

Inclusive Technology's Impact on Society through the Neighbourhood Watch Scheme

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Outline

- Background
 - Neighbourhood Watch Scheme
 - Motivations for Our Proposal
- Proposed Research
 - Interdisciplinary Collaboration
 - Issues to Consider
- Our Progress So Far
- Summary and Future Work

Background

- Prevalence of communication technologies
 - Facebook, Twitter, online forums
 - Positive and negative impacts
- Fostering “community spirit”
 - Effective communication
 - Minimising social exclusion
 - Big Society agenda

Neighbourhood Watch Scheme

- Local communities working together with local authorities (e.g. police)
 - Dealing with certain aspects of neighbourhoods
 - Such as safety and aesthetics
 - Reducing fear of crime
 - Improving physical/emotional well-being
 - Popular in the 1980s but seems to have struggled to get wider participation in recent years
 - Tend to attract only certain group (older people)

Motivations

- Rejuvenating Neighbourhood Watch Scheme
 - Utilising new technologies
 - Reducing barriers to initiate/maintain
 - Spreading to wider age/social/ethnic groups
 - Improving relationships between local community and local authority
- Alleviating the cut in police funding
- Better understanding of socio-technical problems, leading to more effective solutions

Proposed Research

- Empirical study on the social impact of a socio-technical system
 - Iterative approach
 - Requirements gathering through focus groups, questionnaires, and meeting stakeholders
 - Design and development of the socio-technical system
 - Data collection through deployment with volunteers
 - Assessment and evaluation
- Work in progress, to be submitted to the EPSRC/ESRC soon...

Interdisciplinary Collaboration

- Newcastle University's School of Computing Science
- Northumbria University's Psychology and Communication Technology Lab
 - Design Evaluation Tea Party
- Northumbria Police
 - Through Newcastle University's Centre for Cybercrime and Computer Security (CCCS)
- South Tyneside Neighbourhood Watch volunteers

Issues to Consider

- Communication system
- User perception of the solution
- System properties
- Stakeholder involvement
- Psychological and social factors
- Legal issues

Our Progress So Far

- Participation at the *Threats and Trust in Cyberspace Conference* organised by CCCS (Mar'11)
 - Discussion with South Tyneside NW volunteers and officers from Northumbria Police
- First Design Evaluation Tea Party (May'11)
- Second Design Evaluation Tea Party (Aug'11)
- Preparation of proposal documents (ongoing)

Design Evaluation Tea Party



Photos by David Greathead

Early Results

- Analysis from the first Tea Party
 - Anonymity is a desired feature, especially in reporting crime
 - Users would like full control of the system
 - Ability to turn it on and off
 - Ability to choose which neighbours to include
 - Easy to use portable device
 - Possibility to facilitate face-to-face interaction
 - Invitation to visit
 - Offer to help with grocery shopping

Summary and Future Work

- Work in progress
 - Potential societal impact
 - Time is right
- What's next?
 - Analysis of the second tea party
 - Further discussion with various stakeholders
 - System mock-up design and implementation
 - Early trials and evaluation
 - Submission as a proposal to the funding body