

From Paradigmatic to Syntagmatic Communities: A Socio-Semiotic Approach to the Evolution Pattern of Online Travel Communities

Lorenzo Cantoni^a,
Stefano Tardini^a,
Alessandro Inversini^b, and
Elena Marchiori^b

^aNewMinE Lab
University of Lugano, Switzerland
lorenzo.cantoni@lu.unisi.ch, stefano.tardini@lu.unisi.ch

^bwebatelier.net
University of Lugano, Switzerland
alessandro.inversini@lu.unisi.ch, elena.marchiori@lu.unisi.ch

Abstract

This paper presents the results of an observatory research which explores the users' participation in three different travel related virtual communities. The behaviour of the first ten users has been observed in three different timeframes recording both outgoing interactions (e.g. from the studied user to other users) and incoming ones (e.g. from other users to the studied one). Then, a socio-semiotic linguistic approach has been adopted to explain the users' behaviour and to hypothesize a possible evolution pattern for the communities.

Keywords: Web communities; Syntagmatic relationships; Top-Users; Top-User Generated Contents; Tourism communities; Web 2.0.

1 Introduction

The English word “community” derives from the Latin word *communitas/communitatis*, and literally means “people [...] considered as a unit because of their common interests [...]” (<http://dictionary.cambridge.org>). Communities, and more precisely online communities, have been studied by different scholars in different areas (e.g. McWilliam, 2000; Preece, 2000). In recent years, thanks to the so-called Web 2.0 (O'Reilly, 2005), new users are exploiting these web applications built for interest sharing purposes. The innovation introduced by Web 2.0 is not in the application itself (communities were used and studied also before the Web 2.0 rise), but in the easiness of use: few technical skills are now required to participate in online communities (Hotho et al., 2006). When it comes to travel and tourism, since they are experience-based activities (e.g. Tussyadiah and Fesenmaier, 2007), they have to be communicated as experiences. Communities, blogs, travel review websites and more in general the so-called “social media” are helping this kind of communication and information sharing among the users (Arsal et al., 2008).

Furthermore, communities are really important in this field as they are spreading within the web the so-called eWord of Mouth (e.g. Niininen et.al., 2007). Moving from a socio-semiotic viewpoint, communities can be seen both as being (i) a group of people who share certain characteristics (e.g.: age, interests, spending capacity, etc.) and (ii) a group of people who actually interact with each other. While (i) can be called paradigmatic communities, (ii) are syntagmatic ones. In fact, in order to have (i) and (ii), a common shared background is needed, which can involve different aspects, but always the cognitive domain. Communities of the (ii) type, in addition, actively negotiate, produce and refine that common ground. Hence, in order to build a community, one needs to offer both common experiences/cognitive references (type (i) community), and foster actual and active communication among members (type (ii) community). For this purpose, designers of tourism Web 2.0 applications may exploit, in different ways, a run-time access structure, labelled “top contents” or “top users”. In this observatory research three significant applications have been selected, and the changes in their “top ten contents/users” have been studied along a two months period, to find different patterns and relevant effects in the evolution of these communities.

2 Theoretical background

2.1 A socio-semiotic and linguistic perspective on communities

The notion of ‘community’ has been defined as “the most fundamental and far-reaching of sociology’s unit ideas” (Nisbet, 1966: 47). Nevertheless, it is not easy to define precisely what a community is: for this reason, in the sociological tradition this notion has often been banned or ignored as a scientific concept. A community can be defined as “a group of persons who share something more or less decisive for their life, and who are tied by more or less strong relationships” (Cantoni & Tardini 2006: 157). More specifically, the term ‘community’ can be used to refer to two different situations: (i) to a group of persons who interact with one another; (ii) to a set of people who have something in common but do not interact. Borrowing the linguistic terminology of structuralism, the two different typologies of communities can be named respectively ‘syntagmatic’ and ‘paradigmatic’. The latter are characterized by similarity: in paradigmatic communities members have similar features (e.g. they share similar interests, have the same age, speak the same language, go to the same school, practise the same profession, and so on). The former are characterized by differences: syntagmatic communities are built up through the succession of concrete interactions among the members (Tardini & Cantoni, 2005). For instance, when one speaks of the community of tour operators, s/he is speaking of a paradigmatic community: the members of this community usually do not know each other, they do not communicate each with all the others, but they may have the perception of belonging to the community. All kinds of communities are defined by having a common ground. The common ground of two or more people is a set of information, knowledge, beliefs and suppositions they believe they share. Clark distinguishes two different types of common grounds: a communal common ground and a personal one. He defines the former as an expertise that “consists of facts,

