Tools for transparency: examples and challenges
DATA TRANSPARENCY LAB: KICK-OFF NOVEMBER 2014

An Open Organisation was created with the target of building a new community

WHAT IS THE DATA TRANSPARENCY LAB?

A community of technologists, researchers, policymakers and industry representatives working to advance online personal data transparency through scientific research & design
Personal Data Transparency is about providing tools to redress the transparency unbalance between the user and the rest of the ecosystem.

Users want to understand the use of their data and decide what to do.

Different attitudes toward privacy
- Flexibility

Different types of practices on personal data
- Different tools needed
PERSONAL DATA TRANSPARENCY

know
understand
act
PERSONAL DATA TRANSPARENCY: DIMENSIONS

KNOW: WHAT?

FLOODWATCH
A COLLECTIVE AD MONITORING TOOL FOR SOCIAL GOOD

STAY TUNED FOR THE BETA RELEASE OF FLOODWATCH
SIGN UP TO RECEIVE AN EMAIL NOTIFICATION WHEN THE BETA RELEASE IS READY.

You are not your browser history.
KNOW: WHAT?

$sheriff
Detecting Price Discrimination

Install Sheriff_v2 - Chrome
Install Sheriff_V2 - Firefox
Install Sheriff(Old version) - for IE
## PERSONAL DATA TRANSPARENCY: DIMENSIONS

### KNOW: WHAT?

<table>
<thead>
<tr>
<th>Variant</th>
<th>Converted Value</th>
<th>Original Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>You</td>
<td>€ 15.47*</td>
<td>$16.94</td>
</tr>
<tr>
<td>Windows 7, Chrome, Spain</td>
<td>€ 15.47*</td>
<td>$16.94</td>
</tr>
<tr>
<td>Mac OS, Safari, Spain</td>
<td>€ 15.47*</td>
<td>$16.94</td>
</tr>
<tr>
<td>Linux, Firefox, Spain</td>
<td>€ 15.47*</td>
<td>$16.94</td>
</tr>
<tr>
<td>United States, Maryland</td>
<td>€ 9.12*</td>
<td>$9.99</td>
</tr>
<tr>
<td>Canada, Ontario</td>
<td>€ 10.05*</td>
<td>$11.01</td>
</tr>
<tr>
<td>Czech Republic, Praha</td>
<td>€ 11.04*</td>
<td>$12.09</td>
</tr>
<tr>
<td>Poland, Warsaw</td>
<td>€ 11.22*</td>
<td>$12.29</td>
</tr>
<tr>
<td>Italy, Sicilia</td>
<td>€ 16.89*</td>
<td>$18.50</td>
</tr>
<tr>
<td>France, Champaign-ardenne, Troyes</td>
<td>€ 13.48*</td>
<td>$14.76</td>
</tr>
<tr>
<td>Ireland, Westmeath</td>
<td>€ 10.58*</td>
<td>$11.59</td>
</tr>
<tr>
<td>Portugal, Praga</td>
<td>€ 11.22*</td>
<td>$12.29</td>
</tr>
<tr>
<td>New Zealand, Dunedin</td>
<td>€ 9.12*</td>
<td>$9.99</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>€ 9.12*</td>
<td>$9.99</td>
</tr>
</tbody>
</table>
KNOW: WHAT?

What do you want ReCon to do with this leak in the future? Tap to control

Ifa=20332435-11EF-4F93-AF78-8C8F0300F74A has been sent to mopub.com (Tracker) by the *default* app at least 6 times, (lastest at 2016-04-07 15:03:07 UTC). Is this correct?

What do you want ReCon to do with this leak in the future? Tap to control

Idfa=20332435-11EF-4F93-AF78-8C8F0300F74A has been sent to tapstream.com by the *default* app at least 2 times, (lastest at 2016-04-08 12:32:21 UTC). Is this correct?

What do you want ReCon to do with this leak in the future? Tap to control

A_id=20332435-11EF-4F93-AF78-8C8F0300F74A has been sent to fksu.com by the *default* app at least 26 times, (lastest at 2016-04-08 12:32:21 UTC). Is this correct?

