Public and Situated Displays to Support Communities

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ABSTRACT

This workshop will bring together researchers and practitioners working with public displays in communities to share experiences and to identify research themes and issues arising from social and community use of public and situated displays, while increasing awareness of various relevant projects and encouraging collaboration.

Categories and Subject Descriptors

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

General Terms

Design, Experimentation, Human Factors, Theory.

Keywords

Community, situated displays, public screens, urban informatics.

1. INTRODUCTION

It is five years since *Public and Situated Displays* [4] was published, reporting on a workshop at CSCW'02 exploring social, technical and interactional aspects of public and situated displays. As the enabling technologies for such displays (mobile computing, wireless networking, large flat displays, etc.) become increasingly sophisticated, reliable and affordable, there has been considerable work on the use of public displays for commercial and cultural purposes, crystallised around the *Urban Screens* events in Amsterdam 2005, Manchester 2007 and Melbourne 2008.

One potential application of large displays is in supporting communities of individuals sharing a geographical location, workplace or interest by, for example, improving communications, enabling awareness of the community, or reinforcing values. There have been many examples of actual systems that utilise large displays situated in public or semi-public places to support notions of community [2,3,5] and while some systems have been on the whole successful, others have created experiences that people find socially awkward as well as irksome.

We see public displays as having the potential to play an important role in supporting social interactions across various different environments, but also acknowledge that public deployments are fraught with complex socio-technical challenges and issues. Designers of public display systems must be aware of these issues and choose their techniques accordingly, but the challenges and appropriate techniques may change from environment to environment.

This year's conference theme, "Designing for Habitat & Habitus", could not be more suited to the discussion of these systems, embedded within everyday habitats and communities such as public social spaces and workplace environments. This OZCHI 2008 workshop will bring together researchers and practitioners to share experiences and to identify research themes, issues and techniques arising from social and community use of public and situated displays.

2. GOALS AND OUTCOMES

Our primary aim is to explore the potential for situated displays to support communities of all kinds by bringing together many individual community display projects, with the added benefit of increasing awareness and communication between researchers involved in this field. We hope to share experiences of working with communities and the challenges this can involve and explore the different approaches, techniques and technologies used by the workshop participants. In doing this, we aim to learn which of those have proved successful, which have not been so successful and facilitate comparison of the various approaches and the contrasting communities in which they were based. It is our hope that the workshop will encourage collaboration between disparate research groups, and if suitable the outcomes of the event may be considered for publication in an appropriate venue.

3. TOPICS

We welcome contributions related to the use of public situated displays in supporting communities, including empirical results, initial studies of settings or design ideas and case studies of successful or unsuccessful real-world deployments. Relevant areas for discussion include, but are not limited to, the following:

- Exploration of different settings and deployment environments (urban, suburban, rural, workplace, etc.).

- Techniques for gathering requirements and information for design.

- Display designs and design techniques.

- Discussion of key deployment challenges.
- Issues arising from working with communities.
- Evaluation of community displays and different interaction techniques, such as the use of touch screens, mobile phones and web applications.
- Issues arising from display content, such as moderation, censorship, legislation and copyright.
- Repurposing of content for public displays from multiple devices and platforms.
- Access control and possible solutions and approaches (authentication, registration, etc.).
- Persuasiveness and community-building effects.
- Sustainability and evolution of solutions.
- Managing multiple displays (content issues and architectural issues).
- Enticing and encouraging users to participate and incentives to contribute.
- Role of gatekeepers to control access and content, and local 'champions' to encourage uptake.
- Spaces and places [1].

4. WORKSHOP PLAN

We will accept submissions of up to three pages in OZCHI submission format for a full-day workshop. We expect that the first half of the day will comprise conference-style paper presentations of around 15 minutes each, with discussion of emerging themes and issues from the presentations. The second half of the day will involve a group design exercise based around a scenario for a new community display.

Ideally, participants will have worked with public display deployments and be able to contribute their own experiences with other participants. However, those with an interest in the field or intending to begin work with public displays are also welcome.

