Generational Dynamics in HCI: Understanding Perspectives and Patterns through Timelines

Alice Ashcroft
Lancaster University
UK
alice.ashcroft@lancaster.ac.uk

Bran Knowles
Lancaster University
UK
b.h.knowles1@lancaster.ac.uk

This workshop explores potential connections between life experiences, resource accumulation, and technology attitudes across different generational cohorts. Building on prior work, we propose considering age as an axis for accumulating (or not decumulating) various resources which impact their technology engagement in later life. Through activities such as timeline creation and technology attitude mapping, participants will gain insights into shared patterns and unique narratives within their generations. By fostering empathy and understanding, the workshop enhances HCI research and design practices.

1. INTRODUCTION AND AIMS

Vines et al. (2015) states that “we must remember that ageing is not a phase of life but a process that happens across the entire life course” and calls for richer understandings of this life course on how this affects interactions with technology. This workshop aims to address Vines et al. (2015)’s recommendation to critically engage with the context of ageing across an individual’s life course and reflect on how personal histories impact technology use now and in the future.

How older adults engage with technology has been explored at BCS HCI before (Kruger and Samaddar 2023; Samaddar and Petrie 2023) and within other conferences such as CHI (Petrie 2023), but thus far there has been little practical or methodological advancement toward engaging substantively with lifecourse. Building on our own prior work Knowles et al. (in submission), we propose considering age as an axis for accumulating (or not decumulating) various resources which impact their technology engagement in later life. Relevant resources may include financial means, physical and cognitive abilities, technical skills, psychosocial attributes, and leisure time. How a person may (or may not) accumulate such resources over the course of their lives has been unexplored in HCI literature, resulting in an explanatory gap regarding digital exclusion for some (but not all) older adults. While physical and cognitive decline are acknowledged as factors (i.e. consequential decumulations), there are growing concerns that over-emphasis on decline obscures other relevant factors in older adults’ attitudes toward and use of digital technologies. One such factor deserving of more attention is how resource accumulation is shaped by technology engagement uniquely across generations.

By guiding participants in capturing timelines of major life events alongside how interactions with technology may have affected their lives, we aim to discover which events precipitate resource accumulation or decumulation over the lifecourse. We also aim to explore how these significant events interact with generational norms, which may present structural barriers to accumulation/decumulation of particular resource depending on a person’s intersectional position in society.

The workshop will facilitate this by provoking discussion and reflection upon participants’ own timelines relative to the norms of their generation (how their de/accumulations fit with these norms). Similarities and differences between timelines will be explored as a group to reveal insights into generational dynamics in technology interactions that may enrich discourses on ageing in HCI and inspire new research directions.

2. WORKSHOP AGENDA

The workshop’s agenda is designed to blend structure with adaptability, providing a framework for
interactive exploration of generational dynamics in technology interactions. Participants will begin by reflecting upon their experiences, culminating in meaningful discussions that foster understanding and empathy among HCI researchers. Through a series of carefully curated activities including timeline creation, resource mapping, and technology attitude mapping, participants will delve into the intersections of life experiences, resource accumulation, and attitudes towards technology across diverse generational cohorts. This progression allows for an exploration of how individuals navigate and interact with technology within the context of their generational backgrounds.

Participants will be asked to self identify with a generation following the introduction where these will be explained. If the representation is disproportionate, for example the majority of participants falling into one generation, we will simply break these into smaller groups - this may lead to less opportunities for comparison, but will still allow for reflexive practices by the participants as an additional element of personas can be used if this is case.

Each group will be given a long sheet of paper with a timeline drawn on, and pens in order to carry out the following agenda. Everyone on each table will all contribute to the timeline on that table.

**Introduction and Framing (30 minutes):** The workshop begins with an introduction where participants will be guided through the workshop’s objectives and the significance of examining generational dynamics in HCI research embedded in various literature. We will provide an overview of the activities planned and invite participants to reflect on their own generational experiences.

**Timeline Creation (1 hour):** Participants will engage in creating personal timelines highlighting significant life events and technological advancements that have impacted their generational cohort. This will be done with each of the participants adding their own life events to the same timeline as the others in their peer group. This activity encourages reflection on the evolution of technology alongside individual life trajectories, laying the foundation for deeper exploration.

**Break (15 minutes):** In this break, participants will be encouraged to wander between tables and look at the in progress timelines of other generations.

**Resource Mapping (45 minutes):** Upon returning to their own generation’s timeline, participants will be asked to reflect upon how these life events aligned (or did not) with resource accumulation or deaccumulation (e.g. getting married or buying a house may have cost money). Although this will be different for each participant, this will be shared on the same timeline to show potentially differing experiences. Through collaborative discussion and reflection, participants will identify the influence of resource dynamics on technology adoption and usage patterns within their respective generations.

