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# A Qualitative Analysis of Local Community Communications

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## ABSTRACT

This paper explores how people communicate in reference to local interests and suggests information and communication technology (ICT) design for enhancement of local community networks. Qualitative data was gathered from participant observations of local community collective action and open interviews with active community members. Data analysis revealed concepts, leading to categories in relation to local interactions and interests. Design suggestions consider introducing people to local community private-strategic activity via public displays that indicate simple entry points to active participation, and creating information collections according to local community perspectives for long-term reference.

## Author Keywords

ICT, Community Informatics, Communities of Practice, Grounded Theory

## INTRODUCTION

Putman addresses America's decline in social capital and calls for research questioning the impact of electronic networks on civic engagement (Putnam, 1995). In response, the Netville wired suburb project revealed electronic networks have a positive impact, allowing growth of large weak-tie local community networks that are beneficial to accessing information and resources, linking groups, and providing social identities (Hampton & Wellman, 2003). The Netville work focused on interaction patterns of residents in a neighbourhood specifically set up with a high speed ATM network. Other work has concentrated electronic network studies on specific communities such as university campuses (Pape & Reinecke et al., 2003), academic communities (Churchill & Girgensohn et al., 2003; Girgensohn & Lee, 2002), work groups (Mansfield & Ward et al., 2001), and virtual communities (Godwin, 1994; Rheingold, 1992). This paper questions how local community communications are formed and sustained, and the potential role of ICTs in supporting communications across a broad mix of people with varying interests, and varying access to ICTs.

When a community is faced with a crisis, residents, local community groups, local government, and business have a direct need to communicate in reference to local interests. The networks and connections that people have available become critical to open discussion and resolution of problems. Schuler advises that community networks should develop within existing technical infrastructure and social context (Schuler, 1994). To inform the design of sustainable community networks this research studies how people communicate in reference to local interests. Rheingold describes knowledge as currency in virtual communities, and the process of exchange of information between strong and weak ties (Rheingold, 1992). The collection of knowledge for long-term value of community networks as a resource is considered.

## RESEARCH ENVIRONMENT & DATA GATHERING METHODS

The research data was gathered from the city of Brisbane, Australia. The Brisbane environment is a relevant place to conduct research addressing sustainable community networks as it provides many examples where people need to communicate in relation to local interests. South-East Queensland has recorded the largest growth of any region in Australia. Development in the city moves at a steady pace in order to accommodate rapid population growth and residents need to keep pace with communication to all relevant groups. Design solutions for sustainable technologies that facilitate and aid the process of active participation can be informed by the communication patterns of people that are actively involved in communicating in reference to local interests.

Data was gathered from a long-term participant observation over an eighteen-month period of email communication relating to the local community association trying to establish dialogue about development in a local area. The local community is facing major changes to their place with subdivision of land changing vistas and placing pressure on limited community infrastructure such as roads, schools, and public spaces. In addition state government is proposing to bypass a motorway through the area as a solution to road design and maintenance problems outside the locality.

Open interviews were used as a data gathering method to capture individual community leader perspectives and reflection on building communities. A business leader, councillor, and community group leader were interviewed. All

have experience as active community members with interest and experience in developing community networks. Short-term participatory observations were made at local community meetings addressing local interests.

### **DATA ANALYSIS AND RESULTS**

Grounded Theory analysis (Strauss & Corbin, 1998) was applied to the raw data (email, interview notes, and observation notes) gathered from the three contexts: long term local community collective action, local community group leader reflections, and local community public meetings. This revealed ways to categorise the activities. In summary Grounded Theory is developed through microanalysis of text and coding techniques. Microanalysis aids the move from description to abstraction by generating concepts. Open coding consolidates concepts into categories and creates a substance for phenomena.

The long-term local community collective action categories include *document, lead, network, design, meet, promote, collect, chat, teamwork, and structure*. The local community group leader reflections categories include *connection, message delivery, and interests*, and the local community public meeting categories include *process, discuss, and describe*. While space only permits us to name the categories in this paper, the discussion of ICTs for local community and place is informed by detailed consideration of the categories and associated data.

