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Italian tourism virtual communities: empirical research and model building

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Abstract

Virtual Communities are considered an effective mean to achieve good and stable relationships with customers, thus attaining higher levels of economic returns from a website. Italian tourism websites suffer from a general poor capacity in terms of offering good quality contents and services to their visitors. As a consequence, online Italian tourism market is one of the smallest in the world of Internet. This paper analyses the usage of community features by Italian online tourism operators and derives a viable model for a successful implementation of such features.

Keywords: virtual communities, tourism websites, Italy.

1 Introduction

Nowadays it has been well accepted that tourism on the Internet represents a sector of great importance; the digital travel segment, one of the most significant on the Web, is characterized by a steady growth, and the revenue forecasts are still on the rise.

Even if the demography of the Italian internet tourism is in general conformity with that of the rest of the world, the e-commerce penetration is at a much lower level than the one of other countries. This consideration is particularly true concerning online tourism field, where the proportion of online transactions is one of the lowest in the world. It has been estimated that in 2002, electronic sales in our country will be only 0.25% of the whole tourism market share, while the European average could be around 2.8% and the American average (that is to say USA's and Canada's) may reach 10% (Antonioli and Baggio, 2002a).

Such a difference can be considered a consequence of the gap in terms of general ecommerce development, with worries concerning the security of data and payments and with the historical reservations of customers about mail order sales. But these explanations are, obviously, inadequate. Recent surveys (see, for example, http://www.cyberatlas.com or http://www.nua.com), on the reasons why cybernauts do not buy tourism and travel products online, say that they prefer the traditional travel agent, they do not trust web sites or they maintain they do not know "appropriate" sites. Basically, this means that the contents and the services offered online are not considered satisfactory by the users. The aforementioned has proven to be truthful for the Italian tourism web sites (Antonioli and Baggio, 2002b). The main findings are shown in the following figures.

Fig. 1 shows the distribution (in terms of percentage of sites which contains that particular type of content) of the main kinds of website contents: customer relationship services (CUST.REL), e-commerce functionalities (ECOMM), informational materials (INFO) and general interactive services (SERV).

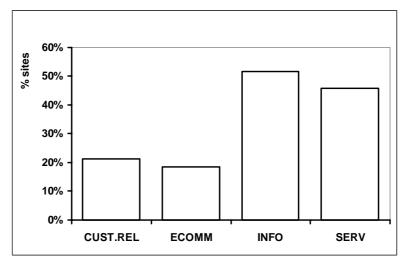


Fig. 1 Contents and services of Italian tourism websites

The user evaluations (given on a scale from 0 to 10) of the main characteristics of Italian tourist websites are shown in Fig. 2. The total average value is 6.58, a hardly sufficient grade.

For tourism intermediaries (tour operators and travel agencies) such a low quality represents a huge risk of disintermediation. Since traditional intermediaries do not offer valid web sites, the user is more tempted to turn straight to the main providers (hotels, airline companies, etc.) to fulfil his vacation needs.

For other tourism operators, the relative poverty in terms of contents and services generates directly a general distrust that can eventually affect also the economic performance of the "real world" (see, for example, Gaudin, 2002). And this situation becomes even more serious if the operator is a destination marketing organization because of the effects that these circumstances can have on the development of the whole destination. This is mainly true for public organisations that, in Italy, cannot directly market and may only attract visitors by offering interesting contents.

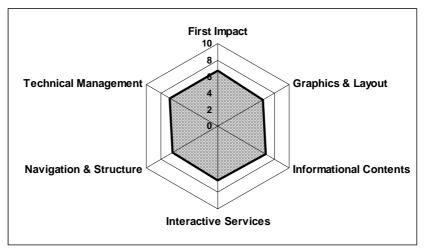


Fig. 2 Evaluations of Italian tourist websites

One possible help in building good quality websites and giving the users more interactive services is the exploitment of a virtual community.

Online travel communities are every day more utilized by tourists to satisfy their information and communication needs, to exchange ideas, impressions and suggestions. On the other hand, tourism organisations may appreciate the importance to use this "tool" to improve their capabilities and their relationships with the customers. This is necessary in order to develop products which could better respond to the market, thus increasing the possible economic returns.

Creating a virtual community requires a thoughtful understanding of a range of elements: the overall concept, the necessary technologies supporting community building and the management requirements able to translate community systems into practical marketing tools.