beliefs, procedures, norms, and assumptions that members of the community assume they can take for granted in other members” (Clark 1996: 102). The latter is constituted by the joint personal experiences of two or more persons; these joint experiences can be joint perceptual experiences (e.g. both persons hear a loud noise or see the same scene while walking together) or previous joint (inter)actions (Clark 1996). The presence of a common ground (at least a communal one) is a necessary condition for the existence of a community: if a group of people does not have a common set of knowledge, beliefs, facts, procedures, etc., they cannot be considered a community. The distinction between the two types of common ground is pivotal with regard to communities: in paradigmatic communities “only” a communal common ground is shared, while in syntagmatic ones also the personal common ground is shared, which is constantly built and updated by all the interactions that take place among its members. The role of communal common ground is very important in order to create a common basis of meaning and understanding in a group of people. However, the importance of the personal common ground is even higher, since only real interactions can guarantee the survival of a community: as a matter of fact, the communal common ground can be created, maintained and updated only by means of real interactions. If no interactions take place, the community will soon or later become a “dead” community, i.e. a community that relies only on past experiences that are no longer able to activate actual interactions (in linguistic terms: the elements of a paradigm are created only in syntagms, i.e. only by means of concrete interactions). In the last two decades a new form of communities has re-proposed the discussion about them, namely online (virtual) communities. The term ‘virtual community’ is attributed to Howard Rheingold, who in the early Nineties gave rise to the discussion about this new form of social aggregations telling his experience in the WELL (Whole Earth ‘Lectronic Link), an online community created in 1985 (Rheingold 1993a & 1993b). An online community can be defined “as a group of people to whom interactions and communications mediated by ICT [Information and Communication Technologies] play an important role in creating and maintaining significant social relations” (Tardini & Cantoni 2009: 350). ICT can play a twofold role with respect to social relations: they can either *create* social relations, by connecting persons who had no previous mutual relationships, or *facilitate* the communication processes in already existing groups, organizations or communities. In the former case the community is constituted by the use of ICT, in the latter ICT facilitate the activities of a community (Lechner & Schmid 2000). The expression ‘virtual communities’ in its original sense referred to the former situation.

The distinction between paradigmatic and syntagmatic communities can be effectively applied also to online communities. If proper virtual communities are to be intended as social relationships created by online interactions, then these are to be considered syntagmatic communities. However, in the virtual world paradigmatic communities play an important role as well: as a matter of fact, the visitors of a website (or the users of a web service) can be considered – in particular from the point of view of the web service managers – as a paradigmatic community: “this kind of online communities is mainly paradigmatic: users normally do not interact with each other, but share the fact that they interact with the same website; moreover, they

usually have no perception at all of being part of a community. This is another case of imagined communities” (Tardini & Cantoni 2005: 376).

2.2 Tourism

Tourism is an information-intensive activity (Werthner & Klein 1999; Gretzel et al. 2000). In few other areas the generation, gathering, processing, application and communication of information are as important for day-to-day operations as they are for travel and tourism industry (Poon, 1993). Furthermore, the continuous development of ICT during the last decades has had profound implications for the whole tourism industry (Buhalis 2003); as a noteworthy example, during the last few years both the way of purchasing tourism goods and the way of gathering information and commenting on travel experiences have changed dramatically. In general terms, we can argue that ICT are very important in the tourism industry with regard to the purchase process (Werthner and Klein, 1999). Tourism information has spread in a galaxy of different websites (Baggio et al., 2007) and beside the official ones a group of unofficial websites are competing to reach the travellers’ attention on the Internet. Web2.0 (O’Reilly, 2005) and the so-called social media websites (the ones that publish User Generated Content - UGC) are now part of the so-called long tail (Anderson, 2006) and they are a valid source for information for the Internet users. These kinds of websites have gained popularity among the travellers who search for online information (Gretzel et al., 2006). As underlined by Henzinger (2007), the amount of information potentially available online is incredibly huge and diverse in nature, and the appearance and the rise of these websites in the tourism domain is dramatically changing the domain itself but also some of the related issues (e.g. information search and online marketing strategies). Tourism online communities or social networks (the Web 2.0 name for such a dynamics), together with blogs, wikis and other different websites, are populating the online tourism domain (Xiang et al., 2008). All these web applications are helping more and more users in all three phases of the tourism goods consumption, namely (i) pre-consumption, (ii) consumption and (iii) post-consumption, suggesting places where to go, proposing hotel reviews and so on. A study by Wang and Fesenmaier (2004) has analyzed the level of participation (in terms of number of contributions) and of interaction (in terms of number of connections with other users and number of favorites – what in this research has also been called bookmarking – for every user and rank level) of users in online social networks in the tourism domain. The users, i.e. the community members, have been classified in terms of the contributions they give to the community. Four different types of users have been singled out: (i) *Tourists*: those who lack strong social ties with the rest of the group, and contribute seldom to the community. (ii) *Minglers*: those who maintain somewhat strong social ties with the group, and sometimes contribute to the community. (iii) *Devotees*: those who maintain strong social ties with the group, are enthusiastic about community activities and contribute often to the community. (iv) *Insiders*: those who maintain very strong social and personal ties with the group, and very actively contribute to the community.

