



Engaging Content
Engaging People

novel contribution!

Personalised Privacy Policies

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(→ that's me!)

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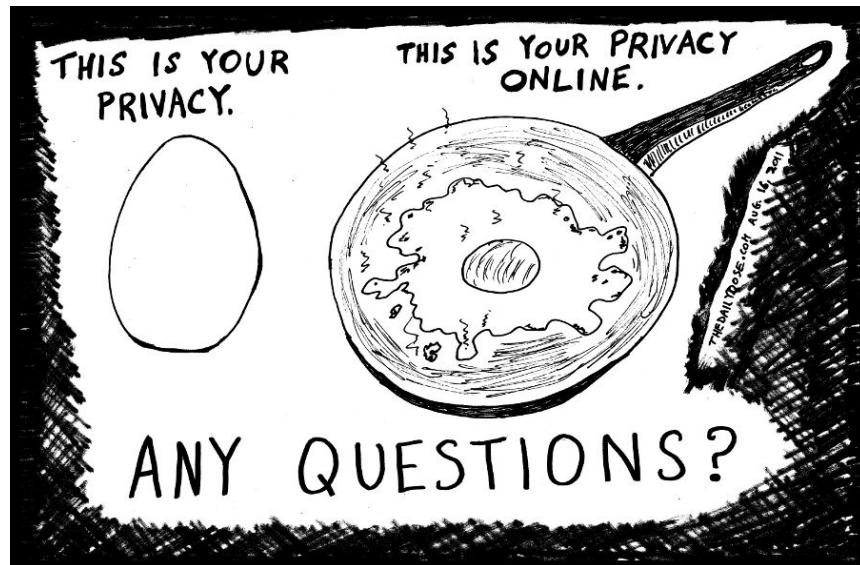
✉ email me
• thoughts
• questions
• collaboration
• criticism

twitter

all research work
& publications

privacy policy is a legal document (according to privacy laws) that discloses how (personal) data is -

- a) gathered
- b) used
- c) disclosed
- d) managed



Reading the Privacy Policies You Encounter in a Year Would Take 76 Workdays

- Alexis C. Madrigal - The Atlantic - Mar 1, 2012

pre-GDPR

THE REAL COST OF PRIVACY

Median length of a privacy policy: **2,518 words**

Average time to read that policy: **10 minutes**

Number of privacy policies you encounter in a year: **about 1,462**

Number of work days it would take to read those: **76**

Number of hours it would take US users to read them: **53.8 billion**

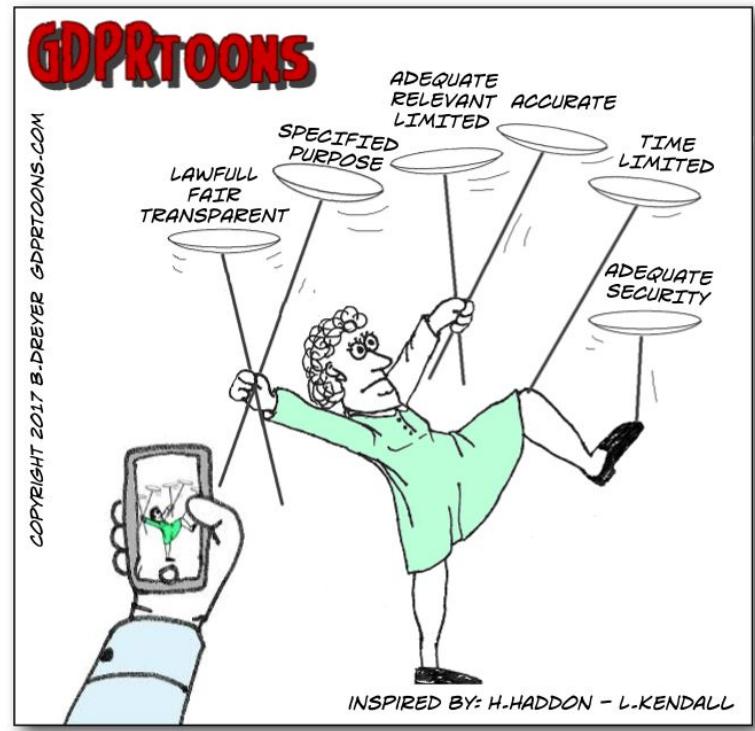
Hypothetical national opportunity cost of reading privacy policies:

\$781 billion

then came GDPR...

