THE MISSING 'CALIFORNIA EFFECT' IN DATA PRIVACY LAW

ONLINE APPENDIX

Websites Included in the Analysis

The analysis uses a longitudinal dataset consisting of the texts of the privacy policies of 695 websites, with one observation per week between late November 2017 and October 2019. Table A1 lists all websites included in the dataset by country, ordered alphabetically.

Table A1: List of Websites Included in the Dataset

U.S. websites			
9gag.com	Biblegateway.com	Concursolutions.com	eharmony.com
Aa.com	Bing.com	Costco.com	Envato.com
Academia.edu	Bleacherreport.com	Couchsurfing.com	Epicgames.com
Accuweather.com	Blizzard.com	Coursehero.com	Espn.com
Adobe.com	Bloomberg.com	Craigslist.org	Etrade.com
Adoptapet.com	Box.com	Crunchyroll.com	Etsy.com
Airbnb.com	Breitbart.com	Cvs.com	Eventbrite.com
Allrecipes.com	Britannica.com	Dailycaller.com	Evernote.com
Amazon.com	Brobible.com	Dailysnark.com	Evilangellive.com
Amazonaws.com	Buzzfeed.com	Datehookup.com	Expedia.com
Americanexpress.com	Ca.gov	Dell.com	Facebook.com
Ameritrade.com	Canva.com	Delta.com	Fandom.com
Ancestry.com	Cargurus.com	Deviantart.com	Fantasypros.com
Answers.com	Cars.com	Devolverdigital.com	FastMail.com
Aol.com	Cbsinteractive.com	Digg.com	Fedex.com
Apnews.com	Cbslocal.com	Digitaltrends.com	Fidelity.com
Apple.com	Cdc.gov	Diply.com	Fiverr.com
Asana.com	Celebrityinsider.org	Discordapp.com	Flickr.com
Ask.com	Cengage.com	Docusign.net	FlipDrive.com
Att.com	Chase.com	Dropbox.com	Foodnetwork.com
Autotrader.com	Chaturbate.com	Drudgereport.com	Fool.com
Bankofamerica.com	Chegg.com	Duckduckgo.com	Forbes.com
Barnesandnoble.com	Chron.com	Ea.com	Foursquare.com
Battle.net	Citationmachine.net	Ebay.com	Foxnews.com
Bedbathandbeyond.com	Cnbc.com	Ecollege.com	Gap.com
Bestbuy.com	Cnet.com	Ed.gov	Geeksforgeeks.org
Bhphotovideo.com	Cnn.com	Edmunds.com	Geico.com

U.S. websites (cont'd…)			
Genius.com	Istockphoto.com	Netflix.com	Reverb.com
Getadblock.com	Jd.com	Newegg.com	Roblox.com
Gfycat.com	Joinhoney.com	Newsweek.com	Rottentomatoes.com
Github.com	Jpmorganchase.com	Nexon.net	Samsclub.com
Gizmodo.com	Jumpshare	Nextdoor.com	Samsung.com
Glassdoor.com	Kayak.com	Nfl.com	Schoology.com
Godaddy.com	Kbb.com	Nhl.com	Schwab.com
Gofundme.com	Khanacademy.org	Nih.gov	Scribd.com
Goodreads.com	Kickstarter.com	Nike.com	Seekingalpha.com
Google.com	Kik.com	Noaa.gov	Sega.com
Gotomeeting.com	Kohls.com	Nordstrom.com	Service-now.com
Grammarly.com	Ksl.com	Npr.org	Sex.com
Groupon.com	Latimes.com	Ny.gov	Sexier.com
Harvard.edu	Leagueoflegends.com	Nypost.com	Sfgate.com
Healthline.com	Lifewire.com	Nytimes.com	Shutterfly.com
Heavy.com	Line.me	Okcupid.com	Shutterstock.com
Hilton.com	Lotterypost.com	Okta.com	Signupgenius.com
History.com	Lowes.com	Onelogin.com	Slack.com
Hollywoodreporter.com	Lycos.com	Oracle.com	Slickdeals.net
Homedepot.com	Mail.com	Ourtime.com	Sloutroulettelive.org
Hootsuite.com	Mailchimp.com	Pandora.com	Smartsheet.com
Hotels.com	Manyvids.com	Patch.com	Smugmug.com
Houzz.com	Marriott.com	Paypal.com	Snap.com
Howaboutwe.com	Match.com	Pbs.org	Southwest.com
Hp.com	Mayoclinic.org	People.com	Spanishdict.com
Hubspot.com	MediaFire	Photobucket.com	Speedtest.net
Huffingtonpost.com	Medium.com	Pinterest.com	Square-enix.com
Hushmail.com	Meetup.com	Pnc.com	Squarespace.com
Hustler.com	Merriam-webster.com	Pof.com	Squareup.com
Icims.com	Mheducation.com	Politico.com	Stackoverflow.com
Ign.com	Microsoft.com	Porn.com	Stanford.edu
Iheart.com	Mlb.com	Poshmark.com	Staples.com
Imdb.com	Monster.com	Powerschool.com	Starbucks.com
Imgur.com	Mozilla.org	Priceline.com	State.gov
Imlive.com	Myfreecams.com	Psu.edu	Steamcommunity.com
Inc.com	Myshopify.com	Qualtrics.com	Steampowered.com
Indeed.com	Myspace.com	Quizizz.com	Streamate.com
Infusionsoft.com	Nba.com	Quizlet.com	Study.com
Instagram.com	Nbcnews.com	Quora.com	Surveymonkey.com
Instructure.com	Ncsoft.com	Reddit.com	Swagbucks.com
Intuit.com	Nerdwallet.com	Redfin.com	Symbolab.com
Investopedia.com	Nesn.com	Rediff.com	Sync
Irs.gov	Netease-na.com	Retailmenot.com	Take2games.com

