citizen-centric privacy by design

Who we are

(Visualisation and Other Methods of Expression) has been a three and a half year collaborative interdisciplinary project bringing together academics and practitioners from sociology, social psychology, systems design, art and computer science. The project's aim was to design better privacy awareness tools for citizens with varying levels of digital literacy. The project engaged with communities across the UK. Many of the studies came from the North East of England where the academic partners worked together with project partner Sunderland City Council.

The project began with the following premise:

Many users cannot and do not engage sufficiently with issues of privacy and consent in their interactions with ICT. Consequently they are not able to adequately assess the risks they run and organisations cannot develop services which adequately address users' privacy and consent needs.

VOME was tasked with engaging with citizens who, to date, had not been included in privacy design studies. Sunderland City Council have one example of one such group of citizens:

"Consider the case of a young person, aged 13 years, who is 'at risk' of offending. They are one of the target groups for the Empowering Young People programme which will use on-line service delivery as part of the method of delivery. Some of their peers have heard about the scheme and are saying it will be used by the police to keep track of them. Our young person is shy, reserved and has some learning difficulties. How will they express their concerns about how their data will be used, or will they simply choose not to engage? How might this be further complicated if the young person were to be a member of a minority ethnic group?

Would a set of tools designed for youth work support workers help clarify the issue, and engage the young person? How might the youngster explain how the scheme safeguards information rights to their peers?"
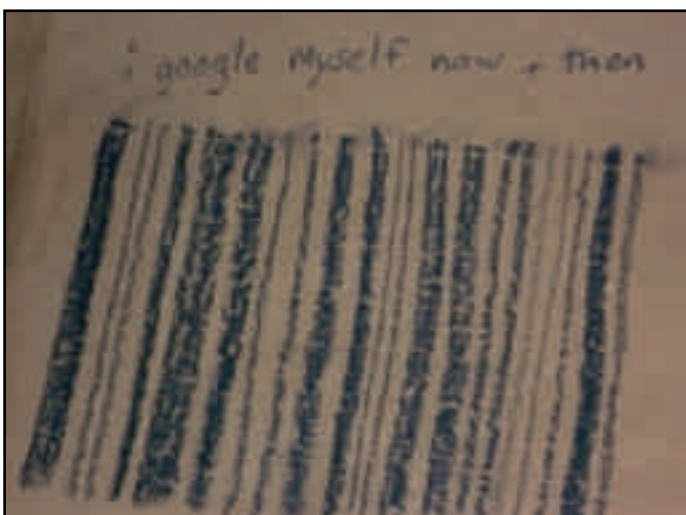
VOME first set about developing a deeper understanding of practices relating to technology and information disclosure in communities across the UK. Then, using this understanding, developed a collection of privacy awareness tools. These tools are developed from design principles which can be adapted to different communities. VOME has had, and continues to have, an active dissemination programme. The project has always been particularly strong in "grass roots" dissemination. The aim of its grass roots programme has been to bring together interested parties: citizens, policy makers, service designers and academics to promote debate and create an environment in which collaborations for change are established.

How we work

VOME engaged with a large range of communities as part of the studies. Salford University concentrated on the over-55s in Sunderland, a network of community reporters in Salford and students. Cranfield University focused on young people in a wide variety of settings. Royal Holloway worked with families and individual community members aged eighteen and upwards. During the project, VOME has worked in communities across England and has not restricted itself to a particular socio-economic group.

In order to achieve as inclusive a design process as possible, VOME used a range of engagement and data gathering methods, including: participatory theatre, community art, futures envisioning, observations, interviews and focus groups.

From these approaches we learned much about engaging in grounded community research. We listed some of our key lessons learned here.

(1) It is important to understand end users and the contexts that determine their attitudes and behaviours from their point of view and this is different from the researcher imagining or assuming what it might be.

(2) It is necessary to accept that participative engagement takes time and resources, and researchers have to be willing to give up control to participants whilst accepting that this can be a risky course of action.

(3) When identifying the most effective way to engage with technology users, understand the involvement and influence of stakeholders close to the end users.

(4) Take into account what stage end users and stakeholders are at in their thinking about the topic of engagement before implementing a particular intervention or research approach.

(5) In order to be most effective with the interventions you select, look upstream at those who are implementing products and services and work to influence their understanding as well as the understanding of the end users themselves.

(6) Segment the end user audience carefully and understand the limitations of the segmentation method you've chosen.

(7) Understand the trade-offs made by end users. These trade-offs demonstrate the competition that attempts at engagement are up against.