The general hypothesis in assessing the value of a virtual community comes from the fact that, if an individual identifies himself with a community, then he will be probably accepting the models coming from that community. His behaviour as a consumer will be influenced in such a way that he will overcome much of the distrust which seems to be the main inhibitor to the spread of online commercial transactions. This business model is based on the belief that a community represents a set of loyal consumers that have commercial value, thus extending this value to the whole community.

Purpose of this work is to analyse the possibility to build efficient and effective virtual tourist communities, to assess the validity of this business model and to design a practical model able to reach, in short times, a self sustaining development in terms of users and contents. All these objectives are essential in order to give all the participants the feeling they have a place where it is possible to satisfy their travel needs and desires from an information and a commercial point of view.

2 A theoretical approach

A Virtual Community (VC) may be seen as a group of people that gathers electronically to discuss specific topics, ranging from hobbies to professional or academic matters. The participants are linked by a common interest. A virtual community does not have any geographic boundary and, usually, any person can be part of it.

Two main approaches can be identified in definitions found in the literature. The first one (Hof, 1997; Hagel and Armstrong, 1997) simply regards a VC as a set of subjects that communicates by using the tools provided by the *Computer Mediated Communication* (CMC), not giving much importance to the emotional aspects that arise from the relationships created, and emphasizing the utilitarian side of the connections deriving from the achievement of commercial objectives.

The second one (Rheingold, 1993; Jones, 1997) mainly stresses the emotional and social aspects of the relationships among the subjects forming a VC.

All the definitions have some common points: the connection by means of telematic equipments, a common interest shared by the members of the community, the feeling they belong to the community, the idea that the latter can initiate a virtuous circle capable of creating a good amount of high quality content that may provide significant returns in terms of reputation and revenues for community organizers.

Virtual communities can be classified in four main categories (Hagel and Armstrong, 1997), based on the needs which people wish to satisfy with their participation: interest, relationship, fantasy, and transaction.

Interest aggregates people with a specific interest or expertise in a certain area; relationship gives participants with common experiences the possibility to share them and to develop significant personal interactions. Fantasy provides an opportunity for people to come together and to deal with matters of imagination and entertainment. The transaction communities are based on the exchange of information and/or products and services among the participants.

Similar classifications, even with some differences in the wording, have been given by several authors (Carver, 1999; Jones and Rafaeli, 2000).

It must be noted, however, that very seldom a VC has a simple connotation; more frequently they express hybrid characteristics making difficult, as a consequence, their classification.

Many virtual communities show an economy of increasing returns: they start providing very low revenues at the initial stage, then the revenues increase as the audience builds up and they have a sharp acceleration when the threshold called "critical mass" (Hagel and Armstrong, 1997) has been reached.

According to Subramaniam, Shaw and Gardner (1999) virtual communities show increasing returns due to marginal cost effect, learning curve effect and network externalities effect.

In the building of a VC Hagel and Armstrong (1997) suggest a four steps process:

- 1. *attract* members to join the community with a marketing strategy;
- 2. *promote* the participation by carrying the contents and providing facilities and services;

- 3. *build* a sense of belonging and loyalty to the group by enhancing the interactions;
- 4. *capture* the value generated in terms of unique content and revenue coming from targeted advertising or trading of information, products or services.

Obviously the process is a circular one and, by capitalizing the achieved activities and results, the cycle starts again.

The main advantages in creating and managing a virtual community may be summarized as follows (Kambil and Ginsburg, 1998:96): "First, it generates stocks of new, unique and proprietary content that is hard for competitors to replicate. Second, ... virtual communities can potentially create significant returns to scale in content production, reputation, and revenues for community organizers. As a site becomes more useful it can generate more subscribers who, in turn, can contribute new useful content, generating positive externality".

3 Methods

Aim of this work is to define a viable model of virtual community for a tourist website. As it has been seen above, one of the most critical problem for Italian tourism websites is the poverty in terms of contents and interactive services for the visitor.

To achieve this objective, a different classification of virtual community, this time based on the communication tools that are used, is needed. The tools generally utilized to provide community services are (Long and Baecker, 1997):

- *email*: the first minimal level of communication with interested customers;
- *newsletters*: sent regularly after a registration;
- *board*: electronic boards or guest books where visitors can publish online comments or specific requests;
- forum: one or more areas of active discussions among visitors with the participation of the community organizers;
- *chat*: interactive channels of simultaneous discussions (with textual and/or graphical interface).

These tools are considered a conventional value (see Table 1). By adding values corresponding to the features offered on the website, a *community index* can be calculated.

