Chapter 1.20

Mobile Social Networks and Services

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ABSTRACT

Mobile social networks allow users to connect with each other, share information, and create technologically enabled mobile communities. With the introduction of the iPhone in 2007, the public dream of the likelihood of mobile computing was realized. This chapter reviews mobile social networks ranging from early examples to current services; and, it identifies and categorizes them according to a specific media type, mode, and code. The challenges of categorization in light of technology convergence are discussed. Issues of privacy, compatibility, and pricing are presented as they relate to mobile social networks. Potential strategies are suggested for dealing with these challenges. Finally, future trends of mobile social services are identified.

BACKGROUND

Mobile communication is becoming ubiquitous in many parts of the world today with over 3 bil-

lion mobile phone users worldwide (Tsai, 2008; Wolverton, 2008). Over 255 million mobile subscribers live in the U.S. (CTIA, 2008), which means more Americans own a mobile phone than have an Internet connection (*On the Move: The Role of Cellular Communications in American Life*, 2006). Considerable research has explored the social effects of mobile phone use (e.g., Goggin, 2006; Ito, Okabe, & Matsuda, 2005; Katz, 2003; Katz, 2006; Katz & Aakhus, 2002; Ling, 2004, 2008). Some have argued that mobile phones may lead to the atomization and privatization among users by discouraging face-to-face communication in urban environments (Banjo, Hu, & Sundar, 2006; Bull, 2004; Puro, 2002).

As mobile technology advances, however, new services for mobile phones have been developed which allow people to create, develop, and strengthen social ties. Similar to social networking sites on the Internet (Benkler, 2006; Boyd, 2004; Boyd & Ellison, 2007; Castells, 2000; Rheingold, 2002; Rosenbush, 2005; Saveri, Rheingold, & Vian, 2005), these mobile services may help users to build valuable networks to share information and resources (Ziv, 2009).

One of the first mobile social devices to appear was the Lovegety in Japan (Iwatani, 1998; Reuters, 1998). The Lovegety was a stand-alone device that would fit in the palm of the hand and beep when it was within 5 meters of another device. There were "pink girl" devices and "blue boy" devices each with three settings: "let's chat", "let's karaoke", or "get2". The devices beeped and flashed green when two co-located devices were on the same setting (e.g., both devices were set to "let's chat"). The devices would beep and flash red when they were on different settings. According to one account, users would turn down the volumes, hide the devices, and pretend they did not have a device if they did not want to contact another Lovegety user (Iwatani, 1998).

There were two kinds of information exchanged using the Lovegety. First, information regarding the identification of people who were interested in using a mobile device to meet other people; second, information regarding what kind of social interaction each person was looking for. The information exchanged was rather simplistic, but it allowed people to have interactions with strangers in public spaces mediated by mobile devices without divulging personal identifying information, such as mobile phone numbers or even names.

MIT's Media Lab and Intel Corporation each developed two other early mobile social networks. Social Serendipity was MIT's Bluetooth-based social service meant to harness the power of mobile technology and social information (Eagle & Pentland, 2005). Social Serendipity facilitated social interaction among geographically proximate users by matching user profiles and then exchanging profile information with similar matches. Intel's Jabberwocky sought to monitor and broadcast a user's movement to identify "familiar strangers" and encourage a sense of urban community (Paulos & Goodman, 2004). Both of these technologies relied on the mobility of the devices to ascertain locational information to facilitate social connections among users.

Early versions of mobile social services, such as the Lovegety, Seredipity, and Jabberwocky, were often made as stand-alone mobile devices. As mobile phones have advanced, however, there has been a movement away from separate mobiles devices that facilitate social connectivity and towards mobile social services that work on mobile phones. The mobile phone has joined the ranks of keys and wallets as items most people do not leave home without (Lohr, 2005). Therefore, most publicly available mobile social services have been developed to be used with mobile phones. The present chapter reviews a range of mobile social services, from the early examples to most current, and identifies and categorizes various mobile social networks and services.

Mobile Social Services

Mobile social services refer to software, applications, or systems for mobile phones that allow users to connect with other people, share information, and create technologically enabled mobile communities. Many different terms are used to describe these kinds of services including: *mobile social network*, *mobile social software*, *mobile social network service*, and *mobile blog* (or *mo-blog*).

The term *mobile social network* has evolved in reference to the rise of such social networking services (SNS) as Facebook, MySpace, and Friendster. Boyd and Ellison (2007) define *social network sites* as "web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system." The most obvious difference between a mobile social network and a SNS is that the latter is web-based and the former is primarily mobile phone-based.

Boyd and Ellison's (2007) definition also is helpful to differentiate between mobile social

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