

## **Promoting European countries destination image through twitter**

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# PROMOTING EUROPEAN COUNTRIES DESTINATION IMAGE THROUGH TWITTER

**ABSTRACT:** Destination Management Organizations (DMOs) have traditionally been providers of destination-related information and knowledge. Nowadays they have realized the added value of using social media channels to market their destinations. They are developing strategies and initiatives to increase awareness, achieve influence and promote country's image. Twitter is the most popular microblogging site. Building relationships, convenience of networking, and expanding online branding opportunities have been recorded as the perceived benefits of using it. The paper records tourism Twitter accounts of 38 European countries and indexes of Twitter performance such as number of followers of each account and indexes of followers' community involvement. An overall performance index is constructed. European countries are then ranked according to their Twitter accounts performance. Three indexes regarding actual Tourism performance for each country, are also recorded. Indexes include International Tourist Arrivals 2011, International Tourism Receipts, and The Travel & Tourism Competitiveness Index 2011. Correlations between Twitter performance indexes and tourism indexes are calculated. The high and significant correlations reveal that Twitter use is in accordance with countries' tourism performance and that Twitter, as a medium of eBusiness, does not fail to provide information and to promote countries' Destination Image.

**Key words:** Twitter, web 2.0, destination image, DMOs, Performance

## INTRODUCTION

Nowadays the world wide web is part of many people's daily lives. Travel and tourism have for a long time been one of the most visited categories of websites by internet users (Heung, 2003; Lexhagen, 2008) due to the fact that tourism products are intangible, can hardly be evaluated prior to their consumption (Pan *et al.*, 2007; Rabanser & Ricci, 2005), are high-priced, high involvement, well-differentiated in nature (Jeng & Fesenmaier, 2002; Leung *et al.*, 2013) and depend on accurate and reliable information (Kaldis *et al.*, 2003). Thus travelers during their decision-making process, collect and review various forms of travel information in order to minimize the risk of making wrong decisions (Leung *et al.*, 2013).

One of the main challenges that tourism destinations and businesses confront is the rise of microblogs, blogs, online communities, social networking sites and media sharing sites (Sotiriadis & van Zyl, 2013) allowing tourists to interact and share their views, experiences, travel advice, suggestions and recommendations thus becoming the primary medium by which travel information is shared (Xiang & Gretzel, 2010), one of the most important information sources for travel planning and the new digital form of word of mouth (Litvin *et al.*, 2008; Schmallegger & Carson, 2008). Yoo *et al.* (2007) wrote characteristically that social media 'are taking an important role in travelers' information search and decision making behaviors'.

Local, regional, national and transnational DMOs have a wide range of responsibilities including destination promotion; coordination of destinations' marketing strategies like the destination brand, and the management of information and knowledge about the tourism destination; establishment of networks and initiatives to improve the destination offer and the coordination of tourism development and planning (Munar, 2012; Ritchie & Crouch, 2003). The increased use of web 2.0 applications forces DMOs to adopt and integrate them in their marketing strategies in order to better communicate with online

target audiences (Milwood *et al.*, 2013). Despite the fact that it is of vital importance that DMOs understand ‘the antecedents of the tourists’ use and adoption of social media before, during and after their trips due to the impact of these collaborative behaviors on tourists’ decisions about the choice of all the elements of the trip’ (Bayram & Arici, 2013 p.2), for the moment DMOs still lack the solid strategy of mastering social media and implement it in the tourism industry (Manap & Adzharudin, 2013).

## TWITTER

Twitter officially launched in October 2006 (Krishnamurthy *et al.*, 2008) and now is the most popular microblogging site with more than 554,750,000 active registered users and one of the top 10 most visited websites on the Internet (statisticbrain, 2013). Users post short messages, less than 140 characters, averaging 11 words per message (O’Connor *et al.*, 2010) which are displayed in reverse chronological order (Hargittai & Litt, 2012) answering the question: “What are you doing now?” (Naveed *et al.*, 2011; Sousa *et al.*, 2010) or after 2009 “What’s happening”. Chu *et al.* (2010) claimed that Twitter by changing the question above the tweet input dialog box, have made a transition from ‘a personal micro-blogging site to an information publish venue’ to some extent.

Users can set their updates to private or they can allow the entire cyberspace area of Twitter, to view their pages (Edman, 2007). Users may also choose to follow other users or are followed. Unlike on most online social networking sites the relationship of ‘following’ is not mutual (Hargittai & Litt, 2012). That means that a user can follow any other user, and the user being followed need not follow back (Kwak *et al.*, 2010). Previous studies have reported contradictory findings about reciprocity. Java *et al.* (2007) investigated users’ networks and found that they have a high degree correlation and reciprocity, indicating close mutual

acquaintances among users, while Kwak (2010) mentioned that only 22,1% of the users have reciprocal relationship between them.

