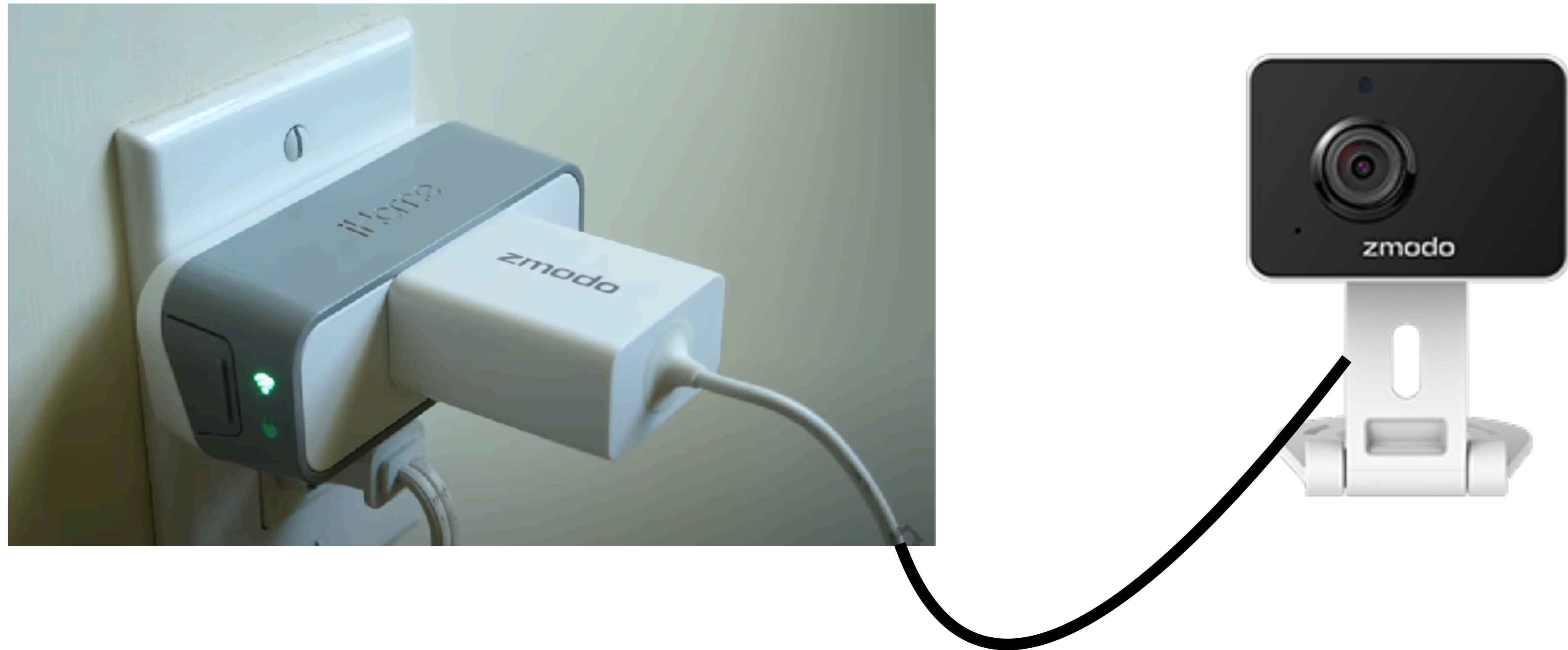


Exploring the Needs of Users for Supporting Privacy-Protective Behaviors in Smart Homes



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Yaxing Yao, Swarun Kumar, Yuvraj Agarwal, Jason I. Hong

Home security camera + smart plugs



Users are improvising tricks to protect their privacy.

↑ Posted by u/Thematturals 4 years ago

3 **Wyze Cam into a smart plug?**


↓

Has anyone used a smart plug to control when the wyze cam is on? I would like it to only notify me when I am not home I, but would turning the camera on and off cause any issues?

10 Comments Share Save Hide Report 81% Upvoted

Home Security Camera Privacy...Solved with Smart Plugs!

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Home security camera companies would love for everyone to install their cameras both outside AND inside your home. But isn't that a little bit creepy? To be sure that your security camera isn't monitoring you when it shouldn't be, automate its power with a smart plug. It's really simple to do and doesn't require a "smart home system" either.

↑ Posted by u/johnkhoo 1 year ago

32 **Guest Mode: An easy privacy control for your home devices**

↓

blog.google/produ...



7 Comments Share Save Hide Report 88% Upvoted

↑ Posted by u/TheGreatestCapybara 3 years ago

2 **Recommendations for a home camera respecting my privacy**

↓

My appartement was robbed a couple of days ago, and I'm looking for an indoor camera to install in front of my door in case it happens again (mainly because my girlfriends wants one). But I'm generally mindful of my privacy online, and having a camera inside my house is extremely worrying to me. Here's what I would want, ideally :

- No Amazon or Google cameras, I don't trust these companies
- Local storage and backup to the cloud, ideally one that I can host myself (I'm thinking of getting a VPS for a bunch of other things). I would need the cloud backup to be done quickly, in case the burglar sees the camera when entering and smashes it straight away.

↑ Posted by u/kmg6284 1 year ago

0 **use of wyze cams inside your home**

↓

i have 3 of the cams setup on the exterior of my house. i never considered using them on inside of house plus the family had NO interest in being subject to video recording while indoors. if you use the cams indoors, why ? if your answer is "to watch the house" then wouldn't using cams on the exterior of house accomplish the same thing while not invading privacy of your family members?

