

Structures for Knowledge Co-creation Between Organisations and the Public (COP2014)

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Abstract

In recent years, social computing technologies have emerged to support innovative new relationships between organisations and the public. Inspired by concepts such as collective intelligence, citizen science, citizen journalism and crowdsourcing, diverse types of organisations are aiming to increase engagement with the public, collect localised knowledge, or leverage human cognition and creativity. In supporting these approaches, organisations are often provoked to make their data and processes more open, and to be inclusive of differing motivations and perspectives from inside and outside the organisation. In doing so, they raise new questions for both designers and organisations. For example how are “official” and “unofficial” information sources combined or hosted, mediated, or considered reliable? Does the role of the professional change through greater involvement of amateurs? How are the motivations of members of the public harnessed for mutual benefit? This workshop brings together an interdisciplinary group of researchers to address those questions from different perspectives.

Author Keywords

Social Computing; Collaborative Computing; Knowledge Creation; Collective Intelligence; Crowdsourcing.

ACM Classification Keywords

H.5.3 Group and Organization Interfaces:
Web-based interaction, Collaborative computing,
Computer-supported cooperative work.

Introduction

In recent years, social computing technologies have emerged to support innovative new relationships between organisations and the public. Inspired by concepts such as collective intelligence, citizen science, citizen journalism and crowdsourcing, diverse types of organisations are aiming to increase engagement with the public, collect localised knowledge, or leverage human cognition and creativity. Operating around the boundaries between the organisation and the public, these approaches lead to new entanglements of official and unofficial data, and professional and amateur knowledge. As innovative approaches to this emerge, there is a need to build new conceptual frameworks through which the aims, processes and relationships found in these approaches can be understood. In supporting these approaches, organisations are often provoked to make their data and processes more open, and to be inclusive of differing motivations and perspectives from inside and outside the organisation. In doing so, they raise new questions for both designers and organisations. For example how are “official” and “unofficial” information sources combined or hosted, mediated, or considered reliable? Does the role of the professional change through greater involvement of amateurs? How are the motivations of members of the public harnessed for mutual benefit? Several frameworks for collaboration are being developed in the business sector (e.g. social enhanced computing), and research is exploring how to embed incentive schemes into social computing settings.

Background

The social history of knowledge is a “*history of interaction between outsiders and establishments between amateur and professionals, intellectual entrepreneurs and intellectual rentiers, [...] official and unofficial knowledge*” (Burke, P., 2000, *Social History of Knowledge*). However Web 2.0 technologies have brought about an era of “Producersage” or “Prosumption”, where once clear boundaries between producing organisations and consuming members of the public have become blurred. Cultural, educational and research institutions are increasingly undertaking projects such as social tagging, co-curation and georeferencing. Collaborations with the public are also emerging in health and science research. These activities engage digital audiences, but they also contribute to enriching professional and organisational knowledge, sometimes in unexpected and important ways. We will draw on prior work that has classified different models of participation, to provide a starting point to a more detailed review of current developments in areas such as the digital humanities, and crowdfunding. The notion of paid crowdsourcing work as part of a business model is maturing rapidly, with popular platforms such as Mechanical Turk, and the development of frameworks to conceptualise the challenges of a “future crowd workplace”. Distinct from these, there is a proliferation of less well-understood approaches where organisations are engaging with the public by designing structures for voluntary participation in knowledge-based projects. Aided by open approaches that support appropriation and reuse, novel organisation-driven and amateur-driven initiatives are also crossing over into each other, posing new challenges from several angles. For instance, the British Library hosted events to improve content

Organisation Committee

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relevant to their organisation on Wikipedia (Wikipedians in Residence). The History of Advertising Trust (UK) enriched its collection by integrating the Ghostsigns online archive that was completely developed by amateurs.

