Towards Usable Transparency Interfaces to Understand Facebook Data Collection from 3rd Parties
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1. Data collection and aggregation happens at scale: How do users react to it?

**Problem**
User activity across multiple sites and apps, even in physical shops, is collected and aggregated.

**Risks:** leaks, misuses, abuses, etc. → Transparency can help!

**Research Questions**
1. How does the “Off-Facebook Activity” tool affect users’ privacy attitudes?
2. What are users’ reactions and intended behavioral changes after exposure?
3. How usable is the “Off-Facebook Activity” dashboard as a transparency enhancing tool?

**Methodology**
- Intervention study
- N=100 participants
- Recruitment through MTurk

**Pre-Usage Questionnaire**
- Informed Consent
- 1. Demographics & Background
- 2. Awareness & Privacy Attitudes
  - Knowledge
  - SLPPC
  - Trust/Risk Beliefs
  - Strategies
  - Comfort

**Intervention**
- OFA Usage
  - Navigate their Off Facebook Activity Dashboard

**Post-Usage Questionnaire**
- 3. Reactions
  - Feelings
  - New/Surprising Information
- 4. Intended Behavior
- 5. Usability & Usefulness
  - 5GQs, Likes, Dislikes, Suggestions
  - Ability to make better decisions
- 6. Privacy Attitudes [repeated]

2. Results: User Reactions to Facebook Data Collection

Please list three feelings you have after using the “Off-Facebook Activity” tool.

**Overall Sentiments**
- Positive
- Neutral
- Negative

**Top 12 Feelings**
- Surprised
- Shocked
- Worried
- Annoyed
- Protected
- Happy
- Nervous
- Scared
- Confused
- Positive
- Neutral
- Negative

3. Results: Impact on Privacy Attitudes

If I don’t explicitly realise or remember that I’m giving my permission to a company to share my business with them, I should be able expect confidentiality in the same way I would from a public service such as a Library or Doctors Surgery. (P12)

“I won’t take any other action because I don’t know how to, I feel hopeless.” (P67)

“Over 500 listed, I am in shock, how do I remove all of these without having to go through one by one?” (P76)

“I genuinely had no idea that so many websites and apps feed information back (sold my information?) to FB. For instance, one of my banks that I use an app for has a marketing app that sends info to FB. I mean really... FFS. If I can trust anyone, it should be my bank.” (P175)

Participants:
- Were shocked about amount of collected information
- Felt significantly less comfortable with data collection
- Want to protect themselves but feel unable

Current consent notices don’t work well!!

4. Results: Usability

**TRANSPARENCY**
- Level of detail of the information is vague

**CONTROL**
- Limited actionable means to exercise privacy rights

**INTERFACE**
- Meaningful visualizations needed, data exports are hard to interpret

5. Reference