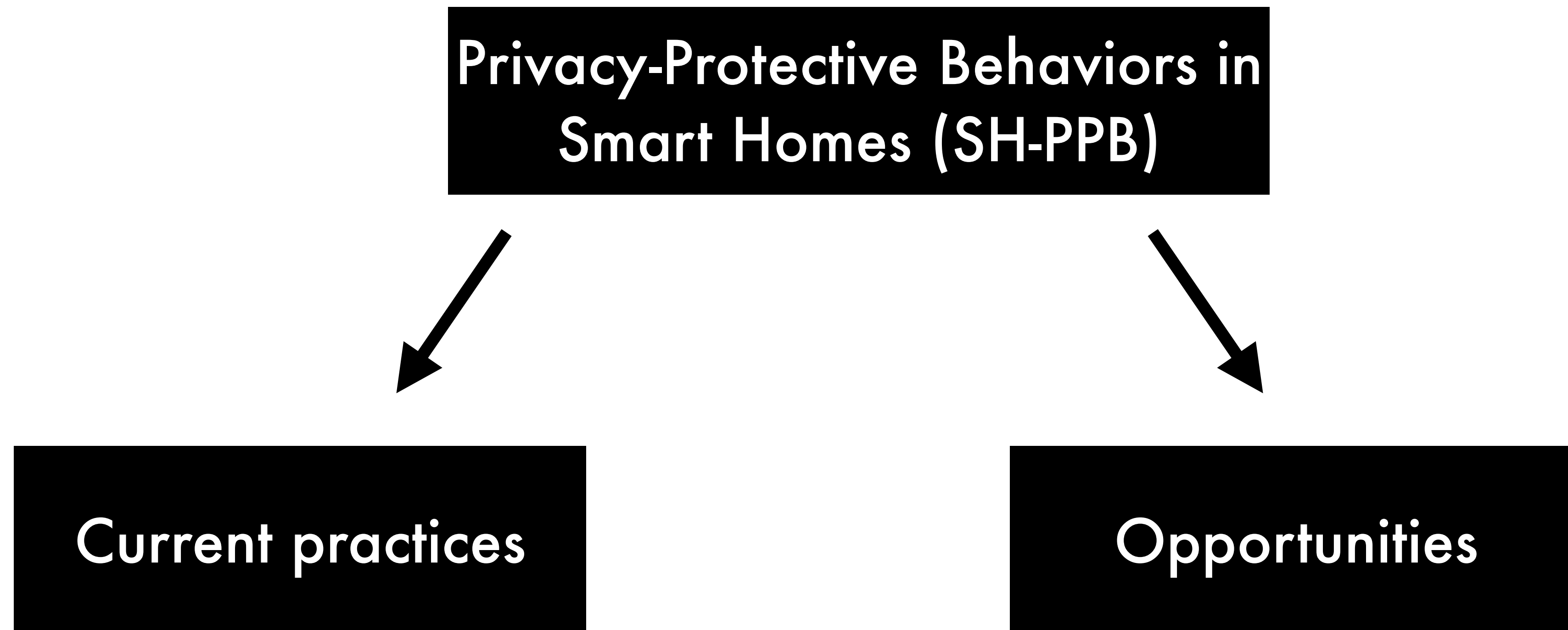
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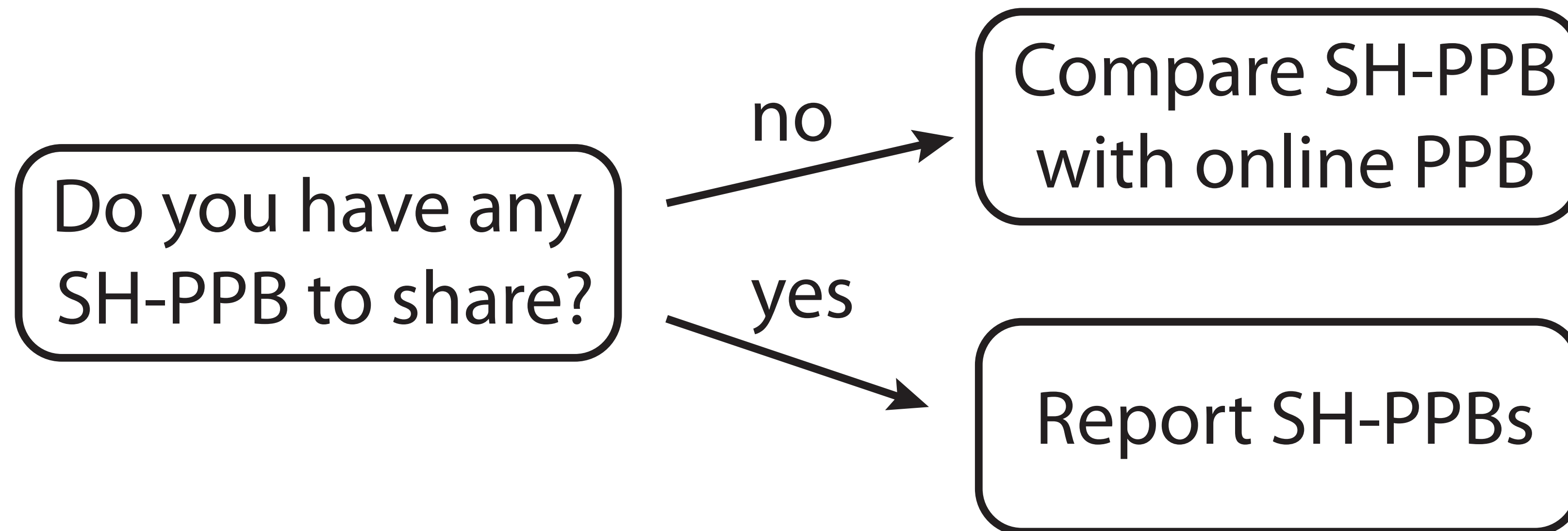
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Research goals



Method (1)

Current practice inquiry surveys (N=159)



Method (2)