Apart from posting status updates, Twitter users may republish another's tweet (RT-retweet), write a tweet addressing a specific user which is called a mention, tweet directed at a certain user via @reply. Both replies and mentions include '@' followed by the addressed user's Twitter id. Twitter users may also follow hashtags that can group tweets by topic ('#' followed by a word), create lists of accounts to follow, search through the Twitter chatter and participate in trending topics (Hargittai & Litt, 2012; Kwak *et al.*, 2010; Sousa *et al.* 2010). Via followers relationships, retweets, #hashtags, and @replies, Twitter users are connected in an implicit or explicit manner (Sousa *et al.* 2010).

In Twitter.com, typical post topics include personal updates like daily life activities with friends, families, and co-workers; share of information and current news, editorials, marketing, and discussions; and opinions with interested observers (Java *et al.*, 2007; McFedries, 2007; Meyer *et al.*, 2011; Zhao & Rosson, 2009). Moreover users may seek knowledge and expertise in public tweets and feel another layer of connection with friends and the world (McFedries, 2007). Zhao and Rosson (2009 p.243) claimed that "Emotionally, people seem to use micro-blogging to achieve a level of cyberspace presence, being "out there".".

#### USE OF TWITTER BY DMOs

Portland, Oregon, in 2008 was the first city to launch its official online visitor information centre on Twitter (twisitor center) [www.twitter.com/travelportland](http://www.twitter.com/travelportland) (Hey, 2010). Nowadays on <http://www.twisitorcenter.com/> someone can find the listing of 868 tourism visitor centers and destination marketing organizations that have a presence on twitter.com. Organizations see Twitter as "a new, groundbreaking way of reaching out to, interacting with,

and understanding the consumer behaviour of millions around the world” asserted Hays et al. (2013, p. 215 ).

Research on Twitter use by DMOs is limited. One of the preliminary studies regarding social media use by DMOs was that of Hamill *et al.* (2010). The authors reported findings concerning social media use by the Europe’s leading national DMOs. 21 out of the 25 DMOs studied, were using Twitter that time. Comparing to 2008 (Hamill *et al.*, 2009) DMOs had made some progress. However, leading national DMOs in Europe were not fully engaged with social media.

The study of Nguyen & Wang (2012) seeks to provide insights into the application of social media in the tourism industry from the perspectives of DMOs by taking into consideration the case of VisitSweden, the Swedish national tourism marketing organization. Part of their study records use of Twitter. The Twitter accounts for Sweden head office and foreign markets were created in 2009, at this time, two of Twitter accounts “Sweden” and “VisitSweden” are considered as the most active. The department of Social media and Public Relations is responsible for these Twitter accounts, the account “VisitSweden” is mostly tweeted in Swedish and handled by cooperate communications officer. The account “Sweden” is updated in English by social media manager. Both of the accounts are posted with information about the tourism in Sweden and campaigns of VisitSweden. They concluded that DMOs need to emphasize the wide participation in online marketing and social media activities to achieve benefits. Integrating online marketing and social media activities with traditional marketing is an essential marketing strategy for today’s DMOs.

Stepchenkova *et al.* (2013) investigated the suitability of using publicly accessible data from Twitter for gaining visitors’ perceptions about Florida using content analysis. They examined what positive affective states are associated with the destination and to which

destination attributes these affective states are related most closely. Findings of the study show how the destination is viewed by visitors and residents.

Bayram and Arici (2013) used also content analysis to explore the usage of social media among the DMOs of Balkan countries and how social media is being used to enhance their brands and to reach potential visitors. Nine out of twelve countries under investigation maintain an official Twitter account. One measure of a Twitter user's effectiveness is the number of followers it has attracted. DMOs have between 260 and 21.799 followers. The study confirmed the growing importance of social media by DMOs. The most used social media tools were Facebook and Twitter. The authors proposed that DMOs should use more social networking sites to communicate with their potential customers and give them the ability to broadcast their opinions about the offered services.

Milwood *et al.* (2013) tried to identify the differences in the adoption and management of social media tools in the United States (U.S.) and Switzerland. U.S. DMOs in recent years have begun to introduce various social media tools to their websites, while Swiss DMOs are using comparatively less social media tools. Particularly, 78,2% of the U.S DMOs and 31,4% of Swiss DMOs have already adopted Twitter. Overall DMOs are at different stages in their adoption of social media tools. DMOs need to strategically organize their web marketing efforts in order to maximize social media adoption and make more efficient use of them.

