

The Influence of Choice Architecture on Privacy Decisions: Effects on Control, Comprehension, and Disclosure

[Masters]

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Privacy decisions are increasingly made through user interfaces that determine how options are presented, ordered, explained, and configured by default. Such **choice architectures** can make privacy choices easier to understand and exercise, but they can also steer users toward particular decisions. For example, defaults, visual prominence, simplified choices, and framing may influence whether users disclose personal information without necessarily improving their understanding of the consequences. The problem is that there is limited understanding of how different choice architectures affect privacy decisions, comprehension, perceived control, and confidence, and under what conditions they support meaningful rather than manipulative choice.

Research Questions:

- RQ1.** What choice-architecture patterns are commonly used to support or influence users' privacy choices?
- RQ2.** How do different choice-architecture designs affect users' privacy decisions, comprehension, perceived control, and decision confidence?
- RQ3.** Under what conditions does a privacy choice architecture support meaningful choice rather than manipulate the user's decision?
- RQ4.** What design principles can be derived for privacy-preserving and user-respecting choice architectures?

To answer the aforementioned questions, this student is expected to

1. Conduct a concise literature review covering privacy choices, choice architecture, nudging, and privacy-related interface design. Identify and classify relevant choice-architecture patterns.
2. Identify and classify existing privacy choice architectures, listing their key characteristics, and specify how each can be implemented in a user interface.
3. Develop a simple web application with representative privacy decisions and alternative interface versions implementing the identified choice architectures.
4. Conduct one or more controlled experiments in which participants interact with different versions of the web interface. Evaluate their privacy decisions, comprehension, perceived control, decision confidence, and perceived fairness/manipulation.
5. Compare the experimental conditions and use the findings to identify when particular choice architectures support meaningful privacy choices. Based on the results, derive practical design principles for privacy-preserving and user-respecting privacy interfaces.