Generate storyboards about privacy protection

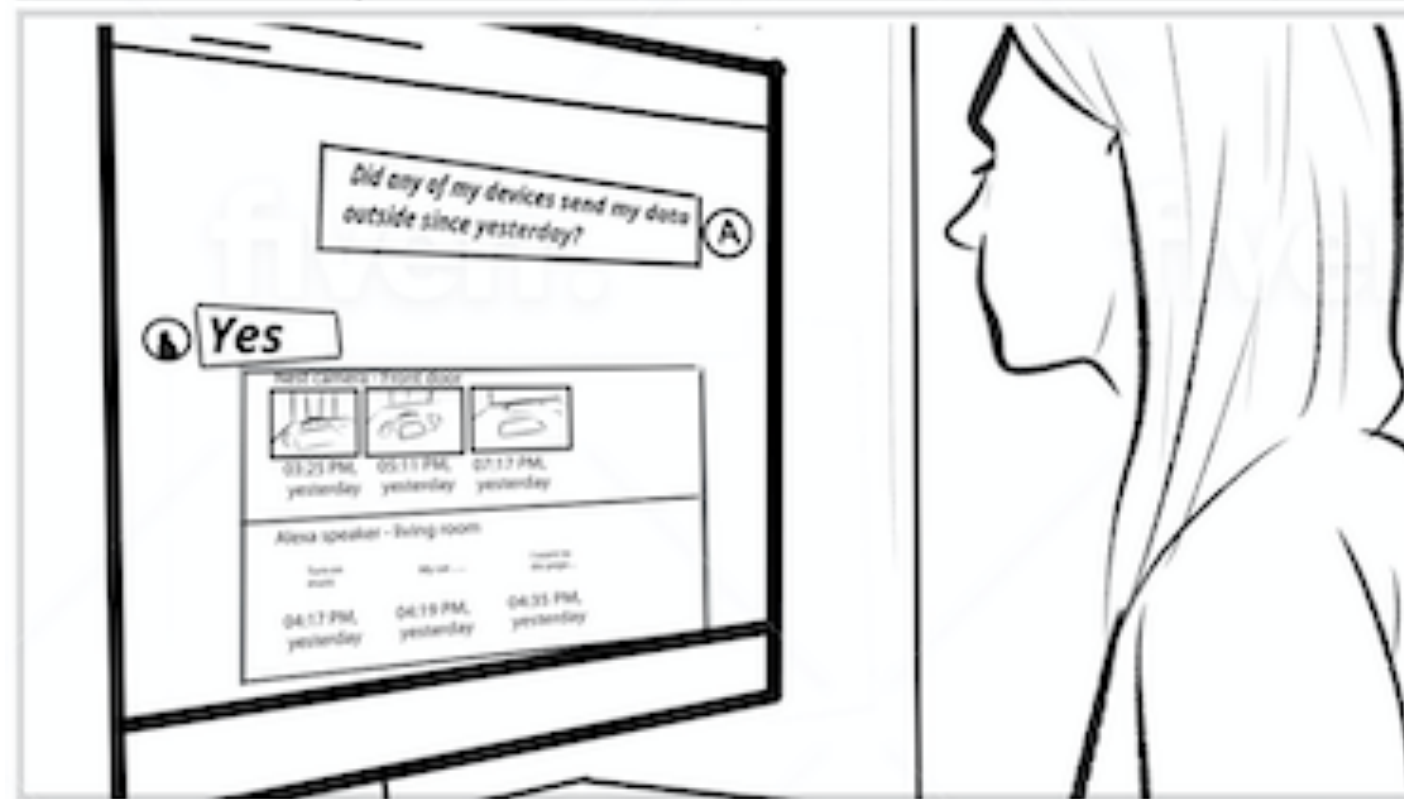
Context



Problem



Privacy protection concept

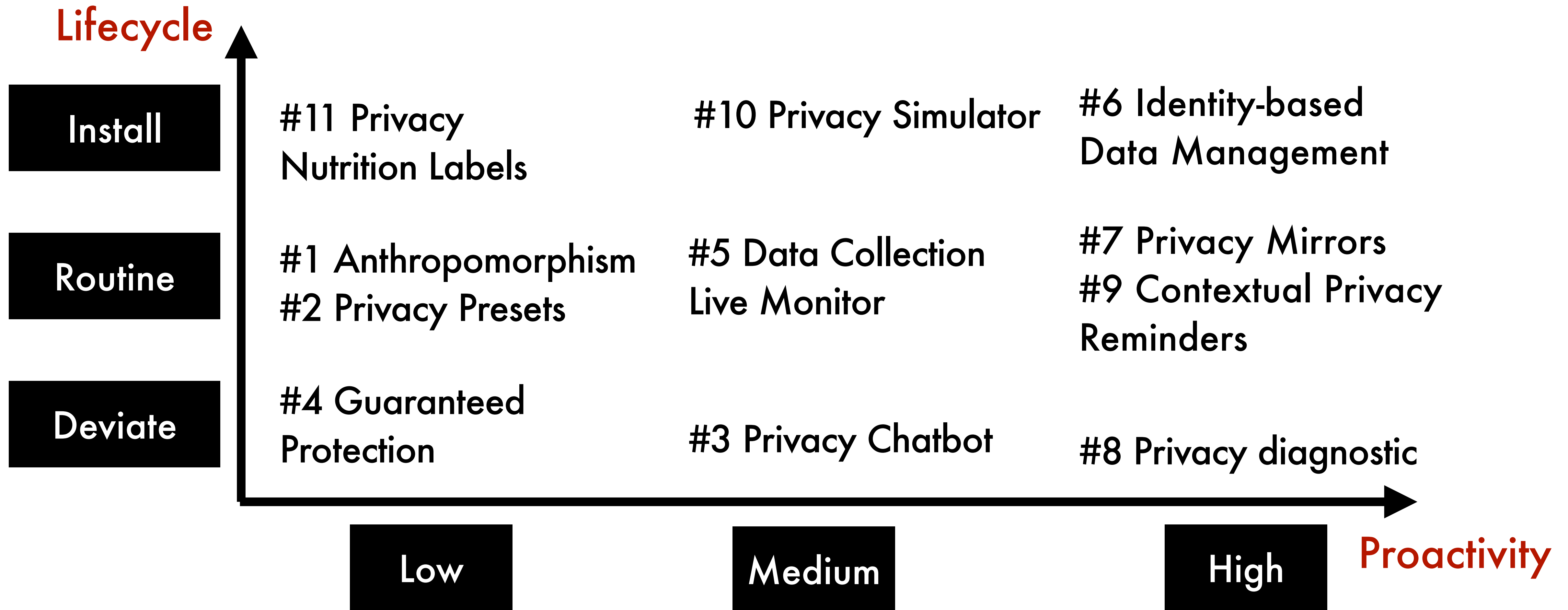


Users' reactions



Method (3)

Seek privacy protection concepts to address needs



Method (4)

Speed dating surveys (N=227)



Each participant **critiques** and **ranks** three storyboards.

Results

Current practices

52% participants have SH-PPB

33 unique SH-PPBs

71% SH-PPBs leverage physical control (e.g.,
powering off, blocking, dodging cameras)

70% SH-PPBs protect participants and their families

Users' needs

18 types of wishlist features

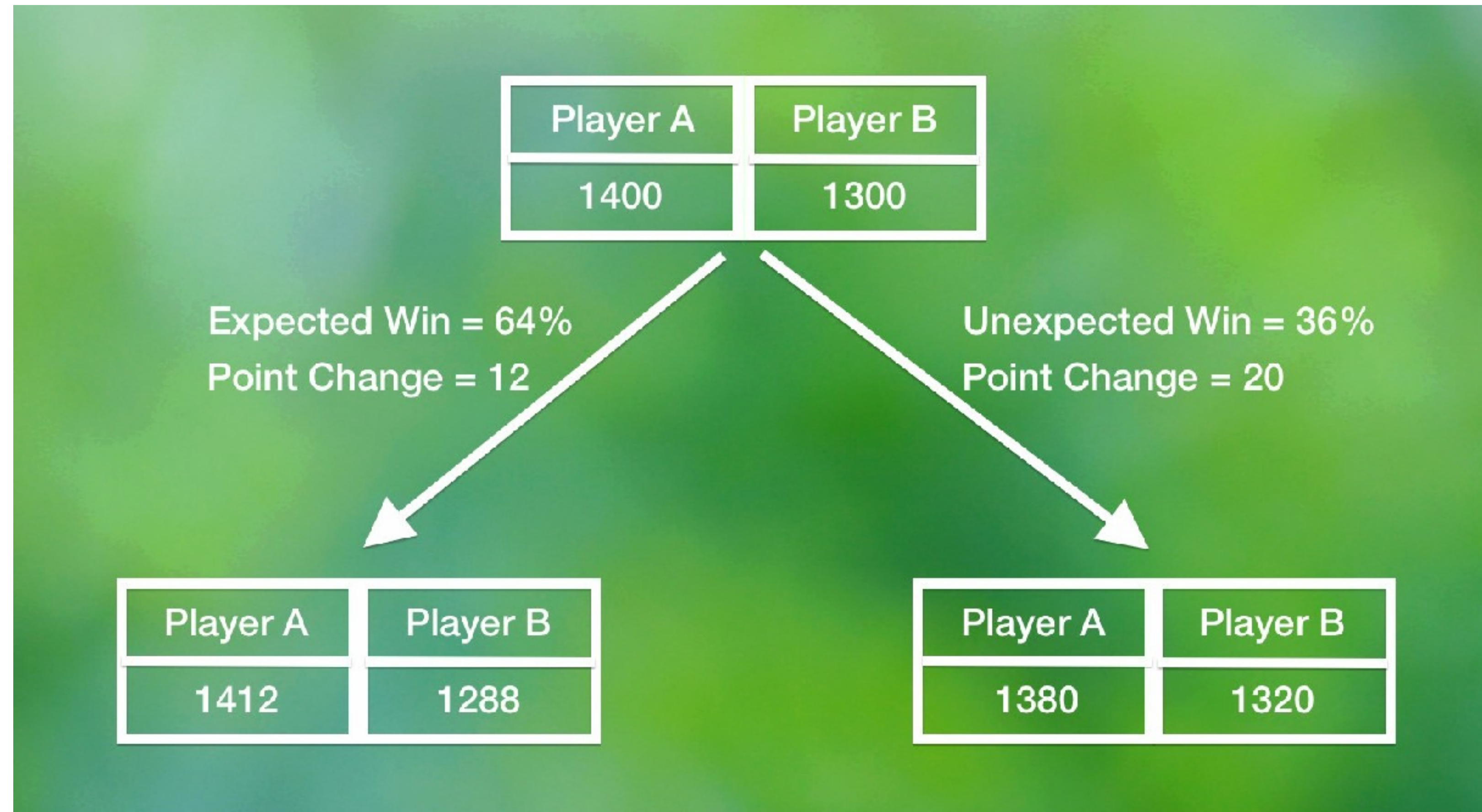
- Better on/off control (most common)
- Fine-grained data collection
- Better awareness
- Usability

