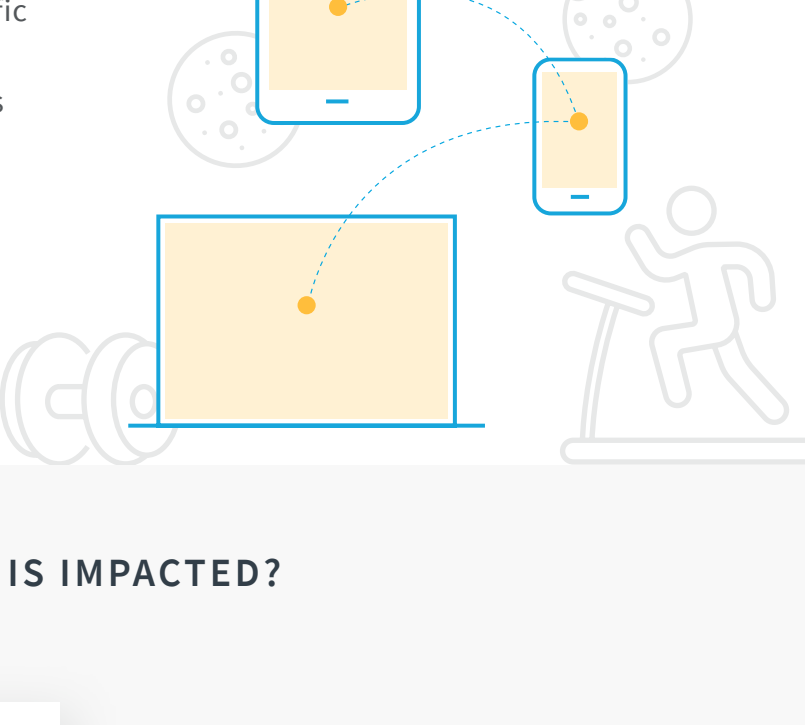


Ad Tech Fitness

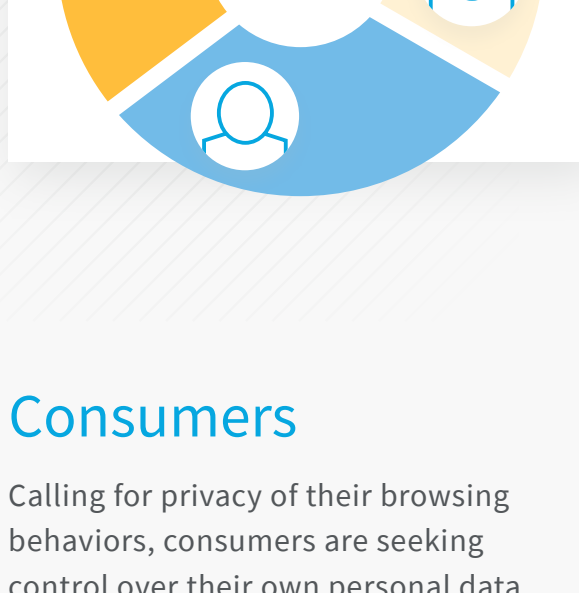
A Healthier Future of Identity Without Cookies

Unique IDs, like third-party cookies and other browser and mobile specific identifiers, allow advertisers and ad tech companies to track users across websites to serve relevant ads and track performance.

BUT CHANGES ARE ON THE HORIZON.



WHO IS IMPACTED?

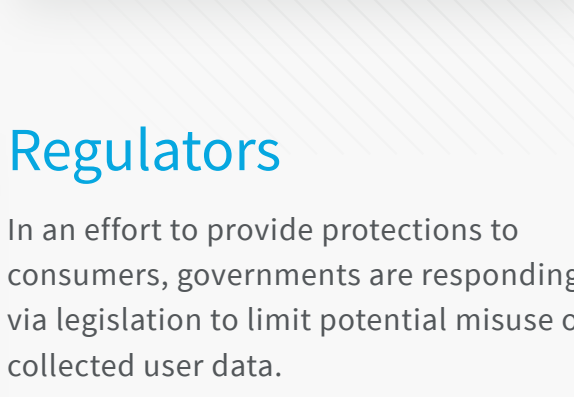


Advertisers / Marketers

Common tactics like audience segmentation and behavioral targeting, as well as conversion tracking, will be limited.

Consumers

Calling for privacy of their browsing behaviors, consumers are seeking control over their own personal data.