DMOs attitude towards using social media in Egypt was examined by Hassan (2013) along with and the role that it can play in positioning the country after 25 January revolution. Data were collected using 180 questionnaires answered by DMOs. The vast majority of Egyptian DMOs are using Twitter. The results of the study revealed that social media is not well used by DMOs despite that DMOs believe that social media is an important marketing tool and can help positioning a new image of Egypt and their products.

How Twitter is utilized by five prominent American destinations (Illinois, San Francisco, Idaho, Texas, and Milwaukee) was investigated by Sevin (2013). The study aimed at understanding the overall trends and usage patterns of microblogging, and the relation of social media ecology and place branding. A total of 5582 tweets were analyzed. The research found that destination marketing projects tend to use Twitter predominantly to share information about events – such as festivals, concerts, and fairs and do not necessarily make use of interpersonal communication and networking capabilities offered by Twitter.

This paper records Twitter tourism accounts of European countries. In total, 38 accounts are recorded. The main objective of the paper is to record Twitter characteristics of the accounts and provide a ranking of them, in relation to their performance regarding Twitter. By recording indexes of Twitter performance, the paper constructs an overall Twitter performance index and ranks European countries according to the partial and the overall performance of their relative Twitter accounts. Next, the paper correlates the accounts' performance with the actual countries' tourism performance as it is recorded by official tourism indexes. The central question of the paper is whether Twitter tourism accounts succeed in reaching potential tourists instead of just being there as another one technological application, which serves more as a gadget than as a channel of providing information and promoting tourism destination image. The idea is to associate Twitter presence of European tourism accounts to countries' tourism performance, in order to explore whether Twitter presence is in line with other tourism indexes. In this way Twitter may serve as another means for promoting countries' destination images. In case that Twitter performance indexes are in accordance with other tourism performance indexes, then at least one cannot reject the plausible conclusion that Twitter accounts assist in promoting destination management.

## METHODOLOGY

During 8-10 October 2013, 38 European countries tourism Twitter accounts were recorded along with their characteristics, metrics and performance indexes. These account are:

@Spain, @VisitBritain, @VisitNorway, @VisitScotland, @Italy\_it, @VisitHolland, @VisitGreecegr, @DiscoverIreland, @HungaryTourism, @VisitPortugal, @GermanyTourism, @MySwitzerland\_en, @GoVisitDenmark, @VisitMonaco, @OurFinland, @Belgiuminfo, @Austriatourism, @Visit\_Poland, @VisitCyprus, @CzechTourism, @Croatia\_hr, @VisitSweden, @UK\_Franceguide, @SloveniaInfo, @RomaniaTourism, @Visit\_Russia, @VisitMontenegro, @VisitMalta, @Visit\_Turkey, @VisitEstonia, @Luxembourginfo, @ExplorMacedonia, @GNTA3 (Georgia), @VisitLithuania, @VisitIceland, @Travel\_Latvia, @VisitSlovakia, @Andorraworld\_en.

Some central tourism websites do not provide links to Twitter accounts. In these few cases we used other tourism Twitter accounts for these countries found through search on the Internet. In the case of France and Lithuania we used UK\_FranceGuide, and Lithuania UK respectively.

Number of followers of an account, number of other accounts an account follows (following), and number of tweets, are recorded since it is supported by the literature that they are indicators of Twitter performance (Anger & Kittl, 2011; Bakshy *et al.*, 2011; Bayram & Arici, 2013; Crump, 2011; Rosi & Magnani, 2012; Sevin, 2012). Also, we used Topsy score (a complex index provided by Topsy.com social search and analytics site, which takes into account the retweets and mentions than matter for a particular Twitter account, as a measure of users community involvement for this account), and Total Effective Reach (the total amount of people whom are exposed to a tweet or its retweets, for the 10 most popular tweets of an account, provided by <http://twtrland.com>). The two last performance indexes

demonstrate the community of followers involved in reading tweets from the 38 tourism accounts and spreading (by retweeting or mentioning) the information originally provided by the 38 accounts. Topsy score and total effective reach are chosen among other indexes of the same type because they add to the construction of an index and they are easily comprehended.

An overall index of Twitter performance is then constructed by using Principal Components Analysis (PCA) and sorting the scores which result from PCA for the 38 countries. In this way a ranking of the 38 countries according to their twitter performance, is provided. The 38 sorted Twitter accounts are described along with the correlations among the performance indexes used, in order to gain some insight of the profile of the 38 accounts.

