Chapter V
Social Navigation and Local Folksonomies:
Technical and Design Considerations for a Mobile Information System

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ABSTRACT

Web services such as wikis, blogs, podcasting, file sharing and social networking are frequently referred to by the term Web 2.0. The innovation of these services lies in their ability to enable an increasing number of users to actively participate on the Internet by creating and sharing their own content and help develop a collective intelligence. In this chapter the authors discuss how they use Web 2.0 techniques such as "folksonomy" and "geo-tagging" in a mobile information system to collect and harness the everyday connections and local knowledge of urban residents in order to support their social navigation practices.

INTRODUCTION

Our physical world holds certain characteristics that enable us to interpret what other people have done, how they behaved, and where they have travelled. Sometimes, we can see traces on physical objects that provide hints about people's actions in the past. Footprints on the ground left by previous walkers can show us the right way through a forest or, in a library, for example, dog-eared books with well thumbed pages might be worthwhile reading as they indicate the popularity

of the text. The phenomenon of people making decisions about their actions based on what other people have done in the past or what other people have recommended doing, forms part of our everyday social navigation (Dourish & Chalmers, 1994). In contrast to physical objects, digital information has no such 'visible' interaction history *per se*. We do not see how many people have listened to an MP3 file or read a Webpage. In a digital environment people do not leave interaction traces, leaving us, according to Erickson and Kellogg (2000), 'socially blind'. However, the high value placed on social navigation in the physical world has motivated people to start thinking about it as a general design approach for digital information systems as well (A. Dieberger, 1995; A. Dieberger, 1997; Forsberg, Höök, & Svensson, 1998; Svensson, Höök, & Cöster, 2005; Wexelblat & Maes, 1999).

This chapter explores some of the technical and design considerations that underpin the conception and development of a mobile information system called *CityFlocks*. It enables visitors and new residents of a city to tap into the knowledge and experiences of local residents and gather information about their new environment. Its design specifically aims to lower existing barriers of access and facilitate social navigation in urban places. The technical development phase and the empirical usability research of *CityFlocks* has been reported elsewhere (Bilandzic, Foth, & De Luca, 2008). The purpose and focus of this chapter is to discuss the underlying design concepts that informed this social software. These concepts are positioned at the intersection of three broad areas of research and development that inform human-centred and participatory methods for designing interactive social networking systems on mobile platforms: social navigation, Web 2.0, and mobile spatial interaction (Figure 1).

First, the concept of social navigation and how people make use of it in the physical world are examined. Relevant previous studies and examples are discussed that apply social navigation as a design approach, e.g., for virtual information spaces on the Web. Based on the success and popularity of what has now been coined 'Web 2.0' services, the second part of this chapter analyses a number of Web development trends that foster participatory culture and the creation and exchange of user generated content. Some of these developments that introduced more and more social interaction and navigation methods to the Web, such as user participation, folksonomy and

Figure 1. CityFlocks is placed in an interdisciplinary field, embracing topics in social navigation, mobile spatial interaction and Web 2.0 technology