3 Methodology

Starting from the study by Wang and Fesenmaier (2004) quoted above, the research has investigated the role of web communities' "top users" section as a tool for fostering the understanding of community activities. As a matter of fact, since online communities are groups of people who not only share certain characteristics, but also interact with each other, the main objective of the study was to establish the *paradigmaticity* or *syntagmaticity* of the online travel communities by observing the behaviour of their top users and analyzing their incoming and outgoing relationships. For this purpose, three main activities have been conducted, described in the following sections.

3.1 Benchmarking analysis

In order to better understand the positioning of each online travel community in the web arena, and the content and functionalities offered by them, a detailed benchmarking has been carried out following an indicator-based methodology (Cantoni et al., 2007). According to the Website Communication Model (Cantoni et al., 2006), a framework of contents and functionalities has been created for investigating the information market of the online tourism communities. This framework is a helpful tool for web analysts to understand the general context of a specific domain and the trends of the information market in that domain. Twenty-one English and Italian online communities in the tourism field have been identified, where tourists' experiences are shared in different forms, such as videos, photos, blogs/diaries of travel experiences and reviews. Some of these communities are entirely embedded into generalist sharing websites (e.g. Flickr and YouTube); in these cases, the section "Travel & tourism" has been considered. Besides, also the communities inserted into booking websites (e.g. Venere.com) have been considered. Out of the 21 initial communities, only five presented a top users / top contents section. These five communities are different with respect to the kind of contents and services they offer, and can be grouped in three categories: (i) Flickr: photo sharing; (ii) TravBuddy: sharing of travel experiences; (iii) YouTube, LonelyPlanet, Travelistic: video sharing.

3.2 Selection of sample communities

For this preliminary study three communities out of five have been selected, one per category: Flickr (photos), TravBuddy (travel experiences) and Travelistic (videos for travellers). In the category "Videos for travelers" Travelistic has been chosen, because YouTube is a general community and LonelyPlanet has not its core business in online communities/communication.

Flickr (www.flickr.com) is a website that helps community members to share their photos with other members. Pictures can be uploaded with different levels of copyrights protection. The label used by Flickr to identify top contents / top users is: "Most interesting". The tourism community can be reached by inserting the word "travel" into the search box in the homepage, and selecting then the "Most

interesting” view (www.flickr.com/search/?q=travel&w=all&s=int). In this way it is possible to find pictures, photos and comments about tourism and touristic places. TravBuddy (www.travbuddy.com) is a community for sharing travel experiences and tips in the form of travel blogs or reviews, and for finding travel buddies. In the TravBuddy community the top contents/users section can be found under the label: “Most Popular Blogs”. (<http://www.travbuddy.com/browse/blogs/popular>). Travelistic (www.travelistic.com) is a website that helps users to share all kinds of travel videos, including user uploads, professional content, and tourist board videos. In Travelistic the top contents/users section can be found under the label: “All time, most viewed video” (http://www.travelistic.com/video/most_viewed/of-all_time).