U.S. websites (cont'd…)			
Taleo.net	Turnitin.com	Vrbo.com	Wordreference.com
Target.com	Twitch.tv	Walgreens.com	Wowhead.com
Teachable.com	Twitter.com	Walmart.com	Wsj.com
Teacherspayteachers.com	Uber.com	Warnerbros.com	Wunderground.com
Tencent.com	Udemy.com	Washingtonpost.com	Xfinity.com
Theatlantic.com	Ultimate-guitar.com	Wayfair.com	Yahoo.com
Thedailybeast.com	Ultipro.com	Weather.com	Yelp.com
Theepochtimes.com	United.com	Weather.gov	Youjizz.com
Thefreedictionary.com	Unsplash.com	Webex.com	Youtube.com
Thehill.com	Ups.com	Webmd.com	Zappos.com
Thesaurus.com	Urbandictionary.com	Weebly.com	Zendesk.com
Theverge.com	Usatoday.com	Wellsfargo.com	Ziprecruiter.com
Thoughtco.com	Usbank.com	Westernjournal.com	Zoho.com
Ticketmaster.com	Uscis.gov	Whatsapp.com	Zoom.us
Time.com	Usps.com	Whitepages.com	Zoosk.com
Tmz.com	Verizon.com	Wikihow.com	Zulily.com
Trello.com	Verizonwireless.com	Wikimedia.org	Zynga.com
Tripadvisor.com	Vimeo.com	Wikipedia.org	
Trulia.com	Vine.com	Wish.com	
Tumblr.com	Vividcams.com	Wordpress.com	
DE websites			
1und1.de	Bahn.de	Craigslist	Edarling.de
9gag.com	Bayern.de	Crytek.com	Elitepartner.de
Accuweather.com	Berlin.de	Daserste.de	Elitesingles.com
Activision.com	Bigpoint.com	Dasoertliche.de	Empflix.com
Adac.de	Bild.de	Dastelefonbuch.de	Eventbrite.de
adobe.com	Bildkontakte.de	Datingcafe.de	Eventim.de
Adscale.de	Blackdesertonline.com	Daybreakgames.com	Evilangellive.com
Airbnb.de	Blizzard.com	Dell.com	Express.de
Aldi-nord.de	Bongacams.com	Deutsche-bank.de	Facebook.com
Aldi-sued.de	Box.com	Deutschepost.de	Faz.net
Alternate.de	Br.de	Deviantart.com	Fernsehserien.de
Amazon.de	bz-berlin.de	Dkb.de	Fiduciagad.de
Americanexpress.com	Camelotunchained.com	Dm.de	Filmstarts.de
Aol.de	Check24.de	Docusign.de	Finanzen.net
Apple.com	Chefkoch.de	Dropbox.com	Flaregames.com
Arcgames.com	Chip.de	Duden.de	Flickr.com
Ard.de	Christlichepartnersuche.de	Dw.com	Flixbus.de
Ardmediathek.de	Comdirect.de	E-recht24.de	Focus.de
Asana.com	Commerzbank.de	Ea.com	Foodora.de
Ask.fm	Computerbase.de	Ebay-kleinanzeigen.de	Fool.de
Asos.de	Computerbild.de	Ebay.de	Freenet.de
Autoscout24.com	Conrad.de	Ecosia.org	Fu-berlin.de

