

Social awareness in public transportation

With the advent of new popular services such as Twitter and Facebook, social awareness has been brought to the forefront in our daily lives. Since years, daily life has been categorized by researchers and a lot of work has been done on specific environments such as work, school or home. We believe that another context need more work, in-between-ness. In-between-ers or commuters are people varying from one place to another, mostly between work and home, and who have very different activities from just waiting to reading emails or playing video games, which makes in-between-ness more complex to study. Our goal is to explore how awareness could be exploited by users in this context.

Related Work

A variety of stationary and mobile systems support social presence and social awareness in different ways. Presence awareness has been an essential part in instant messaging (IM) systems where the status bar is often used to convey activity information (e.g. Grinter and Palen, 2002). The status bar is also used as a way of communicating one's activity in Facebook. In Twitter and Jaiku, two commercial systems for both stationary and mobile use, the status bar is the central means of communication where users basically submit answers to the question "What are you doing?" Twitter is one example of the kind of very simple one-functionality applications that this project wants to explore for self-expression. In Jaiku, however, you can submit more information such as your activity from other online networks like Flickr.

An early example of a mobile awareness system is the Hummingbird (Holmquist et al, 1999), which used mobile devices with radio transceivers to alert users when others were nearby, thus supporting social awareness. The Hummingbird was tested in a group of ski instructors, which showed that when a system provides for such open-ended use, it becomes important for users to collectively negotiate when and in which situations to use it (Weilenmann, 2001). In the commercial system Dodgeball, users can manually tell where they are (e.g. "I'm at the Central Bar"), which broadcasts a text message along with the address to friends and co-located friends-of-friends to allow for ad-hoc socializing.

Design Process

Considering that the public transportation context is very diverse in terms of activities, our first step was to draw inspiration from inbetweeners through a cultural probe. We asked a dozen of Stockholm-subway users to take pictures during their daily journey according to some given criteria. The aim was to try to disturb their daily journey as less as possible, so that the pictures would reflect their daily experiences. The result showed a very colorful and diverse panorama of the subway experience. Users were enthusiastic to share their experience and had a lot to say. From pointing the common civil inattention to emphasizing the role of technology (mp3 players, computers, phones) in their journey, they aimed at the ambivalence of public transportation that is both a crowded and a lonesome environment.

Application

Considering previous works and actual popular applications, we came up with the concept of a location-based awareness system. This web-based application, running on a basic mobile phone, would give information about the location of the user's contacts (known as "friends" in

other services), not all of them, just the one in the same train than her. By logging on the system, the user share her location (the subway station that she went in and the direction she's going to) and has access to the ones of her contacts that are in the same train.

The main idea behind the project is to avoid the constraints that developers and users can find when using mobile software. The compatibility problem is a source of a lot of frustration for users and waste of time for developers. Thus we decided to bypass the compatibility issue by developing a service that is not OS or java dependent: a web service. As instance, tracing location of the user is technologically possible now (iPhone, Cell-ID...) but making that decision would reduce considerably the range of potential users. Even once this decision made, the mobile browsers are still putting constraints due to the very different interpretation that they can have on webpages (example). Consequently we decided to build the service as simple as possible in terms of interface and execute as many operations as possible on the server-side.

User Study

The user study just started and we don't have enough feedback yet to write on it. First results are expected at the end of August.