At the last step, three official, general tourism performance indexes are reported for the 38 countries under study: International Tourist Arrivals 2011 in thousands, International Tourism Receipts (US million) (UNWTO, 2013), and The Travel and Tourism Competitiveness Index 2011 (Blanke & Chiesa, 2011). Correlation coefficients of these three indexes with Twitter performance are calculated to answer the main question of this paper, that is whether Twitter performance is in accordance with the general tourism performance of the 38 countries.

## FINDINGS

Table 1 presents all the variables used in the analysis of this paper. The five Twitter indexes are used to construct the overall performance index, while the next three ones provide actual tourism indexes for the countries that the accounts refer to. Number of tweets indicates the activity of an account. Number of followers and following, provide an indication of the network expansion of a Twitter account. Especially number of followers describe how many users have subscribed to read the tweets posted by the account. However, not all the

followers really “follow” the account by means that they need not read every tweet and they are not necessarily active readers. Topsy score and Total Effective Reach provide indications of the real amount of people that read and transmit a tweet, so they are actively involved in following the account.

By reading Table 1, we can see that @VisitBritain has the maximum number of followers (148,118), while @Andorraworld\_en has the minimum number 17. The average number of followers is 17,966 and the standard deviation equals 28,895. Because the standard deviation is much larger than the mean, we conclude that there is a great dispersion of this particular index among the accounts we study. “Following”, ranges from 2 to 26,382 with an average of 1,793 and a standard deviation equal to 4,261. There exist a great dispersion of the number of following, as well as the number of followers and the number of tweets of the Twitter accounts under study.

Topsy score and Total Effective reach range from zero to 7,702 (@visitBritain) and from zero to 290,167 (@vistNorway), respectively.

**Table 1: 38 European countries' tourism Twitter accounts with their characteristics and metrics. Tourism performance indicators are also reported**

Accounts sorted by	1. Followers	2. Following	3. Number of Tweets	4. Topsy score	5. Effective reach total (based on 10 most popular tweets)	1. International Tourist Arrivals 2011 (1000)	2. International Tourism Receipts (US\$ million)	3. The Travel & Tourism Competitiveness Index 2011 (rank 139) – the smaller rank is better
@Spain	85701	26382	7238	7374	160768	56177	59892	8
@VisitBritain	148118	2116	20381	7702	193593	29306	35069	7
@VisitNorway	20822	1762	8774	1073	290167	4963	5232	20
@VisitPortugal	20397	4492	42353	1342	42538	7412	11339	18
@VisitScotland	54119	529	5101	2696	123220	n/a	n/a	n/a
@Italy_it	47203	947	7144	1873	155443	46119	43000	27
@VisitGreecegr	28290	1716	16540	2726	56381	16427	14623	29
@DiscoverIreland	39008	4301	13164	691	63533	7134	4567	21
@VisitHolland	30649	3596	7003	908	107406	11300	14348	14
@HungaryTourism	55811	83	2175	109	87170	10250	5580	38
@VisitMonaco	12556	1912	9648	723	18182	295		
@GermanyTourism	14971	977	4032	746	39530	28352	38869	2

@MySwitzerland_en	16497	796	4417	968	25685	8534	1754	1
@GoVisitDenmark	10803	926	4168	605	50649	7363	6580	16
@Belgiuminfo	7830	2275	2961	308	35962	7494	11651	23
@OurFinland	12263	533	2569	629	34340	4192	3820	17
@SloveniaInfo	6959	404	8313	340	10447	2037	2717	33
@Austriatourism	8234	2988	619	29	13511	23012	19860	4
@Croatia_hr	8715	295	1850	190	25546	9927	9.211	34
@Visit_Turkey	1105	1326	8036	8	1470	34654	25054	50
@VisitSweden	7738	695	1760	135	24329	9959	1376	5
@UK_Franceguide	4969	865	2251	172	23873	81552	54512	3
@VisitCyprus	6060	1469	1165	171	18965	9927	9211	24
@CzechTourism	6006	337	1075	225	30881	9019	7628	31
@Visit_Poland	8463	955	466	40	25543	13350	10683	49
@VisitMontenegro	1884	1771	1140	36	3242	1201	862	36
@RomaniaTourism	7794	6	169	166	9720	1515	1418	63
@Visit_Russia	1878	1954	15	0	5185	22686	11328	59
@VisitMalta	4086	11	162	249	7793	1425	1267	26
@VisitEstonia	659	71	287	44	11495	2665	1249	25
@Luxembourginfo	632	261	210	32	9065	863	4809	15
@ExplorMacedonia (FYROM)	551	576	95	4	2390	327	239	76