DE websites (cont'd…)			
Fussball.de	Last.fm	Partner.de	Stadt-bremerhaven.de
Gameduell.de	Lbb.de	Paypal.com	Stayfriends.de
Gameforge.com	Leo.org	Pcgameshardware.de	Steampowered.com
Gamestar.de	Lidl.de	Pcwelt.de	Stepstone.de
Giga.de	Lieferando.de	Pearl.de	Stern.de
Gmx.net	Line.me	Picclick.de	Strato.de
Golem.de	Liveprivates.com	Pinterest.com	Sueddeutsche.de
Goodgamestudios.com	Lovescout24.de	Porn.com	T-online.de
Gotinder.com	Mail.de	Pornoente.tv	Tagesschau.de
Guildwars2.com	Markt.de	pornohirsch.com	Tagesspiegel.de
Gutefrage.net	Marriott.de	Posteo.de	Take2games.com
Hamburg.de	Mdr.de	Presseportal.de	Targobank.de
Happn.com	Mediamarkt.de	Primark.com	taz.de
Haspa.de	Meetup.com	Qualtrics.com	Telekom.de
hd-pornos.net	Meinestadt.de	Quizlet.com	Testberichte.de
Heise.de	Meinvz.net	Quoka.de	Thomann.de
HiDrive	Merkur.de	Quora.com	Transfermarkt.de
Hilton.com	Microsoft.com	Real.de	Traviangames.com
Hoerzu.de	Mindfactory.de	Reddit.com	Trionworlds.com
Holidaycheck.de	Mmoga.de	Redtube.com	Tripadvisor.com
Hootsuite.com	Mobile.de	Reuters.com	Tu-berlin.de
Hotels.com	mopo.de	Rewe.de	Tubegalore.com
Houzz.de	Morgenpost.de	Robertsspaceindustries.com	Tum.de
Hp.com	Motor-talk.de	Rp-online.de	Tumblr.com
Huffingtonpost.de	Moviepilot.de	Rtl.de	Twitter.com
Idealo.de	Mozilla.org	Sachsen.de	Twoo.com
Ign.com	N-tv.de	Samsung.com	TZ.de
Ikea.com	Ncsoft.com	Sega.de	Ubi.com
Immobilienscout24.de	Ndr.de	Serienjunkies.de	Uni-hannover.de
Immonet.de	Netflix.com	Sex.com	Uni-leipzig.de
Immowelt.de	Netzwelt.de	Shop-apotheke.com	Uni-mainz.de
Innogames.com	Neu.de	Shutterstock.com	Upjers.com
Instagram.com	Newmodels.de.webcam	Single.de	Ups.com
istockphoto.com	Nexoneu.com	Skyscanner.de	Vimeo.com
Jappy.de	Notebooksbilliger.de	Slutroulettelive.org	Vine.co
Joyclub.de	Nrw.de	Snap.com	Visit-x.net
Kachelmannwetter.com	Nudevista.at	Soundcloud.com	WAZ.de
Kayak.de	Nurxxx.net	Spin.de	Wdr.de
Khanacademy.com	O2online.de	Sport1.de	Weather.com
Kicker.de	Obi.de	Sportschau.de	Web.de
Kickstarter.com	oracle.com	Spotify.com	Webex.com
Kino.de	Otto.de	Springer.com	Welt.de
Kwick.de	Parship.de	Square-enix.com	Wetter.com

DE websites (cont'd…)			
Wetter.de	Wooga.com	Xvideos.com	Zdf.de
Wetteronline.de	Wordpress.com	Yahoo.com	Zeit.de
Whatsapp.de	Xhamster.com	Yooco.de	Zoosk.com
Wikipedia.org	Xing.com	Youporn.com	
Winfuture.de	Xnxx.com	Zalando.de	
UK websites			
Airbnb.co.uk	eharmony.co.uk	Metoffice.gov.uk	Shef.ac.uk
Amazon.co.uk	Expedia.co.uk	Mirror.co.uk	Shein.co.uk
Autotrader.co.uk	Express.co.uk	Missguided.co.uk	Spareroom.co.uk
Badoo.com	Friv.co.uk	Myhermes.co.uk	Sqa.org.uk
Barclaycard.co.uk	Games.co.uk	Mymaths.co.uk	Techradar.com
Barclays.co.uk	Gap.eu	Myworldofwork.co.uk	Telegraph.co.uk
Bris.ac.uk	Gla.ac.uk	National-lottery.co.uk	Theguardian.com
Cam.ac.uk	Hl.co.uk	Nationalrail.co.uk	Thesun.co.uk
Currys.co.uk	Ikea.com	Next.co.uk	ticktemaster.co.uk
Cv-library.co.uk	Indeed.co.uk	Nottingham.ac.uk	Topcashback.co.uk
Dailyfeed.co.uk	Independent.co.uk	O2.co.uk	Tripadvisor.co.uk
Dailymail.co.uk	Jdsports.co.uk	Open.ac.uk	Tsb.co.uk
Deliveroo.co.uk	Leeds.ac.uk	Pinterest.co.uk	Twinkl.co.uk
Dominos.co.uk	Lloydsbank.co.uk	Qmul.ac.uk	Warwick.ac.uk
Ebay.co.uk	Reuters.com	Reed.co.uk	Zoopla.co.uk

Section IV.B.1.b.ii. in the paper uses a subsample of websites operated by U.S. online service providers which operate a separate website or website version directed at EU consumers. Table A2 lists the U.S. websites and the corresponding EU websites, together with an indicator of whether the EU website was primarily targeted towards consumers in Germany or in the UK.