3 barriers for SH-PPB

- Awareness
- Ability
- Motivation

See details in the paper

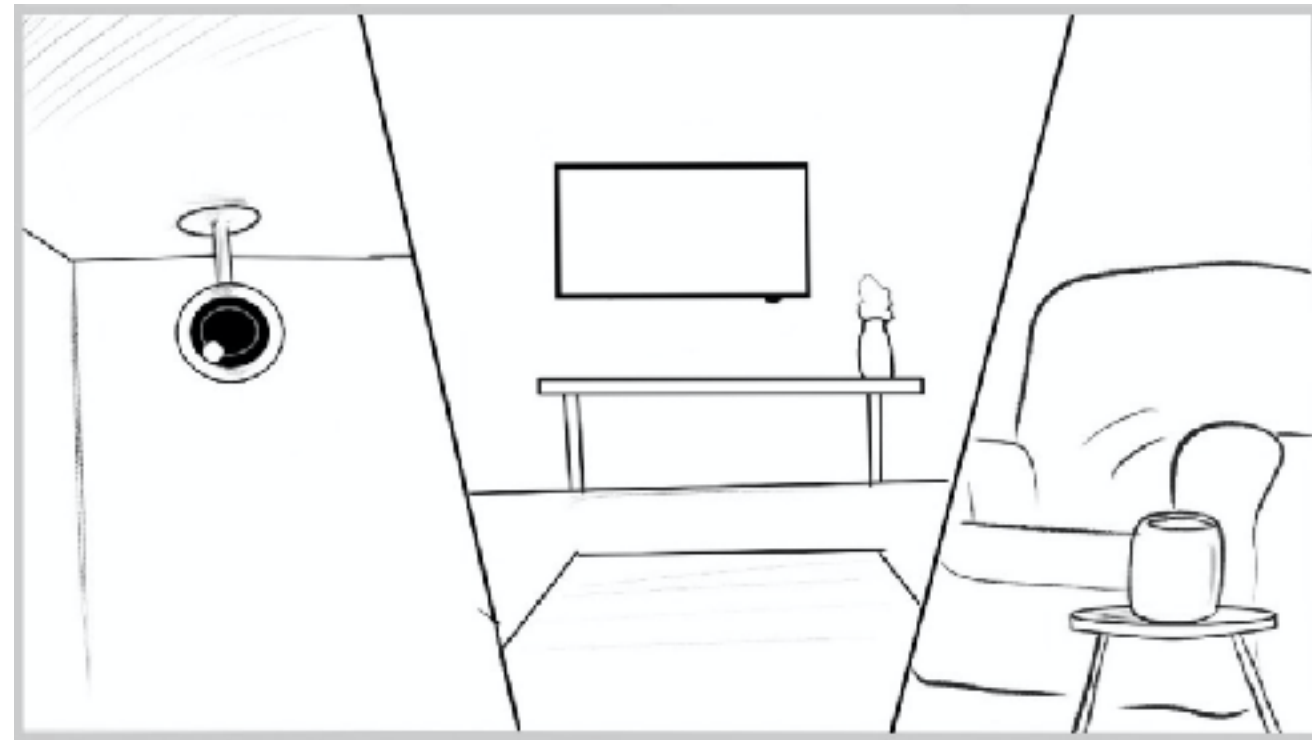
The Plackett-Luce method



similar to how the rating system ranks chess players.