This workshop builds also on the organisers' current research and empirical work, including: Art Maps (<http://www.horizon.ac.uk/Projects/art-maps>), which explores how local and online public engagement activities can be used to gather cultural interpretations and improve geographic data about artworks; Design for America (<http://designforamerica.com>), an award-winning nationwide network of interdisciplinary student teams and community members using design to create local and social impact; The Lab (www.thelab.org.au), using technology to improve the wellbeing of disadvantaged young people; Curating the Bay: Crowdsourcing a New Environmental History (<http://www.historypin.com/project/13839007-yearofthebay/behind-the-scenes>), a collaboration with Historypin, entailing an exhibition and related community events at the California Historical Society, curated by members of the public; and Transforming Tate Britain Archives and Access (<http://www.tate.org.uk/about/projects/transforming-tate-britain-archives-and-access>), a project which will make the Tate archive, the largest of British art in the world, accessible to national and international online audiences, allowing the public to group, tag, annotate and share their own collections of artworks and archived items.

Workshop Aims and Activities

The design and implementation of these projects navigates a complex set of motivations and

requirements: Aiming to engage the public to feel more connected with the organisation, supporting users to appropriate tools to their interests, producing knowledge that can be used in a professional context, maintaining and enhancing the organisations image, and others beyond this. In the workshop we will aim to build understanding of the principles of making these sociotechnical systems work, and discuss possible designs and opportunities that may be valuable and remain underexplored. As a tangible outcome, our main goal will be to co-author a paper discussing our positions on current systems and future visions around this theme, for submission to Communications of the ACM. This workshop builds upon themes that have emerged strongly in the HCI community in recent years, but are also under discussion in disciplines such as Digital Humanities and Science. As such, we aim to build cross-disciplinary discussions that are fruitful in sharing approaches across disciplines, and include expertise in these domains in the organising group. We take inspiration from the CrowdCamp workshops, most recently held at CSCW 2013 and co-organised by Elizabeth Gerber, but focus attention specifically on voluntary endeavours that leverage interaction with the public for knowledge production. In focusing particularly on the creation of knowledge as an activity shared between organisations and the public, we consider that the field of collective intelligence has evolved to include this and other areas that are distinct. As well as providing a great opportunity for networking, the workshop will set aside significant time for discussions to explore and define this space.

Topics of Interest

The workshop will include space for inspiration sourced from the position papers and interests of participants.

Programme Committee

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Ben Bedwell - Horizon Research Fellow in Computer Science at the University of Nottingham.

Aaron Shaw - Assistant Professor at Northwestern University and Research Fellow at the Berkman Center for Internet and Society at Harvard University.

However as a starting point, the following topics are considered of particular interest:

Models of participation that motivate involvement whilst producing useful knowledge – How can systems be designed to leverage complementary or differing motivations, and how do we conceptualise these in design?

Ownership and openness – How are these systems designed to manage data, attribute work, or draw boundaries between “official” and externally generated knowledge? How can openness support collaborations across organisations as well as with the public where there are shared interests?

Multiple perspectives – How do structures support the representation of different perspectives on an issue (particularly in areas such as the humanities where these are key). When appropriate, how is moderation or fact checking approached?

Technical Design – For example how should APIs be designed to support appropriation of data and tools, or allow the organisation to maintain desired control over “official” outputs?

Tensions between the professional and the amateur worlds – How can the professional framed context and metadata standards be connected with the just-in-time, emergent nature of amateur online collection and curation? Is the role of the professional changed by these innovations?

Engagement as education – There is a clear link between many of these systems and informal learning. Systems such as Wikipedia are now contributed to as part of formal education, are broader connections

between organisations and education a particularly useful area for these systems?

Workshop Activities

A website will be set up to publicise the workshop on acceptance. Based on their experiences and research interests, potential participants will be asked to submit a position paper (up to 3000 words) addressing the question “*What is the future of collaborative knowledge creation activities between organisations and the public?*”. Participants will be encouraged to tackle the topics listed in the previous section, but also to go beyond these where they feel this is appropriate. The workshop will be a one-day event. The selected participants will take part in open, as well as in small group discussions, based on their position papers. The small groups will also work on drafting a document that represents the first result of the workshop, as our main goal will be to co-author a paper discussing our positions on current systems and future visions around this theme, for submission to Communications of the ACM.

For further information: <http://cop2014.wordpress.com>

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