Understanding and Designing Human Data Relations

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# 1 Literature Review

[Target X words]

## 1.1 The Data-Centric World

[Target X words]

* The status quo - data is a part of everyday life. Services are data-centric
* Rise of cloud, globalisation, cost reduction has made it so
* World Economic forum and others - there is a power imbalance over data
* mention attempts to tackle data imbalance i.e. wikis, open data movements, etc - and the resistance the industry has given, closure of APIs, siloism, etc.
* GDPR - as the first attempt by governments to try and tackle this power imbalance, mention CCPA too.
* emergence of data dashboards
* seems GDPR rights not fully realised in practice. e.g. ad infrastructure breaks it.
* question is, how effective is GDPR , it is even the right approach - what is really needed to combat this power balance, how do people understand and relate to data and how do people understand their place in the world of data, what data is meaingful to people, what does effective access really mean.
* in essence, what is it like to live in a data centric world

Notes: - Does the ‘what is data’ question need to partly addressed in the “data centric world” section or is it ok that that comes into chapter 4 more as a finding. - properly explain ‘data-ism’ and bring that in

## 1.2 Human-Centric Design

[Target X words]

* the three waves of HCI, from operators of machines to users to experiences. recognition that digital systems are not solitary single purpose machines, its an ecosystem > weiser and separating data from machine.
* human-data interaction, as a response to that, mortier et al, people need a relationship with data not just with machines
* following on to calm computing, context aware computing, engaged living, tech to the background
* tech sector thinkers ‘designing for the whole person’ (Harris, Tufecki, etc)
* Human Centric data economy, MyData movement
* framed as an emergent space, more work to be done to explore human centric design in practice, need to explore the barriers and possibilities

Notes:

* is there any design thinking from Digital Civics to come in here?
* possibly bring some things about the roles people play with data here? data subject for example
* consider some sort of diagram - triangle - humans, their data, their world.

## 1.3 Personal Data Interaction

[Target X words]

* continuing from three waves of HCI and Weiser, but this time looking at it as from the tech design perspective
* introduce the Abowd angle of the shift from programming environments to programming *environments*
* Personal information management systems and the history of PIM.
* referencing the HCI shift from work to ‘whole life’ experiences
* Quantified self
* Personal Informatics
* personal data lockers / data stores
* limited state of the art - cover technical perspective on what is happening in human-centric design space
* the limitations are the focus on viewing data, as a static thing, instead of looking at in the wider context of human life (as some of the theorists imply we need to do).
* there is a need to look beyond human data interaction, to design systems that focus outward on data in life. examining data’s role in life.

Notes:

* This section is technology/interface focussed where human-centric design section is more framed around high level approaches to this design space.

## 1.4 Research Gap

[Target X words]

* my research aims to fit upon these three areas by:
  + exploring how people understand and relate to data as they live in a data centric world, what is data to them and what mental models do people have around data (positioned as filling research gap around understanding and exploring existing in a data centric world). aim is to understand realities of data today and understand problems with data today.
  + explore the roles people play with regard to data, looking at their life. in particular there is a need to look at relationships with organisations that hold and use data about people - examining data’s role in their lives and how data affects people in their lives (positioning this as a deeper exploration of human-centric thinking, applied to the world of data specifically). aim is to understand realities of relations today and understand problems with relations today.
  + explore the possibilities for designing and building new data systems that would address the problems identified with data and with relations, what are the practical challenges and to explore the different methods of how they might be overcome.

Frame the overall research question:

*What role should people’s data play in their lives, and what capabilities do they need?*

I will use largely qualitative methods as well as situational embedding and reflection informing design to explore these questions. My approaches are detailed more in the next chapter.

# Bibliography