Battle for Online Privacy

Dan Moriarty, @minneapolisdan

About Me

Dan Moriarty

- Web design for 20+ years
- Drupal for 10+ years
- Twitter: @minneapolisdan
- Drupal: minneapolisdan
- Aka Citizen Dan

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About Electric Citizen

Web Agency

- Based in Minneapolis since 2012
- Focus on civic sector (government, higher ed, nonprofits, arts, science)
- Open-source advocates, Drupal experts
- www.ElectricCitizen.com

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What We'll Cover

Battle for Online Privacy

- Privacy in danger
- Privacy and the law
- Best practices
- Technical considerations

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disclaimer:
*not a lawyer

Why are you here?

Battle for Online Privacy

- Privacy advocate
- Keeping up with new laws and regulations
- Understand best practices

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What battle?

Privacy is losing

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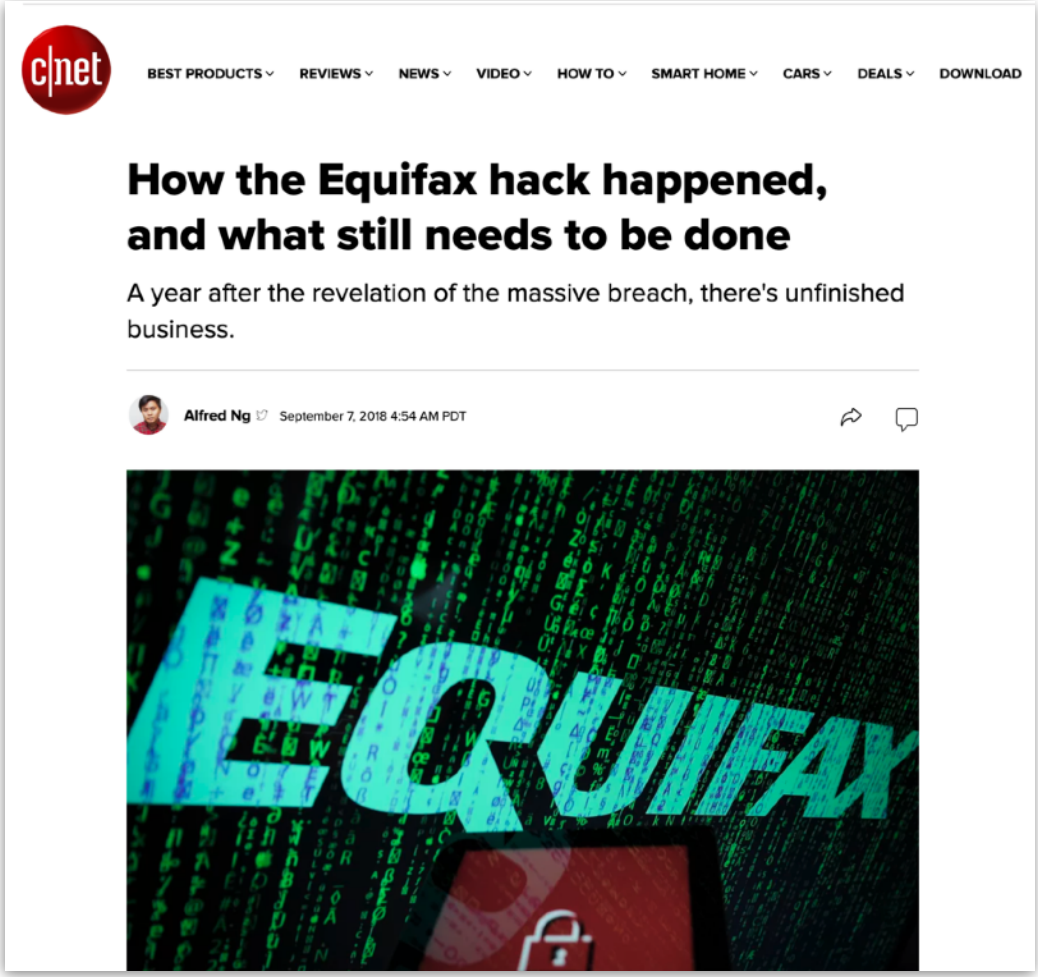
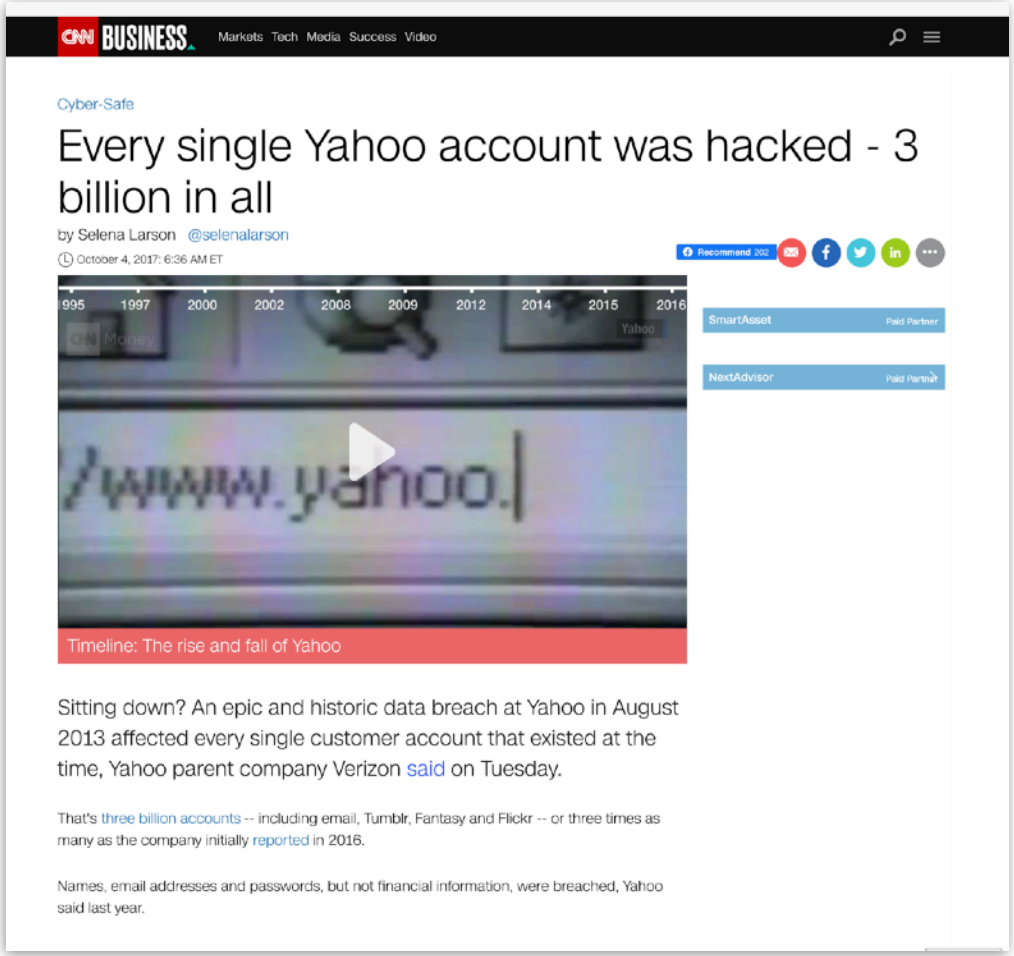
Data Breaches

