Community Engagement for Research: contextual design in rural CSCW system development

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ABSTRACT

In order to bring about innovation within a community-based context, different stakeholder communities often need to be engaged so that they may appropriately take part in the design process. The 'invisible' work of engagement is frequently overlooked, and yet it plays an important, often pivotal role within many design-based research projects. It revolves around negotiations with a series of stakeholder communities in the design setting and ethnographic understandings of the site and community. Insights and accounts are offered based upon practical experience: existing methodologies and engagement strategies are expanded upon. Our research has shown that understanding and employing community engagement strategies is key to the creation of a network of successfully civilly-engaged stakeholders. Failure to instigate such civil engagement appropriately can endanger the project, as the research 'turns' upon this. We present the approaches taken and critically understand the role of community engagement within the design process, with the purpose of enabling designers and other practitioners to appreciate the role that community engagement plays in systems design and the practical implications this might have for it. This research proceeds from a long-term project in which researchers explored community engagement within the context of design.

Author Keywords
Engagement; Community, Technology; Design; Rural; Participatory Design, CSCW; Ethnography; Research in the Wild.

ACM Classification Keywords
H.5.1 - Multimedia Information Systems; D.2.2 - Design Tools and Techniques; D.2.1 - Requirements/Specifications

General Terms
Human Factors; Design

INTRODUCTION

The tenets of methodology relating to the direct engagement of stakeholders in CSCW are aligned with those stemming from Participatory Design (PD). This long tradition of placing stakeholders, and in particular *the end-user* at the centre of the design process [1] in terms of workplace systems design has worked well [2], but the contextual shift of IT-based systems from being "*organisationally embedded*" [3] to becoming part of the fabric of everyday life [4] has raised a host of novel challenges [5] for engaging with *diverse user communities*. The pervasive nature of IT-based technologies means that currently as, Bødker [6] writes,

"…we face a blurring of the boundaries between work and other parts of life, as well as an ongoing reconfiguration of work and non-work technologies".

In this contemporary, multi-sited, multi-context, always-on and always-connected vision, how are we best positioned to work with communities, sometimes geographically isolated in rural areas where traditional engagement-based

workshops are often not possible, in the main due to the logistics of the situation? Robertson and Simonsen [7] have noted,

"...participatory designers have sought to develop processes to enable active stakeholder participation in the design of the tools, environments, businesses, and social institutions in which these information and communication technologies are embedded. These widened contexts have been reflected in the themes of recent Participatory design conferences ...".

This contemporary context of working with diverse stakeholder communities has seen researchers decamp from the laboratory into the wild [8]. This movement extends beyond the established "*deployment*" or "*field trial*" phase of research [9], where prototypes are exposed to the public for short durations of time to *test* or evaluate them, to much more extensive and prolonged engagement with people and organisations outside the lab in the *development* of innovative solutions.

As the computer has steadily moved from the workplace to the domestic space and beyond, in all manner of forms (from laptops, to tablets and mobile phones) we can truly say that this technology pervades our day-to-day lives. Researchers engaging with people in the real world now have to work in multiple, often non-institutional contexts, no longer anchored in a single place with a single community. One of the challenges facing many designers and researchers within the contemporary context of computing is - *how do we engage stakeholder communities in new design contexts within this contemporary context*? Bødker and Iversen [10] state, "*This is why studies of current practice as well as cooperation between users and designers is necessary*", with regard to the practice of design and the way that users participate in design, where engagement clearly plays a key role.

This paper seeks to elaborate on the key issues involved in the practices of engaging users 'in the wild', drawing on a case study from a design-based project in a rural context focusing on the development of a portal for a farmers' market as part of a social enterprise. This study explicates the role of engagement and its evolution in the project, ranging from negotiating with the community in the design setting, through ethnographic understandings of the site and initial points of stakeholder contact, through to fostering engagement. These findings are articulated within existing frameworks in order that they may be understood and used by practitioners/researchers within the fields of Action Research (AR), Ethnography and Participatory Design. The aim is not to focus upon the end product design, but rather to delineate the contexts that were worked in, how we

accomplished engagement: what worked and what didn't. This is done through the provision of concrete, real-world examples of practice, articulated within an adapted framework that relates to the fore-mentioned research fields. The focus of the paper is on the engagement of the stakeholders as opposed to any emerging technologies.

