

Opening up the Online Notice Infrastructure

An [‘Open Notice’](#) Call For Collaboration

Abstract

Many people who use the web express concern about both the increasing amounts of their personal data being collected online and the terms to which they agree. The existing global infrastructure for managing data and terms relies heavily on the use of ‘notices’, and these come from the data collector, rather than from the individual. Notices are the legal regulatory mechanisms that refer to privacy policies and terms of service. This system of notices is unfit for use in the contemporary digital context. The notices are often unreadable, unclear, and not useful in practice. They provide limited guidance for people and few benefits to the companies and organisations who issue them. Open Notice is an effort that calls for an open, global, and public infrastructure for legally required, digitally necessary consent-based notices. The Open Notice effort seeks to foster collaboration among the various projects working on these problems around the world. This paper outlines a framework for greater multi-stakeholder collaboration between these projects, regulators, and governments, with the aim of creating an open and global notice infrastructure.

1. Introduction

The current infrastructure for managing the collection of personal data online is strongly influenced by pre-existing privacy laws. At the core of all modern Data Protection regimes around the world is the notion of “informed consent.” Before collecting and processing personal data, or to form an agreement to terms of service or a license, a data controller must provide a person with a “notice” and seek “consent.” Online, this notice requirement is currently negotiated in the context of terms-of-service and opt-in’s with privacy policies. Do Not Track is a welcome mechanism by which individuals can signal that they do not want to be tracked; but in the long term, the online notices that data collectors provide to individuals need to be made more usable.

The current notice infrastructure is “closed.” By this we mean that notices are not *automatically findable* and *systematically usable*. There is not currently a common way for an individual to locate an online notice at the point when it becomes relevant to him or her. And, if located, the use of these notices is not

systematic; there are no standard icons, policy layers, terms, or structure. Some patient individuals may attempt to read these notices, but by and large it is not yet possible to assess, evaluate, nor track notices in a systematic way.

The result is that people are not aware of what policies and notices they are subjected to at any one point in time online. There is no way to see how policies may interact with each other, or to see how many policies are active for any one single online interaction. This is because, notices are systematically closed, developed ad hoc by and for lawyers, as to have the impact that people agree to notices but fail to understand them. Closed notices are very expensive, they hinder and stop the free flow of information and the ability for people to control their own information in a performative way. The effect is that the economic performance of existing notices is very low. It takes people hours to use notices and days to interact with organisations about the use of them. Opening notices would dramatically improve the performance of notices for not only privacy, but security, health and safety information, in multiple ways. As a result, web users increasingly find their expectations for privacy and use of service are in conflict with the legal realities of the notices they have “agreed” to.

An “open” notice infrastructure would be one in which these notices *are* automatically findable and systematically usable. The average web user would, with minimal cost, be able to access, assess, track and compare the notices they have agreed to. There are a number of ways this could be achieved, and the solution is likely to involve a mixture of top-down, bottom-up, and crowd-sourced technical and policy efforts. The important point is that under an “open” system, notices would no longer demand an unrealistic level of patience and diligence on the part of the user.

Opening up notice may not, in itself, solve all the problems of privacy and fair service use. However, it is the most relevant starting point and a fundamental building block for further solutions across all jurisdictions. The positive opportunities inherent in the emerging market for personal data are predicated on the informed consent of individuals. Until they can actually *use* online notices, people will not be in a position to make informed consensual choices.

2. A framework for opening up notice

There are a number of projects working on solving different aspects of this problem. They each would benefit from a more open notice infrastructure. There are a number of steps in the process of opening up notice, including [see

appendix A for flowchart of Open Notice efforts and components, (contributed by collaboration between Solon Barocas' and Par Lannero's)];

The components are:

- Locating and recording the URL of a notice/policy.
- Capturing and cleaning the notice, and putting it into a centralised repository.
- Tagging notices.
- Providing a method for remotely tracking changes to notices.
- Establishing standardised terms/language.
- Developing schema that breaks a notice into different facets.
- Coding notices according to a schema – either by the organisation who created the notice, or hand coded by lawyers and law students, crowd-sourced, and / or natural language processing techniques.
- Converting the notice into a machine readable format.
- Subsequently, they can be:
 - a) parsed into simpler formats, such as icons, simple language, or nutrition labels.
 - b) compared with each other, and rated according to a variety of metrics.
 - c) compared to and checked for compliance with a user's own privacy preferences (P3P style).