Table A2: List of Websites Included in the Analysis in Section IV.B.1.b.ii.

U.S. websites	EU websites
9gag.com	9gag.com (DE)
Accuweather.com	Accuweather.com (DE)
Adobe.com	adobe.com (DE)
Airbnb.com	Airbnb.co.uk (UK)
Amazon.com	Amazon.co.uk (UK)
Americanexpress.com	Americanexpress.com (DE)
Aol.com	Aol.de (DE)
Apple.com	Apple.com (DE)
Asana.com	Asana.com (DE)
Blizzard.com	Blizzard.com (DE)
Box.com	Box.com (DE)
Dell.com	Dell.com (DE)

U.S. websites (cont'd…)	EU websites (cont'd…)
Deviantart.com	Deviantart.com (DE)
Docusign.net	Docusign.de (DE)
Dropbox.com	Dropbox.com (DE)
Ea.com	Ea.com (DE)
Ebay.com	Ebay.co.uk (UK)
eharmony.com	Eharmony.co.uk (UK)
Eventbrite.com	Eventbrite.de (DE)
Evilangellive.com	Evilangellive.com (DE)
Expedia.com	Expedia.co.uk (UK)
Facebook.com	Facebook.com (DE)
Flickr.com	Flickr.com (DE)
Fool.com	Fool.de (DE)
Gap.com	Gap.eu (UK)
Hilton.com	Hilton.com (DE)
Hootsuite.com	Hootsuite.com (DE)
Hotels.com	Hotels.com (DE)
Houzz.com	Houzz.de (DE)
Hp.com	Hp.com (DE)
Huffingtonpost.com	Huffingtonpost.de (DE)
Instagram.com	Instagram.com (DE)
Istockphoto.com	Istockphoto.com (DE)
Kayak.com	Kayak.de (DE)
Kickstarter.com	Kickstarter.com (DE)
Line.me	Line.me (DE)
Marriott.com	Marriott.de (DE)
Meetup.com	Meetup.com (DE)
Microsoft.com	Microsoft.com (DE)
Mozilla.org	Mozilla.org (DE)
Ncsoft.com	Ncsoft.com (DE)
Netflix.com	Netflix.com (DE)
Nexon.net	Nexoneu.com (DE)
Pinterest.com	Pinterest.com (DE)
Qualtrics.com	Qualtrics.com (DE)
Quizlet.com	Quizlet.com (DE)
Quora.com	Quora.com (DE)
Reddit.com	Reddit.com (DE)
Samsung.com	Samsung.com (DE)
Sega.com	Sega.de (DE)
Sex.com	Sex.com (DE)
Shutterstock.com	Shutterstock.com (DE)
Sloutroulettelive.org	Slutroulettelive.org (DE)
Snap.com	Snap.com (DE)
Square-enix.com	Square-enix.com (DE)

U.S. websites (cont'd…)	EU websites (cont'd…)
Steampowered.com	Steampowered.com (DE)
Ticketmaster.com	Ticktemaster.co.uk (UK)
Tripadvisor.com	Tripadvisor.co.uk (UK)
Tumblr.com	Tumblr.com (DE)
Twitter.com	Twitter.com (DE)
Ups.com	Ups.com (DE)
Vimeo.com	Vimeo.com (DE)
Weather.com	Weather.com (DE)
Webex.com	Webex.com (DE)
Whatsapp.com	Whatsapp.de (DE)
Wikipedia.org	Wikipedia.org (DE)
Wordpress.com	Wordpress.com (DE)
Yahoo.com	Yahoo.com (DE)

Outcome Measures

The various analyses in Section IV.B.1. of the paper use three different outcome measures obtained by automated text analysis. Here, I describe the different measures in more detail.

Measure 1: num_words

The first measure (*num_words*) reports the length (measured by the number of words) of each policy in the sample. This measure was obtained by tokenizing the policy text using the RegexpTokenizer function in the nltk package, deleting all numbers, and counting the remaining numbers of tokens that contained at least 2 letters.

Measure 2: compare_docs

The second measure (*compare_docs*) approximates the amount of added text between two versions of a privacy policy. To obtain this measure, I first calculate count vectors for the tri-grams in both versions of the policy. I then subtract the vector representing the older version from the vector representing the newer version, setting all negative values to zero. Finally, I calculate the sum of the vector elements and divide the resulting number by the sum of the vector elements in the count vector representing the older policy.

Measure 3: GDPR_vocab

The third measure (*GDPR_vocab*) measures the amount of GDPR-specific vocabulary used in a policy. This measure was obtained by way of topic modeling. To obtain this measure, I implemented the following steps, using the stm package in R for all calculations.

