Consent Management Experiment

ANONYMOUS AUTHOR

If at any point you have any questions about the study, please reach out to maximilian.hils@uibk.ac.at.

1 STUDY OBJECTIVE

The objective of this study is to determine whether accepting or rejecting cookies has an influence on the advertisements that are shown on websites. We want to test how providing consent influences the amount of personalization seen in ads.

2 RESEARCH ETHICS

Participation as a rater in this study is voluntary. All data you submit will be published as supplementary material of the research paper documenting this study. You may withdraw from the study at any point in time and delete the data you have submitted so far.

As part of this study, you will be asked to visit websites that relate to engagement planning. Due to the pervasiveness of adtech tracking, your partner or other members in your household may see wedding/engagement-related advertisements on their devices in the next few days. If this is uncomfortable for you, do not participate as a rater in this study.

As part of this study, you will be asked to submit website screenshots. These screenshots contain advertisements, which may show contents related to your personal interests. You may skip any screenshot you do not wish to share.

3 STUDY DESIGN

This study consists of three parts. First, you will *setup* your browser to be ready for the measurements. Second, you will *prime* your browser profile cookies by visting websites that relate to engagement planning. Finally, you will visit websites randomly drawn from the most popular websites in Austria and *measure* if there are advertisements relating to this topic.

3.1 Setup

(1) **Decide which browser and browser profile** you want to use. To increase the accuracy of our study, we would appreciate if you could use your normal browser profile (which already carries cookies that are associated with human-like behavior), but you may also create a new browser profile if you are uncomfortable with using your normal profile.[1] Unless you are using Safari, please create a profile and do not use incognito mode. Incognito mode is commonly detected by advertising companies. You can delete the profile after completion.
(2) **Deactivate all adblocking and anti-tracking** browser extensions.
Disable your VPN if you use any.

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[1]**Chrome/Edge:** Start Chrome and click on the user icon in the top right. **Firefox:** Enter `about:profiles` in the URL bar. **Chromium:** `chromium --user-data-dir=/tmp/chrome` **Safari:** Not possible, use incognito mode instead.

Author's address: Anonymous Author, anon@anonymized.

3.2   Priming Phase

Start priming the browser profile **for ten minutes**:

(3) **Pretend to be someone who is planning to propose to their significant other**. Search for engagement rings, diamonds, proposal tips, wedding things, and so on to make advertisers believe that you are interested in this topic.
- Do everything in German if possible, otherwise in English.
- If you encounter any cookie prompts, accept them.
- Make sure that you actively engage (scroll, click around, search on site, …) with websites for more than a few seconds. This is a common method to detect bots.
- You may also improve priming by including searches on Instagram/Facebook/etc.
- Please do not click on advertisements.

3.3   Measurement Phase

We want to measure whether your priming has an impact on the ads you are seeing now.
Take the last digit of your matriculation number. If it is a...

- **0, 1, or 2**: You are lucky: Your strategy will be to *accept* all cookie dialogs in this phase.
- **3, 4, or 5**: Your strategy will be to *reject* all cookie dialogs in this phase, but not object to legitimate interests. This is typically done by clicking a "Reject All" button in the dialog (if one exists), or by clicking "More Options" and then something like "Save & Exit". Imagine a regular human being who does not want to be tracked, but also wants the dialog to go away.
- **6, 7, 8, or 9**: Your strategy will be to *reject all* cookie dialogs and object to all data processing based on legitimate interest ("Berechtigtes Interesse"). In other words, you want to exercise the maximum amount of privacy options available to you. This often means clicking "More Options", then searching for a legitimate interest button, and then manually objecting to each purpose.

For simplicity, you perform the same action (either accepting or rejecting cookies) on all webpages. Next, do the following:

(4) **Open** <URL> and select the correct sheet.
(5) **Take the first participant ID** where no measurements have been entered yet.
(6) **Enter your metadata** (browser, operating system, primary language) into the first row with your participant ID.
(7) **Visit each website** listed under your participant ID:
  (a) **Complete the consent dialog** if it exists and if your action is possible (some dialogs have no reject button – don't do anything then if you are in one of the reject groups).
  (b) **Check if there are advertisements,** and if they are personalized.
  (c) **Make a screenshot** of the browser window if (and only if) there are personalized ads, i.e., ads related to engagement/marriage things.[2] In the spreadsheet, at the very bottom, select the sheet belonging to your participant ID and upload the screenshot there.
  (d) **Enter your observations** into the spreadsheet.

After completing the measurement phase, make sure to reactivate your adblocking browser extensions. Thank you! :-)

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[2]**Windows/Linux:** Focus the browser window, press Alt+Print (Alt+Druck). The screenshot is now in your clipboard, and can be pasted into the spreadsheet. **macOS:** Press Shift, Command, and 4. In the spreadsheet menu, click Insert, then Image, and select the screenshot file on your desktop.