- Companies hoarding too much personal info
- Poor security and determined hackers



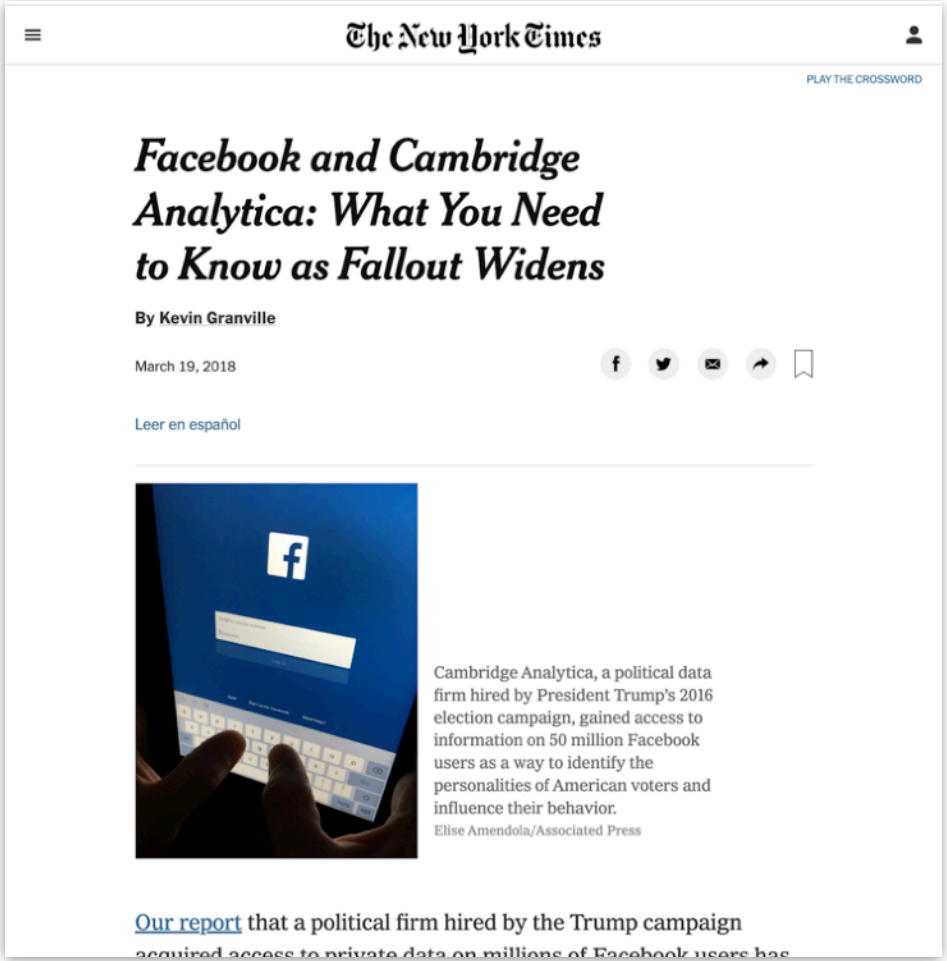
EQUIFAX

- 143 million – half the US!
- Social security numbers, birthdates, credit card numbers – all stolen



YAHOO!

- 3 billion accounts
- Names, DOB, passwords, answers to security questions, all hacked



The New York Times

PLAY THE CROSSWORD

Facebook and Cambridge Analytica: What You Need to Know as Fallout Widens

By Kevin Granville

March 19, 2018

Leer en español

Cambridge Analytica, a political data firm hired by President Trump's 2016 election campaign, gained access to information on 50 million Facebook users as a way to identify the personalities of American voters and influence their behavior.
Elise Amendola/Associated Press

Our report that a political firm hired by the Trump campaign acquired access to private data on millions of Facebook users has

Cambridge Analytica

- 87 million affected
- Personal info harvested without permission
- Used by campaigns for targeted political ads

Data Breaches: How to Respond?

- Freeze credit
- Identity protection
- Quit using the service?

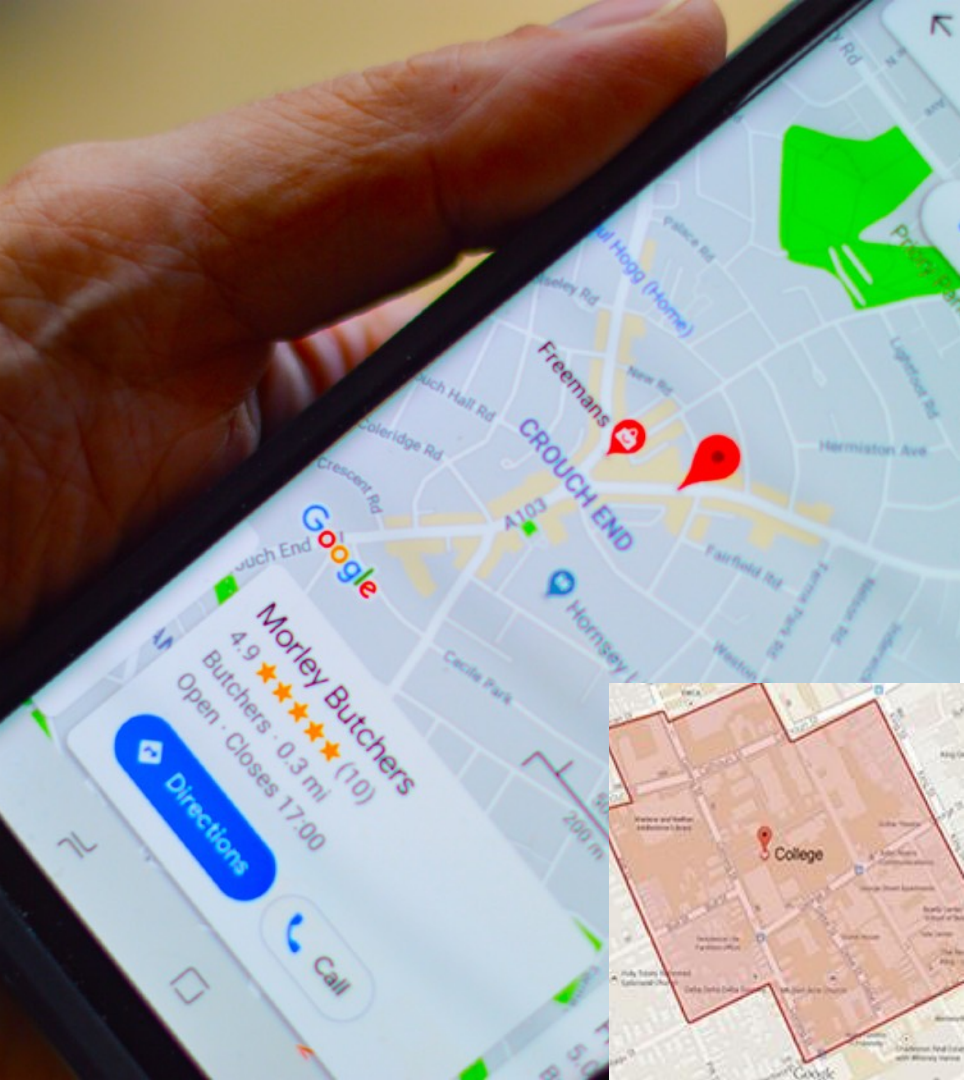
Facial Recognition

- Repressive governments
- Law enforcement
- For profit companies
- Clearview AI
- NEC