There are different projects working on different stages of this process. Our intention is to facilitate basic notice standards, privacy, and terms to help all projects in this area interoperate, and even build upon each other's work. Ideally, an Open Notice coalition would continue to develop and contact all the groups and projects working on this problem. There may be additional stages in the process which we have neglected, which other projects might be working on. The overall aim is for a broad, multi-stakeholder process which encourages any relevant projects to get involved, collaborate, innovate, and find funding.

What could be achieved through collaboration?

- Common standard, location and structure for notices.
- Common formatting, layering of notices to polices and icons.
- Common legal terms, vocabulary, and ontology.
- Common way to link/augment existing policies so they are open.
- Common data formats, and places to share code development.

- Mapping the global legal environment, and combining this with common ways to refer (or even better, link) to immediate remediation as well as the regulation/legislation.
- Developing common metrics for evaluating notices across multiple factors, from legal compliance within a given regime, to attributes like the clarity and usability of notice.
- Standard ways to inform users of changes to notices.
- Standard ability to enable people to independently track, manage and control consent.

3. The potential benefits

There are many potential benefits of greater collaboration between these projects. For those working on building this infrastructure, there will be greater interoperability between projects. By using common data formats and places to share code, we can hopefully minimise duplication of existing work and be more effective. By agreeing on common terms and ontologies, projects working on different aspects of the ecosystem can normalise legal terminology and ensure that the whole process flows more smoothly for each other and for end users of notice. For instance, an individual should be able to apply the rating system (or legal metrics) provided by one project to the notices that are captured and tracked by another project. Or alternatively, use one service to track changes to the notices they have agreed to, and another service to translate them into simplified versions. Common terms and formats could create this kind of interoperability.

The benefits to society at large would be significant. Common standards and open infrastructure for notice would pave the way for incredible personalisation, new services, and alternative forms of notice which are bilateral and very performative. New commercial and social tools and services might also be built on top of this open infrastructure. For instance, emerging “Vendor Relationship Management” tools could be used in conjunction with this infrastructure to go beyond tracking and evaluating notices towards two-way negotiation between individuals and companies.

4. Conclusion

Opening up the notice infrastructure is not in and of itself the solution to all current and potential privacy problems, but usable transparency over notices and consents is an important and necessary first step. Privacy laws and principles around the world emphasise openness as informed consent is a core prerequisite for legitimate information processing. The existing notice