First, I estimate a series of 41 structural topic models[1] that are identical in all respects except that they differ in the number of topics estimated (K). I estimate models for all $K \in \{10, 11, \dots, 50\}$. I then pick the topic model that shows the most drastic shift in topic distributions during the time of the entry into force of the GDPR (the model with $K = 37$ topics).[2] Finally, I identify the topics whose average prevalence increased by at least 100% between the time periods April 23 and May 21, 2018, on the one hand, and June 4 and July 2, 2018, on the other hand. This procedure yields a list of 6 topics: Topics 6 (prevalence increase: 177.9%), 17 (170.2%), 21 (1,001.7%), 25 (283.2%), 34 (208.3%), and 35 (419.5%). I define *GDPR_vocab* as the sum of the prevalence of these 6 topics in a privacy policy at a given point time. While this procedure necessarily entails some arbitrary choices, these choices do not seem to matter much. As I show in the following Section, the results obtained from analyses using *GDPR_vocab* are robust to different choices.

[1] All models are estimated with a dummy variable for whether the date of the policy was before or after the entry into force of the GDPR as a covariate in the topic prevalence portion of the model.

[2] For this, I first calculate the cosine similarity between the topic distributions at T and $T-1$ for all $T \in \{2, 3, \dots, 101\}$ for all policies. Next, I calculate a measure for the intensity of weekly changes by calculating the mean value for all policies at the week level. Finally, I calculate the sum of the average values for the weeks of May 21, May 28, and June 4, 2018, and choose the topic model with the lowest resulting value.

Table A3 shows the most common words in each topic and the topic prevalence pre- and post-GDPR. In addition, the table reports the words identified by the FREX algorithm (which combines a measure of frequency with a measure of exclusivity) as characteristic for each topic.

It is worth noting that the words associated with the topics that saw the most drastic increase in prevalence seem to confirm that these topics represent vocabulary typical of provisions in privacy policies implementing requirements of the GDPR. Topic 21 (whose prevalence increased more than tenfold, to an average value of .041) seems to be associated with vocabulary suggesting explicit references to the provisions of the GDPR. Topic 25 (which saw an increase of more than 280% to an average prevalence of .027) seems to have a similar focus. The vocabulary associated with Topic 34 (which increased slightly more drastically than Topic 25), by contrast, suggests a slightly different focus. Most of these words suggest provisions implementing consumers' rights mandated in the GDPR (such as the right to withdraw consent), without expressly referencing the GDPR.

Table A3: Topic Content and Prevalence

Topic	Most common	FREX	Avg. prevalence	
			Apr 21-May 23	Jun 2 – Jul 4
Topic 1	member, profil, can, inform, email, use, account, will, regist, name, address, messag, user, person, contact, set, public, registr, membership, visibl	member, membership, visibl, invit, profil, communiti, neighborhood, regist, registr, gender, password, friend, photo, join, lovescout, voluntari, usernam, cours, premium, upload	0.026	0.0186
Topic 2	inform, person, websit, use, polici, privaci, collect, may, will, provid, parti, third, protect, servic, access, contact, request, secur, purpos, pleas	websit, polici, person, inform, disclos, collect, privaci, reason, secur, disclosur, will, appropri, procedur, last, store, chang, request, enforc, safeguard, unauthor	0.086	0.0733
Topic 3	inform, person, servic, may, use, account, provid, payment, privaci, platform, parti, third, ebay, applic, user, collect, data, includ, share, law	ebay, guest, gap, china, paypal, book, host, accommod, platform, seller, financi, payment, resid, transact, japan, risk, india, investig, tax, list	0.0129	0.0137
Topic 4	data, use, can, cooki, protect, address, process, advertis, websit, will, servic, web, inform, also, order, offer, provid, user, purpos, person	inventori, mailbox, deutsch, pseudonym, portal, adform, abroad, bank, german, lotteri, xcxc, bdsg, tariff, configur, revoc, lifespan, exclus, branch, bonus, nrw	0.0306	0.0218
Topic 5	privaci, data, shield, framework, principl, custom, provid, use, person, servic, process, contact, transfer, collect, complaint, request, swiss, disput, softwar, european	shield, framework, arbitr, swiss, principl, certif, resolut, commerc, qualtric, switzerland, disput, onward, bind, complaint, satisfactorili, unresolv, resolv, certifi, complianc, jam	0.0187	0.019
Topic 6	inform, servic, may, user, use, privaci, provid, collect, devic, data, share, polici, uber, account, process, match, can, group, includ, exampl	uber, match, automatt, kayak, wordpress, meaning, dnt, driver, group, uninstal, trip, instanc, hash, geoloc, signal, okcupid, cross, suspect, ourtim, border	0.0056	0.0147
Topic 7	com, inform, www, advertis, privaci, user, servic, onlin, opt, use, data, polici, cooki, provid, parti, third, yes, interest, network, collect	yes, nhttps, car, www, nhttp, com, optout, html, subscript, networkadvertis, daili, reader, youronlinechoic, php, newslett, krux, aboutad, webedia, onlin, espanol	0.0145	0.0132
Topic 8	inform, use, polici, person, servic, site, privaci, collect, will, may, cooki, secur, illumin, user, address, provid, order, request, email, access	illumin, cafe, symfoni, adblock, mozilla, rout, httpfoundat, spin, dictionari, pipelin, testimoni, compon, authserviceprovid, filebag, headerbag, kernel, modelnotfoundexcept, notfoundhttpexcept, parameterbag, serverbag	0.0168	0.0152
Topic 9	websit, inform, cooki, use, person, data, may, collect, includ, provid, technolog, email, privaci, user, browser, advertis, servic, inc, googl, track	icf, comcast, websit, technolog, xexx, inc, refus, area, cooki, track, analyt, navig, accept, expir, rememb, minor, beacon, chat, pixel, notic	0.0213	0.0238
Topic 10	inform, servic, may, use, parti, third, platform, polici, provid, collect, user, privaci, account, share, content, includ, profil, advertis, will, set	platform, twitch, profil, third, parti, post, meetup, reddit, public, choic, otherwis, content, may, mobil, network, servic, share, choos, usernam, featur	0.0525	0.0458
Topic 11	inde, job, may, inform, data, use, person, parti, third, employ, cooki, site, provid, privaci, resum, will, user, account, polici, includ	inde, job, resum, seeker, employ, stack, recruit, candid, relay, career, salari, dept, hire, pursuant, search, wish, materi, scam, answer, perform	0.0055	0.0055
Topic 12	microsoft, data, use, servic, can, devic, product, account, provid, inform, app, includ, collect, will, window, person, access, set, privaci, content	microsoft, xbox, window, skype, bing, silverlight, outlook, onedr, health, summari, speech, edg, msn, diagnost, translat, voic, enterpris, sign, turn, favorit	0.0055	0.0055

