Is Online Privacy a Privilege?

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Mentimeter Interaction

• POLL: please go to
  • www.menti.com and use the code
    • 3228 7585
  • Choose one response to the question:
    • Is Privacy dead?
  • Results at the end of the session

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Menti QR code left, OR

www.menti.com and use the code: 3228 7585
Privacy: *do we have any?*

• In a 2016 movie, *I.T.* the antagonist plays an expert in I.T. and I.T. security systems.

• This character, called Ed Porter, states that:
  • “privacy is a privilege”.

I.T.: https://www.imdb.com/title/tt2679552/
Bryce Dallas Howard TED talk 2022
Need for preserving our private life online

https://research.coventry.ac.uk/sites/csi-cop/Shared%20Documents/Graphics/2023-02-07%202016-04-38%20-%20Trim.mp4
How is our privacy compromised online?

- Through the collection of our personal data from:
  - Websites we visit
  - Apps on our smart devices
  - Digital tech we use around the house connected to the internet (e.g. smart TV)
Try the cookie game: 2mins

Game here: https://cookieconsentspeed.run/
Gifting our personal data all over the web


  • “By contributing rivers of data, people … give advertisers the ability to learn about them in great detail”
Who we are gifting to...

From Bashir and Wilson (2018)

➢ "52 Advertising & Analytics (A&A) companies observe at least 91% of an average user’s browsing history";
➢ "... AdBlock Plus (the world’s most popular ad blocking browser extension) ... is ineffective at protecting users’ privacy..." ;
➢ "To show relevant ads to users, advertisers rely heavily on collecting information about users as they browse the web.”
➢ This data collection is achieved by embedding trackers into webpages that gather browsing information about each use“


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Our data extracted without our knowledge...

From Bashir and Wilson's 2018* paper:

➢ "When a user visits a website, JavaScript code from a third-party advertiser is automatically downloaded and executed in the user’s browser";

➢ "... cookie matching ... a process by which different Advertising and Analytics companies exchange their unique tracking identifiers for specific users."


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But what data? >

Personal data
Securing personal data

Examples of personal data include names, (email) addresses, or someone’s date of birth. The GDPR also brings in new things - such as IP addresses. Particular care must be taken with 'special categories of personal data' (e.g. information on someone’s physical or mental health, sex life, and now - under the GDPR - biometric data).

From: Coventry University’s GDPR Information

Personal Data is:

'Any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental economic, cultural or social identity of that natural person.'
Examples of personal data?

• From Irwin (2021): “Under certain circumstances, any of the following can be considered personal data”:
  • A name and surname
  • A home address
  • An email address
  • An identification card number
  • Location data
  • An Internet Protocol (IP) address
  • The advertising identifier of your phone

Irwin, L. (2021). Personal data vs. sensitive data: what’s the difference?
IT Governance.
It wasn’t always like this on the Internet:

in the early days the user was in control.

SO WHAT CHANGED?
"Number of years since launch as at 2020:

- Amazon - 25 years (still < age 30 in 2023!!)
- Google - 22 years
- Netflix - 22 years
- iPod - 19 years
- Skype - 17 years
- Facebook - 16 years
- Gmail - 16 years
- Twitter - 14 years
- iPhone - 13 years
- WhatsApp - 11 years
- Uber - 11 years
- iPad - 10 years
- Instagram - 10 years (now a teen in 2023!)
- Snapchat - 9 years
- Zoom - 8 years
- AirPods - 4 years"
Mobile phone companies and your data

• Brodkin (2021):
  
  • "Starting April 26, 2021, T-Mobile will begin a new program that uses some data we have about you, including information we learn from your web and device usage data (like the apps installed on your device) and interactions with our products and services for our own and 3rd party advertising, unless you tell us not to,"


  T-Mobile will sell your web-usage data to advertisers unless you opt out.

arsTECHNICA

https://arstechnica.com/tech-policy/2021/03/t-mobile-will-tell-advertisers-how-you-use-the-web-starting-next-month/
T-Mobile, privacy and consumer data

• Brodkin (2021):
  
  • “T-Mobile said in a privacy notice. “When we share this information with third parties, it is not tied to your name or information that directly identifies you.”
  
