# Methods of Research in Virtual Communities

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### INTRODUCTION

The Internet has developed from an informative medium to a social environment where people meet together, exchanging messages and emotions and establishing friendships and social relationships. While the Internet was originally conceived as a commercial marketspace (Rayport & Sviokla, 1994) with new opportunities for both firms and customers (Alba, Lynch, Weitz, Janiszevski, Lutz, Sawyer, & Wood, 1997), nowadays the social side of the Web is a central phenomenon to truly understand the Internet. Social gratification is among the most relevant motivations to go online (Stafford & Stafford, 2001). People socialise through the Internet, adding a third motivation to their online activity, other that the pleasure of surfing in itself (the "flow experience" described by Hoffman and Novak, 1996) and the usefulness of finding information.

Virtual communities are springing both as spontaneous aggregation (like the Usenet newsgroups) or forums promoted and organised by Web sites. The topics of a community range from support for a disease to passion for a given product or brand. The intensity and relevance of the virtual sociality cannot be discarded. Companies can receive useful and actionable knowledge around their own offer studying the communities devoted to their brand. Hence social research should adopt refined tools to study the communities achieving reliable results. The aim of this work is to illustrate the main research methods viable for virtual communities, examining pros and cons of them.

### VIRTUAL COMMUNITIES

A virtual community can be defined as a social aggregation that springs out when enough people engage in public conversations, establishing solid social tie (Rheingold, 2000). The study of virtual communities has increased following the develop-

ment of the phenomenon. One of the first works is that of Rheingold that studied a seminal computer conferencing system: "The Well" ("Whole Earth 'Lectronic Link"). Starting from that, lots of researchers have deepened different facets of the Internet sociability. The methods employed are various: network analysis (Smith, 1999), actual participation as ethnographer in a virtual community (Kozinets, 2002), documentary and content analysis (Donath, 1999), interviews (Roversi, 2001), and surveys (Barry, 2001).

The aims of these studies can be divided into two main and intertwined areas: sociological and business-based. The former is well understandable, due to the relevance that the virtual sociality has gained today. Turkle (1995) uses the expression "life on the screen" to signal the richness of interactions available in the web environment; Castells (1996) reverses the usual expression "virtual reality" into "real virtuality", since the virtual environment cannot be considered a sort deprivation from life, but one of its enhancements and extensions. Regarding the business benefits of studying the communities, many of them are organised around a brand and product.

The virtual communities can be spontaneously formed or organised by the company. An example of the latter is the community created inside the Swatch's site (Bartoccini & Di Fraia, 2004, 196). The researcher could even create an ad hoc community, without rely on extant ones (spontaneous or organised), that would fit the research objectives. In creating a community, the researcher should follow the same rules that keep alive a normal community, such as the organisation of rituals that foster the member's identity in the group and their attendance, allowing for the formation of roles among the users (Kim, 2000).

Some community can exert a real power on the product. The fans of the famous movie series *Star Wars* (Cova, 2003) pushed the producers towards changes in the screenplay, reducing the role played by a character not loved by the fans. Also, when no power is exerted on the firms' choices, analysing a community of consumption can give the firm useful

insights about the tastes of the market (Prandelli & Verona, 2001). A virtual environment can be leveraged for innovations too (Sawhney, Prandelli, & Verona, 2003).

All these applications and forms of the communities call for an examination of research methods, as literature has begun to approach in a systematic way (Jones, 1999), seeking for those methods that best fit with the particular features of virtual sociality. Independently from the method applied, according to Bartoccini and Di Fraia (2004, 200-201) the virtual community has pros and cons for research as listed in Table 1.

### METHODS OF RESEARCH

### **Questionnaire Survey**

According to Dillman (cit. in Cobanoglu, Warde, & Moreo, 2001), the most relevant innovation in survey methods were introduced in the 1940s by the random sampling techniques and telephone interviews in the 1970s. The Internet should be a third wave of innovation for survey.

A questionnaire survey administered through the Web, specifically by e-mail, seems to have a clear advantage in efficiency and costs. It is very easy to send a questionnaire to huge numbers of addresses. An alternative method, even easier in its administration, can be that of posting the questions inside a Web page, asking the visitors to fill in the questionnaire. Some Web sites are beginning to offer Internet space for online surveys. A detailed segmentation of the population can be reached thanks to search engines or users lists. Moreover the anonymity and the lack of any sensory clues may push the respondent towards a more sincere and open attitude, reducing the incidence of socially desirable answers. The lack of a

human interviewer limits also the mode effect, avoiding that the style and modality of the interviewers would affect the answers (Sparrow & Curtice, 2004). Another benefit is the asynchronous feature of the email, allowing the respondent to answer the questions at her convenience and with calm reasoning.

Barry (2001) cites his expected difficulty in finding enough subjects for one of his Internet studies about ethnic minorities. He planned to study the acculturation of Arabic immigrants in the U.S. His study was conducted just after the Oklahoma bombing in 1995 that initially "resulted in widely publicized and unfounded speculation about the possible involvement of Middle Eastern terrorists" (Barry, 2001, 18). Due to that atmosphere some of the respondent expressed suspicion, even asking whether the researcher was affiliated whit some sort of police agency. Eventually, the anonymity of the Web-administered questionnaire allowed a very good response ratio and, above all, for a high quality of the answers provided. The respondents were quite sincere and deep in their answers. As Barry argues, "One potentially potent use of the Internet is that it facilitates self-exploration; it can serve as a safe vehicle for individuals to explore their identity. This is facilitated by a prevalent sense of anonymity, which often results in increased self disclosure and disinhibition" (Barry, 2001, 17).

Yet the quality of the results of an online questionnaire may be not high. Firstly, a sampling issue arises. The response rates of online questionnaires are lower than expected. Usually, people filter unsolicited mails, due to "spam" and viruses concerns. The fear of being cheated, even though the anonymity is assured, may be higher than in the off-line reality, since there is not an actual and reassuring interviewer. Moreover the Internet population is not representative of the entire population, but it is likely younger segment open to new technologies. The reliability of the answers received is not high as well. In fact, none can assure who actually answered the questions.

Table 1. Advantage and disadvantage of virtual communities for the research activity

Advantages	Disadvantages
High involvement by the members	Biased sample
Spontaneity of the information provided by the members	Fake identity
Archive of past exchanges	Overflow of material not tied to the research objective

Source: Adapted from Bartoccini and Di Fraia (2004, pp. 200-201)

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