While technology and regulation may change rapidly, there are fundamental truths about privacy UX that remain constant over time.
Understanding these truths can help us **design products** that respect users’ privacy
Privacy UX truths and design guidelines

3 privacy truths
Representing user needs drawn from research

3 design guidelines
to address these truths in products
3 privacy truths
Privacy UX truths and design guidelines
Alyssa
School Teacher
2009
2009

- **Avatar** was the top grossing film
- The year of the social network
- No Instagram

Alyssa loves social networks.
She is trying to lose weight, and is worried her friends will see her weight loss ads.
Alyssa was tagged in a picture, and is worried that her boss may have seen it.
Despite having these concerns, she still **dismisses** privacy reminders.
Privacy UX truths and design guidelines

Riku
Financial Advisor
2019
Privacy UX truths and design guidelines

2019

- *Avengers: Endgame* is the top grossing film
- IoT is on the rise
- Instagram is thriving

Riku loves new technology and has invested heavily in IoT throughout his home.
When he tried to access his settings, he was frustrated by the overwhelming amount of information.
Privacy UX truths remain consistent over time

3 themes about truths around privacy UX needs drawn from research

01 Privacy is complex and contextual.

02 Multiple factors shape privacy “ABCs” (attitudes, behaviors, comprehension).

03 Privacy is often not users’ main task, even though it’s important to them.
Privacy is complex and contextual
Privacy is a complex concept with many interpretations.

People face a variety of security and privacy threats

- Companies
- Local threats
- Hackers
- Government
Global survey participants were concerned about....

Hackers 77%

Tech companies 47%

Friends & family 25%
Privacy attitudes and needs are contextual — everyone is privacy sensitive sometimes.

A user might think it’s generally useful to save their shopping activity...but might become privacy sensitive when looking for an engagement ring.

When I watch online movies, the movies open in a pop-up player of a third party. They don’t care about what kind of people are watching. They show ads of scantily-clad women. I was watching it with my mom [once] and it became pretty embarrassing.”

Source: Agarwal et al. “Do Not Embarrass…” SOUPS. 2014
Geographic and cultural differences exist (and matter)

Privacy perceptions differ across 15 countries

How possible is it for you to have privacy in today’s world?

<table>
<thead>
<tr>
<th>Country</th>
<th>Slightly Possible / Not at all Possible</th>
<th>Somewhat Possible</th>
<th>Extremely Possible / Very Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>8%</td>
<td>22%</td>
<td>71%</td>
</tr>
<tr>
<td>Ghana</td>
<td>8%</td>
<td>22%</td>
<td>70%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>11%</td>
<td>18%</td>
<td>63%</td>
</tr>
<tr>
<td>China</td>
<td>14%</td>
<td>26%</td>
<td>62%</td>
</tr>
<tr>
<td>India</td>
<td>11%</td>
<td>26%</td>
<td>61%</td>
</tr>
<tr>
<td>Mexico</td>
<td>20%</td>
<td>32%</td>
<td>49%</td>
</tr>
<tr>
<td>Brazil</td>
<td>25%</td>
<td>41%</td>
<td>41%</td>
</tr>
<tr>
<td>France</td>
<td>23%</td>
<td>34%</td>
<td>37%</td>
</tr>
<tr>
<td>South</td>
<td>38%</td>
<td>45%</td>
<td>26%</td>
</tr>
<tr>
<td>Germany</td>
<td>28%</td>
<td>38%</td>
<td>28%</td>
</tr>
<tr>
<td>Israel</td>
<td>33%</td>
<td>40%</td>
<td>36%</td>
</tr>
<tr>
<td>UK</td>
<td>37%</td>
<td>39%</td>
<td>32%</td>
</tr>
<tr>
<td>Canada</td>
<td>40%</td>
<td>35%</td>
<td>19%</td>
</tr>
<tr>
<td>Ireland</td>
<td>40%</td>
<td>35%</td>
<td>17%</td>
</tr>
<tr>
<td>Japan</td>
<td>51%</td>
<td>52%</td>
<td>32%</td>
</tr>
<tr>
<td>Russia</td>
<td>28%</td>
<td>41%</td>
<td>41%</td>
</tr>
<tr>
<td>US</td>
<td>28%</td>
<td>41%</td>
<td>32%</td>
</tr>
</tbody>
</table>

Source: Kelley. “Privacy, measurably, isn’t dead.” Enigma. 2021
Multiple factors shape privacy “ABCs”
(attitudes, behaviors, comprehension)
“Folk” models impact how people interact with and understand online systems

Privacy UX truths and design guidelines

Sources: Murillo et al. "'If I press delete, it’s gone...." SOUPS. 2018.
Privacy is often not users’ main task
Privacy is often not users’ primary task, even though privacy is important to them.
Privacy UX truths and design guidelines

Privacy can become a primary task based on privacy / security events or life circumstances

Security or privacy events
Users may look for security or privacy settings after experiencing a potential or actual security or privacy event (e.g., news stories, account compromise, security alerts, etc.)

A user might see a segment about hackers on the morning news and want to make sure Google is really keeping my emails safe

Life circumstances
At-risk users may face circumstances that put them at greater risk (e.g., survivors of intimate partner abuse, activists, journalists, etc.)