  • “… customers who say they've had problems opting out …”


T-Mobile will sell your web-usage data to advertisers unless you opt out.

arsTECHNICA

https://arstechnica.com/tech-policy/2021/03/t-mobile-will-tell-advertisers-how-you-use-the-web-starting-next-month/
Google snoops on you in *Incognito mode*

- Nayak and Rosenblatt (2021):
  - *Google* failed to kill a lawsuit alleging that it secretly scoops up troves of internet data even if users browse in “Incognito” mode to keep their search activity private.”
Google’s gimmick *Incognito mode*

• Nayak and Rosenblatt (2021):
  • “The consumers who filed the case as a class action alleged that even when they turn off data collection in Chrome, other Google tools used by websites end up amassing their personal information. A federal judge on Friday denied the *Alphabet Inc.* unit’s initial request to throw out the case.”
Human rights
Microsoft CEO Satya Nadella: “Tech companies need to defend privacy as a human right”
But ... Microsoft and *DuckDuckGo* browser

- Cyberguy 2022:
  - "*DuckDuckGo*, an alternative browser known for its stance and embrace of privacy first, has been sharing tracking data from its customers with Microsoft."
  - "In an apparent deal struck between *DuckDuckGo* and Microsoft, tracking data is shared when others may have thought their web activity was completely anonymous."

From here
Human rights

• Article 12 of the 1948 Universal Declaration of Human Rights includes this statement:
  • “No one shall be subjected to arbitrary interference with his [her] privacy … [or] correspondence.”

Human rights

• Article 1 of the 2000 EU Charter of Fundamental Rights states that:
  • “Human dignity is inviolable. It must be respected and protected”.

The 2018 general data protection regulation (GDPR): “sets a high standard for consent” (ICO).

This informed consent entails:

- “offering individuals real choice and control”
- “genuine consent should put individuals in charge, build trust and engagement”.

ICO. (n.d.)

GDPR Informed Consent at a glance.

ICO

The GDPR has two main objectives:

1. Protection of fundamental rights and freedoms of individual persons with regard to processing of personal data; and
2. Protection of the principle of free movement of personal data within the EU.

As of early 2018, the UK Government has published its new Data Protection Bill, which will implement exemptions from the GDPR. The Bill repeals the Data Protection Act 1998 and enshrines GDPR into UK law post-Brexit. It also incorporates a distinct national security regime, gives effect to the Law Enforcement Directive and creates two new criminal offences.

Select the Next arrow to continue.
But those website third-party cookies!
Microsoft and our third-party vendors use cookies and other data to deliver, maintain and improve our services and ads. If you agree, we will personalise the content and ads that you see.

You can select ‘Accept’ to consent to these uses, or click on ‘More options’ to review your options. You can change your selection under ‘Manage Cookie Preferences’ at the bottom of this page. Privacy Statement
“Cookies are a vital piece of technology in your browser allowing websites to make your internet experience better.”
Previously, Coventry University website: dark pattern **nudged** you to **Accept All** cookies.
Change in Coventry University website from 15 March 2021 (CSI-COP project)

Dark pattern gone - tracking by default.

Does this comply with GDPR?
Business Insider
We and our partners use cookies to deliver our services. By using our website, you agree to the use of cookies described in our Cookie Policy.
Doodle Poll

Doodle asks for your consent to use your personal data to:

- Personalised ads and content, ad and content measurement, audience insights and product development
- Store and/or access information on a device
- Learn more

Your personal data will be processed and information from your device (cookies, unique identifiers, and other device data) may be stored by, accessed by and shared with third party vendors, or used specifically by this site or app.

Some vendors may process your personal data on the basis of legitimate interest, which you can object to by managing your options below. You

Manage cookies  Ok, I agree
What is legitimate interest?? Why is it defaulted to accept?
AND NOW FOR THE WORST EXCUSE!
“We use cookies because if we don’t you couldn’t buy stuff.”
Mobile Applications
GDPR Compliance

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NHS – UK’s health service and Apps

- Royal Free Hospital NHS Foundation Trust - “one of the largest healthcare providers in Britain’s publicly funded National Health service (NHS)

- Collaboration with Alphabet’s (Google) UK company, DeepMind Technologies Ltd.

- From Powles and Hodson (2017):
  - “… transfer of identifiable patients’ records without explicit consent”
  - “… sensitive medical data on millions”

https://link.springer.com/article/10.1007%2Fs12553-017-0179-1

https://deepmind.com/applied/deepmind-health/working-nhs/how-were-helping-today/royal-free-london-nhs-foundation-trust/
Babylon healthcare App

Babylon’s “mission is to put an accessible and affordable health service in the hands of every person on earth”.