Topic	Most common	FREX	Avg. prevalence	
			Apr 21-May 23	Jun 2 – Jul 4
Topic 13	servic, inform, may, use, privaci, collect, parti, third, provid, advertis, polici, includ, content, devic, pleas, interact, cooki, share, user, email	cbs, local, news, turner, station, patch, nielsen, digit, daa, interact, california, contest, sweepstak, precis, listen, beacon, resid, brand, social, nai	0.0259	0.0277
Topic 14	pii, inform, privaci, use, collect, provid, will, secur, protect, site, act, may, access, record, requir, depart, system, identifi, web, polici	pii, cisco, ultim, gov, depart, hill, institut, guitar, paper, solut, educ, act, staff, feder, offici, coppa, agenc, duti, sorn, omb	0.0162	0.015
Topic 15	inform, use, polici, site, user, privaci, may, xbc, can, xbcr, provid, person, will, web, public, servic, nthe, data, nyou, address	xbc, xbcr, nyou, xbcber, nthe, nwe, xae, arrow, nto, soundcloud, nif, nyour, ninform, foundat, png, nfor, xab, nthis, org, nin	0.0091	0.0093
Topic 16	inform, use, servic, googl, like, can, search, account, exampl, may, share, privaci, collect, includ, also, info, devic, cooki, provid, help	info, tumblr, search, stuff, thing, don, like, engin, might, doesn, googl, blog, lot, sure, realli, summari, peopl, ever, won, just	0.018	0.0161
Topic 17	[urlplaceholder], data, use, advertis, gmbh, provid, digit, link, protect, opt, inform, user, can, media, market, googl, cooki, technolog, websit, process	strã¶er, nlink, xexxa, hamburg, taboola, germani, plista, digit, seed, gmbh, tead, twiago, [urlplaceholder], apest, adex, opinari, ligatus, sovrn, newmedia, smaato	0.0033	0.0088
Topic 18	servic, inform, use, may, custom, parti, provid, collect, privaci, third, access, user, polici, includ, box, share, cooki, data, organ, will	box, jone, slack, collabor, organ, dnt, agreement, custom, event, subscrib, administr, testimoni, subscript, servic, electron, modif, processor, notic, behalf, francisco	0.0202	0.0198
Topic 19	site, cooki, use, inform, web, user, visit, browser, page, googl, identifi, visitor, will, advertis, polici, person, privaci, analyt, data, email	site, visitor, univers, web, session, edu, cooki, gather, persist, page, analyt, visit, sign, identifi, traffic, pattern, serv, comput, month, browser	0.0494	0.0421
Topic 20	data, can, use, person, servic, protect, provid, advertis, third, parti, collect, websit, contact, process, also, compani, one, cooki, right, access	pass, declar, data, guidelin, provis, can, protect, get, one, spotifi, function, find, give, accord, possibl, regul, extern, case, save, answer	0.0517	0.0556
Topic 21	data, process, person, gdpr, right, art, legal, basi, para, purpos, user, use, protect, interest, delet, websit, can, accord, inform, storag	gdpr, art, para, lit, basi, articl, assert, durat, storag, freedom, process, legitim, supervisori, insofar, lodg, categori, legal, decis, contract, scope	0.0038	0.0409
Topic 22	use, may, user, term, site, data, inform, parti, right, agre, includ, content, websit, limit, shall, com, servic, access, without, third	librari, shall, copyright, cvs, infring, submiss, discret, sex, major, net, agre, liabil, subscrib, proprietari, expressli, damag, term, herein, warrant, commerci	0.0207	0.0145
Topic 23	game, inform, servic, use, account, onlin, privaci, person, collect, parti, third, compani, will, product, provid, address, user, play, pleas, data	game, steam, valv, twe, player, play, tthe, esrb, tyou, entertain, tif, gameplay, consol, tin, chat, tto, cheat, perfect, forum, back	0.0166	0.0166
Topic 24	inform, use, may, advertis, servic, devic, provid, collect, mobil, cooki, websit, applic, onlin, privaci, opt, technolog, parti, third, locat, social	mobil, flash, choic, devic, target, tailor, advertis, social, onlin, technolog, opt, beacon, applic, locat, across, track, allianc, bank, media, statement	0.0648	0.0575
Topic 25	data, use, googl, cooki, can, websit, process, inform, protect, user, art, interest, browser, offer, advertis, will, gdpr, para, address, lit	lit, para, art, adword, convers, googl, gdpr, usa, font, object, amphitheat, parkway, mountain, pseudonym, doubleclick, remarket, legitim, hereinaft, adit, criteo	0.0074	0.0274
Topic 26	inform, may, servic, parti, third, use, person, provid, site, privaci, collect, polici, identifi, includ, will, advertis, share, web, address, time	california, promot, beacon, statement, contest, sweepstak, practic, site, identifi, mail, may, non, third, featur, parti, disclos, unit, sponsor, flash, asset	0.0948	0.0727

