Ageing in Data
Exploring Everyday Data, Automation and Artificial Intelligence (AI)

RMIT x U3A Deepdene Workshop

November 2023—Summary

Introduction

On Monday 27 November, 12 U3A Deepdene members attended a pilot workshop held by RMIT University at U3A Deepdene. The workshop was a pilot in the Australian Research Council Discovery Project (DP 230103075) *Ageing in and through Data: What can data tell us about ageing?* The project aims to explore the lived experience of older adults with data (i.e. computational information) and technology. As technology has become increasingly necessary for everyday life, this project asks what we can learn from everyday encounters with data and, crucially, what data misses or can't capture.

The workshop lasted 2.5 hours and was led by the Chief Investigator on the project, Distinguished Professor Larissa Hjorth with input and coordination by the project post-doctoral Research Fellow, Dr Caitlin McGrane. This report provides a summary of the workshop, including activities and our recommendations for future workshops.

Pre-workshop 'homework'

Prior to the workshop, participants were asked to complete a short worksheet ('homework') about their understanding, expectations and experiences of Artificial Intelligence (AI) and automation. The task had four questions, and we have summarised them below by grouping the final two questions together:

1. *Defining AI and automation*. Most participants had *some* familiarity with AI and automation while others had more detailed and sophisticated understandings. For instance, one participant defined AI as a "computer robot", while another described it as "autonomous… Computer directed learning". Another participant differentiated between Machine Learning (ML) and AI, writing that previously "the term 'machine learning' (ML) was most frequently used." As AI is such a broad field and covers many different technologies and their application, as well as contemporary media and popular understanding, we will continue to use AI throughout this report.
2. *Feelings about AI and automation*. Participants were also asked about what they felt excited and worried about as AI and automation become increasingly prevalent in everyday life. Participants described being excited by the possibilities for better social, health and wellbeing outcomes in terms of how AI and automation could make processes or administration more efficient and accurate. At the same time, many participants were concerned about trust, privacy, experiencing a "loss of control".
3. *How digital media, AI and automation are encountered*. Participants listed numerous ways they used digital media in their everyday lives, mostly through devices including smartphones, smart TVs, tablets and wearables. Most participants also understood that they encountered AI and automation in many areas of their lives. Participants understood the devices and modes of communication, connection and mobility they listed in their uses of digital media were powered by or made more efficient through AI and automation.

Expectations of AI & automation

"a big breakthrough" …

"exciting"

"scary"

"frightening"

The workshop began with a brief *introductory exercise* where participants introduced themselves and said a few words about what came to mind when they thought of AI and automation. Participant responses were very varied—combining both positive and negative feelings (see quotes above). This exercise established that there were a variety of experiences, expectations and attitudes in the room towards AI, automation and technology. This exercise set the tone for the rest of the workshop and established a trust amongst the group that they could express themselves freely.

For the *first activity*, we asked participants to form groups and use their 'homework' to map out encounters with AI and automation. We wanted participants to find areas of commonality and difference in relation to their encounters with AI and automation within their groups. While this was a good opportunity for participants to discuss their experiences with one another, there was often difficulty in mapping out these encounters collectively because they led such different lives and had varied concerns (In future workshops, we will ask participants to complete this activity as individuals.)

Figure 2: Participants map out their encounters with AI and automation

In the *second activity* we asked participants to focus on Opportunities, Limitations and Fears of AI, automation and technology because we wanted the discussion to be generative while also acknowledging the very important worries and concerns that participants had expressed. This discussion was wide-ranging and touched on many facets of technology, including the social construction, influence and impact of technology.

One group discussed their fears around technology's increasing ubiquity and omnipresence in all aspects of life:

> "One big fear is technology is outstripping the law in every way…
> fear of facial recognition. And it was noted that facial recognition

is very discriminatory in terms of race… [fear of] global insecurity and propaganda. In regard to limitations, there's potentially no limitations to the future of technology, particularly with medical advances."

The use of technology, AI and automation in medical settings received a lot of positive attention—using AI to detect conditions like Parkinson's, cancer and dementia, as well as analysis of large volumes of data that machines can process with greater speed than humans.

Another group mentioned the benefits of careful surveillance technologies in families so children and parents can monitor each other, including "wayward" husbands and wives. However, at least one participant thought these interventions were "intrusive" and an invasion of privacy.

The key themes that emerged in this discussion were:

- Privacy
- Media trustworthiness
- Data ownership
- Mis- and disinformation
- Internet scams
- Drone technology in warfare
- Large language models
- Changing role of language
- Digital archiving and cultural heritage
- Play
- Agency

This exercise was extremely valuable to understand some of the most pressing concerns for older adults around technology. In future workshops, we will ensure to allow more time for groups to work together and report back on their discussions.

Figure 3: Discussing opportunities, limitations and fears

Possibilities

In the *final exercise*, we asked participants to imagine using AI or automation in their homes in 2050. Most responses saw increased use of technology as an inevitability, articulated by one participant:

"Robot will take control of our life. Keep up with technology, otherwise we'll be behind. Living with them in the future."

Many participants expressed fears about the future of AI and automation, including one response that read like a poem:

> "Expensive, high maintenance, automation of home's lighting, security, climate, appliances, food preparation, cleaning et etc…
>
> Humans will be redundant so why live?
>
> Machines controlling everything.
>
> Who controls the machines?"