Babylon health app: https://www.babylonhealth.com/
Embedded Trackers in Babylon App

Babylon health app has these embedded trackers:

- Facebook Login
- AppsFyer
- Mixpanel
- Google Firebase
- Google Crashlytics

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Babylon app and previous UK Govt Minister

- Matt Hancock, former UK Secretary of State for Health (*I’m a celebrity get me out of here 2022 contestant*).
  - Endorsed Babylon “private healthcare company in a sponsored newspaper supplement” (Syal, 2018).


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Babylon app data breach

• “... one of its [Babylon app] users discovered he had been given access to dozens of video recordings of other patients' consultations.” (Kelion, 2020)
• “A follow-up check by Babylon revealed a small number of further UK users could also see others' sessions.” (Kelion, 2020)

https://www.bbc.co.uk/news/technology-52986629
Livi app for GP appointment

Download the Livi app
Sign up and select your existing GP practice for our free NHS service. If you’re not yet eligible you can choose to use our pay-as-you-go service instead.

Book an appointment – at a time that suits you
See a GP online the same day or book up to 3 days ahead. Your GP will call you in the app to start your video appointment.

Get medical advice, prescriptions & referrals
Our GPs can offer medical advice, prescriptions delivered to a pharmacy near you and referrals to a specialist, if necessary.

https://www.livi.co.uk/

BCS Coventry talk: 15 February 2023
Livi GP Appointment App Trackers

EXODUS PRIVACY TOOL

• Livi app has 7 trackers that collect data about usage:
  • Amazon analytics (Amazon insights)
  • Google analytics
  • Snowplow “behavioral data” analytics

From here:
Livi App Permissions on a Smart Phone

- Exodus Privacy tells us Livi app has:
  - 19 Permissions
  - These are things the app can do with your smart phone, incl.
    - Read contents of SD (memory) card
    - Modify or delete contents of SD card
    - Take pictures/video
    - Record audio

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App permissions

• Goode (2018):
  • “mobile apps—not just Facebook—can vacuum up a crazy amount of data with every interaction.”


App Permissions Don’t Tell Us Nearly Enough About Our Apps:
Your apps are smarter than ever. Your app permissions are not.
Wired.

https://www.wired.com/story/app-permissions/?code=7WCuvRW65wrIMV_A1BJoeBKa1U20xAyHqlj3KsaFS&state=%7B%22redirectURL%22%3A%22%22%22%22%22https%3A%2F%2Fwww.wired.com%2Fstory%2Fapp-permissions%2F3Futm_source%3DWIR_REG_GATE%22%7D&utm_source=WIR_REG_GATE
App permissions

• Goode (2018):
  • “Both iOS [Apple devices] and Android apps are capable of accessing your phone’s microphone, cameras, camera roll, location services, calendar, contacts, motion sensors, speech recognition, and social media accounts.”

App Permissions Don’t Tell Us Nearly Enough About Our Apps: Your apps are smarter than ever. Your app permissions are not. Wired. 
https://www.wired.com/story/app-permissions/?code=7WCuvRW6E5wriMV_AiBJoeBKtalU20xAyHqlj3KsaFS&state=%7B%22redirectURL%22%3A%22https%3A%2F%2Fwww.wired.com%2Fstory%2Fapp-permissions%2F%3Futm_source%3DWIR_REG_GATE%22%7D&utm_source=WIR_REG_GATE
App permissions

• Goode (2018): “Some of this access is necessary”:
  • “.. a photo app doesn’t work without access to a smartphone’s camera…”
  • “… a ride-hailing app like Uber doesn’t work without location information.”
  • “Reject those permissions, and you’ll break functionality. But sensor data could also reveal a lot more than some people realize, especially when patterns start to emerge.”


https://www.wired.com/story/app-permissions/?code=7WCuvRW6E5wriMV_AIBJoeBKtalU20xAyHglj3KsaFS&state=%7B%22redirectURL%22%3A%22%7B%22https%3A%2F%2Fwww.wired.com%2Fstory%2Fapp-permissions%2F%3Futm_source%3DWIR_REG_GATE%22%7D&utm_source=WIR_REG_GATE
“The Internet is plagued with Trackers”*

*Privacy International
https://privacyinternational.org/news-analysis/3188/taking-depression-test-online-go-ahead-theyre-listening
Internet for tracking?

• Dr. Arvind Narayananan leads Princeton University’s Web Transparency & Accountability Project:

“The web is a cesspit of surveillance”

https://www.cs.princeton.edu/~arvindn/
https://webtap.princeton.edu/
The problem....