3.3 Analysis

Top user” and “top content” have been considered in this study as synonymous, because in no one of the top sections any user with more than one top content could be found: in these communities one content always corresponds to one user. The following rules have been established for the data gathering. It has been decided to observe the users of the communities mentioned above three times in a period of two months from July to September 2007 (July 16th, August 17th and September 21st). The main task was to analyze the variation in the top contributors sections. During this period the users’ participation and their changes within the first ten position of the community ranking have been observed, and data about the views, the comments and the bookmarking have been gathered.

4 Results

The three given communities have been observed and the behaviour of top users has been recorded three times in two months (figure 1). The first month has been used as the starting point for the observation. The study has recorded the changes in the ranking of the top ten users in the months of August and September. In figure 1 the users’ ranking variations in that period are presented. In figure 1 each circle represents an active user within the community. The study considers only the first ten active top users in each observation (the dotted line separates the first ten positions from the others in the ranking). As it can be seen, during the different observations some users changed their ranking position, other users went out of the ranking. In figure 1, new entries are represented with capital letters. Generally speaking, it can be noticed that Flickr is the community with less variation, while Travelistic is the less stable community. As a matter of fact, in Travelistic the ranking of the first three users has changed in the three different time frames, and some new users entered the “top ten” and started to move up the ranking. In TravBuddy, only positions six to ten present changes, while in Flickr the first nine users have been stable: only the last position changed because of the entry of a new member. Within these three communities, top users have been almost stable during the three observations. Only a few variations in terms of ranking positions and new entries have been encountered. Having a core group of stable community champions, it was possible to study their relationships with other users. Going back to the distinction between paradigmatic

and syntagmatic relationships among the members of a community, three levels of syntagmaticity can be singled out: (i) Level 1: “I watch your content”. This is the basic level of interaction: users get in contact with one another by means of a non-verbal interaction. This first level can be monitored through the indicator “contact views”. (ii) Level 2: “I comment on your content”. At this level the interaction becomes verbal, the relationship between users is made explicit. This level can be monitored through the indicator “comments”. (iii) Level 3: “I add you to the list of my favourite users”. This is the highest level of interaction, where the tie between the users is a strong tie. This third level can be monitored through the indicator “bookmarking”. Not all data (views, comments and bookmarking) are present in all communities: table 1 shows which data are present in the considered communities.

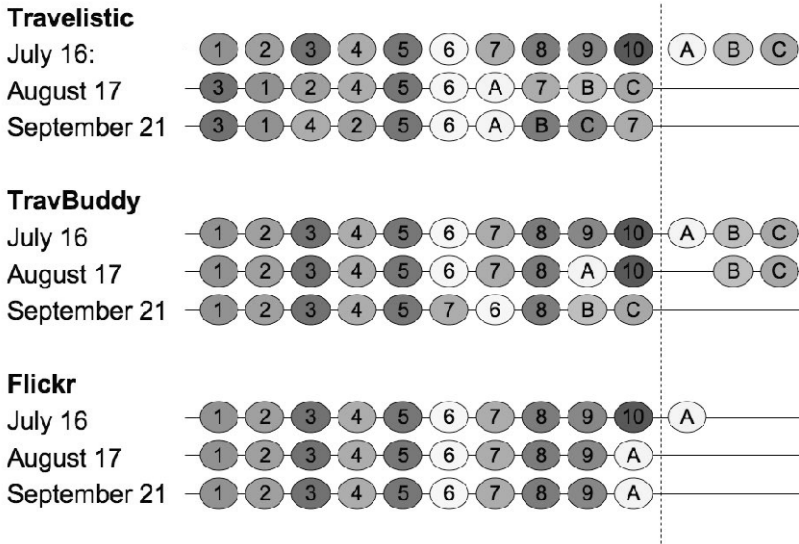


Fig. 1. Users’ ranking variations in the three considered communities: Travelistic, TravBuddy and Flickr.

Table 1. Presence of the views, comments and favourites indicators in the communities.

	Views	Comments	Favorite
Flickr	X	X	X
TravBuddy		X	
Travelistic	X	X	

As it can be seen, Flickr is the most complete community, while TravBuddy provides only one indicator in the users’ profile. This study considers all these data in order to observe if any trends can be recognized within the three communities. Where it was possible, the trends have been compared, while in the case of the “favorites” no comparison could be made.

Level 1. As the first level of syntagmaticity is the simple watching, the data available for Flickr and Travelistic have been compared (figures 2 and 3).