(8) Accept the complexity of the relationship between service use and information disclosure as stated attitudes are often at odds with observed behaviours and do not strongly predict or cause behaviour.

(9) Issues may be high on the policy agenda but not on the media or public agenda. So, niche areas need to be identified so that arguments can be developed and publicised to justify moving issues higher up the public agenda'.
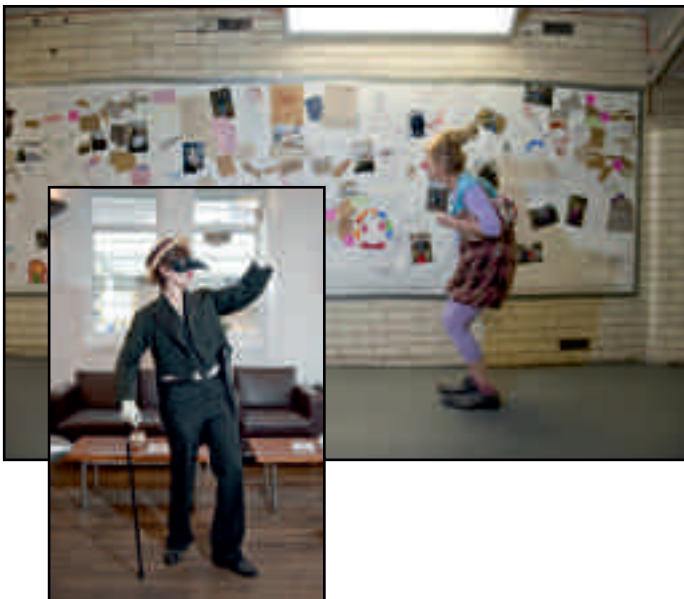
The main outcomes from our engagement work will be blogged over the next few months. Follow us on Twitter @vome_project.

What we made... service design

VOME first conducted consultations and user studies across the country to better understand how communities engage with on-line services. From this understanding, we developed design principles for privacy awareness tools. Using VOME's design principles, researchers developed a series of interventions through which to explore how people feel and experience personal data disclosure in on-line contexts. Details of these can be found at http://www.vome.org.uk/digital-intervention/

When designing these tools, we conducted user studies up and down the country and discovered that when giving their personal details on-line, citizens most wanted to know:

Which organisations have access to the information I give when I register?
What do other people I know think about this service?
Will the service provider (the organisation giving me my service) let me know what they are doing with my information?

From experiences gained in these user studies, we refined the design principles that service providers and service designers can use to make their privacy awareness features more accessible and effective. These principles can be downloaded from: http://www.vome.org.uk/toolkit/

When thinking where personal information goes, citizens most wanted to know:

What parts of the information are sent?
Who is sent the information?
What will organisations do with this information?

So, as you can see from the screen shots, using the design principles we created a map that shows this information, according to what service you are interested in.

What we made... music

- a participatory music video production by VOME and Hudson's Youth Project (a youth centre in the London Borough of Newham) in association with MO-AM and MasterCutz.

VOME had identified that young people's interests and concerns surrounding online activity range more widely than the safeguarding issues currently included in 'E-safety' education. This participatory video project aimed to allow a group of young people to express their own perspective.

Whilst encouraging the group to reflect on online privacy amongst themselves, we also aimed to develop a research perspective on how young people make sense of their privacy online, the strategies they use to manage their privacy and the nature and extent of their privacy concerns. The participants and their editors would decide the aesthetics and style of the video but it was to be suitable for an audience of other young people, and able to be widely shared. Thus the project aimed to be enjoyable and enriching for the participants, as well as producing a video that can form part of VOME's dissemination and knowledge transfer, defining a transferable project methodology and contributing to academic evaluation of the use of participatory video.

Starting out with a series of video interviews and group discussions about online privacy and personal information at the Youth Project, mostly led by youth workers with support from VOME researchers, a short talking-heads piece about managing identity online was produced. However, it quickly became apparent that the greatest interest was in communicating these issues through a music video and the project responsively moved in this direction.