### **PRIVATE-STRATEGIC ACTIVITY**

The local community association which had seen only moderate levels of activity, galvanised in response to a crisis facing the local community and attracted members interested in protesting a proposed motorway bypass. Some members play a passive role, with their membership fees providing financial support and their numbers conveying local community support for collective action. Active members were forced to respond to the development proposal and communicate in relation to key protest activities in a timely manner. The communication that resulted focused on private-strategic activity, invisible to passive members and the wider local community that have potential interest in the protest outcome. Local community association members did organise face-to-face meetings for specific purpose such as planning, debriefing, event coordination, social, and event rehearsal, but were irregular in comparison to the consistency and frequency of email communication.

State government funded a team of skilled employees to generate documentation and reasoning for the proposed motorway bypass proposal before public announcement of the project. The local community association could not afford to respond with presentation of an ill-considered and scattered public protest to state government, and structured their communication for private-strategic activity that produces work for public presentation.

Private communication between active members of the local community association allowed focus and concentration on the action, without need to publicly discuss the variation of interest across a broad range of people. Although a formal structure was defined as an association with an executive, an informal structure was realised over time as people become increasingly aware of others strengths, skills, and particular interests through their actions and interactions. As the structure was realised, correspondence between executive and other leaders could flow to committed team members and strength of argument accumulated against the proposed motorway bypass. Although membership to the local community association increased overtime, the initial structure of leadership and active members did not significantly change and private correspondence continued to flow between particular members for organization and coordination of local community association activities.

Individuals determined the level of privacy as they chose particular individual email addresses to direct messages to. Email list addresses that only recognised a formal hierarchy (i.e. executive, members) and did not recognise the fine grain informal associations between members were infrequently used. Private communication between active members allowed for specific discussion between small groups of people in relation to key strategic activities such as design of promotional media, editing of documentation, and detailed coordination of public events. Members discussed interests and ideas in confidence to their trusted and familiar contacts before sharing them with larger groups of people.

### **COMMUNITIES OF PRACTICE**

The communication that evolved through the local community association private-strategic activity was typical of Communities of Practice (CoP). CoP are informal or cooperative groups created overtime by the sustained pursuit of a shared experience, where the most important inclusion mechanisms are collective learning, production of shared meaning, and collective identity. Members feature beginners and experts with a shared history of learning (Lave & Wenger, 1991; Pape & Reinecke, 2003; Wenger, 1998). While the organization had an elected executive of President, Secretary and Treasurer, the work was organised and decisions made by sub-committees formed in response to relevant issues such as motorway and housing development.

Although CoP outlines a pattern of interaction for co-workers observed in American corporations, the long-term communication activity of the local community association follows a similar pattern. American corporations offer a very different context in comparison to the local community association for co-workers to sustain shared experience, collective learning, shared meaning, collective identity, and experts with shared history. CoP in American corporation

are supported by a backbone of business plans and structures with the financial market being the ultimate backbone structure that co-workers and business are bound to.

The local community association provided an avenue for active residents to develop CoP and to protect their local place, but the wider community that potentially benefits does not have an overall system to capture the experience for future reference. Furthermore all positions are filled by volunteers. The bulk of information relating to local community is structured from local government perspective, the formal governance and hierarchy of local community systems.

The retention of expert information and knowledge in local CoP is threatened as co-workers burn out and leave local community groups. While information about local community issues is available to local residents, strategic activity is situated in CoP that exist through interaction and contribution, rather than passive membership. Co-workers in American corporations are introduced to CoP as they are given particular jobs and are expected to contribute to work towards the overall goals for the corporation. People on the outside of local resident CoP may find it difficult to engage in local community groups without simple, visible indication of private-strategic activity.

### **STRENGTHENING LOCAL RESIDENT COP**

Community groups such as the local community association hold a wide variety of knowledge and information relating to short and long term community issues. Applying a common structure to information generated by groups of local people, and relevant to the local community and place may provide increased access to a collection of resources built from a local perspective. A structured collection may provide people with a sense of the larger questions common to all projects and prevent residents, council and business from viewing each issue separately, without connection to interests over time. Careful consideration to the categorization of collected information and maintenance issues will allow access to an increasing valuable local community resource.