DESIGN CONTEXTS

The Market Portal
The setting of this work is within a rural farmers' market in West Wales (both English and Welsh are spoken in the market and a researcher was able to speak both languages). Once a week the market traders come together to sell a variety of produce. The market space is owned by a local community project that wants to open a shop on site eventually and use mobile technologies to display the provenance of the items they sell. The stallholders pay the project in order to set up their individual stalls on the market site. The stallholders use very little technology in regard to the promotion and sale of their products and yet would like to increase "footfall" and "interest" in the market, perhaps by means of an online *Market Portal* that could serve as a virtual marketplace, providing tools and services for local traders. The placement of the stalls and stallholders means that the researcher's activities are instantly visible to everyone in the market. This in itself offers opportunities and creates boundaries. Entering the physical space of the market is akin to entering an arena in terms of one's visibility.

The rural produce market is both a socially and economically complex institution, with a plethora of different rules, accountabilities and economic events occurring within one location. The market is space that is: a workplace; an open public arena; a site of leisure; relationships; gossip; food and fun. It is not purely a site of economic activity. Black [11] writes, "*If we looked at just the economics of markets there would not be a lot of reason for this form of distribution to continue. Economically speaking, markets are amongst the least efficient methods of food distribution and retail...*" However, the multiple functions of the market make it a place of importance to the local communities that use the site.

Clearly there are fields such as Economic Anthropology that may be drawn upon to offer research approaches which could combine ethnographic understandings of the reasoning behind the economics of the market, but the existing literature within this field still doesn't offer an insight into the applied use of findings in respect to systems design and how one should engage with communities. However, we thought it was important to take an approach that would consider the market and the actors involved within the process of bringing things to market, the way they co-operate in order to do this, the technologies that

they use and their motivations for being part of the market. The motivation of the stallholder is an important area to understand as it often underlies the reasons behind why the stallholders attend the market and the reasoning behind the way they work to produce what they sell. The stallholders report that their motivations are, for example, "to be environmentally friendly, wanting to promote local food or play a part in the local community", and they highlight certain aspects of this to describe their produce: "home-reared, organic, high quality and local".

In the following section we present and explicate the ways in which we engaged the various stakeholder communities and discuss some of the key issues that drove this engagement.

ADAPTING METHODS

In this section we discuss the way that we adapted existing methods in order to engage with the complex settings that we were working in, with a diverse group and often-differing stakeholder values and requirements. The dynamic and evolving nature of the research and approaches used should be stressed in this context. We start by framing the design concepts and move on to present a set of generalized approaches to fostering and broadening civil engagement across the project.

FRAMING THE CONCEPT

The initial design concept acted as an engagement tool to enable us to '*get it right*' [12]. The *Market Portal* concept was concerned with a focused group of users, but although these groups: (stallholders, customers and the market owners - a local social enterprise whose main motivation was the regeneration of the small market town in which the market occurred) - could readily be identified it was not clear what the motivations of the stallholders (numerous enterprises) and the other stakeholders involved in the research were in regard to the development of the site, their businesses and the stallholder produce.

It was therefore essential that we engaged these different stakeholder communities in order that we could start to introduce ourselves, understand the issues that might impact upon appropriate forms of engagement and start to map out the different stakeholder communities at a micro level. As part of this engagement it is important to update stakeholders and keep them informed as the software/system develops. *Figure* 1 shows the early development of the *Market Portal* with a series of interface snapshots. A part of this process was motivated by previous research on shaping a design consensus, and in particular by Bucciarelli [13] who writes;

 "*...different participants in the design process have different perceptions of the design, the intended artifact, in process. [...] The task of*

design is then as much a matter of getting different people to share a common perspective, to agree on the most significant issues, and to shape consensus" (Bucciarelli)

Figure 1. The *Market Portal*, concept sketch, wireframe and Photoshop mock-up

Consequently, we decamped from the confines of the lab and engaged in a variety of activities in the wild, including awareness-raising and networking activities, Action Research, Ethnography, and Agile systems development framed by a Collective Resource Approach [14].

Below we consider the nature of some of these activities and the particular contributions they made to the initial design of the *Market Portal*, including the ways in which established methods of user-centred design had to be reconfigured to drive engagement in a real world context. This reconfiguration of established methods in turn elaborates another foundational feature of this model for engagement.

Action Research

Action Research typically focuses upon "civilly engaged research" as a key method, "connecting substantial human issues with innovative computing solutions" [15]. One of the core tenets of Action Research is the engagement of stakeholders and communities with vested interests in defining problems and related issues, and the development of solutions using iterative approaches. As an initial starting point the research was concerned with finding the most appropriate communities to engage, finding a contact with a relationship to the group, and engaging this community in the process of design.