**Technology Attitude Mapping (1 hour):** This interactive activity involves mapping attitudes towards technology across different life stages within each generational cohort. Through group discussions and shared insights, participants will uncover commonalities and divergences in technology perceptions, shedding light on the nuanced relationships between life experiences and technological attitudes.

**Break (20 minutes):** In this break, once again, participants will be encouraged to wander between tables and look at the in progress timelines of other generations.

*Here would be a potential break for lunch, depending on the structure of the conference.*

**Group Reflection and Insights Sharing (45 minutes):** Following the activities, participants will reconvene for group reflection. Each group will share key insights from their timeline, resource, and attitude mappings. This session fosters dialogue and mutual learning, allowing participants to gain a deeper understanding of generational dynamics in technology interactions.

**Closing Discussion and Next Steps (30 minutes):** The workshop will conclude with a collective discussion on implications and next steps. Participants will reflect on how the insights gained can inform future HCI research and design practices. Additionally, avenues for continued collaboration and exploration will be explored, ensuring that the workshop’s impact extends beyond the session itself. The impact of this discussion will be regarding how HCI can engage substantively with varying generations.

3. **PROMOTIONAL STRATEGY**

The workshop will be promoted through various channels including academic networks, social media platforms, and mailing lists relevant to HCI research. A maximum of 30 participants (excluding organisers) will be invited to ensure meaningful engagement and productive discussions. The minimum people signed up will be 10.

The call for participation can be found in Table [1] and may be distributed alongside images to boost engagement.
Table 1: Call for Participation

Workshop Title: Exploring Generational Dynamics in HCI: Call for Workshop Participation

Date: [Date to be added]

Location: UCLan, Preston, UK

Are you interested in exploring the impact of age on technology interactions? Do you want to find out more about life experiences, resource accumulation, and attitudes towards technology shape individuals’ interactions with digital interfaces? If so, we invite you to participate in our hands-on workshop, “Exploring Generational Dynamics in HCI.”

This workshop aims to investigate the diverse perspectives shaping technology interactions across different generational cohorts. Through group discussions and shared insights, you will uncover overlaps and differences in technology perceptions, helping our HCI research be more equitable.

Why should I attend?

This workshop is open to HCI researchers, practitioners, and students interested in exploring generational dynamics in technology interactions. Participants with diverse backgrounds and experiences are encouraged to join and contribute to the discussions.

How do I register?

To register for the workshop, please visit [https://digiage.io/](https://digiage.io/) and complete the registration and consent form. Anything shared in the workshop will be anonymised, but further information can be found on the website. The deadline for registration is [Date to be added].

Please note that there are limited slots available for this workshop. Registrations will be accepted on a first-come, first-served basis. Reserve your spot early to secure your participation.

Contact Information:
For inquiries or further information, please contact Alice Ashcroft at alice.ashcroft@lancaster.ac.uk.

We look forward to seeing you at our workshop.

4. POST-WORKSHOP PLANS

The output of the workshop will be in the format of fully anonymised digitised versions of the timelines created as well as some personas made using an accumulation of the life events shared. There will also be written up findings shared, including insights generated from timeline, resource, and attitude mappings. These will all be shared through the DigiAge project website.

We will also distribute a survey alongside the findings directly to participants through email in order to evaluate the success of the workshop. This survey will be anonymous. The survey will also cover whether the participants see direct applications of insights from this workshop to their research/practice.

Additionally, findings and reflections may be disseminated through academic publications, presentations, or collaborative initiatives within the HCI community, and we will be inviting participants to join in the contributions of these publications.

5. LOGISTICS AND EQUIPMENT REQUIREMENTS

The workshop will run fully in person, or in the case of a remote conference, fully online. Unfortunately, running this workshop in a hybrid way is not possible.

For the timeline workshop accommodating a minimum of 10 and a maximum of 30 participants, specific audio/visual and setup needs are essential to facilitate an engaging and interactive session.

Audio/Visual Equipment: Rooms should ideally be equipped with a projector, screen, and computer audio system to display presentations and visual aids effectively. Additionally, a large whiteboard screen
can serve as an alternative or complementary visual tool for group activities and discussions.

**Workspace Setup**: Given the interactive nature of the workshop, participants will require ample workspace to engage in collaborative activities. Each group of 10 participants will need a long table to facilitate discussions and timeline creation.

**Materials**: To support hands-on activities such as timeline creation and group discussions, the workshop will require long rolls of paper to serve as canvases for timelines, as well as a variety of pens and sticky notes for annotating and organising ideas. These materials are essential for enabling participants to visualise and articulate their generational experiences effectively.

6. **WORKSHOP HISTORY**

This workshop has not been run before, but similar workshops following Adobe’s Innovation Kickbox format [Kickbox Foundation (2021)] have been done before by the researchers.

**REFERENCES**


**URL**: https://www.kickbox.org/