Table 1 Community tools values		
Tool	Value	
email	0	
newsletter	1	
board	2	
forum	3	
chat	4	

It is possible to classify the level of community offered by a site by calculating the *community index* as shown in Table 2.

Table 2 Community levels			
L	evel	Description	Community Index
	0	No community	0
	1	Minimal	$1 \div 3$
	2	Medium	$4 \div 6$
	3	Good	$7 \div 9$
	4	Full	10

A random sample of 300 Italian websites has been chosen. The websites have been analysed to identify community services and to classify their types.

All the sites received a (e-mail) questionnaire asking for quantitative data on the following topics:

- average monthly number of visitors;
- average monthly number of HTML pages viewed;
- average monthly revenues;
- average monthly number of visitors making a commercial transaction.

A number of 85 websites have compiled the questionnaires that have been collected and analysed. A very small number of answers, not statistically significant, contained data regarding the economical side (revenue and buyers) of the survey, still considered as "reserved matters". Therefore the number of visitors and the pages viewed have been used as an index of website popularity and success.

4 The results arising from an empirical test

All the websites of the sample may be considered going thorough their mature stage (ages have a mean of 5.1 years and a median of 5). The distribution of the community tools used is shown in Fig. 3; only a small proportion of the sites offer their visitors advanced community tools.

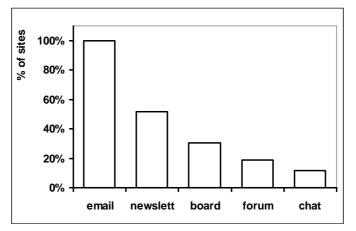


Fig. 3 Communication tools used in Italian tourist websites

The community indexes measured for the sites of the sample are shown in Fig. 4.

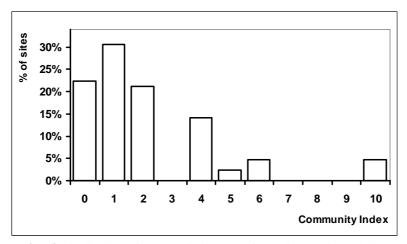


Fig. 4 Distribution of community indexes for Italian tourist websites

Comparing the popularity of the sites, measured by using the average number of pages (html) read online by the users and the average monthly number of unique visitors, with the community index, it is possible to show the importance of community tools to increase the audience of a website and, as a consequence, the higher value of a virtual community for the online tourism sector.

A linear regression on the data shows only a slight positive trend, but with a very low significance ($R^2 = 0.02$). This is mainly due to the high concentration of very low usage of interactive services by the Italian sites. Of greater interest are the distributions obtained plotting the popularity data with the community indexes (Fig. 5 and Fig. 6).

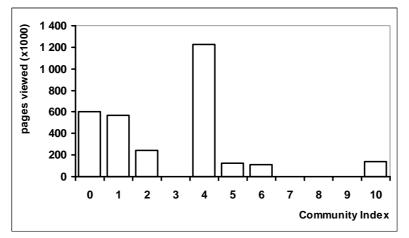


Fig. 5 Pages viewed and community index

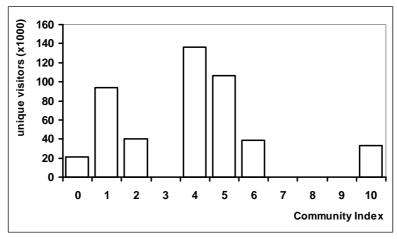


Fig. 6 Unique visitors and community index

It is rather clear that the highest popularity (in terms of the mean values of pages viewed and unique visitors) belongs to sites with medium levels of community features, usually consisting of newsletters and discussion forums. Implementing and running a virtual community is a growth factor for the audience of a tourist website, able to insure the production of a significant amount of high quality content and increase the level of economic returns that may be expected from a commercial website. The high loyalty of the members a virtual community can eventually bring to the building of a good and stable customer base.

Further analyzing sites with the highest popularity, it is possible to derive a list of elements that have shown to be very successful in building and managing a virtual community. Apart from the obvious richness and completeness in terms of informational contents and tools to keep visitors informed (newsletters) about the different areas of the website, these sites usually show:

- multiple levels of interactivity: well organized multithematic forums dedicated to different possible destinations or different types of vacations, including areas where it is possible to meet potential fellow travellers by requesting or offering company for a trip;
- some kind of "human" guide proposing and commenting trips and destinations and keeping a good contact with the site visitors via online (forums or chatboards) or offline (e-mail) channels;
- proper use of different types of media, offering services through various channels (web, e-mail, sms, etc.), including the possibility to have a direct contact via green telephone numbers;
- large areas where the visitors are the main contributors to the content of the website through stories, observations and comments about real travel experiences or new travel proposals.