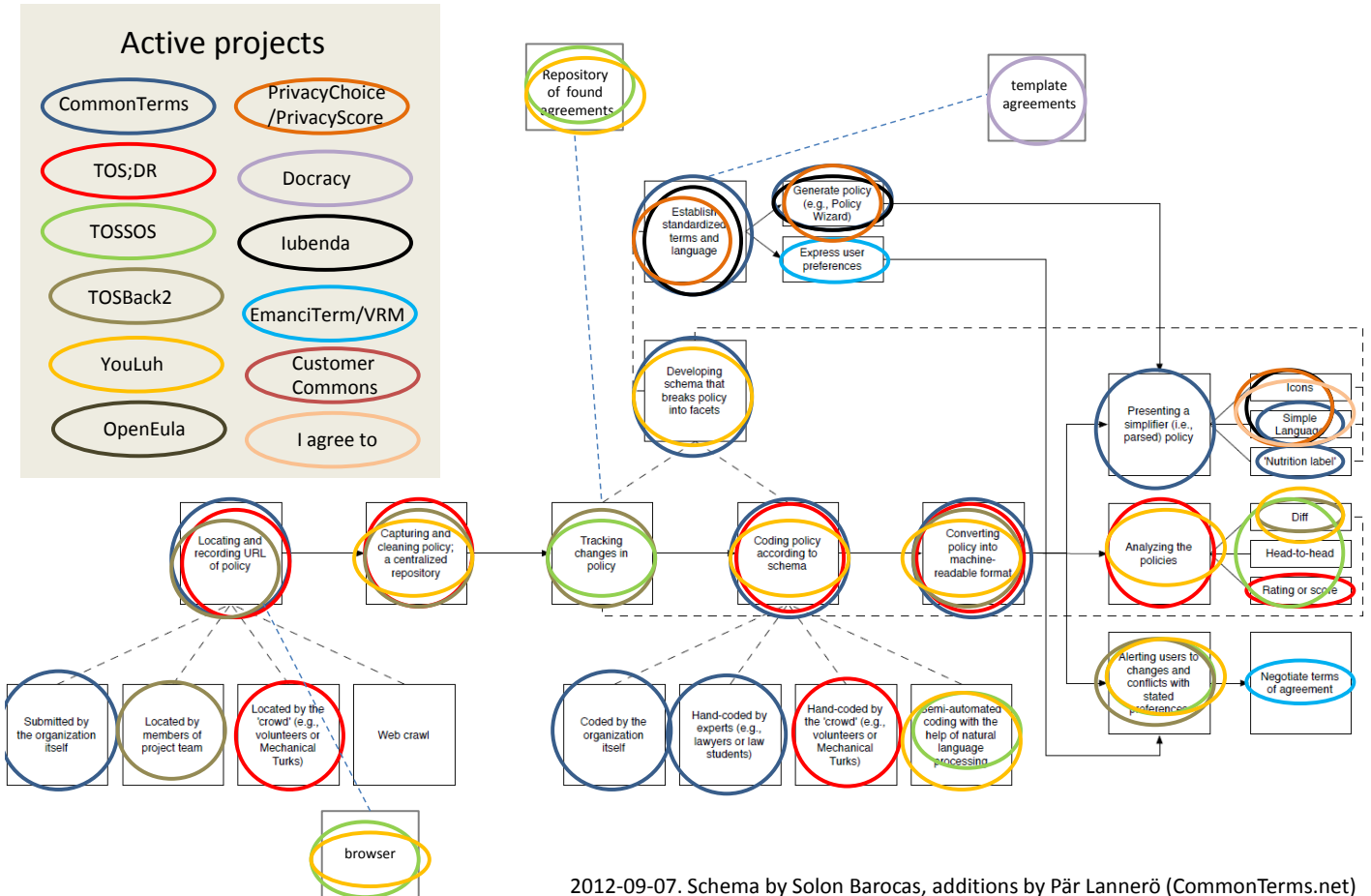
infrastructure does not live up to its stated purpose, rendering its legality to administer terms of service and the like questionable. With further regulation on the horizon, the existing framework will cease to meet the demands of modern information infrastructure.

Many projects today are working on updating, adapting, and bridging this infrastructure. By working together on Open Notice, collaboration with these projects will create an open infrastructure, helping each other and people who interact with digital policies across the web.

Appendix A

Ecosystem of Privacy Policy/TOS management

The road to solving the Biggest Lie problem



2012-09-07. Schema by Solon Barocas, additions by Pär Lannerö (CommonTerms.net)

Appendix B: List of Founding Participants and Projects

Mark Lizar & Reuben Binns
[Open Notice](#) Project Coordinators

Pär Lannerö
[CommonTerms project](#)

“CommonTerms is a non-profit project with the same focus as Open Notice: to change the current broken status of online Terms & Conditions (Terms of Service, Privacy Policies and to some extent EULAs and similar). We have drafted a *preview format* for online Terms & Conditions. We have tried to find all other similar projects, in order to get some cooperation going. We try to contribute to putting the "Biggest Lie" problem in focus, by presenting at conferences, talking with journalists, policy makers, web developers, being active in social media and launching the confession booth www.biggestlie.com. We did a detailed analysis of 22 TOS documents selected from popular online services to see what terms are commonly appearing, and we are planning to use the resulting database as a start for a growing database of common terms, which will be accessible by API and as open as possible for anybody to read, add to and reference.”

Sebastian Lemery
[TOSSOS Project](#)

TOSSOS was built to archive Terms/Privacy Policies, to allow users the ability to compare products side by side and see legalese summarized into plain English. There is currently a early release Chrome Plugin and a simple, general purpose API.

