Alternative Technology Consumption Under Capitalism

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Abstract

Even as large technology companies come under increasing legal and political scrutiny, their market dominance continues to grow. As Big Tech tends toward monopoly, however, people continue to seek out alternative technology systems and uses. What are the conditions that lead people to choose alternatives? What are the long term values associated with having viable alternatives? This SIG presents *alternative technology*, or AltTech, as a growing area of interest for the CSCW community to consider. We invite community members with interests in technology non-use, design for disruption, and post-growth design to join us for a sketch-based speculative discussion to better understand the landscape and future of AltTech.

CCS Concepts

• **Human-centered computing → Collaborative and social computing theory, concepts and paradigms**.

Keywords

alternative technology, critical computing, Big Tech

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1 Introduction

In recent years, there have been increasing calls from lawmakers and politicians to more heavily scrutinize large technology companies like Alphabet, Amazon, Apple, and Meta, including invites to "break up Big Tech." In April of 2025, for example, regulators in the European Union fined Meta and Apple nearly 700 million euros for violating EU antitrust laws [11], and in August of 2024, a federal judge in the United States ruled that Google had acted as a monopolist when it paid other tech companies billions of dollars to feature its search engine [1, 10].

On the other hand, these large technology companies continue to grow their dominance and influence. For example, Google Chrome covers more than two-thirds of the global market for internet browsers. Soon after naming AllTrails, an app that provides maps for outdoor trails, its "App of the Year", Apple began offering its own topographic and trail mapping capabilities natively in Apple Maps [9]. Outages to Big Tech-owned cloud services have been informally characterized as "breaking the Internet", stopping business functions around the world that rely on these services. And, with the rise of artificial intelligence and large language models, Vipra and Korinek [16] have observed that producers of foundation models engage in vertical integration—both in upstream computational power and downstream integration of these models into their products—to tend toward monopoly.

In the midst of these monopolistic forces, however, people continue to seek out alternatives to the offerings of Big Tech. Within HCI and CSCW literature, there has been increasing interest in what we collectively term *alternative technology*, or **AltTech**. Li et al. [7], for example, studied how American users change their uses of technologies in protest of a company's values or actions, finding that nearly a third of survey respondents engaged in some form of protest against a major technology company. In particular, they found evidence of an emergent concern for companies profiting off of users' data. More recently, Mhasakar et al. [8], in their study of Hawaiian educators' views on large language models, argued for data sources that were "Hawaiian-made and Hawaiian-owned" as an alternative to models that may bias Western epistemologies.

At the same time, shifts to AltTech may not be solely attributable to protesting Big Tech. For one, AltTech may be driven by social influences: Fiesler and Dym [3], for example, investigated how fandom communities have repeatedly moved platforms—from Usenet, to Livejournal, to Tumblr, to AO3, to self-owned servers—to better serve community needs. For another, physical environments and constraints may also lead people to seek out AltTech. For example, community-run telecommunication networks offers people the opportunity to directly own and manage their access to the Internet as a cost-effective alternative to more traditional, corporate Internet service providers [4].

In this SIG, we invite discussions around the following questions:

- What motivates users and developers to seek out AltTech? What kinds of conditions are favorable for users to switch to AltTech (or for developers to build AltTech)?

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- What long-term values are associated with having viable AltTech?
- What is the scope of AltTech? Is it limited to only specific systems or technologies, or can it also include alternative communities? Does AltTech have to directly challenge or antagonize Big Tech in its mission?
- What economic models (e.g., cooperatives, commons-based funding) that are alternative to Big Tech's economies of scale can AltTech adopt to compete sustainably?

2 Intended Community

CSCW researchers and professionals with interests in the following may find value in participating in our SIG:

- Acting against harms perpetrated or facilitated by Big Tech [2]
- Cultivating alternative communities and data infrastructures [6]
- Communities of practice around repair and technology design for disruption [5]
- Post-growth or post-capitalist technology design [14]
- Unmaking and/or undesigning technology [15]

3 SIG Structure

To ensure a productive use of the SIG period, we propose the following tentative structure to guide discussion:

Introduction (5 minutes) The SIG co-organizers will give brief introductions about our backgrounds and interests in AltTech. Participants may introduce themselves in a collaborative document if they wish.

Sketching Activity (10 minutes) Participants will participate in a brief sketching activity to share imagery of how and why users within their domain of expertise might choose to consume AltTech options. The purpose of this activity is to invite participants to collectively define the scope of AltTech, guiding the formation of small groups.

Sharing Sketches and Generating Personas (20 minutes) Participants will break out into small groups to share their sketches. The small groups will collaboratively create a persona of either an AltTech developer or user based on their sketches.

Presenting Common Sketch Themes (15 minutes) Groups will present their personas, along with common themes within their groups for how and why users might choose to consume AltTech in different contexts.

Group Discussion (20 minutes) Participants will reflect on the questions listed above, and whether the answers to those questions would change how they compose their personas. We will also discuss next steps for the SIG.

Closing Remarks (5 minutes)

4 Goals

First and foremost, we hope to draw new connections between members of the CSCW from seemingly different domains. For example, the organizers of the SIG offer diverse research expertise in usable security and privacy, networking and rural computing, sustainable development, public data labor, and game design. We expect participants to bring many new perspectives and experiences of AltTech from their own fields.

Additionally, we aim to build a living corpus of literature related to AltTech and also generate concrete research questions for future work in AltTech. To cultivate continued discussion about AltTech, we will make these resources available to participants after the SIG. We will also solicit interest in composing an article about AltTech and the SIG outcomes for submission to ACM Interactions or Communications of the ACM.

5 About the Organizers

Yuxi Wu is a Distinguished Postdoctoral Research Fellow at the Khoury College of Computer Sciences at Northeastern University. She examines how the deep entanglement of algorithmic technologies and digital services into society has resulted in concrete harms to people's privacy. She aims to design collaborative and social systems to help people recover from these privacy losses.

Beatriz Palacios Abad is an incoming Assistant Professor in the Department of Computer Science at the University of New Mexico. Her research lies at the intersection of networking, policy, and human-centered computing. She is interested in measuring and characterizing Internet access and quality of coverage in marginalized communities, particularly in rural and Tribal lands in the United States. Her goal is to support community organizing and self-advocacy efforts in the pursuit of digital inclusion.

Vishal Sharma is an incoming Provost's Postdoctoral Fellow in Engineering at the University of Notre Dame. He studies the design, development, and use of algorithmic systems, including AI, to nurture socio-ecologically just and sustainable futures. His research has introduced the areas of Post-Growth HCI [13] and HCI for Sustainable Development [12] to guide the responsible technology design beyond the capitalist growth logics.

Hanlin Li is an Assistant Professor in the School of Information at the University of Texas at Austin. Her research aims to inform policy and design interventions to incentivize responsible data collection and use. She examines the societal and economic impact of data generated by the public, from rating data to social media comments.

Alexandra To is an Assistant Professor jointly appointed in the Art + Design department of the College of Arts, Media & Design and the Khoury College of Computer Sciences at Northeastern University. In her work she uses human-computer interaction research methods and storytelling to illuminate patterns of racial oppression in technology and critical design and transformational game design to design for BIPOC flourishing.

6 Plans to Attract Attendees

We will share details of the SIG on social media such as Bluesky and LinkedIn, as well as institutional mailing lists and Slack workspaces. We will create a small infographic to be distributed with these posts. We will also proactively reach out to authors on the CSCW 2025 program with relevant research interests to attend our SIG.

7 Primary Contact

Yuxi Wu is the primary contact and will attend the SIG in person.

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