

## Meeting Report

### **Research Methods for Digital Work: Innovative Methods for Studying Distributed and Multi-modal Working Practices**

University of Surrey, Guildford, UK, 25-26 May 2017

“Research Methods for Digital Work” was a two-day meeting held at the University of Surrey on 25<sup>th</sup> and 26<sup>th</sup> May 2017. The meeting was organized by Christine Hine (Department of Sociology, University of Surrey) in collaboration with Gillian Symon (School of Management, Royal Holloway University of London) and Katrina Pritchard (School of Management, Swansea University). The meeting was organized in association with the Digital World Research Centre at the University of Surrey and supported by the Institute of Advanced Studies at the University of Surrey and the RCUK-funded NEMODE network plus.

The meeting was attended by 35 participants from six countries, including three keynote speakers. The meeting comprised presentations from the keynote speakers and eight additional speakers, demonstrating an array of methodological solutions for the study of digital, distributed and multi-modal working practices from disciplinary perspectives including management studies, sociology, education studies, information science, science and technology studies and digital humanities. An open session allowed participants to discuss the methodological challenges that face researchers interested in understanding digital work and to identify additional areas of significance for a publication in the field beyond those addressed in presentations at the meeting.

### **Objectives**

As digital technologies have matured, various forms of distributed working have become commonplace. The contemporary workforce includes many people who move between different sites during the course of a working day or week, and who switch between offline working and diverse forms of online work and mediated communication. Virtual teams coordinate activities across geographic locations, using multiple channels of communication to organize their work and to build identity as a team. Organizationally-sanctioned online communications and digital repositories are used alongside extra-organizational resources such as social media and informal face-to-face conversations. Professional and personal activities share communication channels, and boundaries between work and non-work can become blurred. Digital media both provide a conduit for work to be conducted and preserve traces of work conducted in other spaces. Work is thus increasingly multi-modal and both spatially and temporally complex. This complexity provides many challenges for the researcher aiming to capture and understand these practices, tracking activities - and their meanings for participants - across multiple formats connected in an unpredictable fashion. This meeting focused on a key question for studies of contemporary work across disciplines: how can we combine methods or devise new methods to capitalise on diverse forms of data in order to build rich and theoretically-fruitful understandings of digitally-suffused working life? We aimed to promote cross-fertilization of approaches across disciplines and to instigate conversations on the theoretical purchase offered by different ways of studying work. The meeting was intended to offer an audit of existing approaches to stimulate sharing of expertise and further innovation among participants and, through a website, social media presence and a subsequent publication, to provide a methodological resource for those not able to attend in person.

## Summary of presentations

There were a small number of deviations from the programme published in advance, due to illness. The meeting began with a welcome from **Christine Hine** on behalf of the co-organizers. She then introduced the first keynote speaker, **Richard Rogers**. He presented a case for critical reflection on the dominant perception that visible activities on social media should act as an indicators of success, exploring both the limitations of “vanity metrics” and the possibility of alternative ways of exploring forms of engagement that develop online. Rogers highlighted potential insights offered by developing methods that would explore the emergence of issues and causes online rather than focusing on the individual.

After the break, two presentations explored aspects of the experience of digital work. **Christine Hine** offered an overview of the purchase offered by autoethnographic methods focused on the experience of the digital volunteer. Such forms of work are spatially and temporally complex and difficult to access by conventional ethnographic approaches. Hine argued that an autoethnographic approach can allow for exploration of the socio-material embedding of digital volunteering practices and enable understanding of the forms of ordering and accountability that permeate this kind of work. The second paper in the session, by **Anoush Margaryan** and **Heather Hofmeister**, focused on another recently emerging form of digital work, crowdwork. They argued that this very fragmented form of work conducted outside of a conventional organizational context can be challenging to understand and they proposed a life course approach, combining quantitative and qualitative data from surveys, biographical interviews and offline and online observation, as a means to focus on the learning practices of crowdworkers.

The second keynote speaker, **Diane E. Bailey**, followed after the lunch break with an extensive overview of observational studies conducted with people who use computers at work. Bailey discussed the challenges that an observer encounters as they attempt to notice and to record in detail the ways in which people engage with digital objects. She described an array of techniques for a documenting digital objects and practices highlighting the importance of a structured approach to data collection and an eye for fine detail. In the final session of the day the focus on detail remained a strong theme. **Ibrar Bhatt** presented an approach to capturing and analysing digital work that combined screen capture with video-recording of the writing events in situ. By this approach Bhatt demonstrates that we can both understand the emerging work flow on screen and also explore how it is achieved in context. In the final paper of the day **Andrew Whelan** looked at digital traces of work through the exploration of “track changes” in an electronic version of a policy document in development. The accretion (and deletion) of changes as a document moves through an organization provide, Whelan argued, an insight into an organizational culture in action.