Veronica Picciafuoco
[Docracy.com](#)

“Docracy's general goal is to be the home of free legal documents. We call it "github for legal documents" as we encourage users to branch and improve documents (anybody can publish a new document). As you can imagine, terms of service and privacy policies are some of the most requested documents. In an effort to foster the standardization of privacy policy for mobile apps, we launched this project: <https://www.docracy.com/mobileprivacy/> - the call to action is: improve the draft, create new versions for different types of apps, etc.... getting to a crowdsourced standard privacy policy language that mobile developers can rely upon... we welcome any contribution / partnership with projects that share our goals. Also, we are a source of publicly available

documents and we host some famous TOS/PP that we keep updated, so users can see differences between versions.”

Hugo Roy

[ToS;DR Project](#)

“ToS;DR (Terms of Service; Didn’t Read) is creating a transparent peer-review process to rate terms of service to produce open data and free software.” Hugo suggests “standardised information about services so that we can share information about a specific service, building a strong archiving system to track changes (see [tosback2](#)), tools to scrape these archives to help humans read the important stuff and leave out the unimportant stuff, and a way to build knowledge around these data for users (one example: a rating system)”.

Matt Snyder

[Youluh Project](#)

“Youluh will be a service for end users. Users will have a client app by which they can upload any EULA, ToS, or other electronic agreement they encounter, and receive back a brief report card containing statistics about the clauses in the agreement. The service takes into account that many clauses are borrowed and adapted by agreement authors, so one clause may appear largely unchanged in many agreements. The report card tells the user at a glance about clauses he/she has already accepted as part of prior agreements, clauses accepted by friends, clauses with commentary by other users and/or experts, and clauses that are new or contain new wrinkles. The report card is a decision-support mechanism, meant to assist users who feel they do not have time to read every agreement they encounter, but want to be alerted to anything seriously bad before agreeing. Think of it as a virus scanner for electronic agreements. Youluh is being built by a commercial enterprise, Double Crossroads LLC, but there is no specific profit goal for Youluh, and it may eventually become non-profit.”

Gregg Bernstein

[iagreeo.org](#) (MFA thesis project)

UX Designer, Researcher, and Educator

“I translate complex information into something usable. For my thesis, I worked with an attorney to translate a ubiquitous EULA (iTunes) into something human-readable and visually more intuitive at [iagreeo.org](#). I'm interested in plain language and simplified interface design, and this is the lens through which I view ToS, EULA, and Privacy issues. I also consult for CommonTerms.”

Ashkan Soltani

[Know Privacy](#)

Approach: A comparison of users' expectations of privacy online and the data collection practices of website operators.

Goal: To identify specific practices that may be harmful or deceptive and attract the attention of government regulators.

Result: Recommendations for policymakers to protect consumers and for website operators to avoid stricter regulation.

Mary Hodder & Renee Lloyd

[Customer Commons](#)

CREATING A WORLD OF LIBERATED, POWERFUL AND RESPECTED CUSTOMERS.

Customer Commons is a non-profit for customers who are tired of just complaining about the "powers that be" and want to contribute to making tools for the rest of us

Joe Andrieu

[Standard Information Sharing Label](#)

"I'm a developer and entrepreneur. I've been working with Iain Henderson and others at the Information Sharing Work Group (ISWG) to develop a framework for helping individuals take control over the information they share online. The ISWG recently launched the Standard Information Sharing Label, aka Standard label, as a clear, consistent way people to understand what happens with their information when they share it, at the point they make the decision to share. I'd love to coordinate promotional efforts, collaborate on standards, etc. In particular, the Standard Label has a field for third party ratings, which allows a user-agent, i.e., a browser plugin, to display reputations from user-configured sources, independent of who authored the Label."

Brian Erdelyi

www.clearware.org

Clearware.org was founded to help make sense of these software agreements and is guided by the fundamental principle that all computer users have a right to understand the terms or conditions of software end-user license agreements (or online terms of services) before deciding whether to purchase, install or use the associated software or service. Clearware.org proposes a set of simple, colour coded and easily recognizable symbols that depict terms impacting the user's experience, privacy and system security. These symbols are presented in a human-readable format similar to care labels on clothing, nutrition

facts on food or warnings on hazardous materials. A system readable-format to programatically notify users and a crowd sourced model for creating and storing the labels were also proposed.