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GDPR, which became enforced from 25th May specifies additional rights and obligations for information to be provided by the controller to the data subject before collecting happens.



 Neil Cremins
@ncremins

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Current state of my inbox:

We've updated our privacy policy.
...

4:15 AM - 26 Apr 2018 from Du...
7,684 Retweets 30,129 Likes



Update to our Terms of Service and Privacy Policy

As we continue to improve Twitter's products and features, we've also been working on improving our Terms of Service and Privacy Policy.

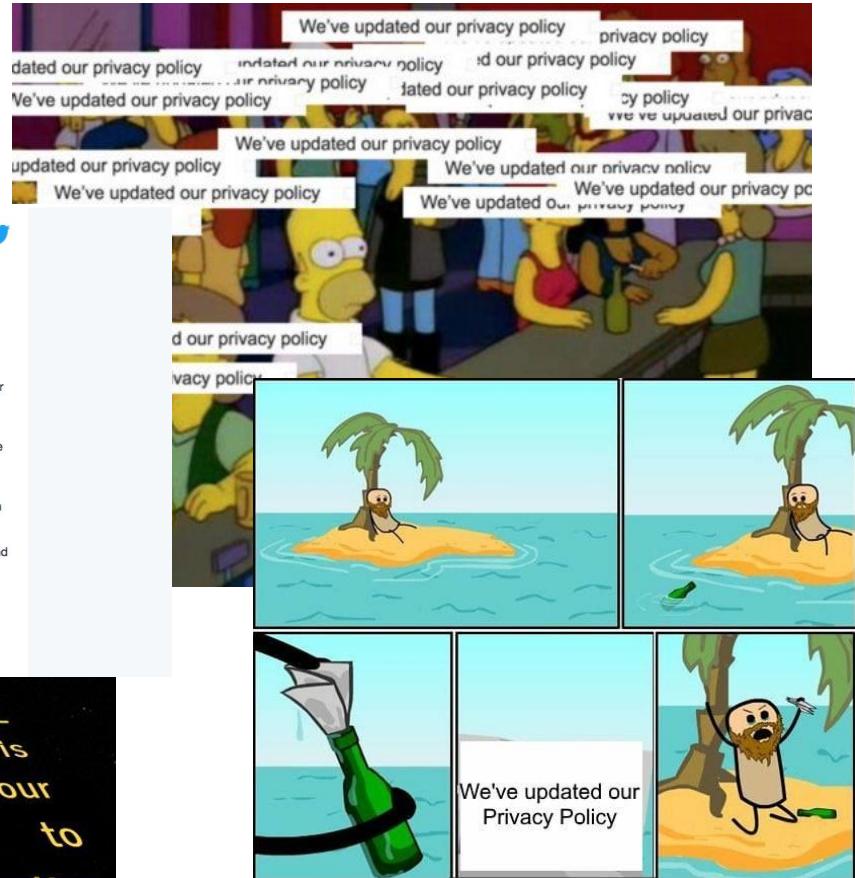
Our Terms of Service are now easier to read and better organized, which should help users worldwide. Our Privacy Policy has been updated to include a section on the EU-US Privacy Shield program. In addition, we've updated and clarified how various services have changed over time. For example, we've included adding additional information on non-public communications, using multiple accounts, logged out access, and our advertising services. Feel free to learn more about this in the Help Center.

Please take a moment to read our [Terms of Service](#) and [Privacy Policy](#), and keep in mind that by using our services on or after September 30, 2016, you agree to the revisions.

Thanks for using Twitter.

- Twitter

*We have updated our GLOBAL
PRIVACY TERMS. Your trust is
important to us. As part of our
ongoing commitment to
transparency, and in preparation*



Provide specific information to the user about how their data is being collected, used, stored, and shared.

Exactly what data?
How is it collected?
Shared with whom ?
Stored for how long?