The second day began with an open session at which participants were invited to introduce emerging projects and challenges on the horizon and to identify key themes and missing issues that should be addressed in a publication focused on digital work (see below). After a lively discussion we resumed the formal programme with a presentation by **Sarah Lewthwaite** and **Warren Pearce** on the use of “over-the-shoulder” methods to understand how actors navigate between multiple social media platforms and different modes of communication. Such methods offer the prospect of a flexible and emergent understanding of the context in which decisions about media use are taken. The second formal presentation of the day was given by **Yenn Lee**, focusing on the work of academic writing as reflected in the use of twitter hashtags such as #AcWriMo. Taken together, these two presentations highlight one of the key tensions in methods for study of digital work: we

need to be cautions of making assumptions about what the meaning of online traces of work might be and yet such representations of work may be highly consequential in constructing what work is for participants themselves, and as such are not to be ignored.

The third keynote presentation was given after lunch by **Monika Büscher**, focusing on mobile work and mobile data in crisis contexts. Büscher explored the extremes of mobility, both physical and digital, required of disaster responders and highlighted the challenges of coordination and collaboration that emerge. Her presentation introduced a new set of research orientations into the mix, highlighting the significance of collaborative and speculative approaches that not only seek to document a situation but to work actively and creatively with actors to envisage alternatives and build new solutions. The final session contained two presentations. **Elpida Prasopoulou** and **Niki Panteli** presented a paper (co-written with Nancy Pouloudi) focusing on the smartphone as the key enabler of contemporary modes of distributed and mobile working. They described the use of interviews and daily logs of smartphone use among knowledge workers to capture the temporal structure of working lives and participants' critical reflection on their practices. Finally, **Esther Ruiz Ben** shifted the focus from temporality to spatiality, exploring the potential of visualization methods for investigating the topographies of digital work and of the work chains that emerge across global labour markets through digitalization.

## Key themes

Substantively, the meeting examined diverse forms of digital work, from the emerging forms of fragmented work such as crowdworking and the highly mobile work of knowledge workers and crisis responders to more conventionally recognisable forms of office-based work such as organizational policy-making, engineering design and academic writing. Methods were also diverse, encompassing: collection and analysis of data from APIs of social media platforms and traces of work left in digital documents; a set of interview- and diary-based methods for understanding the perspective of participants that are fully recognisable from the traditional repertoire of social science methods; collaborative and interventionist approaches that break down the researcher/participant divide; and a set of methods based on close observation, autoethnography, over-the-shoulder techniques and multi-faceted data capture that seek to understand the experiences and practices of being a digital worker. The meeting provided a promising and diverse methodological toolkit for researchers across a broad array of disciplines seeking to explore digital work.

Across this set of varied forms of digital work and methodologies for exploring work practise and experiences, a set of cross-cutting themes are identifiable. The challenges of capturing data and the difficulties of storing and sharing that data emerged as a key concern. While capturing data from a single platform is often a matter of relative ease, it can be much more challenging for the researcher to connect together data from the different platforms that a participant may move across fluidly in a matter of minutes. Researchers may also need to resist the seductions of the readily available single-API dataset, questioning what the meanings of this readily available data might be and whether the data truly answer the research questions we might most wish to ask. Having captured data, researchers face considerable practical and ethical challenges in how to publish the research and how to preserve the confidentiality of participants in doing so. In addition to a critical stance on the use of digital traces of work in research, a further theme focused on the development of methods for interrogating context and exploring the meaning of online traces. Methods for understanding the experience and biographies of digital workers emerged as a priority area, building upon a recognisable repertoire of research methods from social science, organization studies and HCI but adapting to the challenging conditions of multi-sited and multi-modal work conducted in unpredictable fashion.

## **Dissemination and next steps**

Participants tweeted throughout the meeting, and a summary of twitter activity has been collated using storify: <https://storify.com/VolExResearch/research-methods-for-digital-work-day-one-rmdigita/> The outcomes of the meeting have been promoted via the blog maintained by the co-organizers

<https://volunteerexperienceinthedigitalage.wordpress.com/> . The IAS website hosts the meeting report in addition to presentation abstracts and short video interviews with the three keynote presenters. A proposal for an edited collection based on the meeting is under development for a major academic publisher. The intention is for this collection to include papers based on presentations from the workshop and also additional papers commissioned to address gaps identified through open discussions at the meeting, in order to produce a comprehensive resource depicting the state of the art in research methods for digital work.

## **Acknowledgments**

The organisers are grateful to the Institute of Advanced Studies and the NEMODE network plus for financial support and particularly to Mirela Domic (IAS) and Emma Clear (FASS Events Team) for their support and advice in organising the workshop. We appreciated the help of Emily Setty on both days, in welcoming participants, troubleshooting and filming interviews. Wates House and Lakeside staff were very accommodating of our needs in providing meeting space and catering. Finally, we extend our thanks to all our presenters and participants for their interesting, stimulating and thought provoking contributions.