What do you want ReCon to do with this leak in the future? Tap to control

Rdid=20332435-11EF-4F93-AF78-8C8F0300F74A has been sent to googleadservices.com (Tracker) by the *default* app at least 6 times, (lastest at 2016-04-07 15:03:10 UTC). Is this correct?
KNOW: WHO?

Understand the actors and players

Graph of Applications leaking PI vs. receiving Domains.
PERSONAL DATA TRANSPARENCY: DIMENSIONS

KNOW: WHEN? WHERE?
If you read or clicked anything online today, some part of Google probably knows about it.

That’s one lesson from the largest study yet of the technology that tracks people’s movements around the Web. When Princeton researchers logged the use of tracking code on the Internet’s most popular websites, Google code was found on a majority of them.
PERSONAL DATA TRANSPARENCY: DIMENSIONS

KNOW: WHY? WHAT FOR?

Session ads: 4
-Value: 0.008$

Ads clicked: 1
-Value: 0.19$

Value generated:
-This session: 0.198$
-Today: 0.198$
-Last 7 days: 0.198$
-Last 30 days: 0.576$

TOTAL GENERATED VALUE:
0.865 $
DATA TRANSPARENCY LAB: TOOLS ARE KEY

The best way to raise awareness is by offering tools that let them easily understand how data is being used.

TOOL AVAILABILITY IS KEY

Awareness will be raised by offering tools to users that let them understand what happens with their personal data and manage it.

TOOLS TO HELP THE CONSUMERS AND HELP THE HELPERS

The users of the tools could be end-users, but also journalists, activists, policy-makers, regulators that need also to understand what is going.
DATA TRANSPARENCY LAB: GRANTS PROGRAM

By establishing cooperation with the key scientific communities working on Internet Privacy and Transparency

2015: 6 GRANTS AWARDED

“WEB PRIVACY CENSUS”

“DIGITAL HALO” TOOL

REVEALING AND CONTROLLING MOBILE PRIVACY LEAKS

BALANCE BETWEEN PRIVACY AND FUNCTIONALITY

DATA-DRIVEN PRIVACY ANALYSIS FOR END-USERS

FACEBOOK DATA VALUATION TOOL

PRINCETON UNIVERSITY

Technical University of Denmark

Carnegie Mellon University

Northeastern University

Universidad Carlos III de Madrid
DATA TRANSPARENCY LAB: GRANTS PROGRAM

By establishing cooperation with the key scientific communities working on Internet Privacy and Transparency

2016: GRANTS

TranspAd: A Collaborative Tool to Bring Transparency to Targeted Advertising

ANTMONITOR: ON-DEVICE NETWORK MONITORING FOR PRIVACY

CHARACTERIZING INDIRECT PRIVACY LEAKS IN MOBILE APPS

PrivacyMeter: Real-time Privacy Quantification for the Web

DETECTION AND CIRCUMVENTION OF AD-BLOCK DETECTORS: A NEW ARMS RACE ON THE WEB

FINDING WALDO IN A HAYSTACK OF INFORMAL WRITING STYLES
TRANSPARENCY: DIMENSIONS

UNDERSTANDABILITY

FAIRNESS

ACCOUNTABILITY
TRANSPARENCY: ACTIONS

OFFERING USERS AND CONTROL ABOUT THE WHO, WHAT, WHEN, HOW AND WHY OF THEIR PERSONAL DATA USE

SUPPORTING DEVELOPMENT OF TOOLS

RAISING PUBLIC AWARENESS ON DISCOVERED BAD PRACTICES BY SHARING AGGREGATED DATA

EXPANDING THE COMMUNITY OF RESEARCHERS, DEVELOPERS, INDUSTRY, POLICYMAKERS
DATA TRANSPARENCY LAB: INSTRUMENTS

DTL CONFERENCE

NYC COLUMBIA
Co’located with ACMs DAT and Fairness Accountability and Transparency in Machine Learning workshops

GRANT PROGRAM

• Run annually
• 6-10 50 K Grants
• Opens in April
• Selection June

TOOL CURATION

• Opening up Data and Tool Sets
• Support to proposals by emerging industry
http://datatransparencylab.org
http://dtlconferences.org

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@ramonsang