

Finding “Real People”: Trust and Diversity in the Interface Between Professional and Citizen Journalists

Andrew Garbett¹, Rob Comber¹, Paul Egglestone², Maxine Glancy³, Patrick Olivier¹

¹ Culture Lab, Newcastle University, School of Computing Science, United Kingdom
{a.garbett, rob.comber, patrick.olivier}@ncl.ac.uk

² University of Central Lancashire, Preston, UK
pegglestone@uclan.ac.uk

³ BBC Research & Development, Manchester, UK
maxine.glancy@bbc.co.uk

ABSTRACT

The increase of social media and web blogs has enabled a new generation of citizen journalism to provide new perspectives into local communities. However traditional news organisations are currently struggling to incorporate this new form of journalism into their existing organisational workflow. We present an analysis from 10 interviews with professional journalists and explore the current issues faced by professional journalists when searching for reliable and reputable local news sources as well as the perceived role of citizen journalists within a large news organisation. From this analysis we present a set of design implications for building systems that support interaction between citizen and professional journalists in order to encourage participatory news production and diversify national news perspectives.

Author Keywords

Citizen Journalism, trust, reputation, journalism, diversity

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

INTRODUCTION

Access to local news plays an important role in civic engagement, allowing for the critical appraisal of local government, dissemination of knowledge and encouraging cohesion within the local community [23]. However, the decline of local newspapers caused by recession and increasing adoption of the web has meant that this form of localised content is increasingly difficult to source [16]. With this decline citizens are losing news coverage of their

local area. Within the US the Federal Communications Commission (FCC) found that this absence of local news had potential to cause “...genuine harm to American citizens and local communities” and contributing this to “less daily beat reporting about municipal government, schools, the environment, local businesses, and other topics that impact Americans’ future, their safety, their livelihood, and their everyday life” [29, p.59]. In the UK, televised regional news coverage continues to provide the main source of access to localised news content. British Broadcasting Corporation (BBC) regional output is split into 15 regions covering the entire UK, with the main focus on large population centres rather than local community news. In 2002, an Independent Television Commission (ITC) report [8, p.64] concluded, “most television news does not even attempt to focus at the truly local scale”. By comparison, many local newspapers might have a catchment area of tens of thousands but focus specifically on the local area it is distributed within.

Findings from the FCC and the ITC suggest that there is a role for local and amateur news in the broadcast of national news. Deuze *et al* [5] note the increasing importance of citizen journalism and that journalists themselves recognise the emergence of a new participatory journalism. However, professional and traditional news organisations currently lack the organisational structures to incorporate citizen journalism and are wary of the impact they may have on the professionalism of journalism practices.

In this paper, we explore the existing practices of professional journalists with a view to informing the design of systems that support the integration of citizen journalism in setting the national news agenda. We present the findings of a field study of professional journalists within a large national online and broadcast news organisation. We discuss the professional journalists’ perceptions of citizen journalists and their current and potential role in professional news organisations. We contribute design implications for systems that facilitate the interface between citizen journalists as content producers and professional journalists as news source seekers.

Paste the appropriate copyright/license statement here. ACM now supports three different publication options:

- ACM copyright: ACM holds the copyright on the work. This is the historical approach.
- License: The author(s) retain copyright, but ACM receives an exclusive publication license.
- Open Access: The author(s) wish to pay for the work to be open access. The additional fee must be paid to ACM.

CITIZEN JOURNALISM

The term “Citizen journalism” had been extensively debated in journalism literature. Deuze *et al* [5] refer to citizen journalists as ‘news-producing consumers’ while Allan *et al* [1] instead focus on their outputs; blogging and community news websites. Lewis *et al* [17] further define citizen journalists as those who comment on stories, respond to polls, and submit video, audio and text to traditional media companies. Perhaps the most useful definition in this context is provided by the *We Media* manifesto [3]; ‘The act of a citizen or group of citizens playing an active role in the process of collecting, reporting, analyzing and dissemination of news and information. The intent of this participation is to provide independent, reliable, accurate, wide-ranging and relevant information that a democracy requires’.

Hermida & Thurman [9] have found that traditional news organisations are facing a shift in the manner with which they engage their audience. This audience has changed from receptive audience to participatory contributors of User Generated Content (UGC). Public contributions from the 2004 bombings in Madrid and the Asian tsunami that followed in December marked the beginnings of the BBC’s new relationship with the people ‘formerly known as the audience’ [7]. By 2005 the rise of ‘citizen journalism’ was becoming mainstream [28]. And so traditional news organisations like the BBC, National Broadcasting Company (NBC) and Cable News Network (CNN) began actively encouraging the submission of UGC believing the public’s contribution would improve media. Yet, traditional news organisations are currently struggling with the editorial constraints of allowing un-moderated expression found in UGC and to ensure the quality of response are often required to implement editorial constraints.