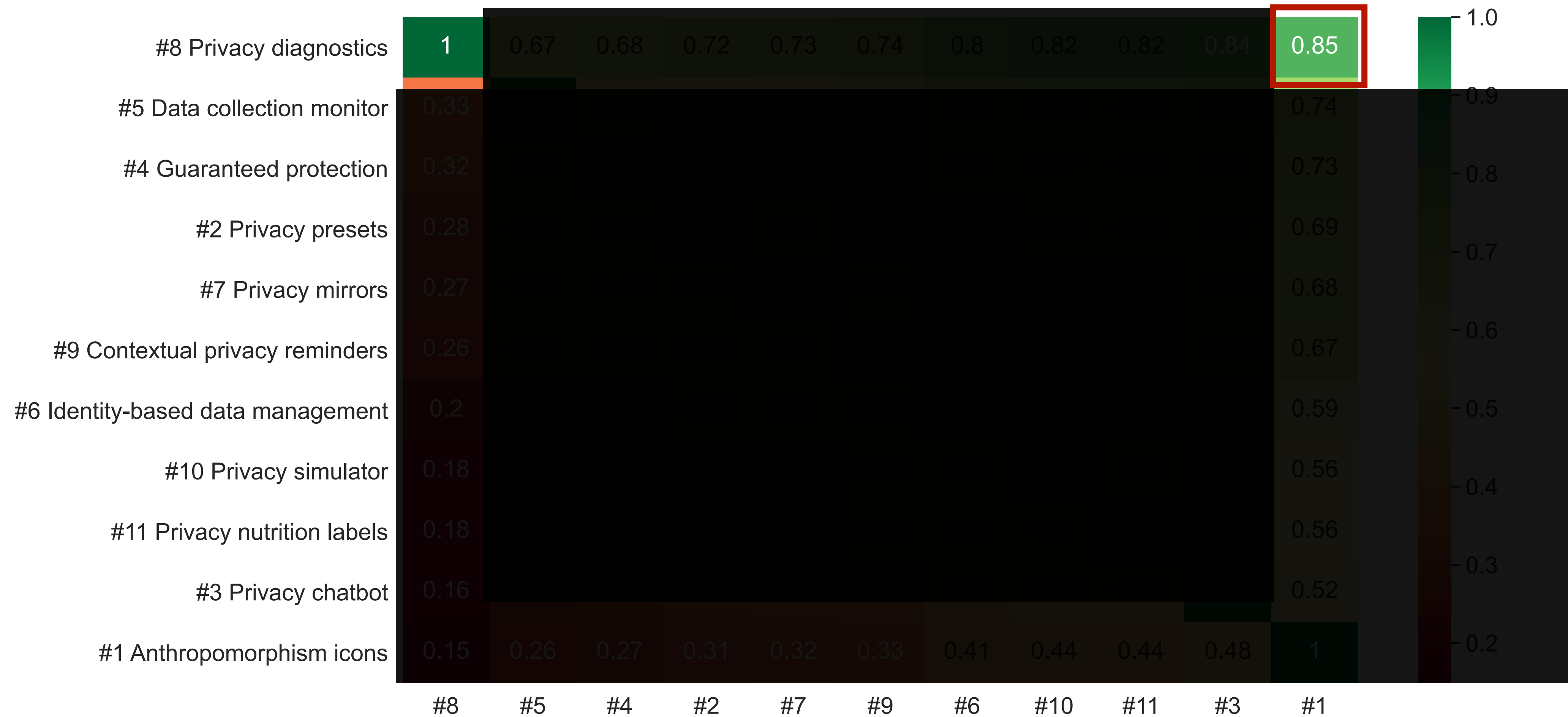
Most favored concept

Privacy diagnostics



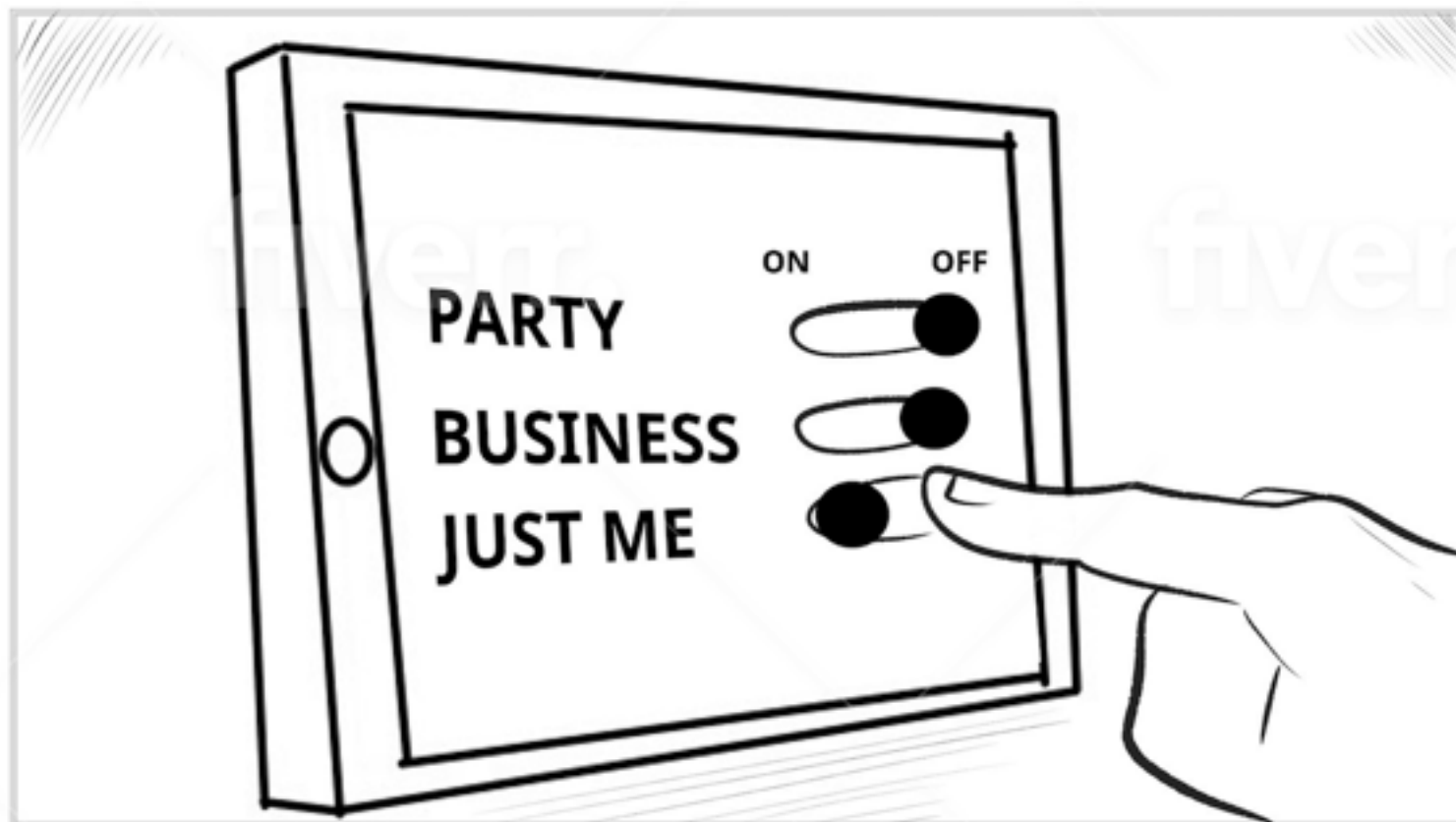
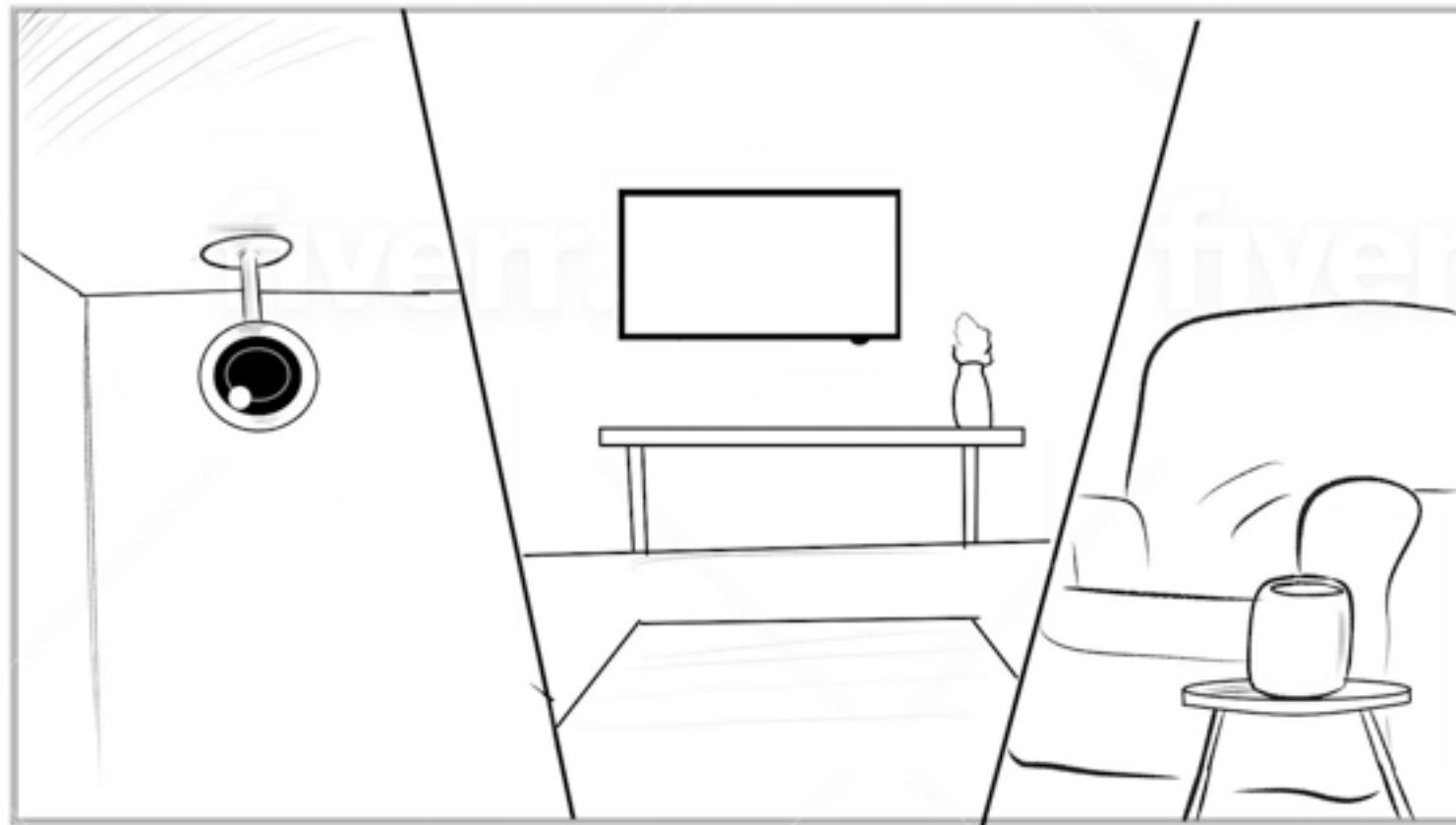
Note: storyboards in the surveys have captions.