Local community association members were involved in protest against the proposed motorway bypass because they had interest in protecting the development of their local place. Volunteers contributed to collective action without remuneration, compensation or financial incentive beyond protecting their property and local community from potential financial degradation. Through the process of contributing to protest, active members gained knowledge and information about the local community and as a consequence gained value as active community members. People often struggle to continue voluntary commitments if the workload compounds with other work and family commitments. A structured collection may aid the retention of knowledge and information in a group, rather than allow expertise leave the group entirely along with an individual. A system designed to allow long-term access to a community collection has potential to inform residents from a local community perspective and disconnect knowledge of how to generate community action from particular people.

Community groups identify issues of concern and welcome interest from residents, but residents may find it difficult to identify how they can contribute to an established group. Passive local community association members and local community residents may feel incapable of leading or contributing to collective action after witnessing experienced active members protest development with ability. While transparency of private-strategic activity is not beneficial to public outcomes, direct and specific requests for help, rather than requests for general interest, may increase individual contribution. Request for help with tasks that offer a low level of commitment, but contribute to the private-strategic activity and the overall goals of the group increase the transparency of private-strategic activity and introduce people to CoP. Direction to private-strategic activity for the wider community may aid the ability for interested people to identify with the task and then become familiar with the people and groups.

### **PUBLIC DISPLAY**

Although Brisbane City Council websites provide a wealth of information and have been recognised as being very forward thinking for e-communication, the online forums are scarcely used by residents to discuss specific local community topics. This is probably due to the timing and implementation of discussion not quite matching the discussion needed from the community perspective. This is something where communities need to work out mechanisms for themselves to have dialogue. They cannot expect council to do this for them.

Although local community websites are rich with information and offer links to other community sites, a local and central point of public display may aid the perception of unity of community knowledge and interests. Public display of some relevant local information and knowledge portrayed from a community perspective has potential to increase awareness of CoP, consideration of private-strategic activity, and access to fine grain knowledge and information.

Active community group members use information and communication technologies such as email and websites for private and public local communication in relation to local interests. Email and websites have limited physical presence in the local community. People must either know the email address or website location, search for the website or be directed to the website through browsing. Technology that offers a physical presence in the community, such as large screen public displays can aid the presence of online information (Churchill & Girgensohn & Lee et al., 2003). The ability for all people to contribute to and access online content relating to local community interests is important. In addition to increasing awareness of local online content, inclusive participation and access to the content should be

considered for sustainable networks (Schuler, 1994). However, some information and dialogue is effective because it is done in private, so public display many only hint at mechanisms for negotiated access.

In summary, recommendations for content and features of public displays designed to enhance ongoing communication and interaction of community members include:

- display local information from the perspective of local community eg. Importance of the proposed motorway bypass protest
- deliver local messages
- create awareness of local resident CoP and hint at ways to negotiate access to further involvement
- provide access to a collection of local information and knowledge
- allow discussion, argument
- clarify important community outcomes and decisions

The presentation of information from a local perspective requires local people to create and contribute content for public display. Sustainability of public display content will be threatened if people do not understand the system or the relevance of the content. Participatory design methods can aid sustainability of local community networks by involving local people in ongoing and democratic design process (Schuler, 1994). Categorization of information allows access to information and community network value will increase over time with well-considered categorization that allows people long-term access to information and knowledge specific to their local interests.

## **CONCLUSIONS**

Community crises motivate people to work collectively towards solutions for community problems. Effective action requires interested people and groups to have awareness of the main issues, understanding of relevant information, local community support, and open communication channels to convey arguments. Communication between interested parties is heightened with community crisis, although continuous dialogue between local government, business, and residents is necessary to resolve long-term problems and solutions for local community.

Local residents engage in private-strategic activity to build collective action and present well-considered, planned arguments in reference to local interests. As people contribute to community group work, CoP are structured and information is shared amongst members. Local resident CoP are vulnerable to loss of shared information as experienced members leave or issues are resolved without recognition or attention to the knowledge and information that has been collected over time.

Current ICT implementations offer limited enhancement of local communication in reference to local interests. A system designed to support CoP will forward benefits to the wider community such as access to information specific to local interests. Location of large screen displays in public areas may aid the presence of online activity, and features that enhance how people communicate in reference to local interests have potential to increase social capital and civic engagement.

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