- Only for me i. e. Data Subject
- Not common to everyone
- Not generalised

But the Privacy Policy still says...

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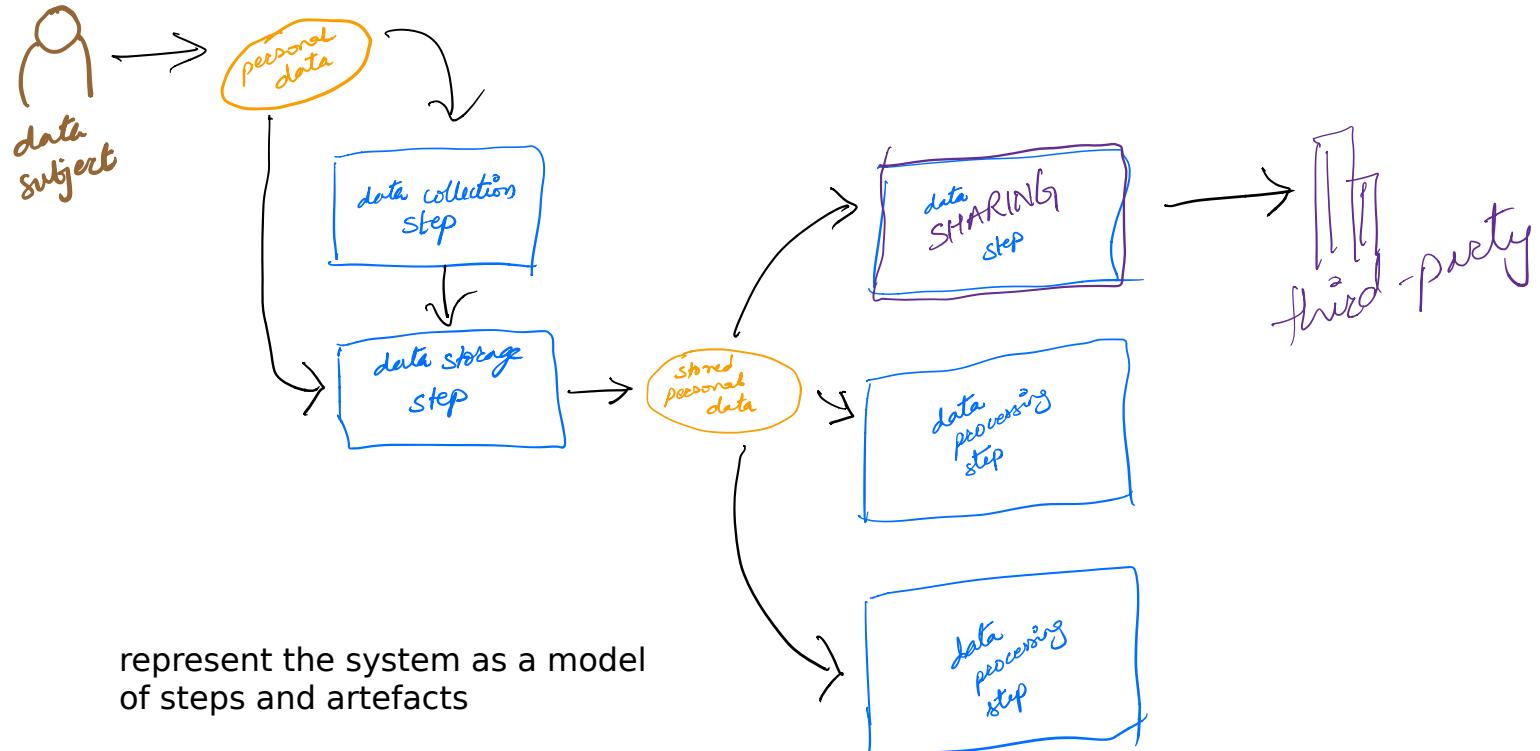
- a) we “*may*” collect your data
- b) we “*may*” store your data
- c) we “*may*” use your data
- d) we “*may*” share your data

Q: Are you collecting data?

A: Yes. No. “Maybe”.

