Chapter IX

Supporting Proximate Communities with P3-Systems: Technology for Connecting People-to-People-to-Geographical-Places

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Abstract

In this chapter we examine systems that link People-to-People-to-geographical-Places, which we label P3-Systems. Four major P3-Systems design approaches have been identified by an analysis of systems prototyped to date: (1) People Centric P3-System design that use absolute user location, based on awareness of where somebody is located (e.g., Active Badge); (2) People Centric P3-System design based on user co-location/
proximity (e.g., Hocman); (3) Place Centric P3-System design based on the use of virtual spaces that contain representations of user’s use of physical spaces (e.g., ActiveMap); and (4) Place Centric P3-System design based on the use of virtual spaces that contain online interactions related to physical location (e.g., Geonotes). This chapter explores how proximate community member interactions can potentially be well supported by P3-Systems through the improved geographical contextualization and coordination of interactions and the identification of previously unidentified location based affinities between community members.

THE MARAUDER’S MAP

It was a map showing every detail of the Hogwarts castle and grounds. But the truly remarkable thing were the tiny ink dots moving around it, each labeled with a name in minuscule writing. Astounded, Harry bent over it. A labeled dot in the top left corner showed that Professor Dumbledore was pacing his study; the caretaker’s cat, Mrs. Norris, was prowling the second floor; and Peeves the Poltergeist was currently bouncing around the trophy room (Rowling, 1999, pp.192-193).

Introduction

Improvements in communication and transportation technology over recent centuries have resulted in shifts in community ties from being primarily people-to-people-in-geographical-places to people-to-people irrespective of local geography (Wellman et al., 2001; Gillespie & Williams, 1988; Carincross, 1997). Much effort has gone into freeing interpersonal interactions from geographic constraints and into enabling communication any-where, anytime. However, there are many situations in which communication within a local geographical context is desirable. For example, an administrator of a physical university campus may see increased interactive communication between students, faculty, and staff as beneficial to campus life. Similarly, local community activists might see increased interactions between local residents as being of significant value.

Until recently our ability to use technology to seamlessly locate individuals and provide them with geographically contextualized personal information manage-
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