Toggles, Dollar Signs, and Triangles: How to (In)Effectively Convey Privacy Choices with Icons and Link Texts

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Problems with privacy choices

Difficult to find
Spread out across services
Inconsistent options

Hele, Sign in Returns Account - & Orders Try Prime amazon Ξ lp & Customer Service + 0 + ir services, you're trusting us at Help Topk ation. We understand this is a Find more soluti What kinds of info and work hard to protect Data Policy unditions of Use and put you in control. Mow do we use this information This policy describes the information we process to support Facebook users Group Company on-Exhaustive List of App Anazon Patents and App instagram, Messenger and other products and features offered by Now is this information share Facebook (Facebook Products or Products). You can find additional help you understand what information we collect Amazon Privacy Notice centred Patents tools and information in the Facebook Settings and Instagram Settings can update, manage, export, and delete your Non-Exhaustive List of Am Trademarks How do the Fa work together Renadon core Gift Card and Electronic Hessage Contornization Service Terms wary 1, 2020. To see price te know that you care how information about you is used and shared, and How can I manage or delo information about me? Return to top carefully and sensibly. This Privacy Notice describes how Amai that we will do st Hiates (collectively "Amazon") collect and a What kinds of information do we Duick solutions tysites, devices, products, services, online and physical sh your privacy settings? ockets, services"). By using Amazon 1 Your Orders collect? tices described in this Privacy Natice How do we operate a source of data as part of our global services Batums & Bat Datumpe or retu formation we collect depend on how you use our Products. You can learn how t How will we notify you of chang to this policy? ccess and delete information we collect by visiting the Eacebook Settings and Instag Prime Manage Prim. Cancel or view Arrange Share You Settings. Privacy notice for California residents tailast information Carl At Information and content you provide. We collect the content to Children Allowed to Use Arrest ation you provide when you use o Carrier Info Shipping car information EU-US and Swiss-US Privacy Shin How to contact Facebook with Products, including when you sign up for an account, create or share content, and message or communicate with others. This can includ information in or about the content you provide like metadata) such Account Settin Change email o the location of a photo or the date a file was created. It can also Facebook Ads Controls What Personal Information About Customers Do so we can do things like suggest masks and filters that you might like, er give you tips on using camera formats. Our systems au Collect? process context and communications you and others provide to Ma collect your · Data with special p Give Us: We receive and store any information ye information in your Facebook profile fields or Life Events about an Services. Click here to see examples of what we collect. You can your religious views, political views, who you are "interested in," or tion, but then you might not be able to take advant your health. This and other information (such as racial or ethnic origin, philosophical beliefs or trade union membershipl could I rotion about your into subject to special protections under the laws of your country. ces, including internative websites, we up fiers, and we obtain certain types of information Pages, accounts, bashtars and groups you are connected to and hor communicate with the most or groups you are part of. We also colle ntact information if you choose to upload, sinc or import it from a For What Purposes Does Amazon Use Your Person Keeping your information secure

Zoom sources. Zoom Privacy Statement

Google Privacy Policy

An empirical analysis of data deletion and opt-out choices on 150 websites. Hana Habib, Yixin Zou, Aditi Jannu, Neha Sridhar, Chelse Swoopes, Alessandro Acquisti, Lorrie Faith Cranor, Norman Sadeh, Florian Schaub. SOUPS 2019.

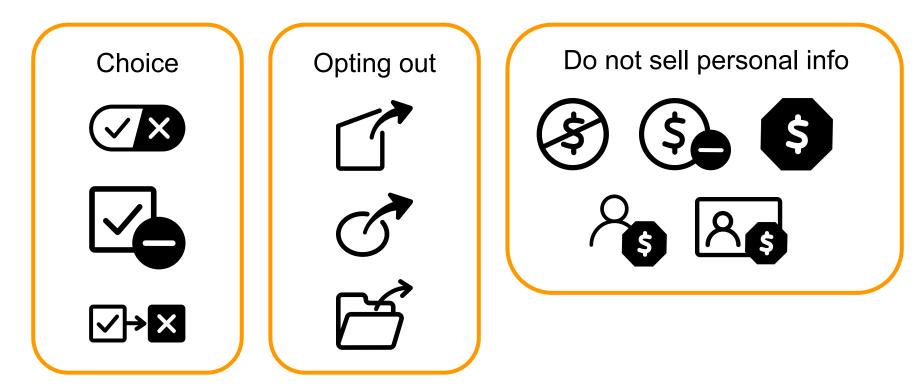
"It's a scavenger hunt": Usability of Websites' Opt-Out and Data Deletion Choices. Hana Habib, Sarah Pearman, Jiamin Wang, Yixin Zou, Alessandro Acquisti, Lorrie Faith Cranor, Norman Sadeh, Florian Schaub. CHI 2020.