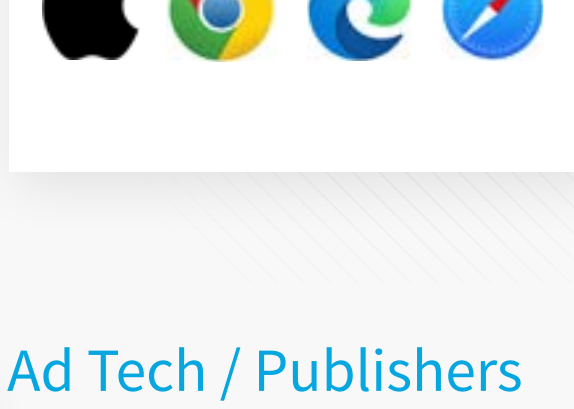
Regulators

In an effort to provide protections to consumers, governments are responding via legislation to limit potential misuse of collected user data.

- GDPR
- CCPA
- CAN-SPAM

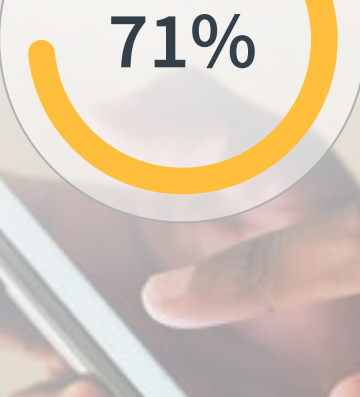
Browser / OS

Large consumer tech companies are updating browser and mobile operating system software to limit or completely block certain tracking.



Ad Tech / Publishers

Nearly every major ad tech provider and publisher is impacted – from DSPs to Exchanges to Publishers to Search and Social platforms.



71% OF RESPONDENTS would like to see the government reform how companies treat their data. (13% disagreed, 16% were neutral)

—Northwestern University's Intent Lab "Digital Satisfaction Index: Brand Trust Spotlight", 2020



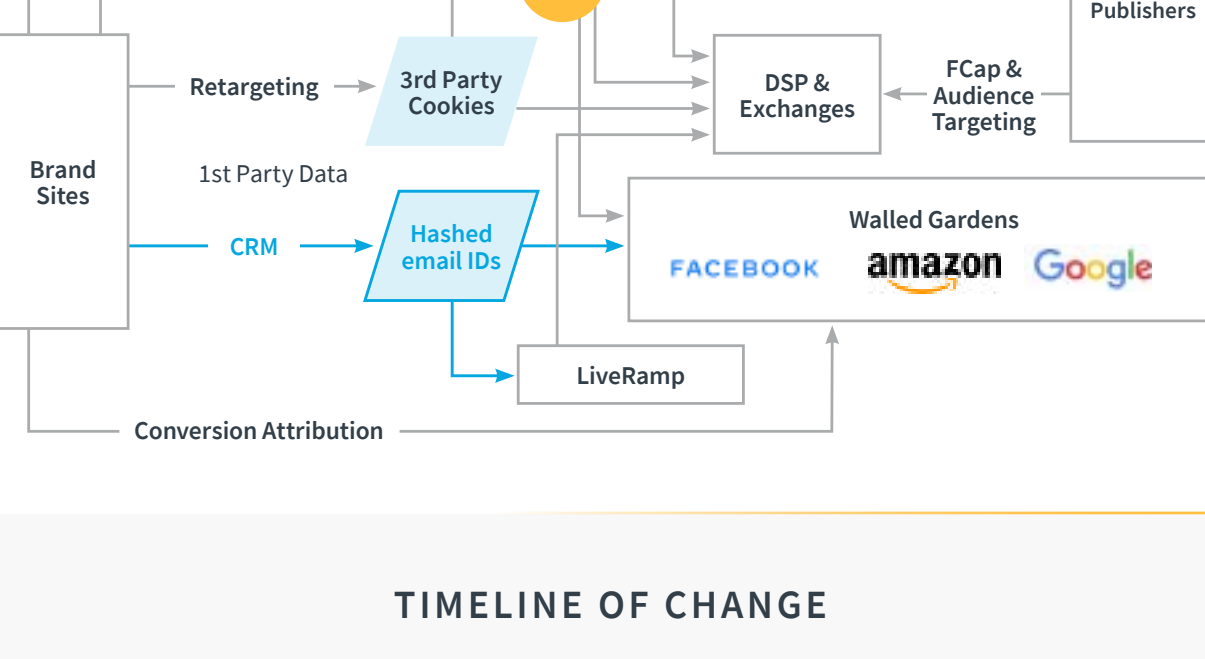
COOKIES: A Historical Glue For The Industry

Much of the advertising industry uses third-party cookies to share user information for tactics like: Frequency Capping, Audience Targeting, Retargeting, and Conversion Attribution.

to support cookieless identity solutions like Unified ID 2.0 and LiveRamp's IdentityLink, but also are directly usable in the walled gardens.