NEC

NEC State & Local Police agencies

NEC Biometrics Identification System
in over 1/3 of US State Polices and Law Enforcement Agencies



Geofencing

- Uses phone data and “invisible fence"
- Tracks where you go, what you attend
- Location-based marketing

Photo by henry perks on Unsplash

In Your Home

- Google Home
- Amazon Alexa
- Apple Siri
- Anything “smart”

Photo by Kolar.io on Unsplash


nest
COOLING
75


ring


PHILIPS
hue
White
Starter kit
800
Automate your lights
for peace of mind


SONOS


OK
Roku


Hello!
Goodbye
Go To Story Time
Go To Games
Go To Photo Album
Go To Settings
Tutorial Video
My friend Cayla
Party Time!
Speech powered by NUANCE

If it’s a ‘smart’ device, it’s tracking you

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Building Your Public Profile

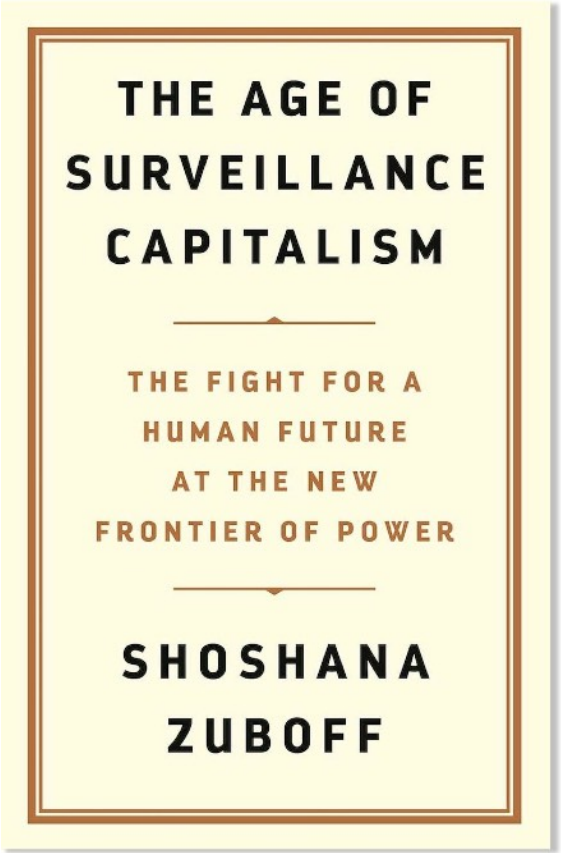
- School
- Religion
- Work
- Politics
- Music
- Shopping
- Health
- Family

Feeding the Data Brokers

- Well-known data brokers like Experian, White Pages, West Publishing
- Hundreds of unknowns
- People search, credit reporting, marketing, advertising, risk mitigation
- Little regulation, billions of dollars at stake

Surveillance Capitalism

- Buying and selling data of predictive behavior
- Human behavior as free raw material
- The new age of robber barons

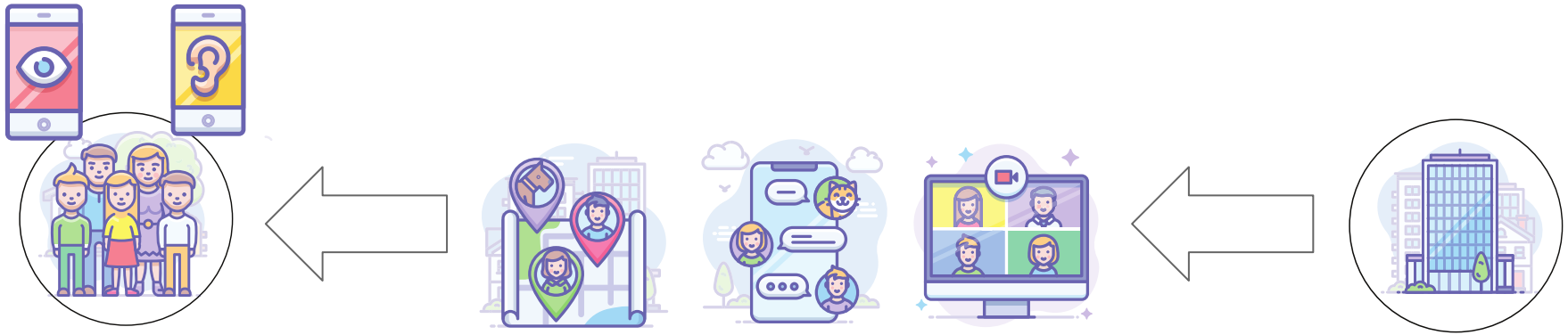


Surveillance Capitalism

Surveillance Capitalism 101

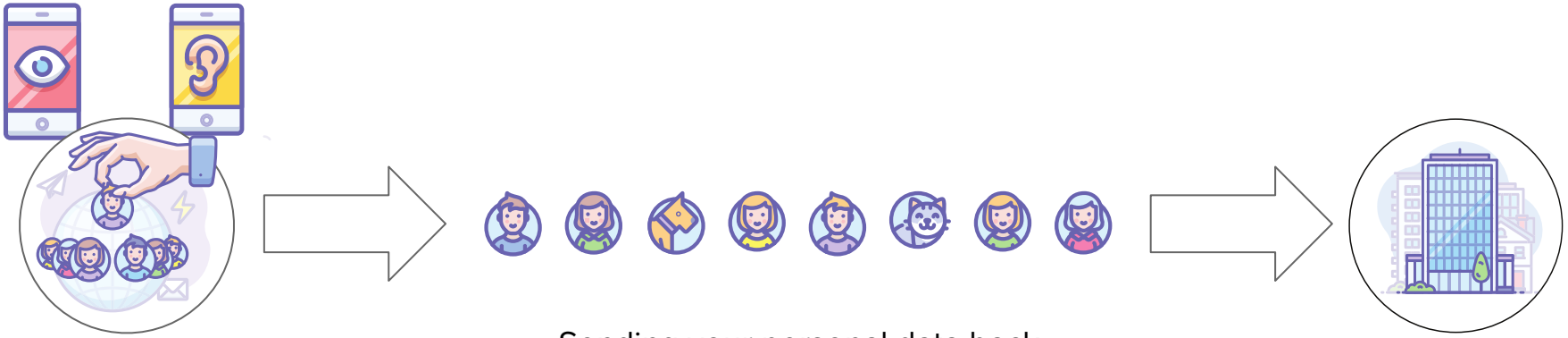
Free, low-cost apps and services
(search, docs, entertainment, chat, etc.)

