Understanding and Designing Human Data Relations

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7 Case Study Three: Personal Data Interface Design & Development

> " "The world is working exactly as designed. And it's not working very well. Which means we need to do a better job of designing it." —*Mike Monteiro, author of 'Ruined by Design'*

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In this chapter, which kicks off the second part of this thesis, I build upon the newfound understanding of the better human-data relations that people need and start to consider *how* these goals might be achieved in practice. This second part of the thesis aims to answer the third sub-research question RQ3: *'What challenges and opportunities exist for improving human data relations in practice?'*. While the exploration of this question has also been informed throughout the PhD by other research activities including my work within the SILVER project (see 3.4.1.1 and 3.4.3.2) and my work on web augmentation (3.4.3.2), RQ3 is largely and substantively examined through my third PhD Case Study, introduced below, in which I was remotely embedded for three months within a full-time internship into the British Broadcasting Corporation (BBC)'s Research and Development department, working with specialists, designers, researchers and developers on an exploratory research project codenamed *'Cornmarket'* during the summer of 2021. I continued this involvement as a part-time research consultant and critical friend for a further 5 months after the conclusion of the initial three-month placement.

In section 7.1 I….

7.1 Context: Designing and Building a

Personal Data Store with BBC Research & Development

[TODO Add in some back-reference to Discussion Part 1 - the intermediate understanding of human data relations needs that precedes this chapter and concludes part 1 - once that section has been written.]

As part of its Royal Charter, one of the BBC's lesser known obligations is to maintain a 'centre of excellence' for research and development in broadcasting and electronic media[REF BBC Charter], and to this end it employs over 200 researchers in its R&D department looking at everything from AV engineering and production tools to new forms of media, virtual reality, digital wellbeing and human data interaction. The Cornmarket project, launched in 2019, is a BBC-internal human-data interaction research project which explores a possible role for the BBC as it moves beyond broadcast television, using its public service responsibility to guide citizens to a position of empowerment within today's digital landscape - encompassing not just entertainment but health, finance and self-identity. Due to its unique funding from UK-wide TV licensing and its duties to not only entertain but to inform and educate the general public, the BBC is uniquely placed to take a more human-centred approach than commercial innovators in this space as it needs only to deliver value, not profit. The project is exploring the use of Solid[REF] technology to build a working Personal Data Store (PDS) prototype (see 2.3.4) while also developing, iterating and trialling user interface designs and conducting participatory research interviews and activities all to explore what for a BBC PDS might take and what features its potential users might value.

The proposed BBC PDS product would allow people to populate a PDS with personal data from APIs and data downloads from a variety of services including BBC iPlayer, Netflix, All4, Spotify, Instagram, Strava, Apple Health, banks and finance companies, as well as social media companies such as Facebook, LinkedIn and Twitter, and then to use these combined data sources to create personal "profiles" for Health, Finance, Media[Entertainment] and Core, within which various data insights, visualisations, capabilities would be delivered. One feature the work explores in depth as potentially valuable to users is the ability to include and exclude certain datapoints from the imported viewing history data in order to present a more accurate, curated view of oneself that could then be fed back to other applications such as BBC Sounds to give better content recommendations.

With a cross-disciplinary team of around 20 people including architects, developers, user experience designers, product designers, innovators, participatory researchers and marketers, and funding to outsource public engagement research to agencies, this project represents a significant player in the emerging personal data economy (see 2.3.4). As such the Cornmarket project is a fertile ground in which to learn more from practitioners in the PDE space and to test the learnings of this thesis in practice while also finding deeper insights in response to my research questions - in particular RQ3 which is concerned with the building of more human-centric personal data interfaces in practice. I took a three-month sabbatical from my PhD to join the project full-time as a Research Intern during the summer of 2020. Details of the work I carried out and participated in is presented in the next section. My involvement in the project can be seen as the conclusion of one of several action research cycles within my

PhD (as detailed in 3.2 and Figure 3).

7.2 The Internship

7.3 Background: Strong Concepts

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7.4 Insights From R&D Practice

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7.5 Discussion: Strengthening the Concepts

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7.6 Conclusion: Applying the Concepts; Implications for Future Work

[target 600 words]

Bibliography