Our first point of contact on the project was a local politician, who through her knowledge of the community was able to provide information that enabled us to contact a local social enterprise, whose chairperson was in turn able to introduce us to the market site and in turn the stallholders in the market.

Whist the social enterprise was able to furnish us with various details relating to the context of the research site, we were aware that in order to fully address the needs and requirements of other stakeholder communities we would need to spread our net widely in the local community. While carrying out research within the market it became apparent that we would need to engage with both the stallholders and the customers of the market. In order to accomplish engagement, we used several approaches that enabled us to both foster and broaden public engagement during the course of the project:

- We called upon *political establishments* to aid us. This included local Assembly Ministers and Parish councillors. They sign-posted us towards the most appropriate groups who would be interested in the research. Having this political element on-board meant that we were taken seriously and this gave us an in-road, as it developed and supported the construction of a network of participants.

- We did a series of *ethnographic scoping studies* within the local context of the field-site, to target the different communities of practice that were both part of and related to the market site. This enabled us to understand the nature of supply and co-ordination that concerned the stallholders and the way in which they accomplished this. This also allowed us to comprehend the motivational characteristics of the stallholders and customers on the site. Within the market we carried out fieldwork on a weekly basis with stallholders, customers and the directors of the social enterprise. The fieldwork enabled us to make contact with people and extended the network of participants.

- We offered *technical help* to some of the stallholders, enabling them to set-up Facebook and Trip Advisor accounts that related to their business and this in turn allowed them to envisage what was technically possible, what might be of benefit to their business, and allowed us to manage their expectations. As a by-product of this, stallholders would tell other stallholders about what they had done, which in itself encouraged participation.

- We took part in a series of *meetings, conferences, workshops and general events* that we thought would be beneficial to the research, relating to rural enterprise. This allowed us to further understand the issues and concerns of other people working within the area. As we developed design concepts, prototypes and wrote working papers this provided us with places to disseminate our research and findings.

- Finally, we used a series of different *media* to inform the public about the projects, including social media such as Twitter, Facebook, online news, and RSS feeds, as well as mail outs. These media provided a route into the community; for some, the online media was a first point of contact and the exposure it created raised curiosity, gave us in-roads, and started the process of stakeholder engagement.

Embedded Research - Being There
Using the strategies described above we were able to develop a stakeholder network that consisted of stallholders, the social enterprise (directors and five hundred stakeholders) and market customers.

Having a researcher *embedded* at the field site was core to the development of these salient stakeholder networks. In order to appropriately engage, maintain and foster engagement over a sustained period we needed to employ a strategy that meant that the researcher could be flexible, adaptable and agile. Key to this was having researchers working in-situ and acting as a conduit between the research team and the stakeholder communities. Often workshops provide limited opportunities to fully engage with stakeholders and are not flexible enough to cope with the dynamic environment that occurrs in natural settings.

Our engagement with the stallholders was located at a specific site and at a specific time. Stallholders, customers and the directors of the social enterprise came to the market and in this respect we were able to engage with a variety of different groups in one locale. In order to move things along we did however ask to have formal meetings with the directors of the social enterprise, so that we could update them on our work and engage with them as a group. This was important, as we were able to get consensus on issues relating to our work. One disadvantage of working with individuals in this dispersed manner is the difficulty in gaining group consensus. Figure 2 illustrates the layout of the market in this respect.

Figure 2. The Market

The often public nature of our engagement meant that people could see that we were on site and therefore approachable, it also meant that we were able to spend time working with the stallholders who there all day, moving between them and providing them with time to talk to us during the day when they weren't busy. Being on-site also allowed us to take advantage of happen-chance encounters. These often proved beneficial as a way of normalizing our interaction with the stakeholders and giving us further opportunities to work and sustain our engagement with them.

In attempting to understand the more social aspects of the research setting we found that it was imperative to have an embedded researcher interpreting this and engaging stakeholders in the design process. Through carrying out this embedded research, importantly on a one-to-one level, we were able to discover a range of facts about the social-life of the stakeholders. Who knew whom and what they did, where they went, when they came to the market, their motivations for being part of the market (both as buyers and sellers) and who would and wouldn't engage with us. We were able to map out the social lie of the land. In becoming a market regular, the embedded researcher became part of the market's 'fixtures and fittings', this proved beneficial in terms of engendering a trust-based relationship with other market regulars, which in turn helped the creation of a relationship between the research team and the market community.