Surveillance Capitalism 101



Tracking data

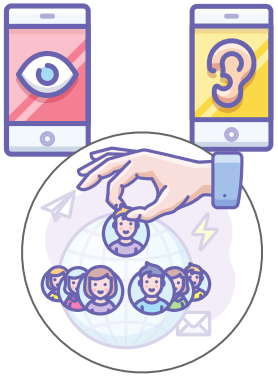
Surveillance Capitalism 101



Extracting your private data

Sending your personal data back to same companies

Surveillance Capitalism 101



Extracting your private data

Selling your private data

Buying your private data

Surveillance Capitalism 101

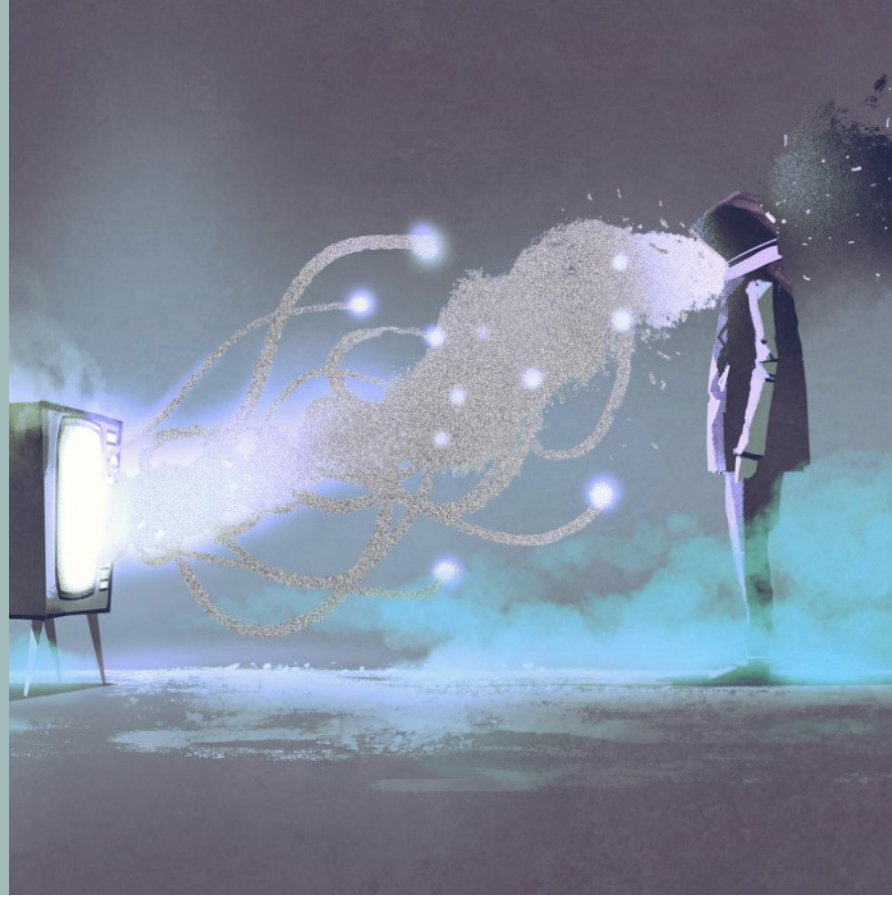
Extracting your
private data

Behavior as
Raw Material

Targeting with
your private data

We’re under attack!

How to respond



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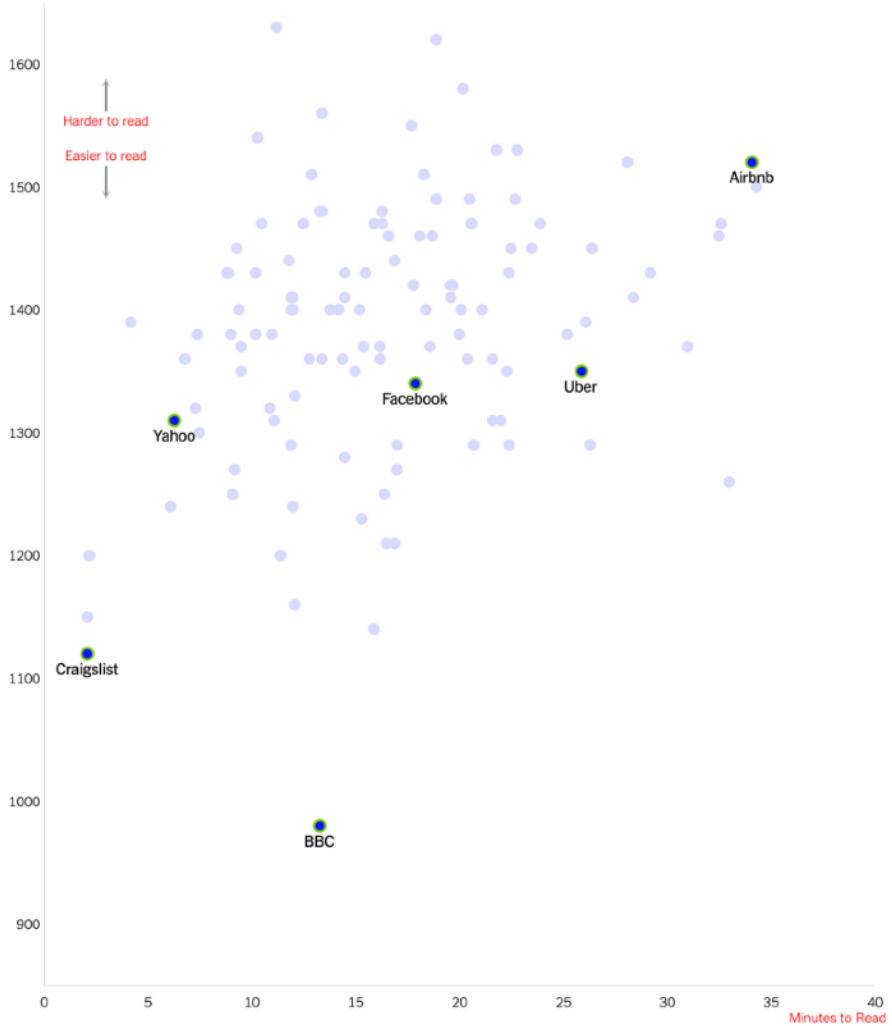
Option 1: Off the Grid

Is that a choice?

