



Websites' Global Privacy Control Compliance at Scale and over Time

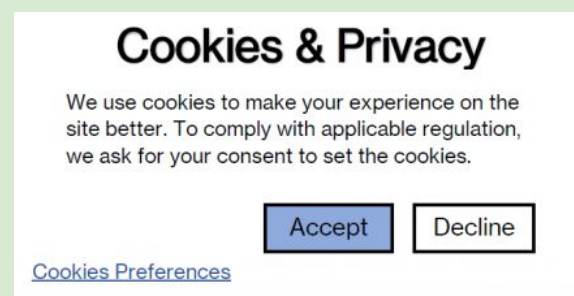
Katherine Hausladen[◦], Oliver Wang[◦], Sophie Eng[◦], Jocelyn Wang^{*}, Francisca Wijaya[◦], Matthew May[◦], Sebastian Zimmeck[◦]
[◦] Wesleyan University, ^{*} Princeton University (work done at Wesleyan)



Background

Problem

Users have no simple and universal way to communicate and enforce their online privacy preferences across websites



Legal Rights without Practical Tools

Cookie banners & privacy notices are overwhelming

Lack of enforcement of User Intent

Solution: Global Privacy Control

User-enabled browser settings that automatically communicates users' privacy preferences (ie. opting out of sale and sharing of their personal information) to all the websites they visit

HTTP header (Sec-GPC: 1) or a JavaScript signal (navigator.globalPrivacyControl = true)

How does it work?

Privacy Preference Signal



Privacy Flags



People → First Party Websites → Third Party Websites

News Websites

Online Retailers

Streaming Services

Ad Networks

Data Brokers

Social Networks

Technical Impacts

01 Standardized Mechanism for Privacy Preferences

GPC provides a **machine-readable signal** sent by browsers or extensions that communicates a user's privacy choices. This creates a **universal standard** that works across sites and jurisdictions, replacing the need for repetitive cookie pop-ups or manual opt-outs.

Global Privacy Control (GPC)

W3C Editor's Draft 16 September 2025

More details about this document



02 Integration with Legal Compliance System

GPC is designed to **align with privacy laws** such as the **California Consumer Privacy Act (CCPA)** and **GDPR**, allowing companies to automate compliance when a user sends the signal.