While carrying out research of this nature it is worth documenting the responses of the stakeholders that the research team are attempting to engage in design, as it often reveals the way that they understand what is occurring. Anecdotes, notes and recordings are all valid, for example a stakeholder said to me, "*We didn't think you were serious until you kept coming back*". This can allow the researcher to understand the way that stakeholders are interpreting their actions, in particular how the stakeholders, as this quote suggests, understand the commitment of the researchers working in the field.

It is possible that practitioners of Action Research could dispute our adaptations and use of this approach. We would argue that our use of these established methods is partly to provide a legitimate account of the research and to enable us to set the parameters for a discussion, which is in some part based around these accepted research practices. In carrying out real-world research it is crucial to understand that there may be circumstances that lead us to use practices that may not be methodologically aligned with the core tenets of the original method. While the Action Research-based approaches [15] that we used had long-term engagement, with stakeholders and specific research sites in common with AR, there were also some AR-based approaches that we did not think aligned with our research, and we discuss these in detail:

- The research that we were carrying out related to a range of real world concerns as raised by the community in a rural setting, the focus of the research was not 'democratisation' but as we shall discuss later, this was a by-product of the methods that we employed in order to accomplish engagement with the community.

- One of the key methods used by Action Research is the spiral model that develops a planning, acting and reflecting way of working. Due to the nature of our engagement being primarily on an individual basis we found that this model was not applicable to our way of working, so we instead turned to a rapid iterative model that enabled us to gain a quick response and incorporate that response into the design.

- As part of the design process we did not develop vision statements before the development of the software had begun, because the nature of real world issues and problems tends to change throughout the design process. Instead, people engaged with an ongoing set of sketches, wireframes and dynamic prototypes.

- Evaluation was an ongoing process as opposed to an activity that was carried out together with the stakeholders. The process of designing in the wild meant that we needed to continually understand and develop the system to a level that was seen as both useable and useful.

- We did not provide a statement that specified the way that partners should work together, instead we allowed people to work in a way that was appropriate for them.

In carrying out research, developing systems and technologies with communities in a real-world setting we

found it necessary to tailor Action Research-based approaches in order that we might adapt to evolving, emergent situations whilst in-field. In working with communities it is apparent that the individuals who make up those communities have a range of real-world concerns and commitments that can affect their participation and engagement with the project. While some are attracted to the project and want to take part, others find it difficult due to other commitments. In using an agile, adaptive approach we were able to adapt to an evolving set of conditions while still keeping the community involved in the design. In the market we initially engaged with the stallholders individually as the stallholders were not willing to take part in workshops and we developed strategies to accomplish this, as we shall further illustrate later in the paper. Key to the project was the continual engagement that meant that we were able to involve the stakeholders in action that in-turn allowed us to get input into the design of the system. Without this action the project would have come to a standstill.

Borrowing from Soft Systems Methodology (SSM)
Soft Systems Methodology or SSM, is an systems-based methodical framework primarily developed by Checkland [16]. Based within the Action Research tradition, the system evolved and developed in order to deal with real-world problems that often do not have a formal specification of the problem itself. A central concern of SSM is the contextual systems-based approach to understanding, applying and adapting methods in the real world.

"*A methodology…is a logos of method; that is to say it is a set of ongoing principles which can be adapted for use in a way which suits the specific nature of each situation in which it is used. SSM provides a set of principles which can be both adopted and adapted for use in any real situation in which people are intent on taking action to improve it.*" [16]

In SSM the term logos (used in an Aristotelian way) is a methodology prescribed as relating to the reasoned debate in regard to the method. In this case we wanted the stallholders to reason with us about the most appropriate way to engage with them in the market. We had demos we wanted to show and wanted to carry on fostering and sustaining engagement, and our initial ethnography had informed us that they were busiest with customers and setting up their stalls in the morning and that many of them were tired at the end of the working day and also needed to pack up the contents of their stall before heading home. In this instance *how* and *when* to engage proved problematic.

As part of the engagement process, we adapted and combined methods from Participatory Design such as the direct involvement of users, and from SSM in regard to the logical reasoning of the method (in this case co-reasoning

in order to choose a suitable method for sustained engagement).

