





# Polonetsky – 10 Privacy Risks and 10 Privacy Enhancing Technologies

Privacy Issues on the Horizon

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## 10 Privacy Risks & Techs



- Whitepaper put together by the Future of Privacy Forum for "Data Privacy Day 2020."
- "Technological advances are creating data protection challenges. But ultimately, managing key issues will continue to require trained people at the center of organizations to bring the human dimension to review products and services, to assess bias, to demand fairness, and to manage the systems and tools that can handle data protection at scale."

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#### 10 Privacy Risks & Techs



#### Privacy Risk #1: Biometric Scanning

- A shift away from keyboard-based GUIs to biometric-enabled UIs.
- These UIs require companies to apply traditional data protection and privacy principles, but will "further blur the divide between law enforcement and consumer privacy concerns."

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#### 10 Privacy Risks & Techs



#### Privacy Risk #3: Social Credit & Reputation Scoring Systems

- Raking of individuals based on information gathered from social media.
- Social credit scores and analyses "span services and platforms, sweeping in a much broader array of unexpected information about an individual."

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# 10 Privacy Risks & Techs



#### <u>Privacy Risk #4: Internet of Bodies & Brain-</u> Machine <u>Interfaces</u>

- Like the IoT, but for medical and biometric devices inside our bodies connected to the Internet.
- "These more intimate devices raise a number of legal, ethical, and security challenges, including who should have access to the data they generate, how to mitigate the risks of malicious hacking, how to apply existing legal frameworks, and who is liable for vulnerabilities, malfunctions, or breaches."

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#### 10 Privacy Risks & Techs



# <u>Privacy Risk #6: Location Services & Proximity</u> Tracking

- 5G signals have shorter range, which requires more cellular towers, which in turn increases location accuracy of data like CSLI.
- This takes the Carpenter case from before spring break to a new level.

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### 10 Privacy Risks & Techs



- "Many of the opportunities offered by emerging technologies relate to increased speed, efficiency, productivity, commercial output, and connectivity. To the extent that these benefits rely upon more extensive collection and processing of personal data, they pose data protection and security challenges."
- Lists 10 "technological innovations and techniques that may be useful tools to manage privacy risks."

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#### 10 Privacy Risks & Techs



- Technological innovations include:
- Advances in Cryptography;
  - · Localization of Processing; and
  - Advances in artificial intelligence and machine learning.
- Short-term actions can be taken by browsers, operating systems, and platforms, too.
  - "[A]s of January 2020, every leading browser has strictly limited or committed to limit most third party cookie tracking, a staple of today's data ecosystem."

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# IV. Privacy in the Digital Age

2. Privacy of Personal Data

a. Privacy Policies

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Stanley – Three Common Privacy Misconceptions that Companies Love

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#### **3 Privacy Misconceptions**



- ACLU opinion paper on three common privacy misconceptions "that privacy-invading companies love."
- "We care about your privacy!"
- 2. What is unfair is also illegal
- 3. We've lost the privacy battle

Privacy - Spring 2023 Matthew B. Welling Johns Hopkins University Information Security Institute 3 Privacy Misconceptions

1. "We care about your privacy!"



- Nearly 60% of Americans believe that a website that has a privacy policy means that it will not share your information without your permission.
- This is not accurate. Most privacy policies detail exactly how your data can be used.
- "How We Use Your Data" would be a better name for these documents.

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# **3 Privacy Misconceptions**



- 2. What is unfair is also illegal
- "People have fairly well-defined feelings about what kinds of behavior are fair and what are not—and they tend to think that things that are unfair are also illegal."
- Large percentages of people (detailed in the article) misunderstand what online advertisers can do with personal data.

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#### **3 Privacy Misconceptions**



- 2. What is unfair is also illegal
- So why do people give up so much info?
- "The bottom line for us is resignation. It's not as if people want to give up their privacy, but in order to get through life they feel they have to, and they don't feel like they have the ability to change things."

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#### **3 Privacy Misconceptions**



#### 3. We've lost the privacy battle

- Basically, there's nothing we can do about it.
- But there have been laws enacted recently to help combat privacy violations:
  - Europe's General Data Protection Regulation (GDPR)
  - California Consumer Privacy Act (CCPA)

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# Do People Really Understand Privacy Policies?

Litman-Navarro – We Read 150 Privacy Policies. They Were an Incomprehensible Disaster.

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## We Read 150 Privacy Policies



- Analysis of privacy policies from 150 popular websites and apps.
- Analyzed the length and readability (complexity) of each, and plotted the results on several graphs.
- Privacy policies took between 2 minutes (Craigslist) and 35 minutes (Airbnb) to read.

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#### We Read 150 Privacy Policies



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- Found that most privacy policies exceeded a high school reading level, and many even exceeded a college reading level.
- For example, Facebook's privacy policy was much more difficult to read than a number of classic texts, like "Great Expectations" and "Pride and Prejudice."

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#### We Read 150 Privacy Policies



- This means "a significant chunk of the data collection economy is based on consenting to complicated documents that many Americans can't understand."
- Contrasts BBC's "unusually readable privacy policy" with Airbnb's "particularly inscrutable"
- Shows the evolution of Google's privacy policy over two decades.

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#### We Read 150 Privacy Policies



- "You're confused into thinking these are there to inform users, as opposed to protect companies. ... These documents are created by lawyers, for lawyers. They were never created as a consumer tool."
- Two things that will continue to make privacy policies more complicated:
  - · More sophisticated and invasive data collection practices; and
  - Additional data protection laws (like California's) with jurisdictionspecific addendums.
- Provides tips to make privacy policies more useful.

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# Privacy Policy Group Discussion

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#### **Privacy Policy Discussion**



- Split into three groups:
  - Breakout Room 1 AirBnB Privacy Policy
  - Breakout Room 2 Facebook Privacy Policy
  - Breakout Room 3 TikTok Privacy Policy
- Work together as a group to answer three questions:
  - On a scale of 1 (very easy) to 5 (very difficult), how difficult is it to understand the privacy policy?
  - 2. What kinds of data are shared about you, and with whom does the company share that data?
  - Do you have any ability to limit the amount or types of data collected about you? If so, what steps do you have to take to do that?

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