A survivor of intimate partner abuse might focus on how to prevent their abuser from accessing their location

People find **transparency, education, and control** helpful, but the wrong balance can be harmful

Users typically want privacy when they need it, rather than as an interruption

“I’m driving...you’re not going to distract me with a privacy notification...It’d be better ‘no, thanks later’ - maybe on an email”
Design guidelines
Privacy UX truths and design guidelines

3 early-stage design guidelines to address these truths in product

01 Deliver appropriate outcomes
02 Design for the context
03 Craft with care
01

Deliver appropriate outcomes
Privacy UX truths and design guidelines

Deliver appropriate outcomes

- Privacy is complex and contextual
- Multiple factors shape privacy "ABCs"
- Privacy is often not users' main goal

Design around privacy-focused critical user journeys, instead of privacy personas

Privacy problem
User may experience unexpected personalization
Privacy UX truths and design guidelines

**Deliver appropriate outcomes**

- Privacy is complex and contextual
- Multiple factors shape privacy “ABCs”
- Privacy is often not users’ main goal

Design around privacy-focused critical user journeys, instead of privacy personas

**Privacy CUJ**

Provide easy access to feature explanation and control

---

Your event

[CONFIRMED] Dentist

Tue, May 25, 4:00 PM - 6:00 PM

View event

Visible only to you

Advanced Dentistry, the Art

1.0 ★★★★★ (44)

Dentist: Dr. Smith

Open: Mon - Fri, 9:00 AM - 5:00 PM

Tue, May 25, 4:00 PM - 6:00 PM

Directions

Review

Photos

About

COVID-19 alert

Call your doctor before visiting if you may have COVID-19. Source: CDC Learn more
Deliver appropriate outcomes

- Privacy is complex and contextual
- Multiple factors shape privacy "ABCs"
- Privacy is often not users’ main goal

Design around privacy-focused critical user journeys, instead of privacy personas

Privacy CUJ
Provide easy access to feature explanation and control
Privacy UX truths and design guidelines

**Deliver appropriate outcomes**

- Privacy is complex and contextual
- Multiple factors shape privacy “ABCs”
- Privacy is often not users’ main goal

**Promote agency, at privacy touchpoints**

![Critical security alert]

Suspicious activity in your account

Google detected suspicious activity in your account. If you don't recognize this device, someone could be using your account.

- Unrecognized device
  - Chrome (Browser)
  - 1 minute ago
  - Near Tel Aviv-Yafo, Israel
  - 26201/16445:2:a4d0:8ff8:7f:7b:eebf
  - [IP address]

Do you recognize this activity?

- No, secure account
- Yes, it was me
Privacy UX truths and design guidelines

Deliver appropriate outcomes

- Privacy is complex and contextual
- Multiple factors shape privacy “ABCs”
- Privacy is often not users’ main goal

Promote agency, at privacy touchpoints

Proactive

- Your privacy suggestions
  - 1 suggestion generated from the Google services you use most
  - See suggestion
Design for the context
Privacy UX truths and design guidelines

Design for the context

Privacy is complex and contextual
Multiple factors shape privacy “ABCs”
Privacy is often not users’ main task

Test for global context
Design for the context

Privacy UX truths and design guidelines

- Privacy is complex and contextual
- Multiple factors shape privacy “ABCs”
- Privacy is often not users’ main task

Design with **progressive disclosure** to align with the user journey

*Dialog Title*

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris.
Privacy UX truths and design guidelines

Design for the context

- Privacy is complex and contextual
- Multiple factors shape privacy “ABCs”
- Privacy is often not users’ main task

Use content design for progressive disclosure
Privacy UX truths and design guidelines

Design for the context

- Privacy is complex and contextual
- Multiple factors shape privacy “ABCs”
- Privacy is often not users’ main task

Design with **progressive disclosure** to align with the user journey
Privacy UX truths and design guidelines

Design for the context

- Privacy is complex and contextual
- Multiple factors shape privacy “ABCs”

Privacy is often not users’ main task

Give users an easy path to meaningful choices and controls
Privacy UX truths and design guidelines

Design for the context

Privacy is complex and contextual

Multiple factors shape privacy “ABCs”

Privacy is often not users’ main task

Privacy Actions

- “delete the last thing I said to you”
- “forget everything I said today”
- “erase my history from last week”
Craft with care
Privacy UX truths and design guidelines

Craft with care

- Privacy is complex and contextual
- Multiple factors shape privacy “ABCs”
- Privacy is often not users’ main task

Optimize for comprehension by breaking up experiences with design, illustration, video, and real-life examples
Craft with care

- Privacy is complex and contextual
- Multiple factors shape privacy “ABCs”
- Privacy is often not users’ main task

Promote & enforce consistency
Craft with care

- Privacy is complex and contextual
- Multiple factors shape privacy “ABCs”
- Privacy is often not users’ main task

Provide control but not too many controls

Balance design tradeoffs, so users don’t need to
Takeaways
Takeaways for the PEPR community

Privacy UX is a challenging and constantly evolving space...but we can start by thinking about how to account for constants (while adapting this guidance to specific product goals)
Takeaways for the PEPR community

But, this is just the start of the conversation... we’d like to challenge the PEPR community to expand and build on this set of “truths” and guidelines — what are fundamentals about user needs & design that our industry would benefit from?
Thank You

Manya Sleeper
UX Researcher
manya@google.com

Johanna Woll
UX Writer
jwoll@google.com

Anneke Glasius
UX Designer
annekeglasius@google.com

Gretchen Gelke
UX Manager
ggelke@google.com