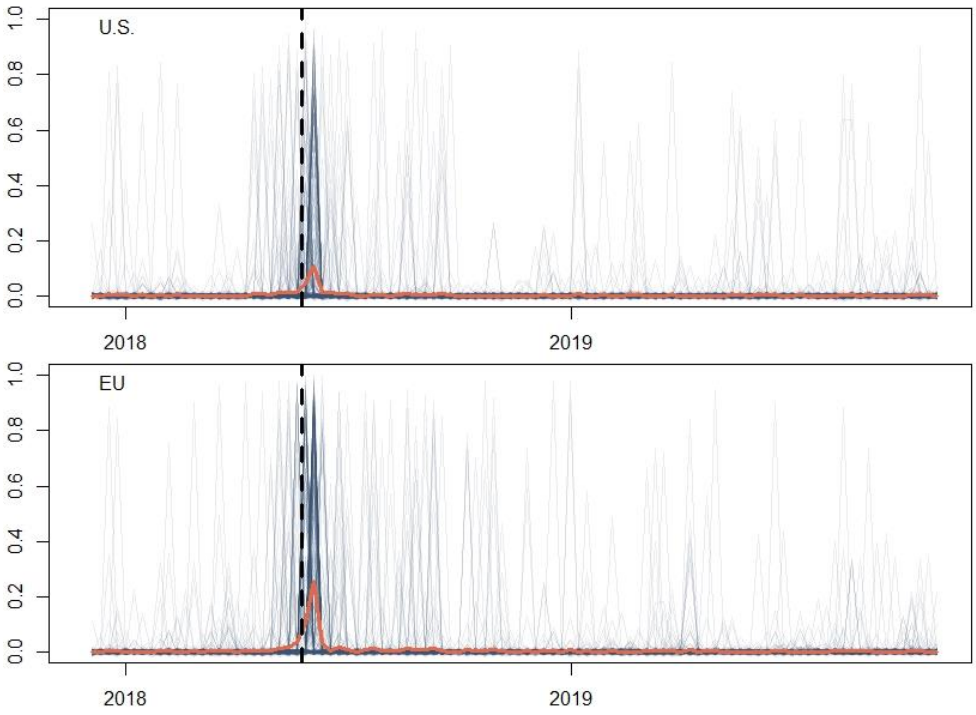
Topic	Most common	FREX	Avg. prevalence	
			Apr 21-May 23	Jun 2 – Jul 4
Topic 27	inform, use, data, will, person, may, servic, can, detail, right, provid, market, product, contact, also, make, interest, includ, share, account	organis, advert, personalis, behaviour, hold, insur, enquiri, weã¢, unauthoris, money, launder, anonymis, ico, detail, sure, agenc, deal, dpo, qualif, recognis	0.0269	0.034
Topic 28	servic, inform, use, privaci, provid, may, devic, polici, verizon, oath, includ, app, custom, collect, account, line, advertis, parti, compani, can	verizon, oath, line, voic, smart, yahoo, whatsapp, aol, iba, wireless, command, affili, recognit, cabl, app, separ, geoloc, menu, famili, supplement	0.0131	0.0137
Topic 29	inform, use, can, share, product, app, facebook, provid, exampl, account, pinterest, content, servic, also, devic, data, collect, includ, set, polici	pinterest, instagram, facebook, pin, peopl, get, app, camera, show, snap, learn, someth, stori, photo, youã¢, product, recip, board, other, friend	0.0161	0.0198
Topic 30	inform, provid, travel, servic, person, may, use, websit, app, collect, includ, adob, will, also, can, hotel, book, partner, onlin, share	travel, hotel, tripadvisor, adob, american, book, flight, airlin, rental, honor, expedia, vacat, reserv, supplier, trip, stay, loyalti, program, express, portfolio	0.016	0.0152
Topic 31	travel, hotel, tripadvisor, adob, american, book, flight, airlin, rental, honor, expedia, vacat, reserv, supplier, trip, stay, loyalti, program, express, portfolio	plugin, button, facebook, agof, ivw, plug, googl, scope, infonlin, usa, gmbh, shorten, szm, telemedia, contradict, influenc, transmit, twitter, remarket, disagre	0.1051	0.0494
Topic 32	data, payment, custom, inform, servic, process, use, websit, order, will, address, can, credit, provid, shop, email, account, purpos, name, protect	shop, payback, paypal, paragraph, score, letter, ticket, otto, real, deliveri, payment, schufa, trader, sovendus, calcul, creditworthi, klarna, probabl, credit, baden	0.0159	0.0156
Topic 33	inform, servic, may, user, use, person, account, school, provid, child, privaci, academi, parent, collect, student, parti, third, data, share, will	school, academi, student, child, github, parent, medium, teacher, educ, vimeo, studi, class, coach, district, repositori, restrict, genet, tree, instructor, children	0.0101	0.0102