Another participant imagined 2050 being like fantasy book and film series *The Hunger Games* in which people live under a "centralised, powerful unit that keeps the rest of the population poor." This future vision of a powerful, "malevolent", controlling force was linked to Big Tech companies who have "more money [and power] than many countries." These fears were based on being rendered powerless and feeling less in control of one's life—with obsolescence and "dehumanisation" at the forefront of many participants minds

when they think about the distant future. With all the "doom and gloom", one participant said, "it makes you glad to be old".

However, these pessimistic visions were not universal, and one participant had imagined writing a letter to her daughter describing a typical day in her life in 2050. As a "glass half full" person, she imagined living independently and still in control of her life, even as she became frailer:

> Dear Daughter,
>
> My robot gave me a delightful bath today. She hooked me into my comfortable robotic chair in lovely clean clothes then she heated up my lunch, which I ordered with my voice online. I am having several 'Facetime' chats with the grandchildren, I hope you are coping with the changes in your household.
>
> Love, Grandma

Other optimistic visions of the future involved interplanetary travel, thought-based communications and biometric data automatically sensing health issues. These visions were not without concerns about losing control over one's life and posited a version of the future where minds, bodies and societies were 'optimised' by unfeeling, uncaring machines.

One participant positioned her vision as somewhere between optimism and pessimism. This vision of the future imagined a world where chips would be implanted into bodies to enable greater automation around the home, easing the burden of some of life's mundane tasks while also transmitting huge amounts of sensorial data to corporations.
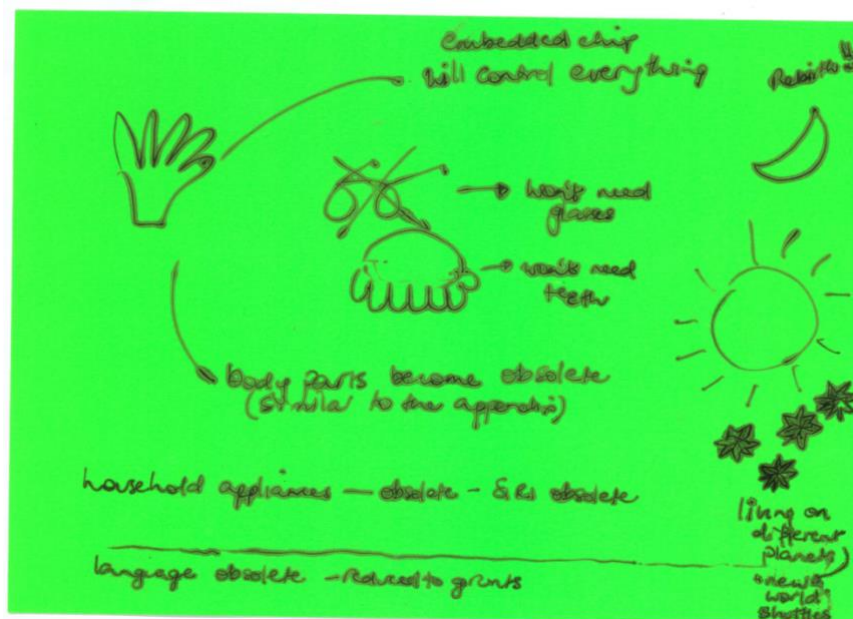

Figure 4: "Embedded chip will control everything"

The workshop finished with a discussion around the future of thoughts, memories, study, universities and generative AI. Participants were interested in the impacts of AI and automation on original thought and ideas, and how technologies in the future might influence human behaviour.

Close to the end of the workshop, one participant said in relation to technology:

"there are some things that seem life enhancing and others that are life restrictive."

This statement encapsulates the workshop content and the complex deliberations and ambivalences that many people are currently feeling about technology now and into the future.

Recommendations for Future Workshops

At the end of the workshop, participants completed a survey that asked them about their experience, whether they felt they had gained insights and knowledge, and what they would like to see in future workshops. Participants gained a modest amount of knowledge and insight, and provided excellent suggestions for us to consider in future workshops:

- Ethics: reiterate the ethics outline about data being de-identified. Anything shared in the workshop will not be attributable to identifiable individuals.
- More Playfulness in the exercises and workshop title.
- Provide citations for definitions.
- Conduct fewer exercises, with more opportunities for sharing and listening to others.
- Provide more examples of current and future technologies (including AI and automation) for participants to respond to.
- Address and discuss data privacy, security, ownership and control concerns more directly and in more detail.

Conclusions

We are enormously grateful to the participants for their generosity in sharing their time, thoughts, fears and ideas with us. These insights are extremely valuable and we look forward to incorporating them into our future research.

As discussed, the workshop was the first pilot in a three-year ARC-funded project. We welcome you to join more of our **co-design workshops** as we start to explore tactics and literacies around ageing in data. What do we need to know and why?

In 2024 we will begin **ethnographic research** with participants where we will visit people in their homes to explore how technology is being deployed in the everyday lives of older adults. Participants in the ethnography will be given a tablet and a FitBit, which will belong to the participant and will not be accessible or monitored in any way by the research team.

We will invite you to share data with us and collaborate with others in playfully engaging with data as the project progresses. If you would like any further information about being involved in the ethnography, please contact Dr Caitlin McGrane: caitlin.mcgrane@rmit.edu.au.