Papers should be submitted through our website review system and will be archived on the site before and after the workshop at: http://wraydisplay.lancs.ac.uk/ozchi08.

5. SUBMISSION AND KEY DATES

Key dates for submission are:

- Call for papers: 26th August 2008
- Submission deadline: 10th October 2008
- Notification of acceptance: 24th October 2008
- Camera ready submission: 31st October 2008

6. WORKSHOP ORGANISERS

Nick Taylor is a research student in Lancaster University's Computing Department, funded by a Microsoft Research European PhD scholarship. He is studying the use of public situated displays to support rural communities, the issues and challenges related to this setting, and the various design and interaction techniques which can be used in developing such displays. He has already published several key papers in this area, including "Probing Communities: Study of a Village Photo Display", which was runner-up for the best paper award at OZCHI 2007.

Keith Cheverst is a Senior Lecturer with Lancaster University's Computing Department. His research over the last decade has focussed on exploring the obdurate problems associated with the user-centred design of interactive systems (typically these systems would utilise mobile and/or ubicomp technologies) in complex or semi-wild settings and the deployment and longitudinal study of these systems in order to gain insights into issues of adoption and appropriation by users. He currently holds grants from both the EPSRC and Microsoft Research for exploring how the use of situated displays can support notions of community and has published widely in this area.

Christine Satchell is a Senior Research Fellow at QUT and an Honorary Research Fellow with the Interaction Design Group at the University of Melbourne. She is currently working on a three year ARC Linkage study at QUT called 'Swarms in the Urban Villages: New Media Design to Augment Social Networks of Residents in Inner-City Developments'. The project is exploring how the design of web and mobile technology can support social networks of urban residents. A specific focus is the integration of urban interfaces and displays.

Marcus Foth is a Senior Research Fellow at the Institute for Creative Industries and Innovation, QUT. Employing participatory design and action research, he is working on numerous projects at the intersection of people, place and technology with a focus on urban informatics, locative media and mobiles. He has published over 50 articles in journals, edited books, and conference proceedings and is the editor of the 2008 *Handbook of Research on Urban Informatics: The Practice and Promise of the Real-Time City*.

Ian MacColl manages the Suburban Communities program within the Australasian CRC for Interaction Design (ACID). The Suburban Communities team researches information and communication technologies (ICTs) for place-based communities and has designed, developed, deployed and evaluated public displays for several urban and suburban communities.

7. PROGRAM COMMITTEE

We have gathered an international and multi-disciplinary program committee with a strong background in situated display research to review submissions. Confirmed program committee members are:

- Michael Arnold (University of Melbourne, Australia)
- Areti Galani (Newcastle University, UK)
- Christian Kray (Newcastle University, UK)
- Ann Morrison (University of Queensland, Australia)
- Kenton O'Hara (Hewlett-Packard Labs, UK)
- Mark Perry (Brunel University, UK)
- Fiona Redhead (Queensland University of Technology, Australia)
- Ingrid Richardson (Murdoch University, Australia)
- Mark Rouncefield (Lancaster University, UK)

8. RELATED PROJECTS

Keith was the P.I. of the recent CASIDE project which used technology probe based approaches to explore how a range of novel technologies could be used to support coordination and community in a variety of domains. Domains (and technologies probes) explored included a rural village community (the Wray Photo Display), a University department (the Hermes II Door Display system and Hermes Photo Display) and sheltered housing facility for former psychiatric patients (the SPAM Messaging System). See www.caside.lancs.ac.uk.

Marcus and Christine are currently working on a three-year study underway to advance design knowledge of how residents in urban environments can be assisted to communicate and interact through the use of new media to bridge the physical and digital city. A central focus is to challenge the notion of the mobile phone as a personal artefact and explore ways in which the device can be used in conjunction with other technologies and interfaces such as urban screens. More information at www.urbaninformatics.net.

9. ACKNOWLEDGMENTS

10. REFERENCES

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