothesis

Events are frequent and diverse. Decision makers have to select only a small number of events to be organized with the goal of strengthening a destination's brand. A very straightforward decision variable is the ability of an event to attract a broad audience. A common assumption is that attendants will act as spontaneous promoters of the event and, therefore, of the location where the event takes place. Selecting events based on their ability to attract a high number of attendants looks like a logical consequence of the traditional marketing mind-set.

Our criticism to this assumption originates from the following observations:

- The promotional effect of events cannot be equated to broadcasting, as it is based on word of mouth. Attendants may or may not promote the location of an event depending on their attitude towards that particular location. In (Fuentetaja, Ariza, & Alzua-Sorzabal, 2012), authors provide an interesting model to describe the attitude towards a tourism destination and highlights the complexity of the relationship between this attitude and travel decisions. Assuming that a visitor who has made a travel decision to attend an event will have a positive attitude towards the event location seems naive.
- Word of mouth does not have the same dynamics as broadcasting. In (Barbagallo, Bruni, Francalanci, & Giacomazzi, 2012), authors note how on social media negative posts have a greater influence compared to positive posts. As a consequence, word of mouth is less predictable and more risky than other forms of marketing.
- Events are diverse and different events may have a varying degree of consistency with the brand drivers of a particular location. Anholt's model highlights six fundamental dimensions of a city brand reputation (Anholt, 2007). In turn, each dimension can be described by multiple brand drivers. Different locations map differently on Anholt's model, showing specific strengths and weaknesses. Anholt describes this mapping as the character of a location.

Our claim is that the character of a location may or may not be consistent with an event. Given the complexity of a location's character, consistency is also a complex

construct. In this paper, we take a first step towards investigating the consistency between events and their locations' character based on simplified exploratory observations (authors of this paper, 2010). We consider an event consistent with a location's character if the event can be categorized along one of the location's brand drivers that represent a strength of the location. This represents a simplification of the consistency construct. However, intuitively the expectations of attendants are more likely to be satisfied if the event takes place in a location that is strong on the brand driver that represents the main target of the event. As a first step towards understanding the impact of events on their location's brand, we test the following hypothesis:

Research hypothesis — Events that can be categorized along one of the location's brand drivers that represents a strength of the location have a positive impact on the location's brand reputation. Conversely, events that can be categorized along one of the location's brand drivers that represents a weakness of the location do not have a positive impact on the location's brand reputation.

3 Method and empirical evidence

Testing is based on social media information and, particularly, Twitter. We have focused on Milan as a location for events. In order to identify the strengths and weaknesses of Milan City, we have first taken Anholt model and defined brand drivers along the model dimensions. Brand drivers have been defined according to the requirements of the Directorate of Tourism of Milan City and they include drivers such as Arts&Culture, Fashion&Shopping, Food&Drinks, Services&Transports, Events&Sport. Each brand driver has been provided an operating definition by defining a corresponding list of keywords identified with a computer-aided Pareto analysis of word occurrences inside a sample of 100k posts selected with keyword "Milan" from Twitter, dated between January 1st 2011 and January 31st 2011. We used a semantic analysis tool (Barbagallo, 2010) to disambiguate and select tweets that express opinions on Milan city, i.e., tweets carrying sentiment.

On social media, a brand can be considered strong on a brand driver if it attracts greater volumes of conversation on that brand driver and if the average sentiment of those conversations is more positive than that of competitors. (authors of this paper, 2010) shows that Milan is consistently stronger than other cities in the Fashion&Shopping brand driver; conversely, it has been found to be consistently weaker than other cities in the Events&Sport brand driver. These results have lead us to select Fashion&Shopping and Events&Sport as our reference strong and weak brand drivers, respectively.