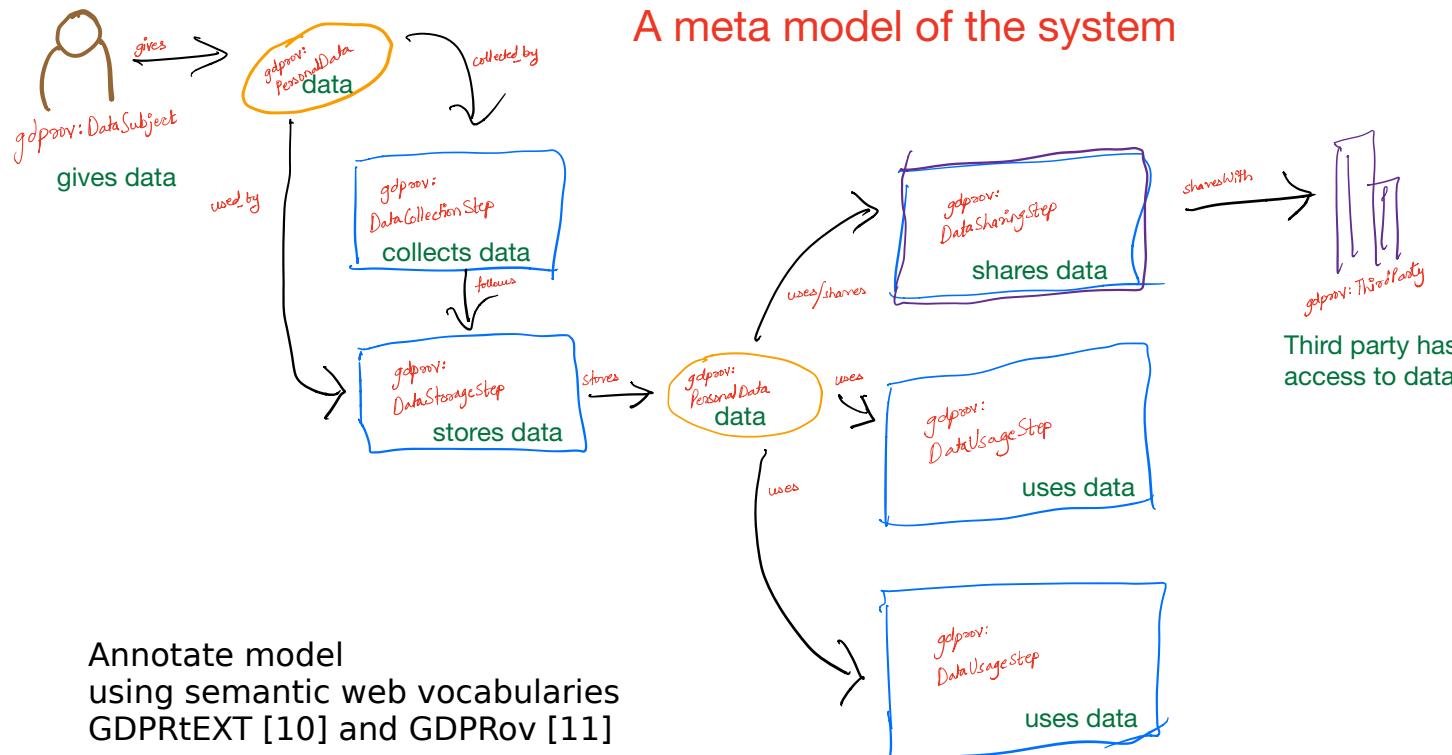


Resolving Ambiguity



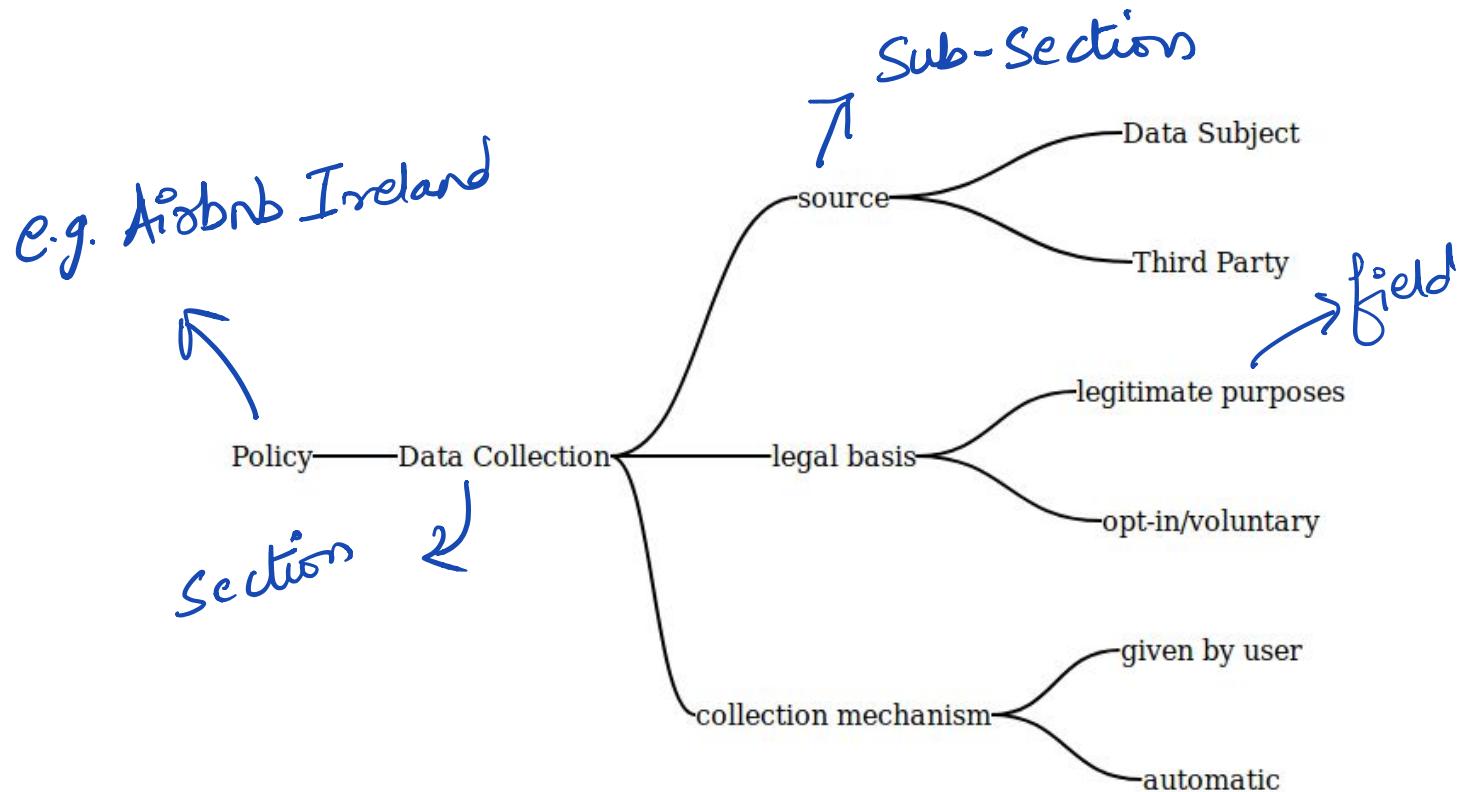
represent the system as a model
of steps and artefacts

Resolving Ambiguity



Analysis of Privacy Policies

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Privacy Policy

This privacy policy is part of a research project (see openscience.adaptcentre.ie) and is made available under the [CC-by-4.0](#) license.

This privacy policy was derived from the policy provided by [Airbnb Ireland](#) (archived copy available [here](#))

→ stored copy
because privacy
polices can change

This Privacy Policy describes how we collect, use, process, and disclose your information, including personal information.

Information We Collect

There are **three** general categories of information we collect.

data collected from user

1.1 Information You Give to Us.

→ **data collection**

1.1.1 Information that is necessary for provision of services

→ **legal basis**

We ask for and collect the following personal information you when you use our service. This information is necessary for the adequate performance of the contract between you and us and to allow us to comply with our legal obligations. Without it, we may not be able to provide you with all the requested services.

data category

◦ **Account Information** When you sign up for an account, we require certain information such as your **first name**, **last name**, **email address**, and **date of birth**.

