Making privacy useable

EuroIA 2016
Philipp Murkowsky
@pmurkowsky
A thought experiment

Who knows, that I am currently here, in Amsterdam, at EuroIA, in this very room?
We live in the golden age of information ...
... but we also live in the dark age of omnipresent surveillance.
Loyalität
Aufenthaltszeit
Demographie
Konversionsrate
Heat Map

Slide: Bönzli & Linder, 2016
Surveillance enables personalization

- Targeted Advertising
- Tailored Search Results
- Filtered Content
- Differential Pricing
Surveillance is profitable

Revenue: $18B
Ads: $17B

Revenue: $74B
Ads: $67B

Global Revenue 2015 - Source: statista.com (1, 2, 3)
Are the users aware of this?

Yes, they are!
Public Perceptions of Privacy and Security in the Post-Snowden Era

Pew Research Center, 2014
91% of Americans believe that consumers have lost control over how personal information is collected and used by companies.
64% believe the government should do more to regulate advertisers.
80% are concerned about the government’s monitoring of phone calls and internet communications.
Data Protection Eurobarometer

Source: Privacy Matters, 2015
More than 80% of respondents feel that they do not have complete control over the personal data they provide online.

Two-thirds of these respondents are concerned about this.
Respondents are most concerned about the recording of their activities via payment cards and via mobile phones.
But what are the users doing?

They agree!
Only 20% of the respondents fully read privacy statements.
Most respondents do not read these statements because they find them too long to read, unclear or too difficult to understand.

Source: Privacy Matters, 2015
The "Herod Clause" Experiment

only as a convenience, and the inclusion of any link to such sites does not imply endorsement by us.

Privacy Policy
Registration data has not been taken from you to ensure your privacy from F-Secure.

Your first born child
In using this service, you agree to relinquish your first born child to F-Secure, as and when the company requires it. In the event that no children are produced, your most beloved pet will be taken instead. The terms of this agreement stand for eternity.

General Use Restrictions
Subject to your acceptance of and compliance with these Terms, you are hereby granted the right to use the Service through a non-exclusive, non-transferable and non-assignable limited license. The Service is provided for your use only (unless
The lie illusion of "informed consent".

Many privacy policies protect the companies, not the users.
Take it or leave it!

Providing personal information is an increasing part of modern life.
Lost in transaction

I agree!
Lost in transaction

Get out of my way!
Convenience is king!

- Availability
- Synchronization
- Integration
- Network Effects
Users care about data, but not about metadata

Metadata is a hidden, yet unavoidable by-product of any digital transaction.

Metadata is much easier to process and analyze than the data itself.
Surveillance is covert

Systems are designed to show us the "value", but not the cost of it.
What can we do to increase privacy?

1. Legislation
2. Corporations
3. Users
Surveillance is not inevitable

We probably can't get privacy on a technical level, but we can get it on a legal level.
Data is the new oil, but it is toxic too!

Seagate sued by angry staff following phishing data breach

Seagate HR fell for a phishing scam and released sensitive employee data. The staff affected by the disaster want compensation.

Source: ZDnet
Be transparent
A label for privacy?

License Features
Your choices on this panel will update the other panels on this page.

Allow adaptations of your work to be shared?

- Yes
- No
- Yes, as long as others share alike

Allow commercial uses of your work?

- Yes
- No

Selected License
Attribution-ShareAlike 4.0 International

This is a Free Culture License!
Enable users to opt-out

From better commute options in Maps to quicker results in Search, the data we save with your account can make Google services a lot more useful to you. Here are your controls for managing this data and editing your activity.

Web & App Activity (paused)

Save your search activity on apps and in browsers to make searches faster and get customized experiences in Search, Maps, Now, and other Google products. Learn more

- Include Chrome browsing history and activity from websites and apps that use Google services

MANAGE ACTIVITY

Based on your organization's current settings, this feature is disabled. If your administrator changes this in the future, your choice here will be honored.

If you use more than one account at the same time, some data may get saved in your default account. Learn more
Anonymize data and metadata

Starting with iOS 10, Apple is using Differential Privacy technology to help discover the usage patterns of a large number of users without compromising individual privacy. To obscure an individual’s identity, Differential Privacy adds mathematical noise to a small sample of the individual’s usage pattern. As more people share the same pattern, general patterns begin to emerge, which can inform and enhance the user experience. In iOS 10, this technology will help improve QuickType and emoji suggestions, Spotlight deep link suggestions and Lookup Hints in Notes.

Source: Wired
And what can the users do?

Not much, because they do not control their data.
To make privacy convenient, we have to do it behind the scenes.
Observe and debate

Image: thewebcamcovers.com
Thank you!

@pmurkowsky
Further Sources


Bruce Schneier: Data Is a Toxic Asset
https://www.schneier.com/blog/archives/2016/03/data_is_a_toxic

Bruce Schneier: Data and Goliath - Talks at Google
https://www.youtube.com/watch?v=GhWJTWUvc7E