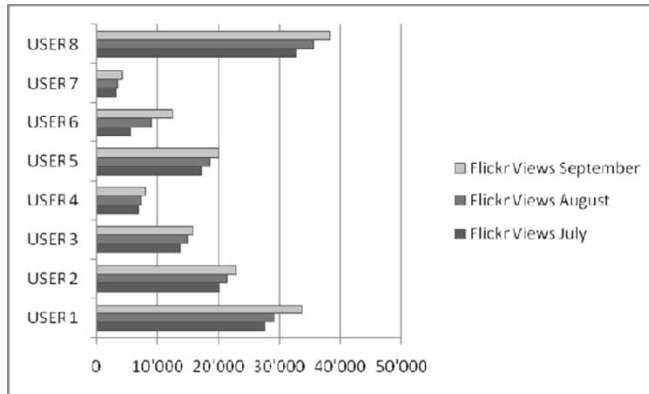


Fig. 2. Flickr top users views

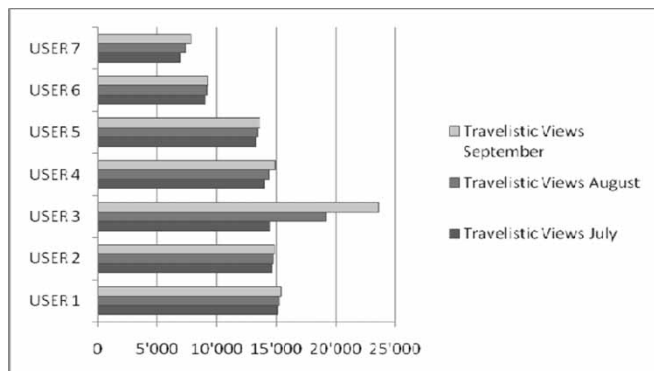


Fig. 3. Travelistic top users views

Figures 2 and 3 show that all top users have increased the number of views of their contents, as it could be easily expected. Even if this is quite obvious, however it shows that these community champions generate traffic within the website and their contents are constantly viewed.

Level 2. For this second level of syntagmaticity, the comments to top users' contents have been investigated in order to understand if they present the same increasing trend as the views.