@VisitLithuania	1231	130	169	10	3480	1775	1323	55
@GNTA3 (Georgia)	123	654	25	0	180	1319	955	73
@VisitIceland	265	7	3	27	185	566	748	11
@Travel_Latvia	245	16	76	0	607	1493	771	44
@VisitSlovakia	63	18	10	2	0	1460	2429	54
@Andorraworld_en	17	2	0	0	0	1948		

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Table 2 presents the correlations among the aforementioned five Twitter performance indexes. Besides the correlation between number of tweets and following, they all are positively and significantly correlated. In order to summarize them under a common component we used Principal Components Analysis (PCA). PCA resulted to one component, which explains 63.4% of the total variance.

Table 3 presents the factor loadings of the component on the five indexes. All the loadings are high and positive. The calculated factor scores of this principal component, serve as an overall performance score of the Twitter accounts. The highest the overall score, the better the performance of the account, by means of reaching and informing more followers and having more active followers as well. Table 1 presented the data used in this paper, sorted by the overall performance index. @Spain, @VisitBritain, @VisitNorway, @VisitPortugal, @VisitScotland, @Italy\_it, @VisitGreecegr, @DiscoverIreland, are the top eight accounts regarding the overall performance.

**Table 2: Correlation coefficients among the five Twitter performance indexes**

	Followers	Following	Number of Tweets	Topsy score
Followers				
Following	0.447**			
Number of Tweets	0.445**	0.231		
Topsy score	0.902**	0.658**	0.452**	
Total effective reach	0.716**	0.366*	0.361*	0.654**

(\*:  $p < .05$ , \*\*:  $p < .01$ )

**Table 3: Factor loadings of the five indexes of the analysis after PCA**

Performance indexes	Factor loadings
Followers	0.916
Following	0.673
Number of Tweets	0.589
Topsy score	0.947
Effective Reach Total	0.798

Next, the paper associates the five performance indexes, plus the overall performance index, with the three indexes of actual performance of the tourism sector of the countries that the accounts refer to. Table 4 presents the correlation coefficients of the performance indexes with International Tourist Arrivals 2011 in thousands, International Tourism Receipts (US\$ million), and The Travel and Tourism Competitiveness Index 2011. The majority of the correlations in Table 4 are high and statistically significant, meaning that Twitter performance is strongly associated with tourism performance of the countries. Number of tweets is the least correlated index, but in general, Twitter performance is in accordance with general tourism performance and especially tourism income. One should notice that Twitter could just be used as another one high-tech application by some countries, just to follow the technological trend. By providing evidence that Twitter use is in accordance with general tourism indicators of the countries, we show that Twitter adds, to some extent, to the countries' destination image. We do not claim that Twitter use is necessarily a factor for the countries' tourism success, or vice versa that tourism success affects Twitter use, although this hypothesis could not be rejected. We just mean that Twitter does not just stand there, by adding nothing or little to the countries' destination image. Being positively correlated with

countries' tourism performance, Twitter as a medium of eBusiness, does not fail to provide information and to promote countries' Destination Image.

**Table 4: Correlation coefficients of the five indexes of the analysis and the overall factor score with the three tourism performance indexes**

	International Tourist Arrivals 2011	International Tourism Receipts (US\$ million)	The Travel and Tourism Competitiveness Index 2011)
Followers	0.386*	0.524**	-0.334
Following	0.437**	0.561**	-0.249
Number of Tweets	0.119	0.222	-0.269
Topsy score	0.440**	0.608**	-0.347*
Effective reach total	0.314	0.419*	-0.345*
Overall score	0.436**	0.598**	-0.389*

(\*: p<.05, \*\*:p<.01)

## CONCLUSION

This paper aimed to study promotion of European countries' destination image through Twitter. It studied 38 European countries tourism accounts and recorded several characteristics and metrics of the accounts. It took into consideration five main performance indexes, which measure both the amount of people who follow the accounts, and the amount

of people who are actually involved in reading and spreading the information they read, as well as the account activity. Data for the 38 accounts were provided. Next, the paper constructed an overall performance index using PCA. The 38 accounts were sorted according to the proposed overall index and comments were made.

A main finding of the paper is that Twitter performance is associated with countries' actual tourism performance as it is measured by three Tourism indicators. The finding surely is not enough to conclude that general tourism indicators and performance are causing Twitter performance or vice versa. It rather supports the conclusion that Twitter may in fact, successfully serve as another channel of information provision and it does not solely retain a role of must-have technological improvement, regardless of its actual usefulness.

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