Merge partial rankings into a global order



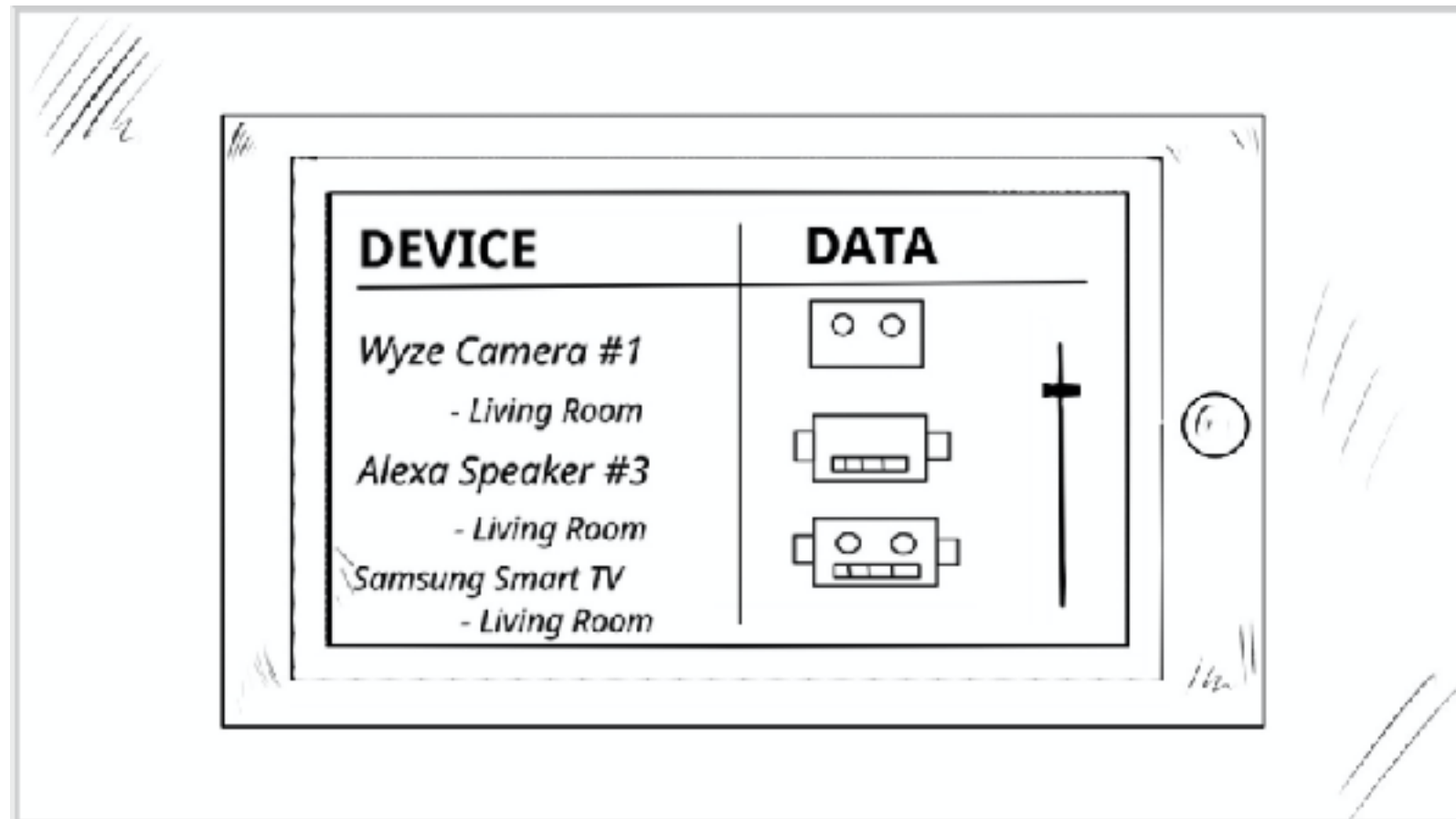
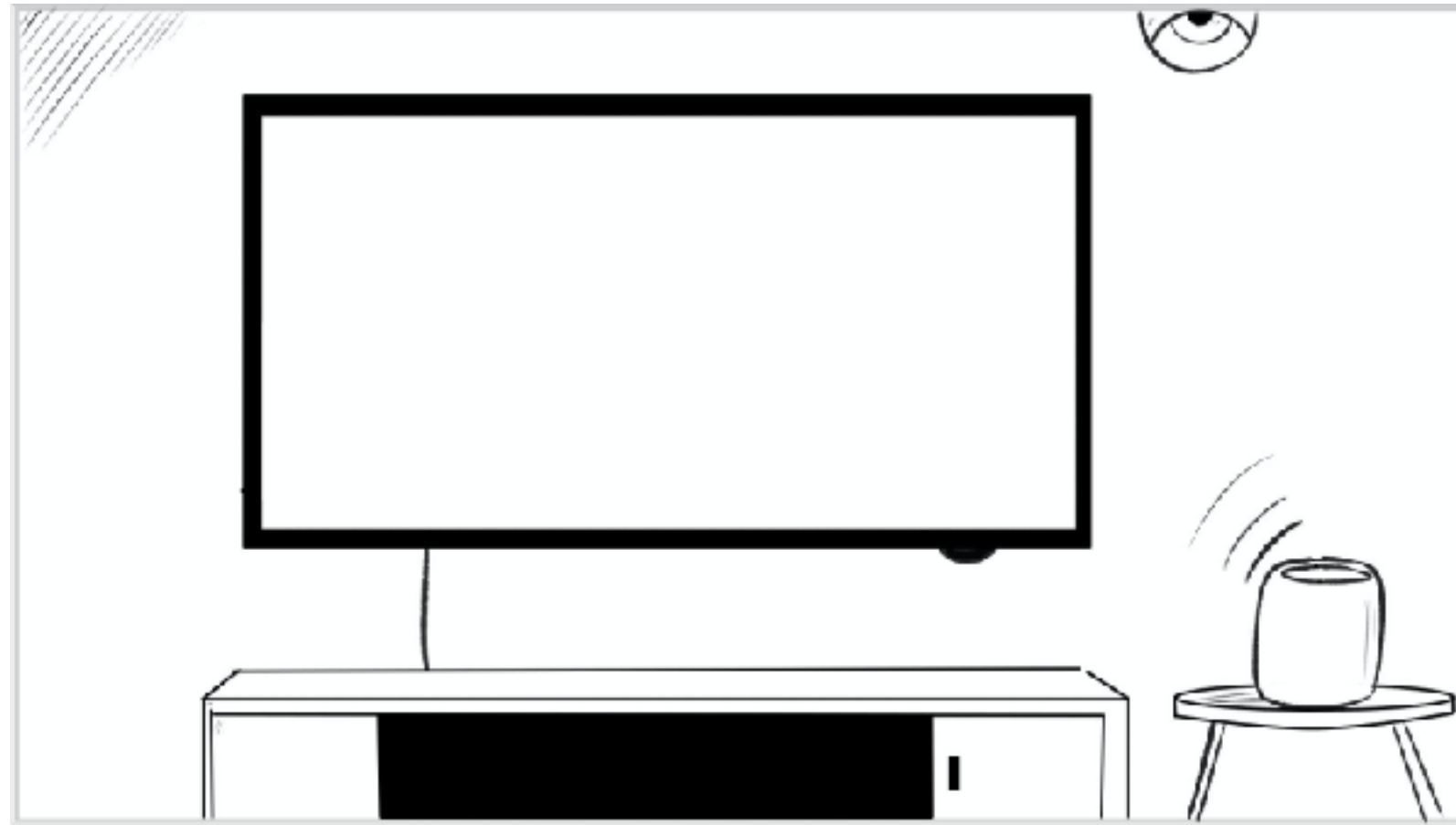
Privacy presets, 4th