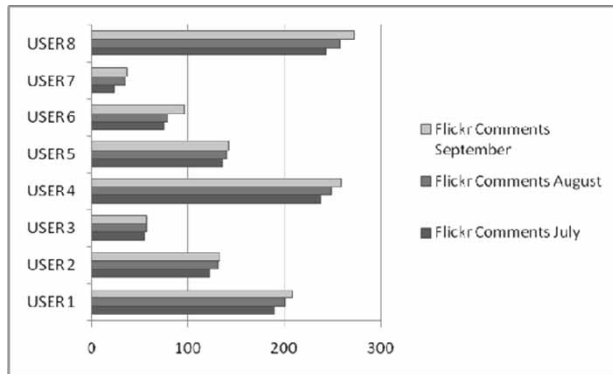


Fig. 4. Flickr top users comments

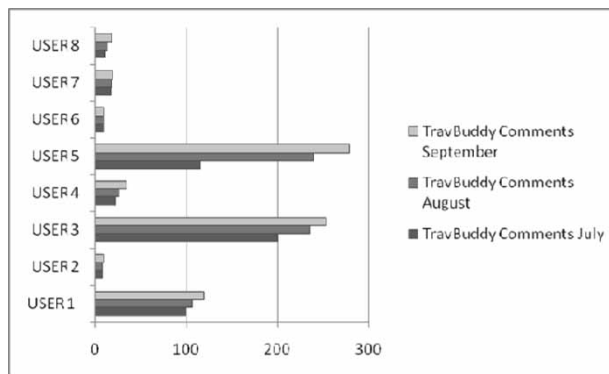


Fig. 5. TravBuddy top users comments

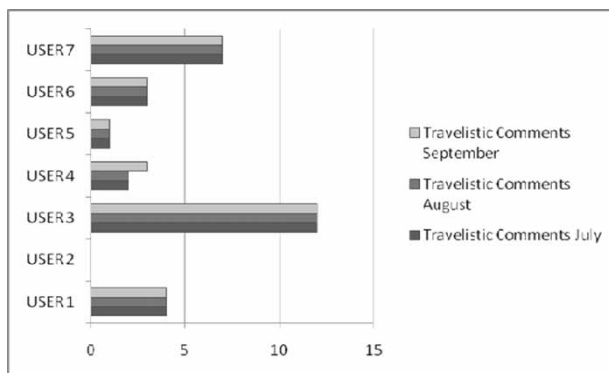


Fig. 6. Travelistic top users' comments

Figures 4 to 6 show the general trends of the comments growth from one observation to another. Comments follow the trend observed in the views (figures 1 and 2), except for the Travelistic community, where the number of comments is very low on the whole, and no significant increase has been observed. For Flickr and TravBuddy, on the contrary, the general rule is that comments on users' generated contents increase over time, with some exceptions (Flickr user 3, TravBuddy users 2, 6 and 7). In

Travelistic only one comment has been added in two months (to user 4): in this community the top user section has increased the community's syntagmaticity only at the first, basic level, while no changes have been observed in the second one.

Level 3. The last level, the most interesting in the proposed model, deals with stable connections among the members. As a matter of fact, bookmarking a user is like establishing a stable relationship, a kind of friendship: exactly like a link from a website to another website expands the website's network and creates a hypertext, bookmarking a user creates a "hyper-tie" between two persons, thus expanding one's network of relationships and increasing participation to the community.

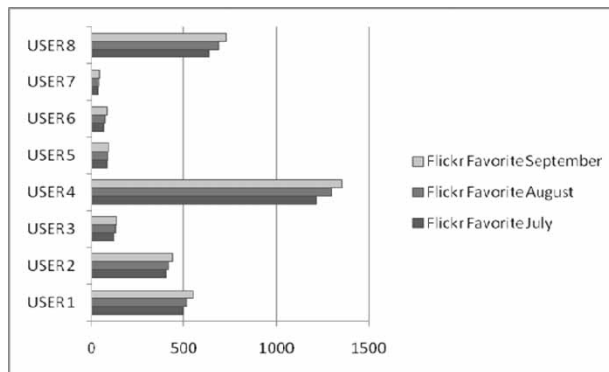


Fig. 7. Flickr favorite trends

This last chart (figure 7) represents the growth of the bookmarked contents in Flickr. Trends for all users are positive: this means that Flickr top-users have extended their network over time.

5 Discussion

Community websites propose "top content/users" as paradigmatic points of reference within the community itself; suggested users and contents become more and more a kind of fixed stars for the other members. These users and contents should be also useful as developers of relationships with other members, transforming the simple paradigmatic relationships into syntagmatic ones. The growth of syntagmatic relationships drives to the creation of a real community, which is based not only on some common features shared among its members, but also on interactions. The more the common ground among users grows, the more the nature of the relation among them changes from a paradigmatic perspective to a syntagmatic one.

The analysis of the three syntagmaticity levels has shown that, even if all communities have been designed to meet Web 2.0 requirements, in one case the syntagmatic growth of the community has been limited to the first level: in Travelistic no increasing trend can be identified at the second level, because no explicit verbal relationships with one of the community's champions have been established.

Even if this preliminary study has stopped before demonstrating the usefulness of top-users and top user-generated contents, it can be likely assumed that they are an added value for online communities, because they are a kind of preferred hub for new and old users. They have the function of creating the common ground of the community, thus promoting the interactions within it and turning paradigmatic communities into syntagmatic ones. The role and importance of top users, has also been recognized by Yahoo.com, describing its design pattern library. Actually, one of the design patterns regards the creation of a “group contributors, numerically, into “buckets” of performance, and acknowledge top performers for their superior achievements. Top 10, 50 and 100 are some commonly-used groupings”. According to Yahoo designers the pattern should be used to (i) encourage top contributors to provide high quality contents and (ii) “motivate heavy (but not yet top) contributors to increase the quality and frequency of their contributions”. (Yahoo developer web site, 2008)

6 Conclusions

In conclusion, this preliminary study shows the importance given by tourism online communities to the top contents/users sections as a strategic element for both design and promotion. Stressing this particular kind of contents in the access structures of the communities may enforce the role of top members as community builders. As a next step of this study, in order to have a more precise understanding of the role played by top users in online communities, the methodology will be refined, e.g. by analyzing the interactions promoted by top users compared with those promoted by other users, by selecting a more complete sample of online travel communities, and by comparing them with online communities in other domains.

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