Chapter 5.7

Social Impacts of Mobile Virtual Communities on Healthcare

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ABSTRACT

Mobile technologies, such as PDAs, pocket PCs and cell phones, are transforming interpersonal communications, making them independent from a fixed location and then "situated nowhere". The widespread diffusion of mobile technologies combined with the popularity of virtual communities is giving rise to the development of mobile virtual community. Mobile virtual community has the great potential to serve information needs. A relevant application's domain for mobile virtual communities is healthcare, where the need for information is deeply felt and has a long-term nature. Mobile virtual healthcare communities encourage information exchange between patients, between physicians, and between patients and physicians. The exchange of information can be used for detecting patients and physicians that have common objectives in order to establish interaction among them.

INTRODUCTION

Social relationships are a key component of human life. Whilst in earlier times communities were bound to the limitations of time and space, these restrictions are removed thanks the evolution brought by the Internet (Whitepaper, 2007). In the Web people organize themselves into virtual communities at the same manner they organise themselves in communities in the real word. A Virtual Community can be defined as an information source in which people share interests and information. It consists of tree elements;

- People interacting to satisfy their own needs or play special roles;
- A shared purpose, such as a need, an interest that provides the reason for belonging to the community.
- Communication systems and server architecture that support social interaction and promote a sense of been together.

The popularity of virtual communities, combined with the widespread diffusion of mobile technologies, such as PDA, pocket PC and cell phone, has given rise to the phenomenon of mobile virtual communities. Mobile virtual communities are considered to be the natural evolution of virtual communities. They can be seen as virtual communities to which mobile services are added. Using mobile technologies, users have an anytime-anywhere connection to their community. The use of mobile devices allows members of the community to communicate among them anywhere and anytime and not only if they are in the same physical place. In this way they can constantly have a connection with other members. The communication is both one-to-many and many-to-many. The participants of a mobile virtual community can exchange useful information by communicating and interacting with each other. Mobile virtual communities should be information rich and it should allow information available for many people because they improve and encourage social processes allowing interaction among colleagues, friends etc..

The aim of this chapter is to analyse the social impacts that mobile virtual communities have in the healthcare sector. Belonging to a mobile virtual healthcare community enables patients with diseases to interact in a virtual space with people that have the same experience. This interaction can allow the improvement of knowledge and the decreasing of problems. Moreover mobile virtual healthcare communities offer to physicians an opportunity to improve the awarness of patients'

health conditions enhancing their satisfaction. They give the opportunity to increase the involvement of patients in their treatments improving access to health care information and communication possibilities between patients and physicians. The use of discussion forum gives physician the possibility to communicate with patients continuously allowing better information sharing. For patients with chronic illnesses, especially those in rural or outlying areas, consultation with an appropriate specialist can vastly improve the quality and outcome of their healthcare. Finally mobile virtual healthcare communities allow physicians to participate in continuous medical education at a time and location convenient for them, along with useful communication. The use of mobile virtual communities improves possibilities to maintain communication and collaboration with colleagues investigating the same subjects. Here physicians aggregate observations from their daily practice and then challenge or collaborate each others' opinions, accelerating the emergence of trends and new insights on medications, treatments and devices. They can apply the collective knowledge to achieve better outcomes for your patients.

The chapter is organized as follow. After a short introduction, which deals with some issues of categorization and definition of virtual communities, the chapter proceeds to analyse mobile virtual communities. Then the chapter first proceeds to describe mobile virtual communities/communication in healthcare sector and then it analyses three kinds of relationship: between patients, between patient and physicians and between physicians.

VIRTUAL COMMUNITY: A MULTI-DISCIPLINARY CONCEPT

The term "virtual community" was even coined long before electronic communication in any form took place. It was a concern of many social theorists and scientists of the 19th and 20th centuries

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