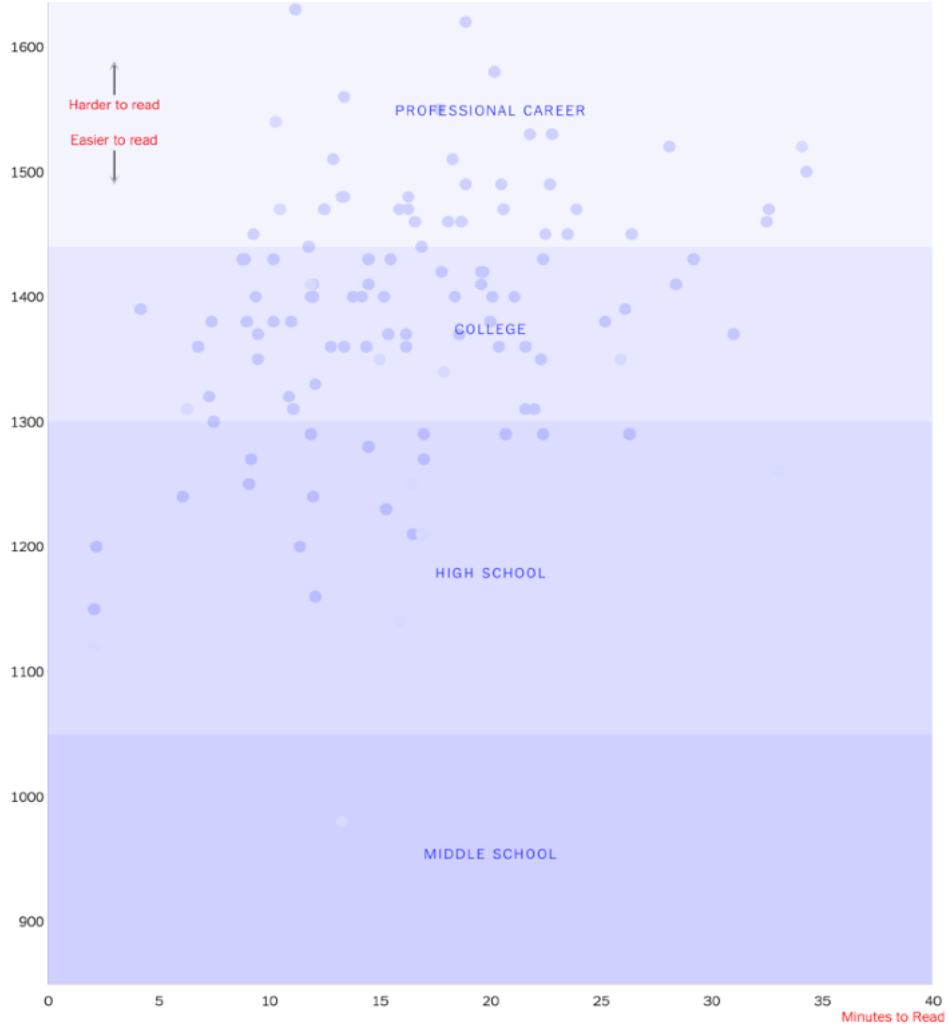
- Maps to find your way
- Conduct banking
- Find a job
- Pay for goods
- Find a partner
- College applications
- Customer service



Privacy Policies

- A false choice for privacy
- Hundreds of hours per year to read policies
- Too difficult for most to understand

https://www.nytimes.com/interactive/2019/06/12/opinion/facebook-google-privacy-policies.html



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https://www.nytimes.com/interactive/2019/06/12/opinion/facebook-google-privacy-policies.html


Option 2: Get Over It

“Privacy is dead” … we just step into this “discomfort each and every day”

– Erik Qualman

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Live with it

- Focus on generating your best social profile
- Trust the market will look out for your best interests


Option 3: Fight Back

Join the Fight

- Follow privacy laws, support new legislation
- Learn best practices
- Choose the right tools to protect your data
- Choose **responsible** open source

The People

Strike Back

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GDPR

- General Data Protection Regulation, May 2018
- Established guaranteed rights with personal data, how it is collected and managed

Rights and Protections

- Breach notifications
- Access to personal data
- Right to be forgotten
- Data portability
- Privacy by design
- Require data protection officers and processors

Who Does it Affect?

- Offering goods and services outside of personal use
- Collecting personal data
- Organizations who could envisage serving EU users
- Could be for-profit and nonprofit
- Any size organization

EPD

- ePrivacy Directive (EPD) defines use of Cookies, along with GDPR

What's Happened Since Law

- Over $360 billion in fines!
  - Marriott, $99 million
  - British Airways, $183 million
  - Google, $50 million
- New/renewed focus on Privacy Experience (PX)
- New laws in the USA (CCPA)

Privacy in the USA

CCPA

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Who’s Ready for the CCPA?

- California Consumer Privacy Act
- Became state law on Jan 1st, 2020

CCPA: What it Does

- Know what personal data is collected
- Know if data is sold to others
- Opt out of sale of your personal data
- Request personal data be deleted
- Not discriminated against for exercising privacy rights

CCPA: Who Must Comply?

- For-profits who collect personal data and do business in CA, and
- Annual revenues over $25m, **OR**
- Possess personal info of 50,000+ people/households/ devices
- **OR** earn half your revenue selling personal information

CCPA: Meeting the Requirements

- Implement and maintain reasonable security procedures and practices
- Ask for parental consent for kids under 13; affirmative consent for 13-16 year olds
- Clearly visible opt-out link of sales of personal info
- Toll-free number for data access
- Update privacy policy

CCPA: What's Happened Since

- Updated privacy policies
- Billions spent on compliance
- Companies scrambling to make private data accessible to users
- Fines issued

Exporting Data


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  "quantity": "1"
}, {
  "productTitle": "Dispatch Service Charge",
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General
Security and Login
Your Facebook Information

Privacy
Timeline and Tagging
Stories
Location
Blocking
Language and Region
Face Recognition

Notifications
Mobile
Public Posts

Apps and Websites
Instant Games
Business Integrations
Ads
Payments
Support Inbox
Videos

Your Facebook Information

You can view or download your information and delete your account at any time.

Access Your Information	View your information by category.	View
Download Your Information	Download a copy of your information to keep, or to transfer to another service.	View
Activity Log	View and manage your information and some settings.	View
Off-Facebook Activity	View or clear activity from businesses and organizations you visit off of Facebook.	View
Managing Your Information	Learn more about how you can manage your information.	View
Deactivation and Deletion	Temporarily deactivate or permanently delete your account.	View

Off-Facebook Activity

Off-Facebook activity includes information that businesses and organizations share with us about your interactions with them, such as visiting their apps or websites. Learn More

Wellsfargo.com, **Amazon** and other websites or apps have shared your activity with Facebook.

What You Can Do

Manage Your Off-Facebook Activity
View activity shared with us by the businesses and organizations you visit off of Facebook.

Clear History
Disconnect off-Facebook activity history from your account.

More Options

What is off-Facebook activity?

Off-Facebook activity includes information that businesses and organizations share with us about your interactions with them. Interactions are things like visiting their website or logging into their app with Facebook. Off-Facebook activity does not include customer lists that businesses use to show a unique group of customers relevant ads.

How did Facebook receive your activity?

When you visit a website or use an app, these businesses or organizations can share information about your activity with us by using our business tools. We use this activity to personalize your experience, such as showing you relevant ads. We also require that businesses and organizations provide notice to people before using our business tools.

Here's How Activity is Shared with Facebook

Jane buys a pair of shoes from an online clothing and shoe store.

The store shares Jane's activity with us using our business tools.

We receive Jane's off-Facebook activity and we save it with her Facebook account. The activity is saved as "visited the Clothes and Shoes website" and "made a purchase".

Jane sees an ad on Facebook for a 10% off coupon on her next shoe or clothing purchase from the online store.