The California Consumer Privacy Act (CCPA)

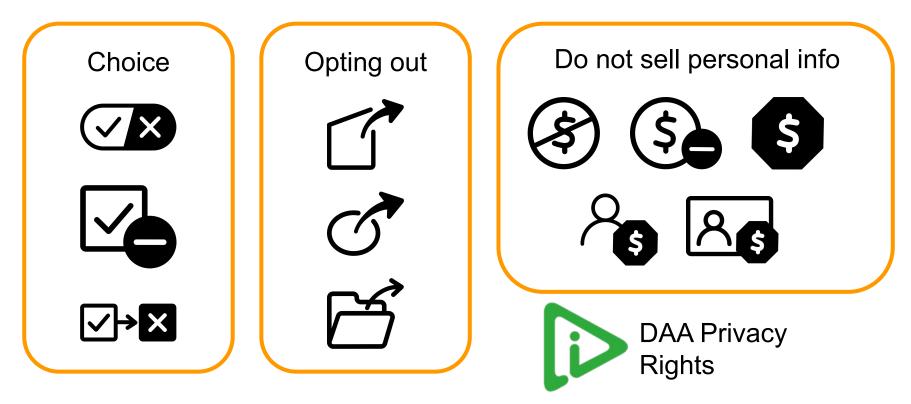
"A business that sells the personal information of a consumer shall provide **a notice of right to opt-out** to the consumer..."

"The following **opt-out button or logo** may be used in addition to posting the notice of right to opt-out... [button or logo to be added]"

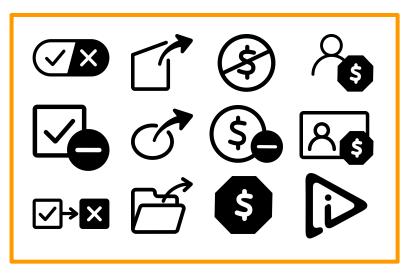
Icon evaluation



Icon evaluation

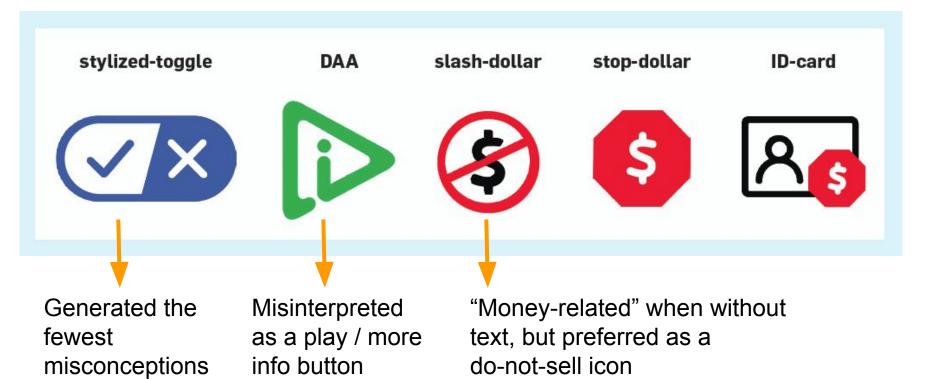






Select the icon that best conveyed

- Privacy choices
- Do-not-sell choices



Link text evaluation

Do Not Sell My Personal Information Do Not Sell My Info

Don't Sell My Info Do Not Sell Don't Sell Do-Not-Sell Choices Do-Not-Sell Options Do-Not-Sell Opt-Outs

Privacy Choices **Privacy Options** Privacy Opt-Outs Personal Info Choices Personal Info Options Personal Info Opt-Outs Do Not Sell My Info Choices Do Not Sell My Info Options

Icon-link text evaluation

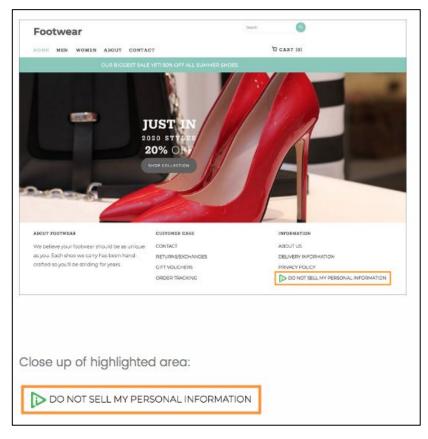
3 icons + no icon



5 link texts + no link text

- Do not sell my personal information
- Do not sell my info
- Privacy choices
- Privacy options
- Personal info choices

23 combinations evaluated by 1,468 MTurk participants



Icon-link text evaluation

Link texts had primary influence on interpretations; some icons continued to convey misconceptions.

Best combo for privacy choices



"Privacy Options"

Best combo for do-not-sell choices

Most icons / no icon

"Do Not Sell My Personal Information" / "Do Not Sell My Info"

OAG icon evaluation

Our stylized toggle icon



The OAG's proposed icon



iOS toggle switch





OAG icon evaluation

Stylized toggle...

- better conveyed do-not-sell choices.
- less likely to be interpreted as an actual toggle.

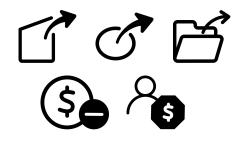


Design implications

Privacy icons should aim to represent **simple** and **familiar** concepts.







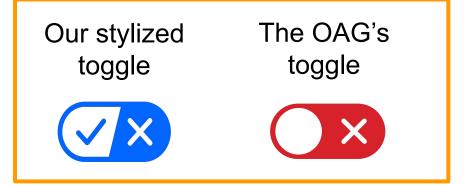
Use link texts to aid comprehension.





Policy implications

Even **small changes** can make a **big difference**.





Integrate user testing into policymaking to provide usable controls for consumers.

Attorney General Becerra Announces Approval of Additional Regulations That Empower Data Privacy Under the California Consumer Privacy Act



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