Riding the tide of UGC, mobile software developers have recognised the demand for local news shared across mobile phones, published online or sent to a traditional newsrooms. Blottr¹ is a UK based user-generated news service. A mobile application enables anyone in the UK to capture and report news as it happens. Such is the appetite for free on-the-scene global news coverage that CNN, Associated Press, Al Jazeera, NBC and SKY News all have applications linking citizen journalists directly to their newsrooms and simplifying the process of sending photos, audio, video and text straight to them. In the US, Meporter² is currently the only journalism application linked to multiple news outputs. It is also the only application in this list that offers to pay citizen journalists for their content by licensing and syndicating it to news organisations.

The Arab Spring has highlighted the potential of citizen journalism in emerging news coverage [12]. The use of social media during the Arab Spring has been seen as the

driving force for the dissemination of information between the local population and journalists in the western world. More broadly, there has been a change in how news is contributed, accessed and shared, with a substantial increase of sharing thoughts, opinions and events via the likes of Facebook [25] Twitter [15], blogs and YouTube. These platforms have been shown to encourage a new generation of grassroots journalism [1, 10, 2].

However, there are significant challenges for citizen journalists. Paulussen *et al* [24, p.38] note, “journalists have to work under high pressure, they tend to rely heavily on well-known routines and hold on to their core task, which they still define in terms of gatekeeping”. This sense of acting as a gate keeper is, in part, the source of negative values that drive professional journalists to ascribe negative value judgements to citizen journalists’ work emphasising “low newsworthiness, the personal tone and the subjective bias of user contributions”. Lewis *et al* [17] conducted interviews with 29 news editors from professional news outlets within Texas, USA to explore the philosophical and practical implications of incorporating citizen journalists into professional news organisations. Their research found that editors took one of four stances towards the use and incorporation of citizen journalists; either favour or disfavour the use of citizen journalism primarily on philosophical grounds, favour or disfavour its use mainly on practical grounds. Those that disapproved of citizen journalism for practical reasons were due to the extra workloads required to organise, edit and fact check the work produced. Editors who objected to the use of citizen journalists on philosophical grounds argued:

“the importance of safeguarding the integrity of what passed through their gates prepublication, of guarding traditional routines of newsgathering and reporting, and of truth-value and legal protection that could only be ensured under the steady hand of trained professionals” [17, p.13]

Contrary to traditional news organisations the Huffington Post³, started in 2005, is an online news organisation that comprises of a collection of blogs from a mixture of experienced professional journalists as well as online citizen journalists. However editors maintain the role of the gatekeeper to ensure standards by vetting and selecting journalists to include within the news organisation. This model of news production that incorporates experienced bloggers and untraditional journalists has been seen as an innovation in journalism. AOL recently purchased The Huffington Post for \$315m [26] demonstrating the economic potential of this model of news production.

JOURNALISM AND HCI

There have been numerous occasions of social media sites such as Twitter serving as an alternative source of news [11, 2, 10]. These instances of public participation in the

¹ <http://blottr.com>

² <http://www.meporner.com>

³ <http://www.huffingtonpost.co.uk>

news reporting process generally focus on breaking news events and subvert the traditional models of news production. However, more recent social media news reporting of the Boston Bombings (2013) has shown that misinformation poses a real risk when relying upon citizen journalism as a news source [22]. Within the HCI community there has been research into various systems to support, facilitate and sustain journalism. The advent of Twitter and online blogging has seen systems developed capable of locating breaking news [18, 13] as well as filtering for hyperlocal content [14].

Diakopoulos *et al* [6] support journalists in searching for credible sources on Twitter using metrics of credibility and influence. The system provided an interface which presents these metrics in order to better inform the user by including elements such as; self and friends' geographic locations, network structure, influential topics and others. Evaluating the system through a mixture of interviewing techniques as well as cognitive walkthroughs with professional journalists, the authors concluded that journalists relied upon the additional metrics within the interface and that better judgements on the credibility of the news source could be made through the interface. Users who had friends in the area of the breaking news event were perceived as having greater credibility. In addition, metrics such as a user's network structure, previous tweets, account age and interaction with others also provided metrics of credibility.

Research has also looked at designing specifically for journalism. Montes-García *et al* [19] present a context aware hybrid recommender system designed for use by journalist professionals to discover news stories. Results are personalised based upon; novelty, proximity, time, user history and trustworthiness of news items. This research demonstrates the need for contextual understanding of communities when designing recommender systems.

Citizenside⁴ is an online service that allows freelance and amateur journalists to upload and contribute news stories that are then independently verified by the Citizenside editorial team. These stories are sold to news organisations with contributors being paid up to 65% of the final sale price. This service provides engagement statistics and previous publication history to credit contributors with different levels and awards, as a form of gamification to encourage competition.

The Guardian newspaper released The Guardian Witness⁵, an online service and mobile application that enables members of the public to contribute to calls for participation from journalists. UGC in the form of text, images and video are uploaded by contributors in response to assignments and breaking news stories that are posted by journalists on the website. Members of the public can also

contribute tipoffs for newsworthy stories. Contributors are not financially rewarded, but incentivised by the prestige of being identified as a contributor in a national news story.

METHODS

A series of semi-structured interviews were conducted with professional journalists. Participants were recruited using snowball sampling [20] during a 4-month placement within a large national online and broadcast news organisation in the UK. Interviews lasted between 40 minutes and 90 minutes and were held face-to-face on an individual basis between the participant and lead researcher.

