WE VALUE YOUR PRIVACY ...
NOW TAKE SOME 🍪🍪🍪

Measuring the GDPR‘s Impact on Web Privacy

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Inbox: Please stay with us. - Regulation (GDPR) coming into effect tomorrow, we want to make sure that we are handling your data correctly.

Inbox: Mind reading technology, mind blowing physics, and mind controlling governments. - "GDPR I am sure that, like me, you have heard..."

Inbox: [Response Required] GDPR Compliance: Please consent to continue receiving Connectiv.com... - Required] GDPR Compliance

Inbox: Keep in touch! Please check your Unbound email preferences - email about GDPR, but we take your personal data seriously. So.

Inbox: Yet another GDPR email - another-gdpr-email?e=2a0fa7471e) http://www.latherinegreen.co.uk I'm sure you've received a tonne.

Inbox: Stay Connected: 1 Day to go... - rules (GDPR) tomorrow, the Club is urging all fans to click the button below and nid

Inbox: DFA x GDPR - ("GDPR"), that comes into effect May 25, 2018. To help comply with GDPR consent requirements, we need to.

Inbox: Do you want Sparks in your life? - comply with GDPR consent requirements, we need to confirm that you would like to receive cont

Inbox: GDPR and Privacy Policy Update - known as GDPR – applicable from 25 May 2018. The full text of the updated Privacy Policy can

Inbox: We’re updating our Terms of Use and Privacy Policy - ("GDPR"), a new data protection law that takes effect across the European l

Inbox: join our new mailing list - if you are reading this it’s because you subscribed, came to a show, bought a shirt from the

Inbox: Do you want Scala to stay in touch with you? - ("GDPR"). To help comply we need you to confirm that you want us to stay in touch
GDPR

The General Data Protection Regulation introduced new privacy rules including:

- new transparency obligations → privacy policy required
- tougher requirements for consent → inform about cookies

Rules apply to everyone collecting data from EU citizens ... including heavy fines.
RESEARCH IDEA

We know the Internet did not break, but...

- How did websites react to GDPR?
- Is there more privacy protection or transparency?
- How is consent to tracking implemented?
MEASUREMENT

How to measure the impact of GDPR on the Web?

- started data collection in December 2017
- manual and automated analysis
DATA COLLECTION

Checked about 6,750+ websites once a month
Collecting 112,041 privacy policies in 23 languages (including previous versions 2016-2018)
MANUAL ANNOTATION

49% manually annotated 3 times for privacy policies. All sites annotated 3 times for cookie consent notices.
PRE/POST RESULTS
EU-wide averages after GDPR enforcement: 79.6% (+4.9%) of sites have a privacy policy

* Based on Alexa Top 500 per country as of January 2018.
** Sites checked after GDPR enforcement on 25th of May 2018

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Despite 2-year grace period, most sites acted late.
ADDITIONAL ANALYSES

• Avg. length increased from 2145 to 3044 words per policy
• Content analysis showed increase in use of GDPR related terms
• No significant effect on trackers and cookies, but some sites made notable changes
• Increase in HTTPS use (privacy-by-default)

more in the 📜!
This website uses cookies to ensure you get the best experience on our website. Learn more
Based on Alexa Top 500 per country as of January 2018.

** Sites checked after GDPR enforcement on 25th of May 2018.
NO OPTION/CONFIRMATION

This site uses first and third party cookies to provide you with a great user experience, measure audiences and show you personalised ads. By using Airbnb you accept our use of cookies. For more details about cookies and how to manage them, see our Cookie Policy.

Problems: Implied consent & forced opt-in
Basic consent. Caveat: often tracking starts before "Accept" is clicked.
Problem: hierarchy created by website owner / library provider
VENDOR-BASED

Depending on the type of data they collect, use, and process and other factors including privacy by design, certain partners rely on your consent while others require you to opt-out. For information on each vendor and to exercise your choices, see below. Or to opt-out, visit the NAI, DAA, or EDAA sites.

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Allow</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000mercis</td>
<td>Allow</td>
</tr>
<tr>
<td>1020, Inc. dba Placecast and Ericsson Emodo</td>
<td>Allow</td>
</tr>
<tr>
<td>1plusX AG</td>
<td>requires opt-out</td>
</tr>
<tr>
<td>2KDirect, Inc. (dba iPromote)</td>
<td>requires opt-out</td>
</tr>
<tr>
<td>33Across</td>
<td>Allow</td>
</tr>
<tr>
<td>7Hops.com Inc. (ZergNet)</td>
<td>requires opt-out</td>
</tr>
</tbody>
</table>

Problems: Up to 300 (unknown) vendors, website may use non-participating partners
Purpose based consent. Caveat: often nudge users to accept everything.
Most websites have no banners or those with no value for the user.
<table>
<thead>
<tr>
<th>Source</th>
<th>Mechanism</th>
<th>User Interface</th>
<th>Technical Details</th>
<th>Legal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version</td>
<td>Self-hosted</td>
<td>Third-party</td>
<td>Local CM</td>
<td>Decentralized</td>
</tr>
<tr>
<td>General Libraries</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Civic Cookie Control</td>
<td>1.7.9</td>
<td>○</td>
<td>●</td>
<td>○</td>
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<tr>
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<tr>
<td>cookieBAR</td>
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<tr>
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<td>Drupal Modules</td>
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<td>Simple Cookie Compliance</td>
<td>7.x-1.5</td>
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<td>○</td>
<td>●</td>
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</tbody>
</table>


**SUMMARY**

- GDPR led to changes on a lot of **websites** with respect to privacy policies and cookie consent
- results **varied by country**
- 16% of websites still do not have a policy and 15% did not update it since 2016
- 🍪 **consent notices are a mess** - clear guidelines required
PUBLIC DATA

Raw data will be available at:
https://github.com/RUB-SysSec/we-value-your-privacy

CONTACT

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HTTPS

Small spike, but within the general trend towards HTTPS