Information About You

Ads and Businesses
Ad topics that are relevant to you, advertisers who have collected information directly from you, information you've submitted to advertisers and your interactions with businesses and organizations you visit off of Facebook.

Ads Interests
Advertisers Who Uploaded a Contact List With Your Information
Your Off-Facebook Activity

Search History
A history of your searches on Facebook

Your Search History

Location
Information related to your location

Location History

About You
Information associated with your Facebook account

Friend Peer Group
Your Address Books

Security and Login Information
A history of your logins, logouts, periods of time that you've been active on Facebook and the devices you use to access Facebook.

Where You're Logged In
Account Activity
Logins and Logouts
Administrative Records
Used IP Addresses
Datr Cookie Info
Authorized Logins
Login Protection Data

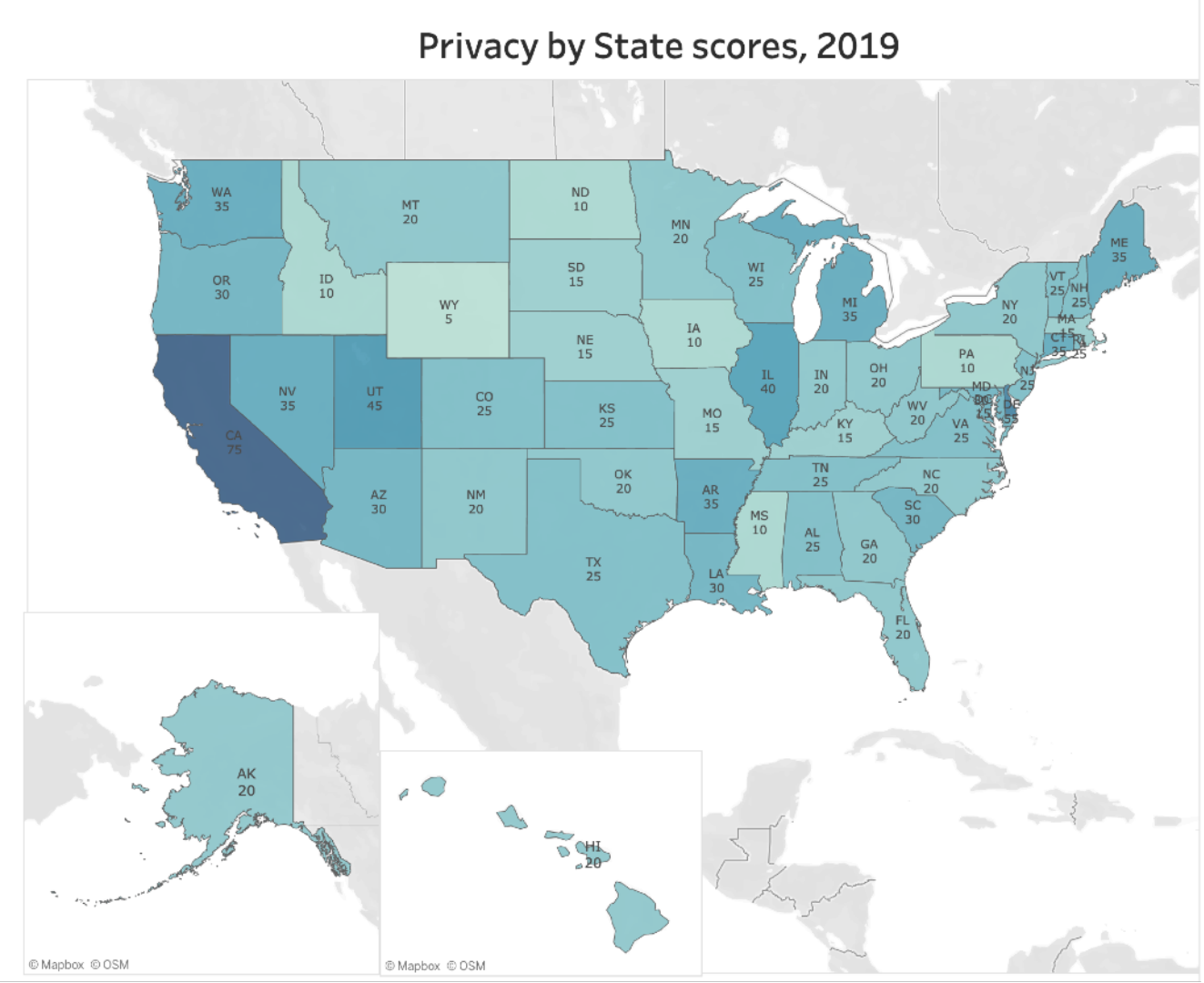
Generated by Dan Moriarty on Friday, February 7, 2020 at 9:54 AM UTC-06:00

Other States

- Massachusetts Data Privacy Law
- New York Privacy Act
- Maryland Online Consumer Protection Act
- Hawaii Consumer Privacy Protection Act

Other Countries

- PIPEDA (Canada)
- AAP (Australia)
- GDPL (Brazil)



Best: California (75)

Worst: Wyoming (5)

US News & World Report

https://www.usnews.com/news/best-states/articles/2019-10-23/states-with-the-strongest-online-privacy-laws

Best practice in PX:

Privacy Experience

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PX: yet another (good) thing to know

- Plan for user privacy and security
- Budget for privacy
- Sharpen your site building routine
- Focus on protecting PII

What is PII?

By Itself:

- Name: full name, maiden name, mother's maiden name, or alias
- Personal identification numbers: social security, passport number, driver's license, credit card, etc.
- Personal address, telephone numbers
- Face, fingerprints, or handwriting
- Biometric data: retina scans, voice signatures, or facial geometry
- Internet Protocol (IP) or Media Access Control (MAC)

Info Combined with Previous Column:

- Date of birth, place of birth
- Business number, address, email
- Race, religion
- Geographical indicators
- Employment information
- Medical information
- Education information
- Financial information

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Set clear policies

- Opt-in to data collection (not out)
- Ample documentation
- Expiration dates on data
- Easy for understand what data is collected, how it is used
- Users can export personal data
- Easy to be forgotten

Plan for privacy

- Don’t wait to end of project!
- Easy to understand
- List all data tracked
- Plan for disasters
- Try a policy creator

Accessibility isn’t required everywhere yet either, but we do it because (a) it’s the right thing to do and (b) it will be soon

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Privacy Issues:

Technically Speaking

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Developers

Change in process

- Plan how you manage PII and any data you collect
- Be conscious on how you protecting users
- Measure “Privacy Impact”

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Managing Data

- Developers working locally
  - What data are you handling?
  - Do you need specific records?
  - How often do you purge data?
- Data on servers
  - Is it encrypted? Should it be?
  - Who has access
- Content and marketing
  - What data are you collecting?
  - How are protecting privacy?