Then, we have selected two important events taking place in Milan City along those brand drivers, the *Vogue Fashion Night Out* (September 2011) and the arrival of *Bike Racing Tour of Italy* in Milan (May 2011). Both events have been indicated as very important by the Directorate of Tourism of Milan City. We have monitored the buzz on Twitter on both events during the week when the event takes place. Both events

generate significant volumes of tweeting (analyses are limited to the English and Italian languages), reinforcing their relevance.

The impact of an event on Milan brand has been measured as the percentage variation of both the volumes and sentiment of tweeting on the city brand drivers. Table 1 and Table 2 show the percentage variations during the weeks of the two events compared to the average volumes and sentiment over all the month in which the event is hosted. Sentiment is measured as a continuous variable between -1 (very negative) and +1 (very positive). Results show that while the *Vogue Fashion Night Out* coincides with a considerable percentage increase of volumes and sentiment for all brand drivers related to the event, the *Bike Racing Tour of Italy* coincides with no significant changes. These results are consistent with our research hypothesis.

Table 1. Impact of the arrival of the Bike Racing Tour of Italy on the volumes and sentiment of tweeting on Milan City

	Average daily volumes			Average sentiment			
Brand driver	May 2011	Event week	Percentage Variation	May 2011	Event week	Percentage Variation	
Food&Drink	74	23	-68.92	0.72	0.68	-4.56	
Events&Sport	1,017	951	-6.49	0.76	0.72	-5.43	
Fashion&Shopping	307	162	-47.26	0.52	0.72	+36.90	
Night&Music	139	161	+15.69	0.75	0.85	+12.25	
Arts&Culture	51	35	-31.37	0.72	0.84	+16.78	
Life&Entertainment	87	70	-19.69	0.89	0.72	-19.16	
Fares&Tickets	11	24	+111.76	0.80	1.00	+25.00	
Services&Transport	309	282	-8.98	0.89	0.77	-12.83	

Table 2. Impact of the Vogue Fashion Night Out on the volumes and sentiment of tweeting on Milan City

	Average daily volumes			Average sentiment			
Brand driver	September 2011	Event week	Percentage Variation	September 2011	Event week	Percentage Variation	
Food&Drink	105	327	+210.44	0.78	0.81	+4.16	
Events&Sport	1,229	2,146	+74.50	0.77	0.83	+7.07	
Fashion&Shopping	462	817	+76.58	0.67	0.79	+16.97	
Night&Music	204	279	+36.43	0.84	0.91	+9.67	
Arts&Culture	69	57	-17.79	0.83	0.81	-3.04	
Life&Entertainment	147	410	+178.60	0.61	0.73	+19.74	
Fares&Tickets	8	9	+8.04	0.78	0.81	+4.16	
Services&Transport	391	750	+91.41	0.07	0.62	+687.67	

4 Conclusions and future work

This paper takes a first step towards understanding the impact of an event on the brand reputation of the location where the event takes place. We have hypothesized that an event has a positive impact on the brand reputation of its location only if it reinforces a brand driver that represents a strength of the location. This hypothesis has been tested by analyzing the buzz on Twitter related to two important events that have taken place in Milan City: the Vogue Fashion Night Out and the arrival of Bike Racing Tour of Italy in Milan. The former is a fashion event and is consistent with a brand driver that represents a strength of Milan city, while the latter is a sport event and is consistent with a brand driver where Milan shows a clear weakness. Preliminary results seem to support our hypothesis. The Vogue Fashion Night Out coincides with a significant increase of both the volumes of tweeting on Milan City and the average sentiment of tweets. On the contrary, the arrival of Bike Racing Tour of Italy in Milan does not coincide with any improvement of Milan's overall brand reputation on Twitter. This research has several limitations and results can be considered only preliminary. First of all, the research proposition discussed in Section 2 could be studied by designing a coherent set of hypotheses that address a richer set of variables describing the consistency between an event and a location's character. In this respect, this paper takes a simplified, yet intuitive definition of consistency that supports an initial exploratory analysis. Second, testing is based on two case studies, while broader evidence is needed to generalize results. However, the data set describing each case study is large and has required a significant analysis effort.

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