Participants

Interviewees were professional journalists (n=10) who had between 3 to 35 years of journalism experience. The majority of the participants were male (n=7). Participants held various positions in the organisational structure at the British Broadcasting Corporation (BBC) and have been categorized as Editorial, Journalist, Reporter, Researcher as seen in Table 1. Participants worked within Television, Radio and Online local and regional news teams.

Journalism Role [Participant Number]	Total
Editor: Radio current affairs [2], TV News [8], Digital Development [10], Regional and Local Programming [7]	4
Journalist: Broadcast [5, 6], Senior [4]	3
Reporter: Political [3, 9]	2
Researcher [1]	1

Table 1. Type and distribution of interviewees at BBC

Interviews were audio recorded, transcribed and thematically analysed [4] to understand the processes and issues that arise when working as a professional journalist. The thematic coding was carried out by the first author and validated through discussions held between three authors. During these discussions samples from both transcripts and codes were analysed to ensure the data was coded with due consideration in regards to the coding scheme and process. The semi-structured interviews used an initial interview script that prompted participants to provide real world experiences in response to the following themes; finding a source, measuring reputation, organisational usage of freelancers and external news sources and the role of citizen journalism. The interview script evolved as the interviews progressed and the lead researcher gained deeper insight into the processes of professional journalism. Data was initially freely coded by the first author and then collated into emerging themes. These themes were refined through further iterative coding and through sense checking across initial codes and the dataset as a whole.

FINDINGS

Five themes emerged from our interviews with professional journalists, these were; locating sources from trusted

⁴ <http://www.citizenside.com>,

⁵ <https://witness.theguardian.com>

sources, finding “real people”, sense of professionalism, and citizen journalism as a spectrum.

Locating Sources from Trusted Sources

A considerable amount of time is spent by professional journalists, editors and producers in finding individuals to interview. When seeking sources for news stories, these professional newsmakers will often look into established routes, including in-house news production system, recognised organisations, knowledge peers, and existing sources. In the following sections we explore how these trusted sources provide and limit access to diverse perspectives.

Electronic News Production System

The national news organisation utilises a digital system to support news production, including storing programme notes and contact information for sources. Journalists use the Electronic News Productions System (ENPS) extensively, as it houses a database of existing contacts, who have appeared previously on other programmes. For participants it is possible when using the ENPS to rely on the judgement of others and trust that the individual has been previously examined and deemed suitable by fellow peers. A high level of trust was placed in contacts that had been previously verified by colleagues:

“In a sense it’s almost a filtering process - so somebody has already gone through that process before has gone like [...] ‘I need a head teacher what head teacher’s are willing to speak to us that were good’” [Participant 4, Senior Journalist]

“he’s quoted in other newspapers and other media areas so you are confident that they’ve done their checks on him” [Participant 5, Broadcast Journalist]

Although participants stressed they would always ensure the correct checks have been followed, the ENPS provides a shortcut to quality sources that have been utilised across the organisation.

Participants reported that interactions with ENPS differed between departments and teams. Although the system offers a structured method for storing programme and contact information, many participants and their colleagues entered contact information in an “Additional Notes” freeform input section for a contact or story record. Thus although the ENPS serves as a filtering mechanism for reaching trusted sources, it does not clearly support the variety of ways in which journalists and news departments collate contacts. Departments often had their own tailored structure to inputting data that added a layer of obfuscation when searching for sources:

“There isn’t a consolidated way of recording names and numbers [...] Some programmes have a contacts list through subjects, some people have them alphabetically,

you know it’s all kind of a bit messy.” [Participant 6, Broadcast Journalist]

Moreover, individual journalists also have their own mechanisms for storing, or not storing, contact details:

“she’s [journalist] got a lot of different contacts and because sport works differently, you never normally find a sport contact [in ENPS] and they never give out numbers, they’ll always ring them into us, they never give out numbers” [Participant 6, Broadcast Journalist]

Consequently there was a desire for additional metadata to support a better contextual understanding:

“There’s no kind of consistent; this is this person he’s MP for this area, he’s in the conservative party, he’s interests is - his manifesto is this - this is his constituency number, this is his west minster number this is how to contact him this is his PA” [Participant 6, Broadcast Journalist]

Recognised Organisations

While the ENPS can be used to find previously trusted sources, journalists regularly need to make additional contacts. In order to maximise the possibility of finding established sources, participants frequently contacted recognised organisations, such as national governing bodies, professional organisations and charities as well as action and campaign groups. These organisations were selected due to their specialism in the given subject area and offered a quick method of obtaining a large body of potential expert interviewees. Individuals with professional organisational ties were perceived as having high level of experience and expertise in the subject:

“[...] this is someone who is an expert [...] because they work for a university, or organisation or think tank type policy unit” [Participant 7, Regional and Local Programming Editor]

These affiliations offer a means to finding specific groups of experts through an identifiable source. Such recognised organisations become shorthand for a particular campaign, or ‘message’. This method of locating individuals was also used when contacting sources within a specific community:

“you’ll go through the low pay unit or you’ll go through charities that work in that area or you’ll go to support groups or you’ll type in, see if somebody’s written their own blog about living on the poverty line or charities that work in the sector and that sort of thing” [Participant 4, Senior Journalist]

Participants explained that freelancers often used their affiliations with other news organisations to demonstrate their credibility and identify their level professionalism:

“You know whether it’s channel 4 news documentary, ITN, 5 Live lots of them will have written pieces done documentaries [...] they’ve produced work that has gone through an established credible news organisation. That

gives you a degree of credibility because in a sense those people have all vouched for you” [Participant 4, Senior Journalist]

In-house Experts

Another method used to find sources was peer recommendations from other experienced journalists. In-house experts were used in order to quickly understand a subject area and gather a contact list. While the ENPS can provide information on contacts, these more experienced journalists become established as the in-house expert through their journalistic outputs:

“...in a sense I’ve become known as the sort of [...] Saturday night massacre correspondent or the hooliganism correspondent because I’ve done lots of stories around both of those topics. And so like people on programmes know that I’ve done something on it so oh he’s on the office and I’ll ring him up” [Participant 4, Senior Journalist]

These in-house experts also mentioned that producers often distributed workloads during the daily stand-up meeting to those who felt they had the best contact lists for the given story. Knowledge and contacts were freely shared between colleagues in the same department. In-house experts contribute relevant contacts and gave insights into the content of related news stories.

The “Usual Suspects”

Participants relied upon their own experiences with individuals who had previously demonstrated themselves as suitable interviewees with extensive subject knowledge. Previous interviewees were used because of their clarity and production values in presenting their perspectives.

“... whenever we need to do a political story and we need a bit of political analysis, we phone John [last name] He is very good at talking so he gets overused, basically, to the exclusion of other people we could use. Because everyone thinks: “Oh yes, this story: John [last name] because he’ll say something good and he’ll say it right.” [Participant 8]

While many interviewees are gathered through ENPS the reputation of certain individuals is recognised without the need to consult ENPS. Therefore journalists may be aware of these individuals without searching ENPS.

A common issue faced by participants is to work within a short time period to produce newsworthy content:

“A lot of this stuff is done under very tight time pressures and so while it would be wonderful never to have to go to usual suspects you don’t always have that option because you’ve got an hour and a half before this thing’s on air or you’ve got two hours before everyone’s going to go home for the day or it’s 11 o’clock at night and you’ve got to fix someone the next morning” [Participant 4, Senior Journalist]

Due to these time constraints participants try to reduce the time it takes to find sources. As previously mentioned using previously contacted sources that have been verified within [news organisation] was a common occurrence. Interviewees were also chosen for a number of different reasons such as; geographic location, availability and access to broadcast and network equipment. These reasons alone also contributed to the repeat usage of interviewees:

“Well, availability - to be frank, availability is one which is why, sometimes, certain people get overused because they are good at making themselves available. They will go to a studio at the drop of a hat” [Participant 8, TV News Editor]

Finding “Real People”

The constraints of finding useful sources through existing mechanisms, means that participants often struggle to find new or diverse perspectives. In particular participants stressed that in journalism there was the need to present “real people”, ordinary listeners or viewers, whom may be effected by the topic of discussion:

“It would be nice to have a real people file for that sort of thing rather than having the expert file. Everyone knows where to find them [experts] in Google, it’s easy to search for an expert on something but to find someone who’s been out of work for like 2 years...” [Participant 6, Broadcast Journalist]

It was clear that news content could be made more engaging through expressing an individual’s story and providing a context to which the public could empathise. However these individuals lack an expert status or organisational tie to explicitly define them. As such there was a desire for a method of finding interviewees:

“... Yes President Obama is worth taking he’s the president of the United State but actually the more interesting story is the human story and so on all of our stories [...] how do we make this relatable to real people. How do we do a real person in this? That’s what people want to hear, facts and figures don’t work” [Participant 4, Senior Journalist]

A common method of recruitment employed by participants was to announce a call for participation and recruit within the existing audience. However one participant expressed concern around ensuring diversity:

“I think that there is a real issue for [news organisation] because it is a middle class organisation and it is a white organisation. So it still has challenges when it comes to hearing from lots of different voices. It has huge challenges when it comes to listening to working class voices. It has huge challenges when it comes to listening to non-white voice.” [Participant 7, Regional and Local Programming Editor]

It could be argued that citizen journalists are not the “real people” that professional journalists require. However,

much in the way that organisations are gateways to experts, citizen journalists may be able to provide the gateway to “real people” within their own community. Citizen journalists are embedded within a community and as such may have a deeper understanding of the people within it.

