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Panel 7 Community Informatics: International Experiences and Case Studies

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PANEL 7

COMMUNITY INFORMATICS: INTERNATIONAL EXPERIENCES AND CASE STUDIES

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Panelists: Peter Day, University of Brighton, United Kingdom
Gert-Jan de Vreede, Delft University of Technology, The Netherlands
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1. INTRODUCTION

This panel will discuss and present case studies of “community informatics” as a strategy for supporting community use of ICT.

Community informatics (CI)¹ as an approach begins with the perspective that information and communications technologies (ICT) can provide a set of resources and tools that individuals and communities can use, initially to provide “access” to information management and processing and thus, with access, to pursue their goals in such areas as local economic development, cultural affairs, civic activism, and community based health and environmental initiatives.²

CI pays attention to the needs and objectives of physical *communities*³ and looks at how technology can support the achievement of those objectives. Thus, a CI approach is concerned with both the technology and the “user” (and the “uses”)⁴ and with community processes, user access and technology usability as well as systems analysis and hardware or software design.⁵ CI takes

¹Others who use the term include the Community Informatics Research and Applications Unit (CIRA) at the University of Teesside, Middlesborough, UK (<http://wheelie.tees.ac.uk/cira/index.htm>). See also the use of the term “social informatics” at the Center for Social Informatics at the Indiana University (<http://www-slis.lib.indiana.edu/SI/>).

²“Community informatics” draws heavily from the on-going practical and research work linked to the area of “community networks” and “community networking” (cf. Schuler 1996).

³ Much of the discussion concerning “communities” in the context of IT/ICT in recent times has been concerned with “virtual” communities rather than with “physical” communities. In this paper, we are concerned exclusively with the use of IT/ICT by *physical* communities. Cf. Rheingold (1993) and Hagel and Armstrong (1997) for discussions of *virtual* communities and their use of IT/ICT.

⁴This approach is often associated with those adopting what is called a participatory design (PD) methodology and concerned with the study of the computer human interface (CHI) and with development of approaches to computer supported collaborative work (CSCW). The literature on all of the above is very large and can be explored easily on the World Wide Web by employing any available search tool.

⁵This area among others is discussed at some length in the various chapters in Gurstein (1999a).

into account the design of the social system within which the technology resides, as well as the technology system with which it interacts (Pigg 1999). In many respects, CI is an extension of the “socio-technical” approach to systems design but shifting attention from the “organization” to the “community,” and thus reflecting the increasingly widespread distribution of ICT access (PCs and the Internet) and their use from organizations to individual end users and communities.⁶

2. COMMUNITY INFORMATICS

Community informatics is the study of the application of ICT to the social, economic, political, or cultural goals of communities.

Fundamental to community use of technology is the issue of *access*. Clement and Shade (1996) identify what they call an “access rainbow,” which includes seven separate levels of access: governance/policy, literacy/social facilitation, service providers, content/services, software tools, devices, and carriage facilities. Included within this are issues of technical access (telephone connections and computers), economic access (the cost of using and maintaining these systems), social access (cultural, educational/literacy, and social barriers limiting use of the systems), and physical access (as for the physically disabled).

Of interest also is how the technology context⁷ (institutional, organizational, training, etc.) can be organized and managed so as to optimize the use of the technology and the opportunities it provides (Gurstein 1999b). Also, there are issues of how public or community access opportunities are linked into ongoing non-technical service or other organizational structures as, for example, how access and use of a public access sites might be linked into existing public facilities in a local community (Pigg 1998; Dienes 1997; Gurstein and Andrews 1996).

CI in certain instances may include distinctive software, hardware, and applications design (for managing community networking, on-line voting, community web sites); specialized approaches to automated information processing and management; the development of community oriented ICT training, education, and organizational design; and management approaches. Also, insights concerning the ways in which communities are organized, pursue their collective objectives, manage themselves internally (including how they develop and process information), and structures of governance are all elements that can and should be taken into account in a community informatics approach.

3. OBJECTIVE: TO REVIEW INTERNATIONAL EXPERIENCE WITH COMMUNITY INFORMATICS

3.1 Community Access

“Public” access to ICT is being made available within communities through a variety of government and not-for-profit supported community access sites, telecenters, and civic networks and through for-profit cybercafes and Internet-enabled telephone centers and other sites. The panel will address the similarities and differences in how universal access to the ICT is being addressed cross-nationally as a response to issues now being discussed in terms of a “digital divide.”

3.2 Community Service Delivery On-line

ICT is being used as a means for providing public services including information and registration concerning entitlements and certification, health information and counseling, employment information, and small business support (including mentoring). The panel will present cases, approaches, and issues from a variety of national contexts.

⁶This approach is often linked with Enid Mumford and the ETHICS methodology (see Mumford 1996).

⁷This is extensively discussed in Gurstein and Dienes (1999).

3.3 Community E-commerce

Both commercial and non-commercial efforts are being made to make some of the opportunities emerging through electronic commerce available to geographic communities (alongside virtual communities) as, for example, through E-mails, community web-sites, links between SME's and on-line commerce, telework and others. The panel will discuss cases, approaches, and issues that are emerging in this sector cross-nationally.

3.4 Civic/Community Participation On-line

ICT is being used to enhance processes of civic and civil society participation through non-partisan electronic democracy projects, through party sponsored civic forums, and through government sponsored public consultation initiatives. The panel will review the current experience cross-nationally with these developments.

4. ISSUE AREAS

Among the areas under consideration within a community informatics context, of broader interest to the IS community are international experiences concerning:

- Community informatics applications—community networking, civic networking, public participation
- Cross-cultural variations in community informatics developments
- International institutional variations in community informatics developments
- Relative significance of, and response to, community or public ICT access within countries and regions

5. DISCUSSION FORMAT FOR THE PANEL

The session will begin with an introduction (about ten minutes) by the Chair, including a brief introduction to “community informatics” and a review of some of the key issues for CI both in developed and developing countries. This will be followed by the presentation of several CI cases, approaches, and issues from developed and developing country perspectives (Canada, Australia, the United States, the United Kingdom, South Africa, and East Africa).

The remaining time will be dedicated to an open discussion, with the audience invited to address one or more of the members of the panel. As a “kick-off” to the discussion portion of the session, the panel will be presented with the following controversial issues for comment:

- Community values, “censorship,” and public access
- The electronic digital divide—rich/poor, developed/developing, skilled/unskilled
- Legislating “secondary languages” in a cyber E(nglish)-world
- The economic development of African countries

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