In order to initially involve people in reasoned debate, we created a basic concept logo for the market. We used an iPad to show each stallholder the logo, in order that they could have input about it and become comfortable discussing the project. This allowed us to discuss the ways that we might appropriately engage with them and how this should be accomplished. This worked very well: the stallholders made suggestions and after they had made suggestions we used the opportunity that this had opened up to negotiate and discuss the most appropriate way to accomplish this. The result of this was *the stall.*

Many of the stallholders suggested that we had a market stall, so we informed the stallholders that in the next week we would do this and that they would be able to come over to the stall whenever they had time in order to engage in the design process. A small stall was set up amongst stalls in the bottom left hand corner of the market and the stallholders were told that they could come over at anytime. However, the stall proved to be a failure. Within the market space stallholders keep in their own territory and they resolutely stayed in their areas. We did not investigate this witnessable behavior in depth, however, because our research was not based on spending weeks carrying out an ethnographic study trying to understand and document the anatomy of failure of *the stall:* the focus was on keeping people engaged and fostering that engagement. There is no doubt that the stallholders are territorial in the way they perceive the market. Our earlier ethnographic work had demonstrated their primary concern with the goings on in that space: if you work on the left of the market you stay on the left, on the right you stay on the right, you have your patch. In order to compensate for this we moved to the middle of the market and worked in full view of everyone, in no-one's territory. In the following weeks it was noticeable that people now approached us from all areas of the market.

We went through a process of co-operating with the stallholders to co-create a strategy for engagement, develop our stall and make the move to the central location. We further present a number of aspects of this practical account of attempting to co-develop a strategy for engagement and its enactment. This is by no means exhaustive and of course one should realize that the context of the work would be different from project to project; it does however form a generalized framework of the key issues that one should be aware of when attempting to co-design an engagement strategy.

The Ritual Induction
For researchers to demonstrate that they have understood and acted upon the guidance for engagement from the

stakeholders they must engineer a way in which to show that they have taken the guidance seriously and are acting upon it. This not only starts an engagement pattern with the stakeholders, but also offers a way in which both parties can take part in a mutual understanding of what input may be required and the methods used to get that input. In many respects this is ritualistic and can offer the researcher a way of being inducted into the context (in this case) the market.

Harper [17], "*...it is only when one does that work that one gets genuinely treated as genuinely interested in that work*".

Harper [17], writes that it is not the "ritual transformations of identity", occurring through the induction that is interesting per se, but it is about the researcher having taken part in the 'ritual'. It validates the researcher as having experienced the phenomenon that they are studying or taking part in, as Harper puts it, "*being there*". This is not purely about the embedded nature of the researcher, which we have previously discussed, but it is about being seen to be accountable [18] in respect to one's actions being understood, reported and observable. In taking part or "*being there*" we are informing the community concerned that we understand the phenomenon that they are engaged in. In this respect the initial debate that lead up to the getting of *the stall,* and being seen at it, acted as an induction into the world of the market. Of course we were not attempting to emulate Harper's ethnographic stance, we wanted to demonstrate our accountability in the sense that we had taken what people had said in a serious way, acted on it and we were available to work with the stallholders, in a very public way.

The induction is an important part of any engagement strategy and should be carefully planned, as it offers researchers an opportunity to display their understanding of the context of the situation in which they are working. This is not only in regard to following the negotiated strategy through which they choose to engage, but also through demonstrating that they understand the context and the communities that are existent within that specific sphere of research. Demonstrating that you know and have also worked with other people in the area that relates to the context that you are working in and that you can demonstrably account for their concerns within the research context will further engender stakeholder trust.

Democratic Leanings
As we have stated earlier within the paper, we were not motivated by "democratisation": our research was apolitical. However, we would argue that for researchers who are motivated by democratization, it is valuable to take the approach of engaging people in their own environment, in a manner that has been previously negotiated and is based on a mutual understanding which places the stakeholder at the centre of the engagement strategy. In the case of the two studies reported upon here it was felt that

these user-led negotiations would lead to an appropriate way to engage, perhaps in the way that way that PD and user-centred design are 'envisaged' as producing better systems, because of the inclusive methodologies that are employed. As Johannessen and Ellingsen [19] write,

"*...the Participatory Design field has been particularly concerned with giving users a direct role in decision making about the development of new systems. Participatory Design generally adheres to the "bottom-up" to ensure "empowered" and satisfied users, on the basis of a general belief that this approach leads to better systems.*"