• ... is huge ... not going away anytime soon

• Companies thrive on cookie data-collection business model

• ‘The Social Dilemma’ Netflix docudrama – naïve male Silicon Valley techies explaining their ‘do positive for the world’

• Ideas that have backfired leaving the web infested with privacy intrusion, data vampires and fake news/bullying
with MSFT where we can but should be wary of their activity [in promoting privacy] and seek to
gain as much intel as possible.”

174. In addition to outlining discussions that Google wanted to have to forestall privacy
efforts, the June 31, 2019 memo also outlined that Google wanted to discuss “competition” and
“ways we can work together.”

175. Google presents a public image of caring about privacy, but behind the scenes Google
coordinates closely with the Big Tech companies to lobby the government to delay or destroy
measures that would actually protect users’ privacy. Of course, effective competition is concerned
with both price and quality, and the fact that Google coordinates with its competitors on the quality
metric of privacy—one might call it privacy fixing—underscores Google’s selective promotion of
privacy concerns only when doing so facilitates its efforts to exclude competition.

From page 64 of US court document; Civil Action No. 1:21-md-03010-PKC accessible from courtlistener.com
Google Analytics & the GDPR

From The International Network of Privacy Law Professionals (INPLP):

• “The Austrian Data Protection Authority (DPA) decided in a recent ground-breaking decision (22nd of December 2021, D155.027 2021-0.586.257) that the use of Google Analytics is currently violating the GDPR.”

• The Austrian Data Protection Authority “held that the transfer of personal data to the US in light of the Schrems II decision is particularly problematic. This is the first decision on the 101 model complaints filed by noyb. Soon similar decisions are to be expected in other EU member states”.

Social media and privacy: Facebook parent company Meta fined $725m

- On Facebook User privacy lawsuit (*CNBC*: Kharpal (2022):
  - "Facebook parent Meta has agreed to pay $725 million to settle a class action lawsuit that claimed the social media giant gave third parties access to user data without their consent."
  - "The class action lawsuit was prompted in 2018 after Facebook disclosed that the information of 87 million users was improperly shared with Cambridge Analytica."
  - "Cambridge Analytica, which shut down after the allegations, was controversial because the data it harvested from Facebook was used to inform political campaigns."

Social media and privacy 2: EU fines Meta/Facebook €380million

- Chan (2023):
  - “European Union regulators hit Facebook parent Meta with hundreds of millions in fines for privacy violations and banned the company from forcing users in the 27-nation bloc to agree to personalized ads based on their online activity.”
  - “Ireland’s Data Protection Commission imposed two fines totaling 390 million euros ($414 million) in its decision in two cases that could shake up Meta’s business model of targeting users with ads based on what they do online. The company says it will appeal.”

CSI-COP

• EU Horizon2020 research and innovation CSI-COP project leveraging citizen science methodology
• Recruit citizen scientists from across Europe and beyond
• Informally educate and train on informed consent in the GDPR
• Engage citizen scientists as online privacy investigators
• Citizen scientists join CSI-COP team exploring beneath websites and Android apps

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CSI-COP outcomes

• Raised awareness of rights accorded in GDPR
• Increased scientific literacy of European citizens
• Volunteer citizen scientists investigations of websites and apps realised two searchable online databases:
  • Websites: https://csi-cop.eu/project-results/citizen-scientists-website-investigations/
  • Apps: https://csi-cop.eu/project-results/citizen-scientists-app-investigations/
• Investigations > innovating online accessible knowledge resource/repository of tracking in websites & apps (due May 2023)

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Free tools available to check websites

- There is **no standard tool** but there are online tools to assess privacy and security of website visitors’ data:
  - WebbKoll: [https://webbkoll.dataskydd.net/en](https://webbkoll.dataskydd.net/en)
  - Page X-ray: [https://pagexray.fouanalytics.com/](https://pagexray.fouanalytics.com/)
  - Security Headers: [https://securityheaders.com/](https://securityheaders.com/)
  - Cookieserve: [https://www.cookieserve.com/](https://www.cookieserve.com/)
  - Cookiemetrix: [https://www.cookiemetrix.com/](https://www.cookiemetrix.com/)
  - Web privacy check: [https://webprivacycheck.plehn-media.de/en](https://webprivacycheck.plehn-media.de/en)
  - 2GDPR: [https://2gdpr.com/](https://2gdpr.com/)

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For apps on Android devices

• Exodus privacy
Another for apps

- **Tracker Control TC**
  
  [https://trackercontrol.org/](https://trackercontrol.org/)
As members of the public, we are also *citizen scientists*