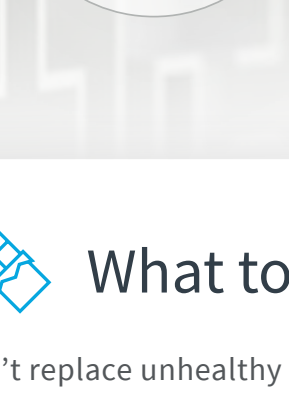
Each grey arrow in the diagram is data shared across systems via a third-party cookies. Hashed email IDs are now used

The blue arrows show a common path of utilizing these IDs. While they don't depend on third party cookies, they also don't have as much reach or scale as cookies.



TIMELINE OF CHANGE

- 1994** — First banner ad
- 2003** — CAN-SPAM Act (Controlling the Assault of Non-Solicited Pornography and Marketing Act)
- 2010** — US Federal Trade Commission (FTC) publishes preliminary report on consumer privacy rights
- 2016** — General Data Protection Regulation (GDPR) adopted by the European Union
- 2017** — Apple Intelligent Tracking Prevention (ITP) limiting tracking on Safari
- 2018** — Mozilla Enhanced Tracking Protection (ETP) released limiting trackers and third-party cookies on Firefox browsers
GDPR goes into effect
California Consumer Privacy Act (CCPA) passed into law
- 2019** — Microsoft Tracking Prevention (MTP) blocks third-party cookies on its browsers
Apple Intelligent Tracking Prevention (ITP) is enhanced to block all third-party cookies in Safari by default
- 2020** — California Consumer Privacy Act (CCPA) goes into effect
- 2021** — Apple iOS14 prompts users to opt-out of tracking, reducing the availability of IDFA's
- 2022** — Google Chrome blocks third-party cookies by default [PENDING]



ESTIMATED NUMBER OF IMPRESSIONS already unreachable due to existing privacy changes. This is expected to increase 2x-3x over the next year given impending changes.

What to Avoid

- Don't replace unhealthy behavior with another **bad habit**
- Don't exploit **privacy loopholes** that do not respect consumer privacy
- Do not attempt to circumvent browser or **privacy regulation**

Helpful Healthy Solutions

Finding the right balance for scale and privacy

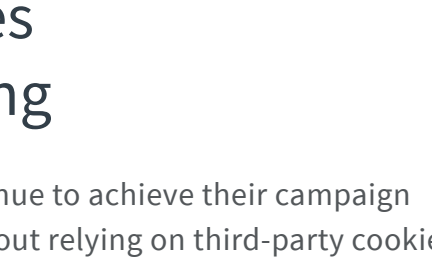
Project Rearc
The IAB's working group addressing privacy changes as a global initiative designed to get stakeholders across the digital advertising and media supply chain to together to re-architect digital marketing in a consolidated effort to harmonize personalization and consumer privacy.



Unified ID 2.0
Open-source ID framework that uses hashed and encrypted email addresses operating across advertising channels giving advertisers insight into campaign performance across streaming TV, browsers, mobile, audio, and TV apps and devices.



LiveRamp IdentityLink
Resolves hundreds of different identifiers for consumers used on devices and in both online and offline marketing platforms to a unique, privacy-safe identifier at the consumer level.



Healthy Approaches to Digital Advertising

Centro is focused on ensuring marketers continue to achieve their campaign objectives to drive business performance without relying on third-party cookies and other non-privacy compliant identifiers. Some healthy recommendations:

Leverage Machine Learning
Basis's Machine Learning technology uses artificial intelligence and privacy-approved data across 30 parameters to decide if and how much to bid on an impression. This tactic can improve media performance all without the use of cookies or infringing on your audience's privacy.

Ingest Anonymized Data Sources
Utilizing sources such as US Census, American Community Survey and North American Industry Classification System strengthen local insights, and allow for smarter decisioning to improve performance and eliminate wasted impressions.

Incorporate Semantic Targeting
Contextual targeting now uses Natural Language Processing to understand semantics and tone. Partnering with semantic data providers like Comscore, DoubleVerify, Oracle, and Peer39 may prove more effective and less expensive than third-party audience data.

Evolved Performance Tracking
While Centro will offer interim solutions like cookieless conversions for click-through-conversions, we will guide a shift to illustrate media performance more fully and thoughtfully with CDP (customer data platform) data, site analytics data, and brand lift studies.



60.4% OF RESPONDENTS plan to increase spending on use of first-party data

—IAB "The State of Data 2020", 2020

Ad Tech Fitness

There are numerous options for a healthier future of identity without cookies. **Contact Centro for a personalized ad tech fitness plan!**