Cookies

The web's little spies

- First party and third party
- Tracking pixels/scripts
- Marketing and statistics cookies require consent
- Cookies required to make site function do NOT

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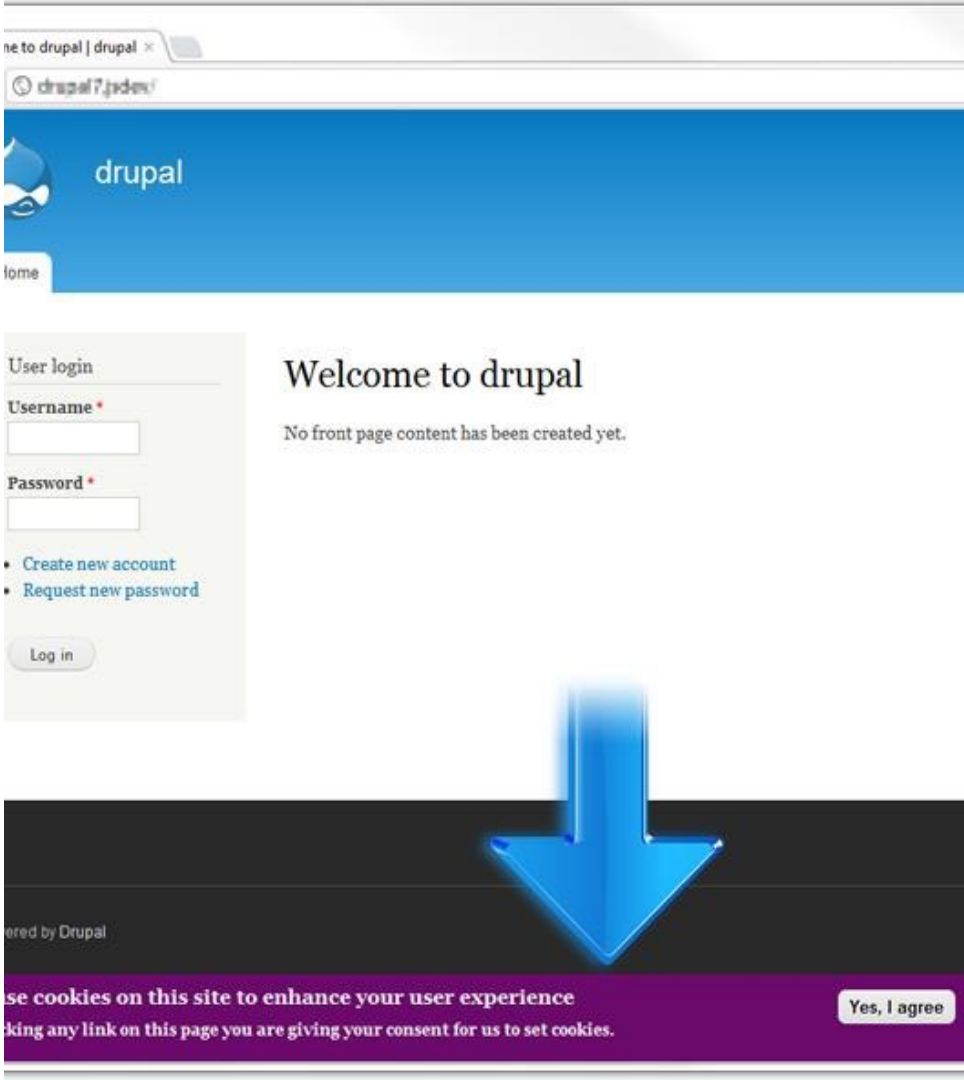
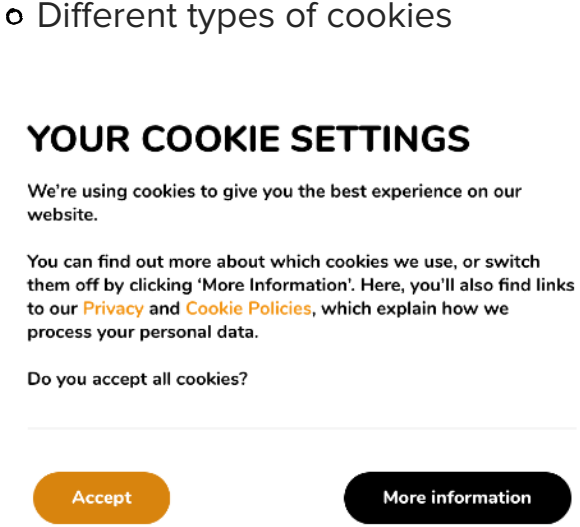
Cookie Compliance

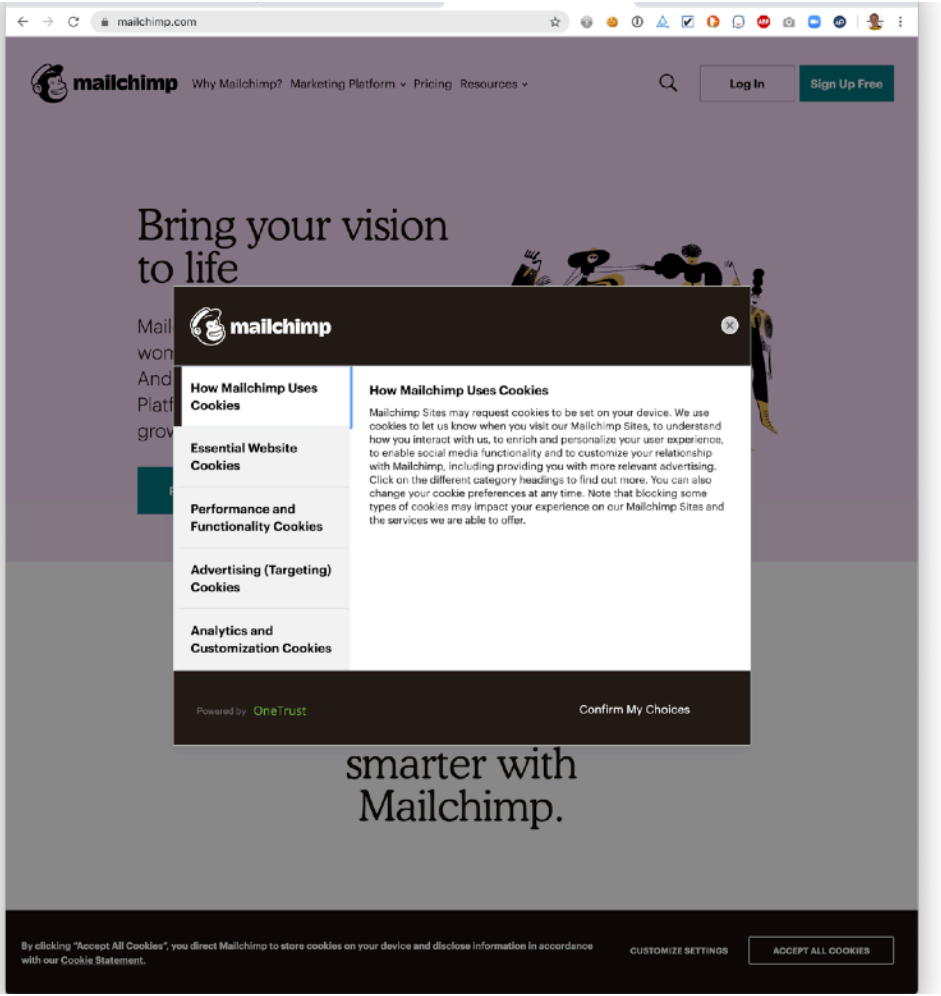
- drupal.org/project/eu_cookie_compliance
- 3rd party integrations:
  - project/cookiebot
  - project/cookieconsent
  - project/divascookies
- wordpress.org/plugins/gdpr-cookie-compliance



GDPR Cookie Compliance

- Options to opt-in by default
- Let users control options
- Different types of cookies





Site Analytics

More data that you'll ever need?