‘*Your Right to Privacy Online*, free informal education resource available in English and twelve translations from here:

[https://csi-cop.eu/informal-education-mooc/](https://csi-cop.eu/informal-education-mooc/)

We can all become privacy champions and *stop accepting cookies on websites*

*Check permissions in apps you download*

*Stop purchasing from sites that violate our *right-to-choose*
CSI-COP project 9th newsletter:
https://csi-cop.eu/csi-cops-9th-newsletter/

CSI-COP project 9th Newsletter presents:
- Project purpose: page 1
- Free educational resource: Your Right to Privacy Online (MOOC) page 1
- Project updates incl. Best Innovative Privacy Project: Picassio Privacy award: page 2
- Partner Activities: page 3
- Guest Interview: CSI-COP Citizen Scientist: page 6
- Meet more of CSI-COP team members: page 8
- CSI-COP contacts: page 15

Project Purpose

CSI-COP project at its core aims to engage citizen scientists across Europe and the world to explore their own digital journeys by recording the number and type, of third-party tracking cookies they find across the web and in apps in their mobile devices. Frequently asked questions (FAQs) about COICOP have been translated into Greek, Hebrew, and Hungarian and can be found here: https://csi-cop.eu/faq/

For further information please contact CSI-COP’s Co-Investigator and Director of Science; Dr. Huma Shah on a/h779@coventry.ac.uk

Free educational resource

CSI-COP’s free informal education resource (MOOC), Your Right to Privacy Online, which you can complete in your own time, is available to download as a document in English and twelve translations: Lithuanian, Czech, Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Polish, Romanian and Spanish from the project website: https://csi-cop.eu/informal-education-mooc/

In five easy-to-follow steps, the course on Your Right to Privacy Online can be completed in under half a day. The course covers:
Step 1 - The concept of ‘privacy’
Step 2 - What is personal data?
Step 3 - How are we tracked online?
Step 4 - What rights do we have to online data protection and privacy?
Step 5 - Free online tools to protect your data privacy.

This MOOC is also available in English from the EU Citizen Science platform, from here: https://mooc4-eu.citizen-science/

Project updates:

CSI-COP has been very busy since the last Newsletter in October-November 2022. Citizen scientists have been completing website and app investigations and partners have been organising parent teacher roundtables and stakeholder calls. You can read and download CSI-COP’s previous newsletters here: https://csi-cop.eu/newsletters/

CSI-COP wins ‘Best Innovative Privacy Project’ in inaugural Picassio Privacy Award

On Thursday evening 9 December 2022, CSI-COP project were represented in the awards ceremony of the inaugural ‘Picassio’ Privacy, Infotech, Culture, Change, Awareness, Society, Organisation Picassio Privacy awards for the ‘Best Innovative Privacy Project’ category, nominated by Dr. Huma Shah from CSI-Coordinating partner, Immer Besser’s Dr Tiboros Ignat and Adriana Ignat joined CU’s Huma and Jamie Winter. CSI-COP were thrilled to learn that the project won the Best Innovative Privacy Project category featuring strong contenders including the UK data protection authority, the ICO, Nokia, PwC, and the UK Cabinet Office. You can find the award winners in all the PicassioPrivacy award categories here. You can view Tiboros short speech of the moment CSI-COP won the award here.

An official event of the event can be found here: CSI-COP team pictures from the event are below:

CSI-COP Year-end meeting in Munich, 13 December 2022

Immer Besser’s Dr Tiboros Ignat and Adriana Ignat hosted CSI-COP’s Year-end hybrid meeting in Munich on 13 December 2022. In the morning’s closed session, partners presented their progress virtually through Zoom, or in person in the Rosenhoerzel Hotel in Munich city centre. The meeting included an opportunity for in-person attending partners to gather for a group photo with the Picassio award.

In the afternoon CSI-COP hosted an open session with two invited guest speakers: Advisory Board member, Emeritus Professor Elaine H. Sommerfeld, and Professor of computer science, Digna Schmitz Dietrich at the Berlin School of Economics and Law (HWW Berlin).
Concluding: *Be proactive*

- Take back your *free-will*: control it
- Do not allow erosion of your *right to privacy*
- Protect your human rights
Results of Mentimeter poll

• https://www.menti.com/al81ipacae1p
Thank you for listening

Email: ab7778@coventry.ac.uk
LinkedIn: CSI-COP
Twitter: @copcsi

ANY QUESTIONS?

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