These elements may be rightly considered "best practices" according to the definition given by O'Dell and Grayson being a "practice, know-how, or experience that has

proven to be valuable or effective within one organization and that may have applicability to other organizations" (O'Dell and Grayson, 1998: 13).

5 Conclusions

Virtual communities are a very important aspect of the Internet world, both from a social and an economical point of view. It has been suggested that virtual communities may play a central role in marketing tourist destinations and services over the Internet (Dellaert, 1999) and may become an important tool to overcome the mentioned poverty of Italian tourism websites in terms of contents and services (Antonioli and Baggio, 2002a, 2002b).

As a matter of fact, communities' participants provide valuable information to other tourists about travel destinations or tourism service providers.

The analysis of Italian tourist websites shows a relatively low presence of community tools: less than 20% offer a discussion forum and only 12% has some chat facilities.

An empirical test performed on a sample of Italian tourism online websites clearly shows that the sites that use these tools, even at a moderate level, have higher amounts of visitors and pages viewed. Sites with a community index value between 4 and 6 (i.e. using three community tools) exhibit 40% more pages viewed and 140% more unique visitors than sites with minimal or no use of community features.

It is therefore possible to suggest that the adoption of interactive features encourages the building of a community. In particular, a discussion forum and a regular newsletter prove to be very useful in fostering the creation of noteworthy informational contents, which are able to increase the audience of a tourist website and to raise the time spent by the users in browsing the site's pages.

The content generated will then help to improve the frequency rate of returns, the average time spent by visitors in browsing the site and the loyalty of the members to the community may assure more reliable and committed customers.

References

Antonioli Corigliano, M. & Baggio, R. (2002a). Italian Tourism on the Internet - New Business Models. *Proceedings of the International Conference "LEISURE FUTURES"*, 11 – 13 April 2002, Innsbruck, Austria.

Antonioli Corigliano, M. & Baggio, R. (2002b). Internet & Turismo. Milano: EGEA.

Carver, C. (1999). Building a Virtual Community for a Tele-Learning Environment. *IEEE Communication Magazine*, March.

Dellaert, B.G.C. (1999). The Tourist as Value Creator on the Internet. In D. Buhalis & W. Schertler (Eds.), *Information and Communication Technologies in Touris* (pp. 66-76). Wien: Springer-Verlag.

Gaudin, S., (2002). Is Your Site Getting The 'Internet Death Penalty'? Datamation, May 30.

Hagel, J. & Armstrong, A.G. (1997). Net Gain - Expanding markets through virtual communities. Boston, MA: Harvard Business School Press.

Hof, R.D. (1997). Internet communities. *BusinessWeek European Edition*, 5 May 1997, pp. 38-47.

Jones, Q. (1997). Virtual-Communities, Virtual Settlement & Cyber Archaelogy: A Theoretical Outline. *Journal of Computer Mediated Communication*, No.3, 3 December 1997, online: http://www.ascusc.org/jcmc/vol3/issue3/jones.html, last access: 3 August 2002

Jones, Q. & Rafaeli, S. (2000). Time to Split, Virtually: 'Discourse Architecture' and 'Community Building' as means to Creating Vibrant Virtual Metropolises. *International Journal of Electronic Commerce & Business Media*, Vol.10, No.4.

Kambil, A. & Ginsburg, M. (1998). Public access Web information systems: lessons from the Internet EDGAR project. *Communications of the Association for Computing Machinery* (*CACM*), Vol. 41, No. 7, July 1998, pp. 91-97.

Long, B. and Baecker, R. (1997). A Taxonomy of Internet Communication Tools. *Proceedings of WebNet'97*, AACE, Toronto, Canada: October 1997.

O'Dell, C. & Grayson, C. J. (1998). *If Only We Knew What We Know: The Transfer of Internal Knowledge and Best Practices*. New York: The Free Press.

Rheingold, H. (1993). *The Virtual Community: Homesteading on the Electronic Frontier*. Reading, MA: Addison-Wesley.

Subramaniam, C., Shaw, M. and Gardner, D. (1999). Product Marketing on the Internet. In M. Shaw, R. Blanning, T. Strader & A. Whinston (Eds.), *Handbook on Electronic Commerce*. Wien: Springer-Verlag.