◦ **Profile and Listing Information** To use certain features, we may ask you to provide additional information, which may include your **id address**, **phone number**, and a **profile picture**.

◦ **Identity Verification Information** To help create and maintain a trusted environment, we may collect identity verification information (such as **images** of your government issued ID, **passport**, **national ID card**, or **driving license**, as permitted by applicable laws) or other authentication information.

◦ **Payment Information** To use certain features of the such as **booking**, we may require you to provide certain **financial information** (like

data type

↑
information categories

→ **data instances**

→ **purpose**

process

Why do it? Benefits!!!

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1. Systematic representation of privacy policy metadata
2. Can generate privacy policy when system changes
3. Automation of policies
4. Structured metadata
5. Better for Data Subjects (more information available)
6. Metadata is also useful for compliance purposes

TWO approaches - do it myself, or automate

A. Manually

- i) complex
- ii) requires legal clarity for concepts
- iii) time consuming

B. Automate

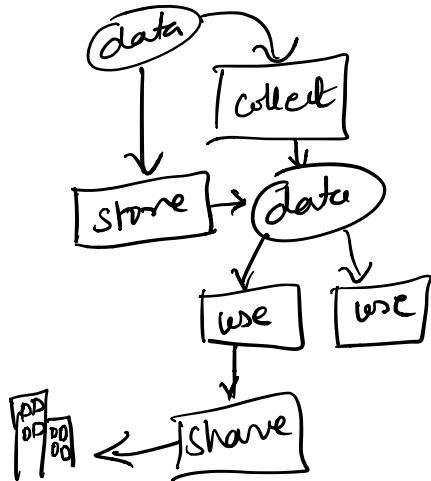
- i) faster
- ii) difficult to implement
- iii) can scale to large number of policies

Future Work - More Annotations

- ① method →
 - a) annotate
 - b) serialize → ontology
 - c) model metadata
- ② test →
 - a) compare with right to data portability
 - b) compare with methods that extract data from policies
- ③ demo

Future Work - Demo

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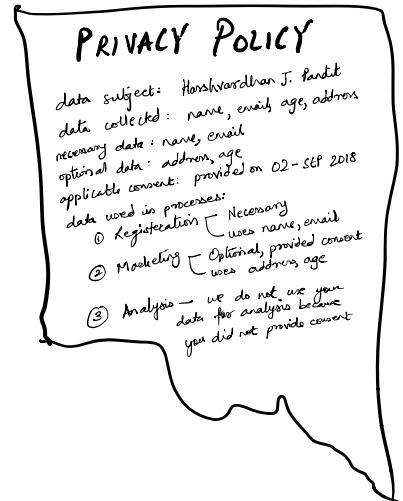


:name a gdprov:PersonalData;
 sdls:label "name";
 gdprov:wasGivenBy "Harshvardhan".

: age a gdprov:PersonalData;
 sdls:label "age";
 xsd:value 28;
 gdprov:wasGivenBy "Harshvardhan".

:Registration a gdprov:Process;
 sdls:label "Registration";
 gdprov:hasStep : SignUpForm;
 gdprov:hasStep : CollectedUserData;
 gdprov:hasStep : SharedUserData;
 gdprov:hasLegalBasis gdprov:legitimateInterest.

:Marketing a gdprov:Process;
 sdls:label "Marketing";
 gdprov:hasStep : SignUpForm;
 gdprov:hasStep : CollectedUserData;
 gdprov:hasStep : SharedUserData;
 gdprov:hasLegalBasis gdprov:consent.



① define model

② convert to metadata

③ generate privacy policy

Let us discuss!

Q: Are all privacy policies structured similarly?

Ans: No. A large number of them are.
But others are similar → how to deal with them?

why?

Q: Will companies adopt this measure?

Ans: **Unlikely.** Unless it becomes legally mandated.
But this can be useful in other domains.

which?

Q: Where is your implementation?

Ans: Work-in-progress!
more details?

comparable
work?

will it become
a law?