- Google Analytics is most widely used. Do they collect PII?
- Disclose use in privacy policy
- Offer users way to opt-out
- Don't collect IP addresses
- Matomo is open-source analytics you host yourself

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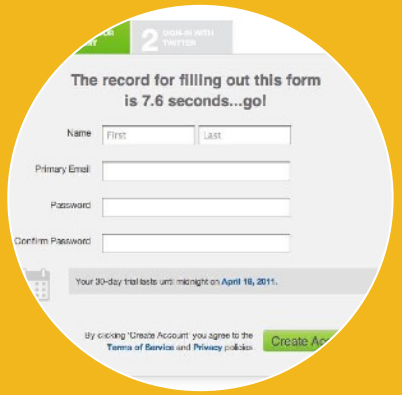

Online Forms

How do you use **and** protect the data you are collecting?

- What data are you collecting? For how long?
- How is it protected?
- Can users see what data you've collected?

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Third Party

Libraries, packages and scripts, oh my!

- NPM, Symfony and Composer
- JavaScript libraries
- Social sharing widgets
- Tracking scripts
- Embedded media

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Be Privacy Smart

Encryption is your #1 weapon

- Rely on (and support laws regarding) **encryption of data**
- EARN IT legislation
- Consider using DuckDuckGo, Firefox, ProtonMail
- Support advocacy orgs like EFF and ACLU
- Support open-source, open web, ethical design

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Gavin Belson,
Founder

Gavin Belson has always been drawn to the most ethical practices of business. He worked tirelessly to change the world as CEO of Hooli, but realized it was time to use his talent and charisma in a life of public service. Since leaving Hooli behind, Belson has jettisoned the corruption of the tech industry to spread a more virtuous way of life.

Belson is no stranger to inventing new words and worlds, and his groundbreaking portmanteau "tethics" is only the tip of a very successful iceberg. He is a prolific author, recently penning a debut novel titled Cold Ice Cream and Hot Kisses. Belson is also an avid runner, agile biker, and adept swimmer, and recently won the HooliCares Triathlon, which was an event for charity.

The Belson Institute of TETHICS

TETHICS: A CODE OF CONDUCT

THE BELSON INSTITUTE OF TETHICS — TAKE THE PLEDGE

TETHICS is the promise to make best efforts to do everything in our power to enhance the quality of life for all ages, while maintaining our uncompromising principles while we grow. TETHICS is about fully investing in each other to inspire the human spirit. TETHICS is striving to meet and follow the principles below, in a worthy quest to make the world a better place.

- Integrity: We do the right thing. We are committed to the highest ethical standards.
- Excellence: We expect the best from ourselves and each other.
- Responsibility: We contribute to the growth, joy and enrichment of all the lives we touch.
- Courage: We dare to spark solutions that create a better, healthier world.
- Strength: Maintaining our uncompromising principles while we grow.
- Generosity: Contribute positively to our communities and our environment.
- Purpose: Build a society in which all people live with dignity and purpose, & fulfill their goals & dreams.
- Action: Champion positive social change & deliver value through advocacy, information, & service.

Drupal-specific

Modules and more

- GDPR compliance team
- Encrypt module
- Cryptolog
- IP anonymize
- Blizz Vanisher
- Drush sql-sanitize
- Faker
- Guardr (security distribution)

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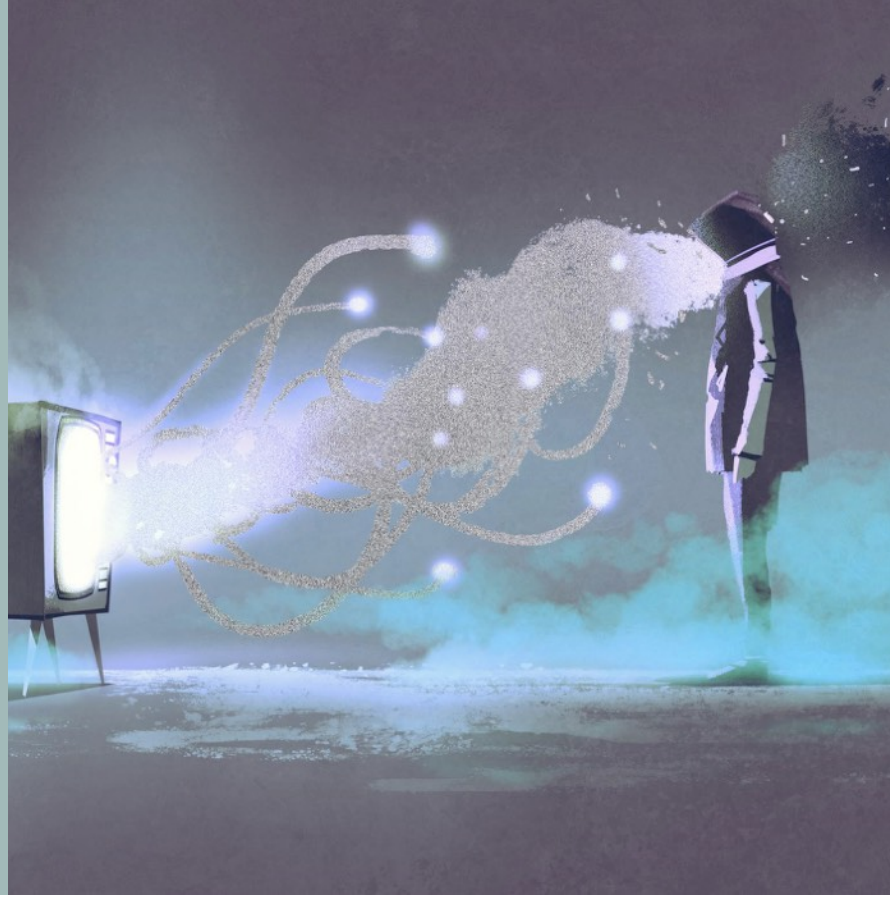
Final Takeaways



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Does Privacy Still Matter?

- Avoid getting comfortably numb!
- Understand new laws
- Follow best practices
- All of us have a role to play, especially those making the web

Thank you!

Questions

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PLEASE PROVIDE YOUR FEEDBACK!

mid.camp/6285

The top rated sessions will be captioned, courtesy of Clarity Partners

Additional Resources

- Think your website is GDPR compliant? Think again
- The GDPR is here. Are you ready? (You need to be!)
- How GDPR will change the way you develop
- Major GDPR fines

- California Consumer Privacy Act (CCPA): What Does It Mean For You?
- CCPA off to rocky start
- Major privacy breaches
- Behind the one-way mirror: technology of corporate surveillance