The message of the video appears to reflect the ambiguity of experiences online and the necessity of 'trying to figure things out on this world-wide system'. It shows an engagement with and an enthusiasm for the use of information technology, but also demonstrates awareness of the potential cost of using online services, ranging from disclosure of personal information through to exposure to advertising.
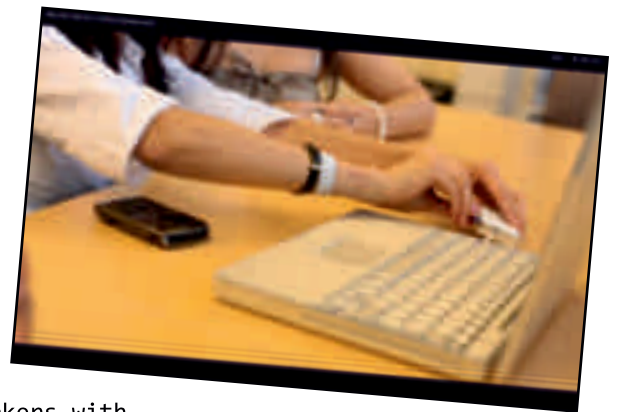
What we made... game

Drawing on real experiences of privacy and consent online as well as research into effective communication methods, VOME's Privacy Card Game supports the discussion and teaching of issues of online privacy and consent.

For the individual user, online privacy is situated within a global network of personal information practices. As it is not clear what such a network "looks like", it is difficult (both) to communicate its nature to others as well as to make systematic and rational judgements about actions within that system.

Games provide a potential way to represent, experience and understand complex sets of interactions – more complex than is possible in a diagram or text – and to make abstract thinking more visible and concrete. Games represent how real or imagined systems work and invite players to make judgements about them.

Players in VOME's game take on one of a number of roles such as Hacker, Bank, Advertiser or Online Shopper and have to make decisions about what type of personal information to play in public or to keep private, what information they can trade with other players, and how best to look after their personal data.

The game design is supported by qualitative ethnographic, interview and focus group research methods. Issues and roles featured in the game are drawn directly from this research, and quoted on the cards themselves. Cranfield University conducted an analysis of existing e-safety education material currently being used in schools, as well as analysing feedback from (ISC)2 /Childnet International 'Safe and Secure' sessions.

VOME trialled the game with videogame designers in Leamington, at GameCity in Nottingham and with Microsoft's Serious Games team. The game has been play-tested with Consult Hyperion, the Sunderland Voluntary Sector Youth Forum, BCS, Warwickshire County Council, Sunderland YMCA, and the Surveillance Studies Network. The production of a tangible, playable game presents the opportunity to offer something back to research participants and contributors in the VOME study. The game can therefore be seen as both a dissemination and knowledge transfer activity for research, but also as a tool for conducting further socio-technical research.

A printable version of the game with rules and advice for using it can be downloaded from the VOME website.

Here's how you can join in

The value of a project like VOME is how the understanding gained on the project is used by communities. In order to further disseminate the tools and techniques, we need your help. Do you have a project you'd like to use VOME's interventions for? Perhaps you are designing an on-line service and would like to use the design principles? Perhaps you are delivering a safeguarding course and would like to use the game?

VOME's interventions can be downloaded from: http://www.vome.org.uk/toolkit/
You can download the interventions for free. We would really appreciate feedback telling us how you used them, what effect the inventions had and whether you passed them on. We're really keen to hear how you adapted or applied the interventions and also keen to understand the way in which the interventions are shared.

VOME is running a number of case studies and pilot sites for its interventions. The main outcomes from this engagement will be blogged through our website over the next few months.

Pallion Ideas Exchange

VOME is working with Pallion Action Group and Proboscis (a non-profit creative studio) in Pallion (a former shipbuilding community, suffering the effects of long-term unemployment and poor social infrastructure in the ongoing economic crisis) to devise a process by which the community can identify the key issues challenging people around their household economies. This is achieved by establishing 'knowledge champions' and helpers to keep track of changes and how they affect peoples' circumstances. VOME's focus is on the specific issues of using social media to share knowledge and experiences in a local community where information leakage can have very serious consequences. Using the VOME design principles helps to create a culture of what might be termed 'informed disclosure'.
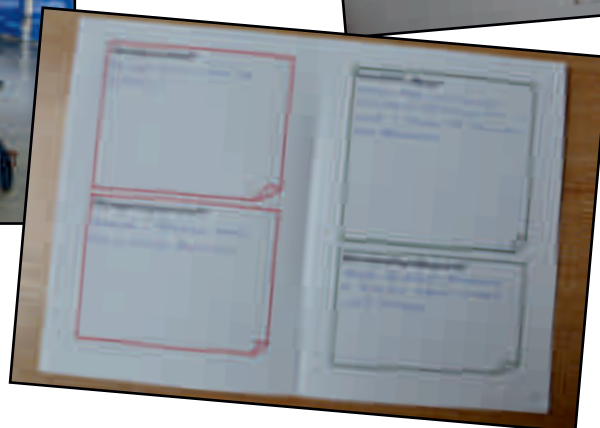
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