## **Abstract**

In this paper, we are concerned with the applicability of the concept of Community Informatics (CI) rooted in North American studies to a different context, Japan. Despite the fact that CI is a relatively new filed of study, and Japan's intensive use of mobile information and communication technologies (ICT) are a common area to find in articles, Japanese CI practices are little known. Among major academic journals that CI scholars appear, there have none of CI articles by Japanese scholars published so far. These draw our attention. We review cases in Japan that apply and adapt information and communications technology (ICT) to local community settings. Applying Williams and Durrance's framework encompassing community informatics practices, twelve community projects and groups were identified in the study (2007). The projects are categorized into four types based on different conceptions of ICT use in fulfilling community needs and objectives (Williams and Durrance, 2007). These are community groups, organizations, and projects that rely on (1) actual places, i.e., public computing places and cyber cafes, (2) virtual spaces, i.e., community networks and online resources, (3) some combination of those two, and (4) organic, that is, borne out of community efforts not particularly concerned with technology but which now involve ICT. We chose an opportunistic sampling technique in order to find cases that fit in those four types of CI models. For the very first step, we draw on a small number of articles by Japanese scholars on the utilization of social network service developed by municipal offices using open source software for community development (Toyama, 2007; Shoji, 2007).

Our preliminary analysis showed that in each case they are harnessing the dynamics of social relations in the use of ICT interactivities. At least one of the following basic functionalities of the Internet has become dominant in the course of development in all the cases, such as web portals, bulletin board systems, email, blogs, archives, social networking services, and audio and video streaming. In addition, a commonality we have found is the collaborative effort brought by different sectors in the community: government officials, representatives from local corporations, universities, and members of community organizations. Interestingly, most of the cases distinguish itself and their activities from interest groups sharing specific areas of activities comprised of individuals. They also describe them as a group that mainly relies on volunteers and private donations. Instead, a sustainable business model is the goal of their pursuit, particularly in the sense of philosophical uniformity and financial obligations. Phrases like "consumer relations management" and "corporate social responsibility" are well received. On the other hand, it is apparent that their activities do promote interaction between individuals by providing "spaces" online through various forms of ICT. We see the projects as facilitating the exchange of information among and the mobilization of people using technology within and beyond their communities.

When we trace the history of each project and relevant policy enforcement, the particular tendency toward developing those alliances and emphasizing their identity is closely intertwined with Japan's prolonged economic stagnation in the 1990s when social force came to play in various aspects of social systems that yielded in political, economical, and educational reforms. Financial crises with the collapse of long-established corporations, massive layoffs, and record-high unemployment rates were the examples of what the nation experienced during the time. Most of these projects were initiated in the early 2000s, while the penetration of ICT with an introduction of the mobile Internet service in 1999 became phenomena in different levels of society. We see this specific trajectory as a key to

understand the conception of 1) community, 2) community groups serving locals as a notfor-profit/government organization, and 3) information in the community. Furthermore, the local communities are taking a vital role to support information sharing and exchange between individuals in their communities, rather than to mediate information flow between the government and individuals. After a few years passed by, the notion of a citizen-tocitizen platform in community building seems strong in the developmental phases. For example, the Tokyo-centric notion of social activities and systems started to transform, while local communities are adapting ICT in parallel to cope with those social forces. The basis of geographic location and division of labor due to the individual resources in access to technologies and level of technical skills are reasonable conclusions to draw. We suggest that segmentation of social relations is the driving force behind these projects, as is the case with CI in the U.S. The growing gap in Japan between those who are computer literate and have access to ICT and those who are not computer literate and do not have access to ICT was found in this study. The salient concern is the segregation of different social groups, such as people living in rural and urban areas; seniors and youth; university students outside Tokyo and those in Tokyo; housewives and working mothers; and young adults/teens in school and dropouts.

Gurstein (2000) denoted Community Informatics as "a technological strategy or discipline" that links community development with emerging opportunities presented by ICT. Sparked by the information economy in the 1990s, concerns arose for a new medium that would bring together community activists, webmasters, Internet enthusiasts, and digital artists as well as a wide variety of academic scholars including political scientists, computer scientists, historians, and sociologists. In addition, initiatives were proposed to support local communities as an intermediate level of social relations. Loader (2000, cited in Keeble and Loader 2001) has described CI as navigating the interaction between transformation as expressed in information technology and continuity as expressed in a local, historical community. Early studies applied outcome-based and qualitative evaluation methodology in order to assess public ICT services and projects (Cordell, 2005; O'Neil, 2002). The objective of this approach was to uncover the intertwined social problems over the inherent of ICTs diffusion due to the limited accessibility to and availability of the networked environment. Simultaneously, the concepts and scope addressed in CI research and practice expanded into different arenas including cyberspace, indigenous locals, developing countries, and international organizations (McIver, 2003). With the emergence of empirical studies, CI research began to branch out into various subjects and fields. Our goal is not only to bolster the applicability of the original typology of Williams and Durrance (2007), but also to foster development of theoretical foundation within CI. Applying Keeble and Loader's notion of Community Informatics (CI) as a "multidisciplinary field for the investigation and development of the social and cultural factors shaping the development and diffusion of new ICT and its effects upon community development, regeneration and sustainability" (2001), in the end we hope this examination helps demonstrate the applicability of CI interdisciplinarity to a wider audience.