Users prefer **simple** solutions that can **offer more controls**



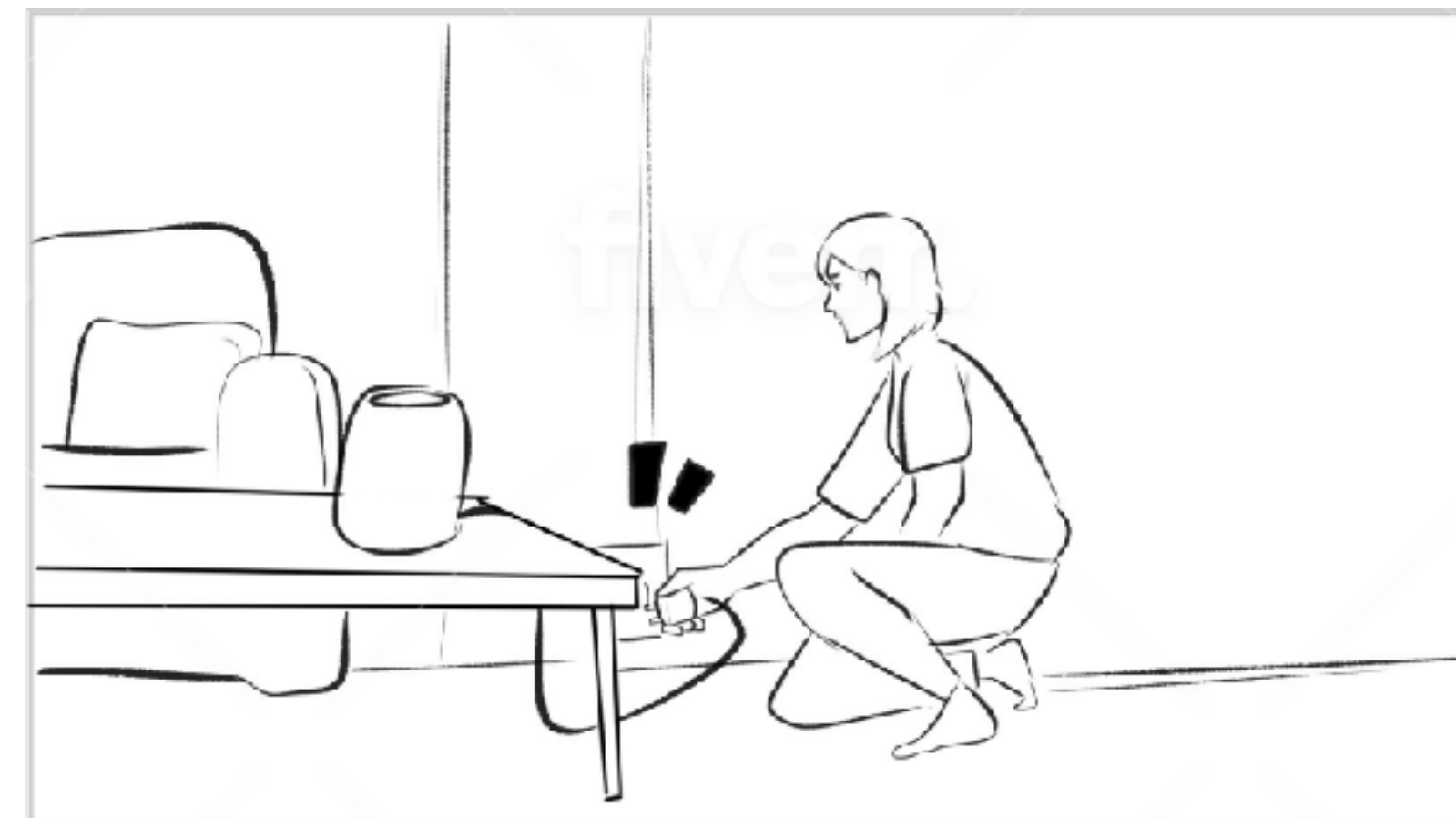
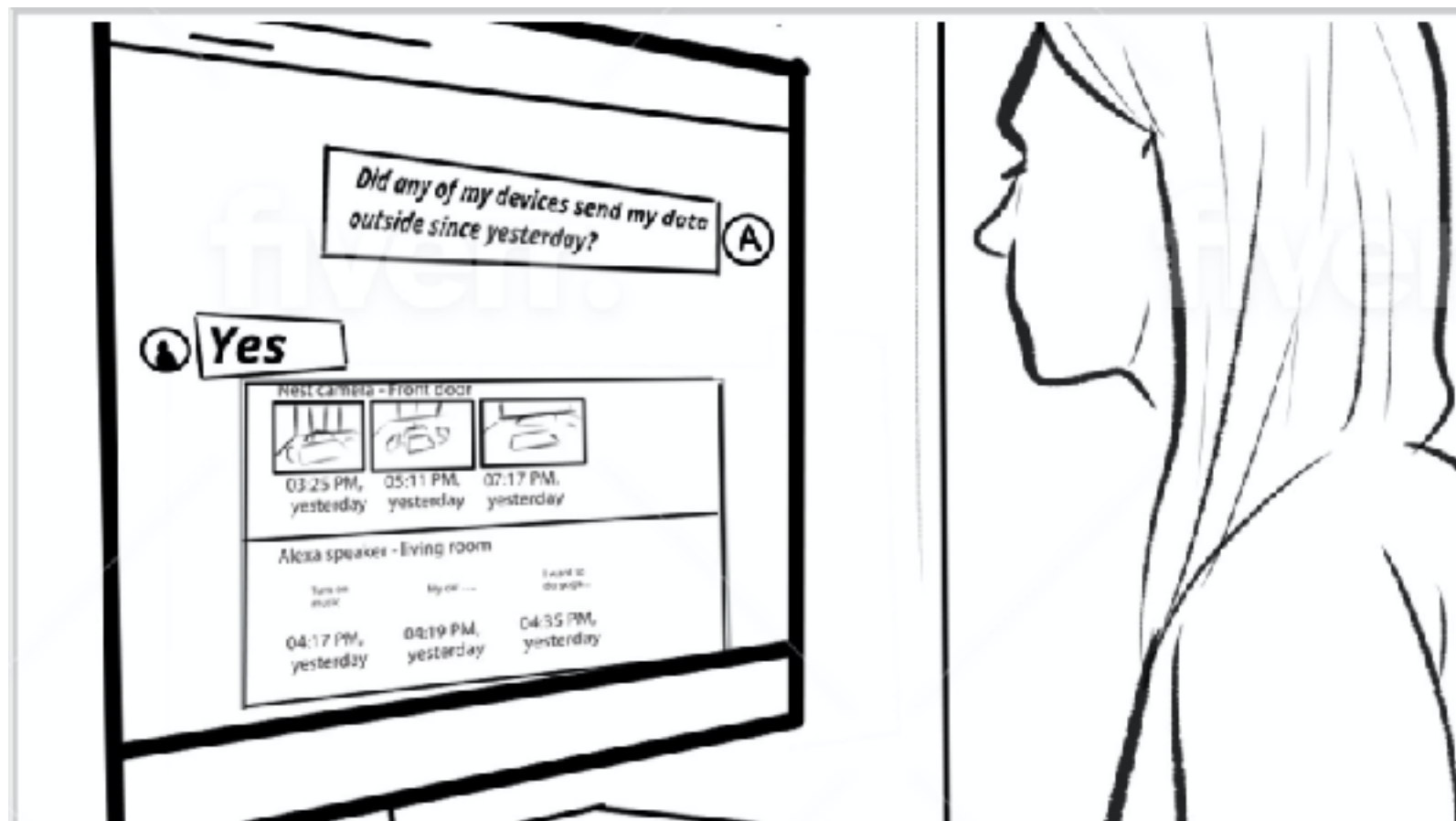
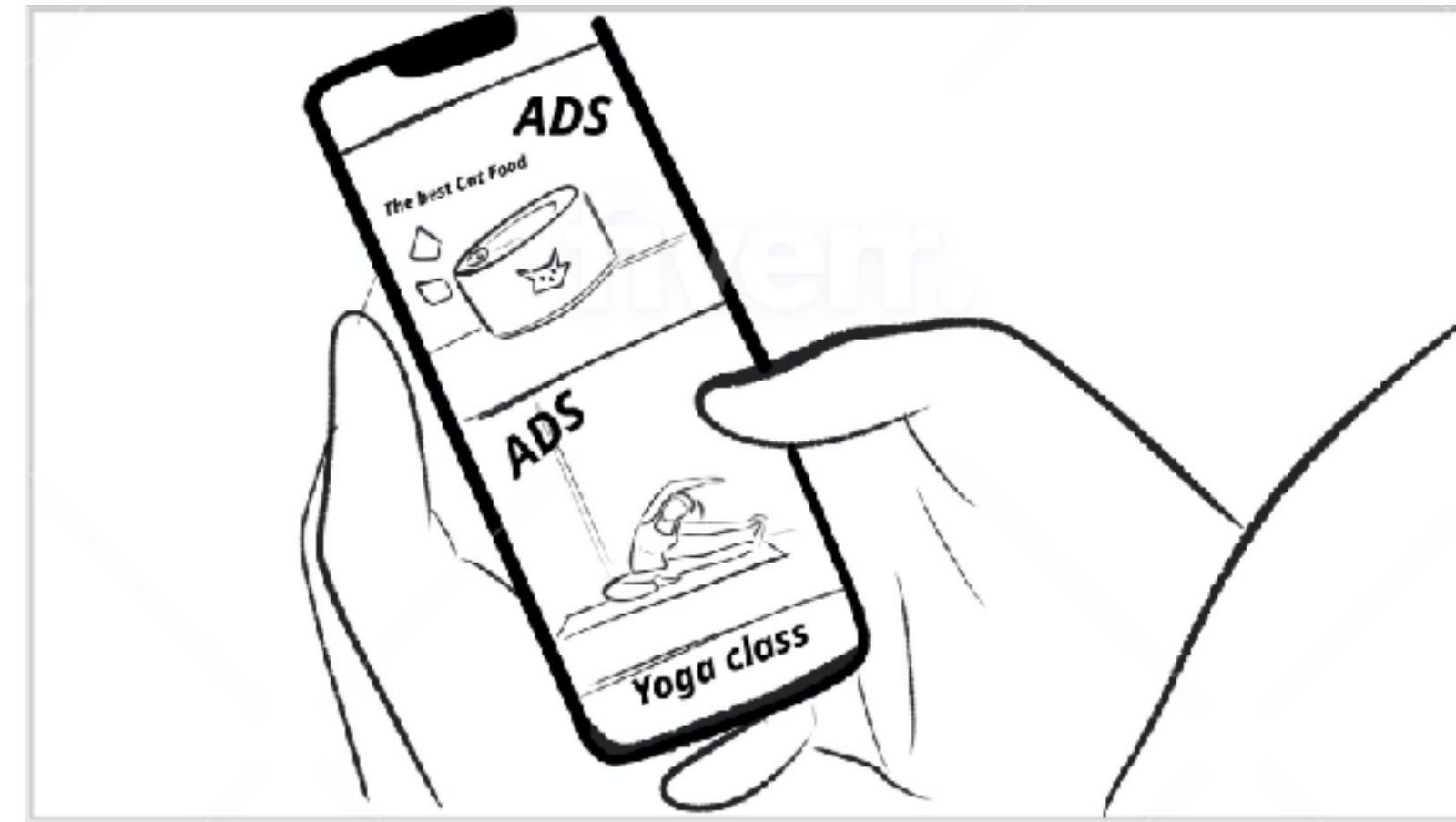
Anthropomorphism icons, 11th

