

Request Summary

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Title: Folk Models of Online Behavioral Advertising

Abstract: Online Behavioral Advertising (OBA) is pervasive on the Internet. While there is a line of empirical research that studies Internet users' attitudes and privacy preferences of OBA, little is known about people's *actual understandings of how OBA works*. This is an important question to answer because people often draw on their understanding to make decisions. To answer this question, we conducted two rounds of in-depth interviews of ordinary Internet users.

We have identified four "*folk models*" held by our participants about how OBA works. We show how these models are either incomplete or inaccurate in representing common OBA practices. We also discuss how privacy tools can be designed to consider these folk models.

In addition, our results suggest *what consumers really care about* in the OBA context. Most of our participants felt that the *information being tracked is more important than the web trackers themselves*. In other words, consumers are more concerned about what information (e.g., financial or health-related information) is tracked than who is tracking their information. This implies that the former would be a better motivator/trigger for people's privacy protection than the later.

Implications for privacy design: an information-based blocking scheme might be more desirable for Internet users than a tracker-based blocking scheme used by existing tools (e.g., Ghostery lists trackers on a site). The information-based model presents tracking practices by the type of information being tracked.

Implications for public policy: laws or industry self-regulations should require or recommend web trackers to explicitly express what types of user information they track/collect and why/how they use the tracked/collected data. Most privacy policies do not provide these kinds of information.

Publication:

Yaxing Yao, Davide Lo Re, Yang Wang. 2017. Folk Models of Online Behavioral Advertising. Accepted for publication in the ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2017).

Demonstration:

We plan to demonstrate the four folk models of OBA by showing and explaining the graphs hand-drawn by our participants to visualize their understandings of how OBA works (e.g., different stakeholders in OBA, data flow between the stakeholders, where user data is stored, and who selects the ads).