Although PD might have empowerment and a grass-roots perspective at its core, this is certainly not the case in terms of developing and engaging communities where, outside of the organisational setting, people are often corralled in workshops without an understanding of appropriate engagement methods for them. It may also be the case that as *outsiders* the research team does not understand the nature of the 'community' and attempts to bring together a group of people they think represents that group instead of working with the community to negotiate, understand and facilitate the bringing together (if that is seen as the most appropriate form of engagement) of stakeholders. Of course there is no doubt that it can be quicker and sometimes easier to work with a captive audience, but the researchers' motivations must be made clear if this is the reason for holding such workshops in the wild. In rural contexts this is further highlighted by the nature of sometimes-isolated communities, the use of different languages within that community (such as the use of both English and Welsh in the communities where our studies took place), poor public travel infrastructure and sparse telecommunications connectivity, meaning that it can sometimes be difficult for people to travel and receive/send electronic communications, or mobile phone calls.

Adaptable and Agile
Earlier in the paper we discussed the use of Agile methodologies as a mode of working in the wild. This had proved effective as it allowed us to sustain stakeholder engagement through the provision of a rapid succession of developments - small iterative cycles - and had enabled us to quickly adapt to any unforeseen circumstances or changes in direction that the development needed to take into account. We found that within our projects we were rarely dealing with a static set of requirements, and had to work with ever changing stakeholders: customers, stallholders, directors and politicians to name but a few. The requirements for such projects were often in a state of flux, so an agile approach was needed in order to deal with these circumstances. More often than not the requirements that surfaced during the life of the project led to "*innovation along new trajectories*" [20]

Agile methods also, as we have seen, focus on *individuals and interactions*, "*most practitioners already know that people matter more than process*" [21]. It is this focus that enabled the research team to come together and quickly respond to the ongoing and evolving requirement, without having to focus on large amounts of paperwork and planning. The team knew what skills needed to be employed to carry out the work quickly and efficiently, and having people in-situ meant that we were able to pass information between the community and the research team. This was often done using short iterations. When we combine this with our rapid, flexible approach, it is clear that this is what enabled us to deal with any issues that came up.

By contrast, traditional design/implement/test software development methods [22] are often inflexible and have a very segmented, defined structure, in terms of the development process and the allocation of work. This happens on a single level and often cannot deal with a series of parallel workflows as often happened when working in the wild. As Greenberg and Buxton [20] propose, "*...the design/implement/test loop, if done naively, encourages the sequential evolution/refinement of ideas rather than the multiple parallel solutions that characterize most traditional design disciplines*".

Prioritisation

The prioritisation of what *we should do*, often leads to a set of negotiations relating to the perceived needs of the researcher and the actual needs of the communities involved. Real world settings = real world needs, and therefore it is often the case (particularly in relation to technological development) that issues relating to the development of technologies don't 'fit' within the communities' agendas. There is little point prioritizing one's own research agenda, if the community will not use the system implemented – having 'cool technology' is all very well, but what does it amount to if the user's needs have not been prioritized? One could say that the technology is nothing more than for demonstration, with a limited purpose or practical application. This is not to say that routes and avenues cannot be found to explore technical innovation, within limits and involving careful negotiation with the community. We ourselves have initially prioritized technical research streams such as sensors, only to find - after many discussions with the community - that they had no use for that sort of technology, resulting in that stream of research being discontinued. It is never about them and us; it is about negotiation and taking forward issues that relate to the mutual concerns of the researcher/s and the communities involved.

CONCLUSION

This paper has given an account of engagement in a rural CSCW context and has demonstrated the value and the practical application of a variety of methods that were adapted for the purpose of engaging stakeholders. These illuminating insights were based on practical long-term engagement and have highlighted some of the challenges facing contemporary CSCW. It is important to remember the value that such experiences can have for academic research and how such studies help researchers to consider the most appropriate methods of community engagement.

We have unpacked some of the features of working with communities in a real world setting and illustrated how these were used in the context of this research. Directly involving *people* in research and design can often be messy and can be frustrating for both the researchers and stakeholders involved. Within this paper we have attempted to highlight some of the features that can aid engagement, such as: building trust (often built up over time); fitting in with the day-to-day life of the stakeholder; developing strategies for engagement (instead of simply running a workshop); demonstrating the researchers' understanding of their context; the way that we used the media, local community groups; and how we involved politicians, using adapted methods that focus upon action. We hope that by presenting this work we have offered understanding and insights that may encourage and support the work of others in these interesting times.

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