Distrust of Proactive Contributors

Although participants regularly sought ways to connect with new sources, there was a reluctance to utilise proactive contributions. Organisations or individuals who represented a cause were often met with a sense of distrust. Interviewees who presented themselves proactively were perceived as being potentially over zealous with a particular, and potentially biased, stance on the news story. It was also an assumed possibility that the ‘real people’ interviewees were in fact being used as a means of presenting the views of a political or activism group:

“You’re always wary of a group being a front for another group. So you’ve always got to look at the politics of whatever the issues is and think; “Right, well, are we being suckered into something here by a political group under the guise of “We’re just local community activists.” [Participant 8, TV News Editor]

Those interviewees who were not acting under the guise of others were also subject to scrutiny. Participants viewed these individuals as potentially having a strong bias in their presented arguments that might detract from the news story because of more extremist views:

“I think there’s chances that people get reputations [...] because they have a certain slant to their argument and [...] too much of an agenda of what they’re trying to put out. Maybe they might not be right for that topic or it might be that they’re not very informative” [Participant 5, Broadcast Journalist]

Interviewees with a particular agenda were not always seen as a suitable candidate for a discussion. Interestingly professional participants felt contributors often did not contact them due to their national and authoritative status:

“I think a lot of people are a bit intimidated by [the national broadcaster]. They don’t engage with us in the way that they might engage with their local paper for instance.” [Participant 8, TV News Editor]

This may be a reason for the lack of communication between citizen journalists and the professional participants. If citizen journalists feel they would be seen as a biased source and also were intimidated by a national news organisation then they would be less inclined to make the initial contact with professional journalists.

Sense of Professionalism

The majority of professional participants explained that they would be hesitant to incorporate citizen journalists directly into national news and programming as they are

unlikely to have the necessary organisational and professional journalism skills and training:

“that would only work if you are gonna get them trained up to the standards that [news organisation] operates to. That’s the bottom line, so that means they have to be able to write as well as anybody who works in [news organisation] does they have to know the law as anybody in [news organisation] does, they have to know the editorial standards that [news organisation] operates at and be prepared to operate to them” [Participant 4, Senior Journalist]

It was assumed that citizen journalists lacked these skills that were seen to be only available to those who had worked within a professional news organisation:

“I know how to write a script that works for broadcast, know how to deliver the script on air. I know how to conduct interviews. [...] And they’re skills that you do only develop over time and with practice of doing it. So the idea of “the amateur” doesn’t quite work in those circumstances” [Participant 2, Radio Current Affairs Editor]

Participants also expressed uncertainty in the quality of the professionalism and editorial standards that citizen journalists were capable of operating at:

“[...] we’d be just too wary that they wouldn’t be covering all the bases. That they wouldn’t be checking out everything they should’ve checked out in that story. We wouldn’t just buy in something from them and put it on air [...] because we’d be afraid of getting a phone call” [Participant 8, TV News Editor]

It was apparent that participants feared the repercussions of using an untrained citizen journalist and felt they would have to recheck sources and re-edit content to mitigate bias which would lead to an increased workload. Understandably participants also felt protective of their own livelihood due to the potential threat of free or cheap labour from citizen journalists:

“If you’re saying it’s going to do all those things, well, what’s the point of having me or anybody else, why don’t we just get the whole news staff replaced by bloggers who want to do it for free?” [Participant 4, Senior Journalist]

When participants were asked about how they assess the credibility and quality of another journalist, freelance or citizen journalist, they expressed a desire to see previous work:

“[...] you can see what they’ve written before and you know who they are and they’re well known and everybody understands them and there’s a sort of establishment about them. If you’re some bloke who’s set up a blog, I’ve got none of that to go off. So in a sense you’re shooting in the dark” [Participant 4, Senior Journalist]

This sense of establishment can be seen as reputation and standing within the journalism profession. This highlights that citizen journalists currently lack the ability to demonstrate themselves in a similar manner.

Citizen Journalism as a Spectrum

Participants had a varying definition of what a citizen journalist was and their role within the journalism profession. The term citizen journalist varied from eyewitness through to amateur freelance journalist. Citizen journalists were not expected to fulfil the role of professional journalists in terms of producing entire news stories but rather their perceived role was to support professionals in their investigations:

"[...] for the stories where we haven't got reporters and certainly where the cuts are coming in now we haven't got as much resource for much reporters so citizen journalists would be a nice kind of little resource if we had contacts of people of where they were, what they talk about, when they do and I think that would be great" [Participant 6, Broadcast Journalist]

There were citizens who were trusted to give their own thoughts and opinions about their local area on a regional radio programme. Professional participants had expressed previously that they did not feel that citizen journalists were technically and professionally capable of generating programming or content themselves without professional editorial policies. Yet a group of citizens had been given a weekly programme slot for a number of decades:

"We have presenters who do the community programmes here, who are amateurs, come in once a week and I don't think get paid or might get paid £20 or something. Then, some of them have been doing it for 20 or 30 years. Are they still amateurs after that? I'm not sure." [Participant 7, Regional and Local Programming Editor]

There were a number of factors as to why these citizens were given the authority to do this. In this instance they had accrued a long-standing presence as community spokes people. However the potential small fee paid to the community members could also arguably be identified as a form of endorsement to their credibility.

It would seem that freelancers present themselves as professional journalists and the expectations are to be paid for their services. However when a journalist has the title of citizen or amateur Journalist, professional journalists expected them to be a not-for-profit and untrained contributor. The difference therefore is in the way in which the title of freelance journalist is perceived:

"You would pay a fee for using it [freelancer content] or you would pay a tip-off fee or a contacts fee. [...] Maybe that's all citizen journalists are? Would a citizen journalist want paying for a story? I don't know. Maybe it is just the terminology? Does that make them a freelance journalist?"