A solutions that can do not offer controls

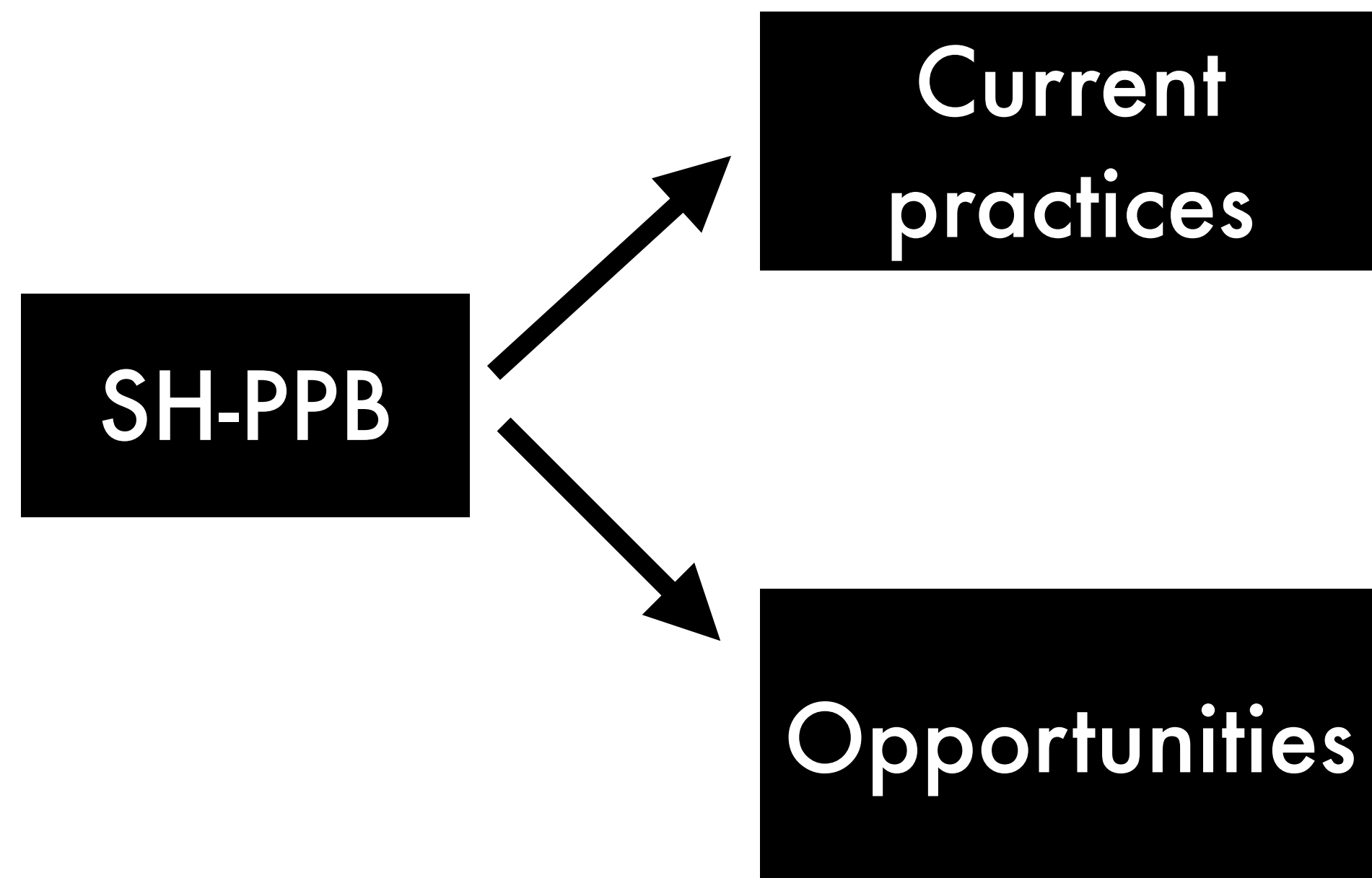


Privacy chatbot, 10th

Users prefer **proactive** and **preventative** solutions



Recap



33 unique SH-PPBs

71% SH-PPBs leverage physical control

Privacy diagnostics is most preferred.

(1) Simple, (2) proactive, (3) preventative solutions that can (4) offer more control