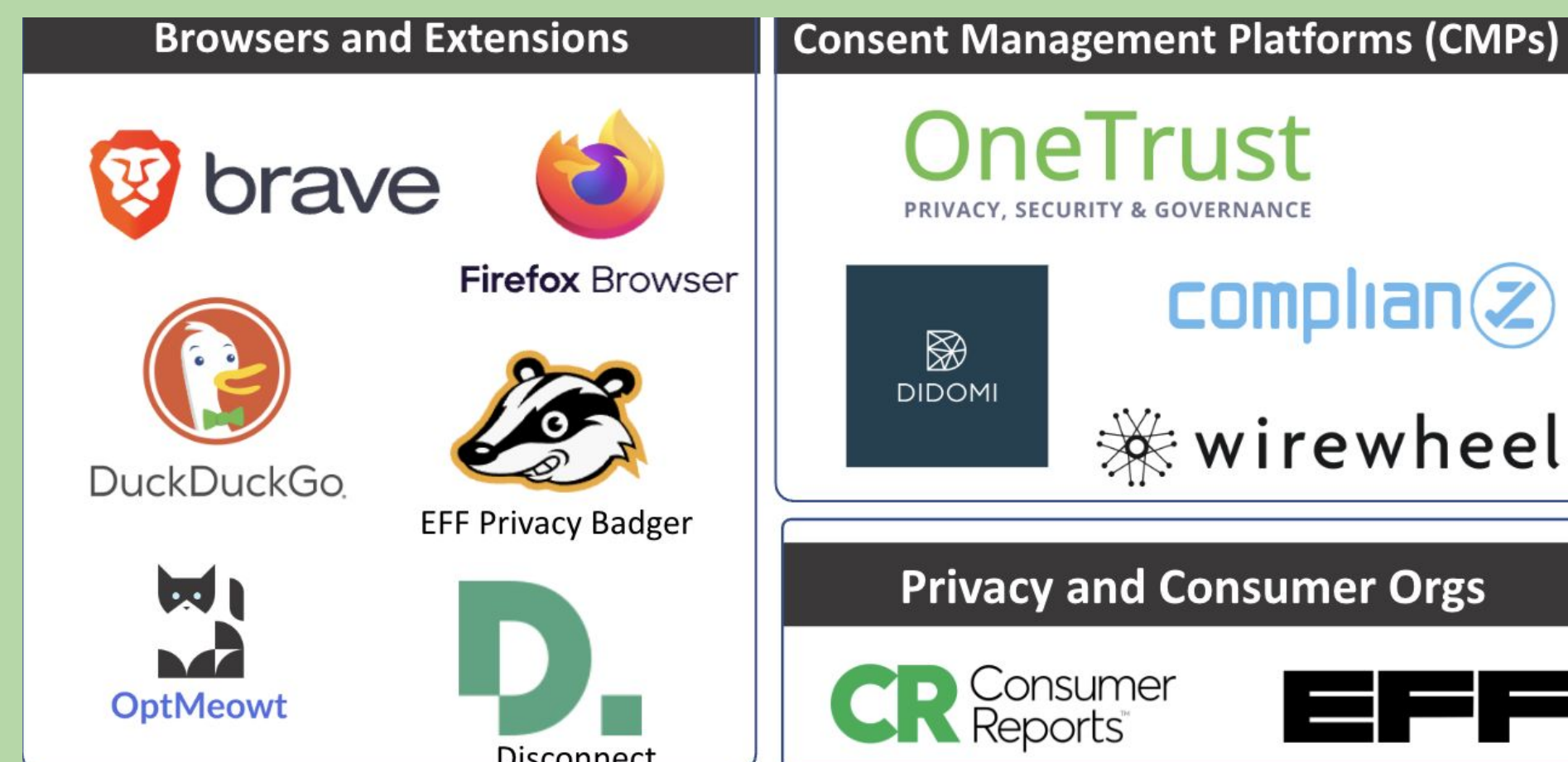


09/09/2025

Connecticut, California and Colorado Announce Joint Investigative Privacy Sweep

03 Encourages Browser-Level Privacy Design

Browser integration of GPC motivates adoption of **privacy-side web standards** & shifts privacy control from website code to **user-side architecture**



Social Impacts

01 Empowering Users' Digital Autonomy

380,000+ Websites Support GPC

The New York Times



The Washington Post

yelp

USA TODAY



Booking.com



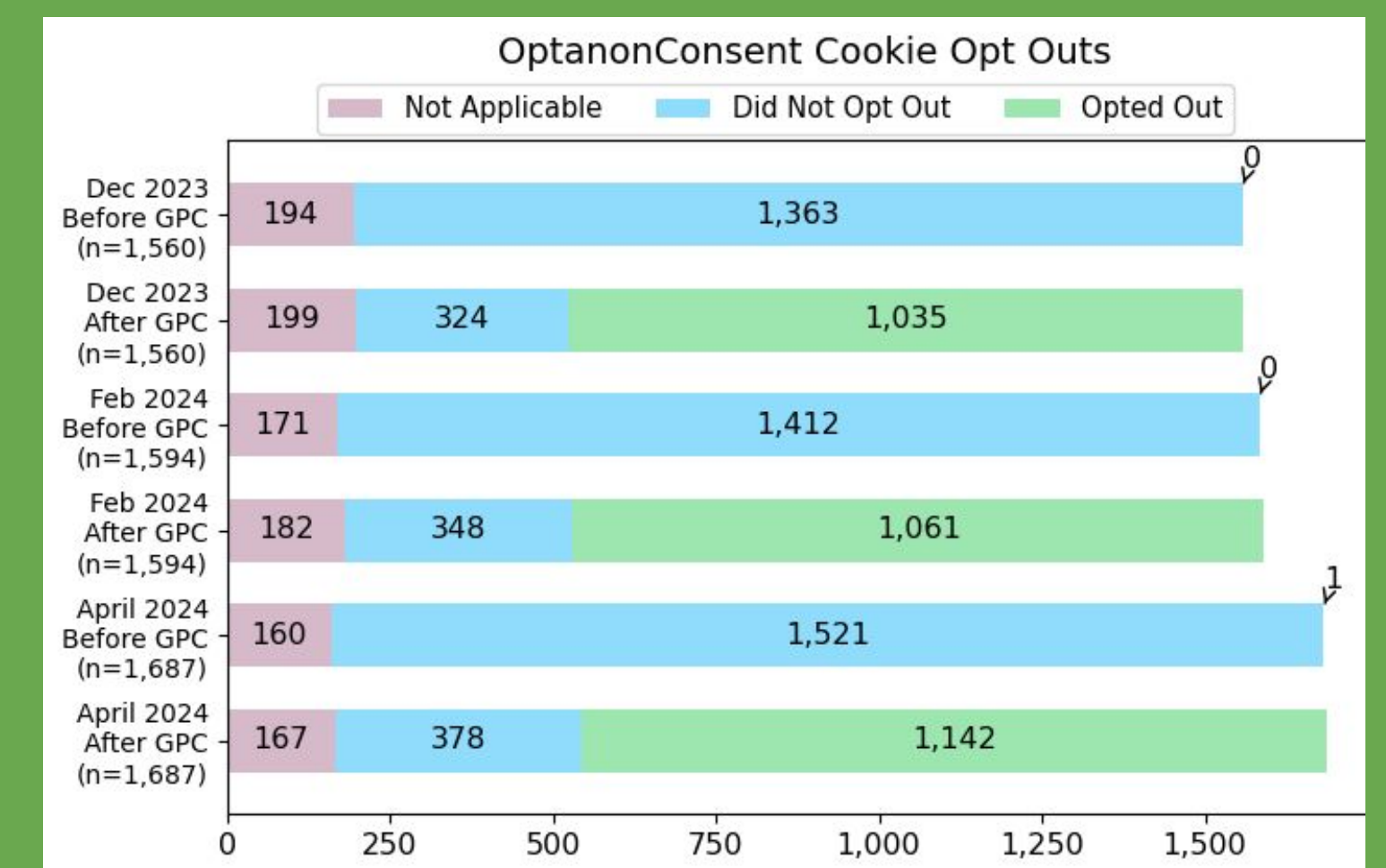
Adobe



Check if a site supports GPC <https://gpcsup.com/>

02 Promoting Corporate Accountability

Gradual improvement in sites' GPC compliance:



03 Global Movement Toward Privacy Norms

- Application in EU
- Default Settings
- Mobile Apps



FUTURE WORK: EXPANDING GPC'S REACH!