"[...] Maybe if you don't get paid, then you're a citizen journalist?" [Participant 9, Political Reporter]

The term citizen journalist was used to describe eyewitnesses who had posted a photo or status update on social media and were often used in breaking news events or instances where citizen journalists were unable to attend:

"it tends to be eye witnesses so like someone will tweet 'Jesus Christ a helicopter has just crashed' and will tweet a picture of it so then you're on to those people and you're going 'will you come on and talk about it?' so that's how you tend to find those sorts of people" [Participant 4, Senior Journalist]

Participants noted that a positive aspect of incorporating citizen journalists was that they were already embedded within the communities that the regional and local programming was targeted at and thus were able to provide local audience perspectives:

"I think if you had trusted citizen journalists [...] who lived in Walkden, Langley or Wythenshawe and were bringing stories that way, it would definitely serve our audience because they tend to be the audiences that listen as well" [Participant 9, Political Reporter]

The different perspectives presented in this section demonstrate a spectrum in the perceived role of the citizen journalist. At one end citizen journalists are deemed as eyewitnesses that contribute status updates and photographs through social media, and at the other is an almost freelance level of professionalism who are capable of storytelling and presenting on community programmes.

DESIGN IMPLICATIONS

Muller *et al* [21] demonstrate the differences within enterprise online communities and emphasise that "there is a need to understand the abstract qualities of different types of social applications, and the different configurations of those applications that can support business, governmental, non-profit, and civic organizations". With this in mind we present our design implications for platforms to connect professional and citizen journalists. Importantly we present the design implications based upon the perspectives of professional journalists. We envisage our findings informing the design of a community platform consisting of citizen and professional journalists. This system could be seen as an extension of ENPS that incorporates social network structures that provides search and recommendation functionality based upon user reputation in order to locate credible news sources.

We provide perspectives on technology support for citizen journalists through the development of trust in the coalition of citizen journalists in organisations, the recognition and implementation of economics of trust, and through identifying specific information needs. We further discuss techniques to support professional journalists in seeking out citizen journalists and the ethics of identifying sources.

Forming Organisations for Visibility

Professional journalists often used organisations as a gateway to more specialised interviewees. Organisations support source seeking by providing a more visible interface to specific interest groups, often with a coherent, and consumable ‘message’. Consequently, it will be useful for citizen journalists to form similar collectives that can be identified with particular concerns, localities or expertise.

The visibility and continual development of an online presence was also an important factor in selecting appropriate news sources. Assessing academic experts who had previous publications listed, institutional ties and professional memberships displayed in an academic online profile makes visible a wealth of demonstrable experience for a source seeking professional journalist. However citizen journalists currently lack an appropriate system that allows them to present themselves as having levels of expertise and demonstrable publications.

Within the journalism profession changes in the way sources are visualised also need to be addressed. In order to promote and encourage the use of citizen journalists, news organisations must ensure that they provide visibility of their sources and content contributors. This may be in the form of linking news articles to individual citizen journalists themselves or the organisations that they represent. It may also take the form of an endorsement by the news organisation for the work or contribution made by a citizen journalist. In doing this news organisations are making visible their connection to citizen journalists and thus demonstrating their support and trust in citizen journalism allowing this growing body of amateurs to become a more established and reputable news provider.

Technology can also be understood as one form of organisation, and as such, any system to support citizen journalists takes on its own credibility. In this light, the existing ENPS is seen as a trust and credible place for source seeking within the national news organisation. Challenging this existing trust or credibility is essential to how any new system can be incorporated into professional practice. It is therefore essential to consider how such systems are seeded in professional journalism.

As we discussed in our findings, large news organisations may be seen as intimidating to potentially contributing citizen journalists. Therefore we propose that systems should be created independently of news organisations to mitigate this issue and provide an interface between professional and citizen journalists. News organisations should endorse these types of systems to provide them with greater credibility and in doing so in this fashion, negate the imposing effects they may have on citizen journalists.

Economics of Trust

There is an underlying tension between the value that professionals prescribe to paid journalists and the value of unpaid citizen journalists. Both the spectrum of citizen

journalism and the sense of professionalism of professional journalists indicate that the credibility of a source is tied to their proven ‘value’. This can be and is delineated from whether the person is paid for the information they provide. If professional journalists were seen to provide financial rewards for useful information and good performance to citizen journalists, this would lend credibility to the citizen journalists. However, such incentives could also be damaging, as professional journalists may want to find cost-free information. The decline in usage of freelancers at the national news organisation demonstrates that a system built upon financial incentives would not be suitable. It is therefore critical to consider alternative economies of trust.

Denoting trust and establishing reputation is an active area of research. User generated reputation systems such as those discussed by Resnick *et al* [27] rely upon active user engagement, calling upon users to provide feedback and ratings proactively. We have shown that professional journalists use recommendations from reputable and established sources extensively. As such displaying and allowing users to endorse these affiliations between colleagues, organisations and employers may provide a means to validate the levels of trust between them.

