Chapter 12
How Social Media Tools are Used in Research: A Case Study

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ABSTRACT
Social media tools are being widely used. Every day we witness new tools appearing or new features being added to already existing tools. Their characteristics allow us to communicate and collaborate without time and space constraints. Moreover, they also help us in the development and creation of new content as well as in the sharing and publishing of it. Since they are so popular, can it be that researchers are also using them in the research workflow process? If they use them, what are the most commonly used tools and their reasons for use? These are some of the questions addressed in this chapter. The authors analyse responses given by a higher education institution to a questionnaire on the use of social media tools. These findings contribute to a greater understanding of the importance of these tools for research purposes.

INTRODUCTION
Information systems and information technology play a central role as promoters of innovation in several fields affecting our daily personal and professional life. Manifestations of this, such as e/m-commerce, e/m-marke, e/b-learning, e-government, e-society, e-democracy and e/m-business have emerged recently. If we apply these concepts to academia and to research, it is possible to find words such as science 2.0, e-science and e-research, where researchers are using the tools available on web 2.0 (social media).

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When trying to explain the phenomenon of cyberspace and internet it is possible to use the metaphor of a rhizomatic network (Deleuze & Guattari, 1987), in particular the ideas expressed in the introduction to their seminal work, ‘A Thousand Plateaus’. According to the authors, a “rhizome ceaselessly establishes connection between semiotic chains, organizations of power, and circumstances relative to the arts, sciences and social struggles” (p.7). In fact, when one looks closely at the internet network, one realizes that it moves in several directions, across boundaries and connecting many other lines of thinking, acting and being.

Web 2.0 - also known as the social web - is defined as the network platform which spans all connected devices (O’Reilly, 2005). Rathi (2010) reinforces this idea when he states that social media activity takes place on the internet and is not limited to a single software product. He also adds that this is an open and shared resource where users provide the content and add value. In this definition one can already see that social media is not just about technology and connection of devices but is also about people, their interaction and collaboration, which is neither limited to a single space nor linear in its nature. This is why we can use the metaphor of a rhizomatic network (Deleuze & Guattari, 1987) to explain how it works. The social web can be seen as something without beginning or end, without a clear, formal structure. In the social web it is possible to connect to anything, starting from any point (p. 7 and 8).

Although the use of Internet is growing each year all over the world (e.g., the penetration of the Internet in 2012 reached 78% of the population in north America, 67% in Oceania and 63% in Europe) (IWS, 2013), specific discussions, in the literature, about the potential of the social media and the theoretical frameworks that might help researchers to develop scholarly practices for these environments are still limited. Nevertheless, as pointed out by Gruzd, Staves & Wilk (2012), social media and networking technologies are changing scholarly practices. In fact, there has been an increase in the importance of social media over the last few years but there is still a lot of work needed to understand the research potential of this new environment; according to Rathi (2010), the first step is to connect the principles of web 2.0 and research 2.0, since few studies have been conducted in this area and even fewer have focused on scholars in the social sciences (Gruzd et al., 2012).

In the literature, one can find research on the use of computer mediated communication for qualitative and quantitative methodology (e.g., the use of computers in synchronous and asynchronous communication, such as interviews and virtual focus groups). Moreover, computers and social media are also used in quantitative design, such as online questionnaires. But these situations only represent the first phase of online research (Rathi, 2010). There is already a movement towards a second phase where traditional rules for conducting research are expected to be challenged.

The pace of using web 2.0 in research is not the same all over the world; one can find some countries encouraging others with their progressive examples. Also, there might be some identifiable triggers for development. In this chapter we will study what is happening in Portugal, within the Polytechnic educational system. This is a case study in academia but it might reflect the reality in some other fields.

Before moving on to the presentation of the research questions, it is necessary to describe the higher education system in Portugal since this will contribute to a better understanding of the case that was under study. The Portuguese higher education system is a dual one, i.e., there are two different types of tertiary institutions - universities and polytechnics. Until 2009, the requirements for polytechnic lecturers did not include a doctoral degree. Due to new legislation, lecturers at the Polytechnic are now expected to complete their PhDs by 2015 if they intend to remain working in a full time position within the Polytechnic higher.