



# The Recipe for the Perfect Batch: Assessing New Cookie Category Terms

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## Background

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In 2012, the UK's International Chamber of Commerce (ICC) published a cookie guide outlining and defining cookie categories. These categories and definitions have not been changed since then. Recent research has suggested that people don't understand the terms that the ICC UK Cookie Guide suggests.

### Research Questions

What terms/phrases could better describe the different types of cookie categories?  
Do these terms/phrases provide a better understanding of cookie categories than the existing set of terms?

## Cookie Categories

ICC UK Cookie Guide splits cookies into 4 categories: [1]

- **Strictly Necessary Cookies:** Cookies essential to enable users to move around the website and use its features.
- **Functional Cookies:** These cookies allow the website to remember choices that users make to enable enhanced and personalized features.
- **Performance Cookies:** These cookies collect information about how visitors use a website
- **Targeting/Advertising Cookies:** These cookies are used to deliver advertisements more relevant to the users and their interests.

## Methodology



Focus group: Privacy experts brainstormed alternative cookie category terms.



Survey 1: 90 Prolific participants ranked how well the original and alternative cookie category terms match the given ICC Guide definition.



Survey 2: 120 Prolific participants answered questions to measure comprehension of the proposed alternative cookie category terms versus the original terms.

## Data Analysis

### Survey 1

We used Likert responses to determine which terms were evaluated by participants as matching the definitions most well and least well. Using these responses, as well as feedback gleaned through emergent coding of the reasons for their preferences, we selected terms to test in our comprehension survey (Survey 2).

### Qualitative Coding

We used coding to differentiate between "positive" and "negative" responses. Participants had positive reactions to terms that seemed to be intuitive, comprehensible, and concise and negative reactions to those appearing to be confusing or wordy.

### Survey 2

We calculated the proportion of correct answers for each comprehension question. Within each cookie category, we conducted paired t-tests to compare the comprehension of all alternative terms to original terms with an alpha of 0.05 and used Holm corrections to handle Type 1 errors.

## Results

### Strictly Necessary Cookies

No significant difference in comprehension between the original term, Strictly Necessary Cookies, and suggested alternative terms **Necessary, Functional, and Website Function**. However, coding results from Survey 1 suggested that users prefer more concise terms. Future work should focus on testing whether the shorter alternative terms, Necessary and Functional, should be employed in cookie interfaces instead.

### Functional Cookies

Significant difference in comprehension when participants were presented with either of the alternative terms, **Personalized Experience Cookies** and **Preferences Cookies** relative to the original term. The majority (65%) of participants in our study thought that Functionality Cookies were "cookies that are needed for the website to work properly."

## Results

### Performance Cookies

Significant difference in comprehension when participants were presented with **Analytics Cookies** relative to the original term.

### Targeting/Advertising Cookies

Significant difference in comprehension when participants were presented with any of the alternative terms, **Marketing Third-Party Advertising**, **Personalized Advertising** and the co-original term **Advertising Cookies** relative to the original term, Targeting Cookies.

Our study is consistent with prior findings from Habib et al. that showed that the terms "Performance Cookies" and "Functional Cookies" were significantly misunderstood [2]. Our findings also suggest that a review of the ICC UK Cookie Guide should be undertaken to ensure that users are presented with understandable cookie terminology when interacting with cookie consent interfaces.

## Future Work

- Compare the comprehension of our study's better understood terms to decipher the "best" term for each cookie category
- Facilitate focus groups with privacy experts and non-experts to surface new terms
- Test the comprehension of the terms suggested by Survey 1 participants
- Consider revising the ICC Guide's cookie category definitions since many Survey 1 participants found them confusing
- Conduct follow-up studies in situ to ascertain comprehensibility in a real-world context

## References

[1] ICC UK Cookie guide. Technical report, International Chamber of Commerce, London, UK, November 2012.

[2] Hana Habib, Megan Li, Ellie Young, and Lorrie Faith Cranor. "okay, whatever": An evaluation of cookie consent interfaces. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, CHI '22, New York, NY, USA, 2022. Association for Computing Machinery.