We therefore propose a reputation system built upon trust as a currency that is spent and earned through engagement with, and feedback from, the community of citizen and professional journalists. Much like the way in which trust is earned and spent within journalism in the real world through producing useful and non-useful recommendations for suitable news sources. Those with more trust currency may be seen as a more established news source and those with a less established reputation, citizen journalists, would have less trust currency within the community. The result would therefore reflect the experience and reputation spectrum of citizen journalism as discussed in our findings. However it may also be possible to consider this as a potential space to subvert existing structures to create and support greater diversity.

Citizen journalists wishing to establish themselves as newsworthy contributors would require endorsements and positive feedback from recruiting professionals and more established users. This would require a number of endorsing and more established users to spend their own trust currency in order to demonstrate their trust in the citizen journalist, reflecting the way in which professional journalists may vouch for another journalist or news source when recommending them to others.

In the real world citizen journalists also have the freedom to suggest new sources and stories to professional journalists without significant impact on their reputation. As such, the cost of recommending others as a suitable news source would be determined by the amount of trust currency that the recommending user possesses, with more established users having to spend a greater amount of trust currency than a less established citizen journalist. These transactions

between users would demonstrate affiliations with more established users and in turn would provide a more reputable and trustworthy citizen journalist.

Currently professional journalists utilise a small number of reputable and trusted sources to gather news. However we aim to reverse this notion and increase diversity in the sources used in national media by proposing a reputation that rewards proactive use of reliable citizen journalism. Through rewarding diversity in gathering news sources, rather than reuse of established contributors, we aim to encourage diverse perspectives in national broadcast news.

Encouraging the inclusion and endorsement of citizen and professional journalists of the online platform may be problematic in that such a system may actually lead to the generalisation of news sources rather than diversification. Making explicit the usage of popular or highly endorsed citizen journalists by a reputable national news organisation, such as the BBC, may lead other news organisations seeking out similar sources. Likewise a careful balance must be struck when attempting to make explicit the algorithm with which journalists are ranked as this may well lead to “gaming” of the system whereby users take specific high value actions to inflate their own calculated reputation. In future work it may also be important to explore how unpopular, but extremely relevant news stories are incorporated into a trust currency based system. Exploring the mechanism for distribution of trust currency and endorsements may be able to actually promote and highlight these contentious news stories.

Demonstrating Experience

There were instances where professional journalists not only judged sources based upon the validity of a story but also other functional and non-functional aspects. Functional aspects related to access to infrastructure such as; source’s distance from audio/visual recording studio, access to local radio station, access to dedicated phone lines. Non-functional aspects related to; production values (clarity of voice, emotive presentation, clarity of argument), making themselves available at short notice, previous media experience, organisational ties and political affiliations.

The additional factors presented here show that professional journalists seek more than just a source of credible news. These may not be apparent to those outside the profession and clarifying these additional metrics may provide citizen journalists with the information they need to become a selected news source. In order to determine the importance of these attributes professional journalists might be asked to clarify and rate their importance when finding citizen journalists in search systems. Relaying this information back to citizen journalists would allow them to ensure that they have the necessary qualities professionals are looking for. Citizen journalists may wish to offer previous recordings of their conversational and presentation ability, their availability and provide contact details for interviews.

As we discussed in our findings, citizen journalists currently lack the ability to demonstrate their experience and previous work to professional journalists. Therefore it is important that systems allow citizen journalists to display items that would enable them to do so such as; previous publications, example recordings or content previous employers and affiliations. A potential system might also encourage citizen journalists to demonstrate the editorial process they have undertaken. This may be in the form of identifying the details and number of sources used as well as the transcripts of interviews or supporting data that the news content may be based upon. By providing transparency in their process professional journalists will inevitably be able to ensure professional standards are met.

CONCLUSION

With the decline in local newspapers and the rise of citizen journalism there is a new body of sources from which journalists can recruit. However participants expressed the difficulties in locating and incorporating “real people” from members of the public and a more diverse range of communities. Participation from citizen journalists may be limited due to the levels of distrust they are met with by professionals due to their proactive and potentially overly bias contribution. Citizen journalists were also perceived as having the potential to undermine the profession through their lack of skills and training as well as the implications of providing low cost labour. However participants presented a positive and varied perspective of the citizen journalist role in a professional news organisation with the focus on having a collection of trusted local sources to support investigations rather than produce news materials.

We have presented a series of design implications that attempt to encourage the visibility and use of citizen journalism as well as provide thoughts on a possible reputation system to support this. We therefore call upon system designers to consider our design implications and encourage the use of citizen journalists in national news organisations and facilitate the public participation in the gathering of national news.

LIMITATIONS

This paper provides an interpretive study through which the HCI community can begin to understand the complexity and dynamics between professional and citizen journalists. Importantly, further user studies of other national, regional and local news organisations and citizen journalists are required to understand the entire ecology of news media. Building on existing citizen journalism research, this paper suggests a number of new avenues for considering the role of citizen journalists in the national news agenda.

ACKNOWLEDGEMENTS

This research was funded by the AHRC Creative Exchange Knowledge Exchange Hub and EPSRC Digital Economy theme SIDE Research Hub (EP/G066019/1).

REFERENCES

1. Allan, S., "Citizen journalism and the rise of "Mass Self-Communication": Reporting the London bombings", *Global Media Journal*, 1(1), 2007
2. Antony, M.G., Thomas, R.J., "This is citizen journalism at its finest": YouTube and the public sphere in the Oscar Grant shooting incident" *Journal of New Media & Society*, 12(8), 2010
3. Bowman, S and Willis, C., "We Media" Media Centre at the American Press Institute, Available From: www.hypergene.net, Accessed 18th September 2013
4. Braun, V., Clarke, V., "Using thematic analysis in psychology" *Qualitative Research in Psychology*, 3(2), 2006
5. Deuze, M., Bruns, A., & Neuberger, C. "Preparing for an Age of Participatory News" *Journalism Practice*, 2007
6. Diakopoulos, N., De Choudhury, M., & Naaman, M. "Finding and assessing social media information sources in the context of journalism" in *Proc. CHI '12*, ACM Press, New York, USA, 2012
7. Gillmor, D., "We the media: grassroots journalism by the people, for the people" O'Reilly, 2008
8. Hargreaves, I. and Thomas, J. "New News, Old News", *Independent Television Commission and Broadcasting Standards Commission whitepaper*, London, UK, 2002
9. Hermida, A., Thurman, N. "Comments please: How the British news media is struggling with user generated content", In *Proc. 8th International Symposium on Online Journalism*, Austin, USA, 2007
10. Hermida, A., 2010. "Twittering The News: The emergence of ambient journalism. *Journalism Practice*" *Journalism Practice*, 4(3), 2010
11. Holton, A.E., "Case of the #UTShooter: The public working with, for, and around the news media" *Journal of Applied Journalism & Media Studies*, 1(2), 2012
12. Howard, Philip N., et al. "Opening closed regimes: what was the role of social media during the Arab Spring?", *Project on Information Technology and Political Islam Whitepaper*, 2011.
13. Hu, M., Liu, S., Wei, F., Wu, Y., Stasko, J., Ma, K.-L., "Breaking news on twitter" In *Proc. CHI '12*, ACM Press, New York, USA, 2012
14. Hu, Y., Farnham, S., Monroy-Hernández, A., "Whoohy: Facilitating Information Seeking For Hyperlocal Communities Using Social Media" In *Proc. CHI '13*, ACM Press, New York, USA 2013
15. Java, A., Song, X., Finin, T., Tseng, B., "Why we twitter" In *Proc. WebKDD/SNA-KDD '07*. New York, New York, USA, 2007
16. Kavanaugh, A., Gad, S., Neidig, S., Pérez-Quiñones, M. A., Tedesco, J., Ahuja, A., & Ramakrishnan, N. "(Hyper) local news aggregation", in *Proc. DG.O '12* (p. 30). New York, New York, USA, 2012
17. Lewis, S.C., Kaufhold, K., Lasorsa, D.L., "Thinking About Citizen Journalism: The philosophical and practical challenges of user-generated content for community newspapers" *Journalism Practice*, 4(2), 2010
18. Marcus, A., Bernstein, M. S., Badar, O., Karger, D. R., Madden, S., Miller, R. C., "Twitinfo: aggregating and visualizing microblogs for event exploration" In *Proc. CHI '11*. ACM Press, New York, USA, 2011
19. Montes-García, A. et al., "Towards a journalist-based news recommendation system: The Wesomender approach" In *Proc. Expert Systems with Applications*, 40(17), 2013
20. Morgan, D. The SAGE Encyclopedia of Qualitative Research Methods. *SAGE Publications*, 1998.
21. Muller, M. et al. "Diversity among enterprise online communities: collaborating, teaming, and innovating through social media" In *Proc. CHI '12*. ACM Press, New York, USA, 2012
22. New York Times, "Should Reddit be Blamed for the Speaking of a Smear?" Available from: <http://www.nytimes.com>, Accessed September 10th 2013
23. Paek, H., Yoon, S., Shah, D. V., "Local News, Social Integration, and Community Participation: Hierarchical Linear Modeling of Contextual and Cross-Level Effects" *Journalism & Mass Communication Quarterly*, 82(3), 2005
24. Paulussen, S., Ugille, P. "User Generated Content in the Newsroom: Professional and Organisational Constraints on Participatory Journalism" in *Westminster Papers in Communication*. Retrieved from <http://www.westminster.ac.uk>, 2008
25. Pempek, T. a., Yermolayeva, Y. a. & Calvert, S.L., "College students' social networking experiences on Facebook" *Journal of Applied Developmental Psychology*, 30(3), 2009
26. Peters, J., Kopytoff, V., "Betting on News, AOL buys The Huffington Post", New York Times, Available from: <http://www.nytimes.com>, 2011
27. Resnick, P. et al., "Reputation systems" *Communications of the ACM*, 43(12), 2000
28. Verclas, K., Mechael, P., "A Mobile Voice: The Use of Mobile Phones in Citizen Media" MobileActive.Org, Pact, USAID, 2008
29. Waldman, S. "The Information needs of communities", FCC, 2011, Available From: <http://transition.fcc.gov>, Accessed September 10th 2013