Topic 34	person, inform, data, process, may, provid, use, request, privaci, right, servic, interest, contact, law, product, includ, market, legal, busi, collect	oracl, eea, legitim, exercis, withdraw, event, channel, profession, busi, administ, obtain, erasur, retent, autom, ground, countri, entiti, zoom, mailchimp, market	0.0116	0.0352
Topic 35	data, use, websit, person, can, inform, cooki, googl, process, subject, servic, advertis, user, time, also, browser, facebook, [urlplaceholder], one, internet	xing, compon, subpag, linkedin, subject, youtub, instagram, concern, alreadi, tealium, integr, amazon, alphabet, doubleclick, adsens, immowelt, pinterest, usa, one, found	0.0035	0.0181
Topic 36	servic, inform, data, use, account, may, person, provid, user, includ, process, collect, parti, will, third, polici, privaci, right, access, share	surveymonkey, grammar, merchant, retain, survey, processor, account, support, holder, payment, creator, respond, model, canada, facilit, bill, team, need, jurisdict, fraud	0.0232	0.0386
Topic 37	inform, person, servic, use, product, custom, includ, privaci, may, provid, share, store, account, receiv, purchas, can, collect, will, devic, exampl	sync, appl, amazon, club, purchas, shop, brand, famili, intuit, card, gift, credit, back, pharmaci, buy, product, inc, catalog, top, retail	0.0271	0.0251
Topic 38	data, servic, inform, twitter, use, may, account, content, share, locat, can, weather, privaci, person, provid, devic, user, public, advertis, includ	weather, twitter, tweet, foursquar, gif, chapter, youa, imag, consum, overlay, submiss, locat, archiv, xve, enterpris, xre, sdk, ibm, close, public	0.0082	0.0082
Topic 39	data, use, cooki, can, protect, offer, person, websit, user, access, process, also, will, provid, address, inform, collect, parti, browser, third	ard, wdr, nielsen, broadcast, zdf, editori, youtub, rundfunk, anonym, evalu, video, szm, statist, embed, infonlin, emb, offer, stabil, analysi, pass	0.0252	0.0225

Alternative Measures

Generally, the results in the paper are robust to the use of different outcome measures. Here, I replicate various parts of the computational analysis using a range of different measures.

First, I replicate Figure 1 using a different version of *compare_docs*. Different from *compare_docs*, this version (*compare_docs_alt1*) uses 1 minus the cosine similarity of tri-gram count vectors of two versions of a privacy policy to obtain a measure for changes between two versions of a policy. As can be seen from Figure A1, the resulting graph shows roughly the same pattern as Figure 1.

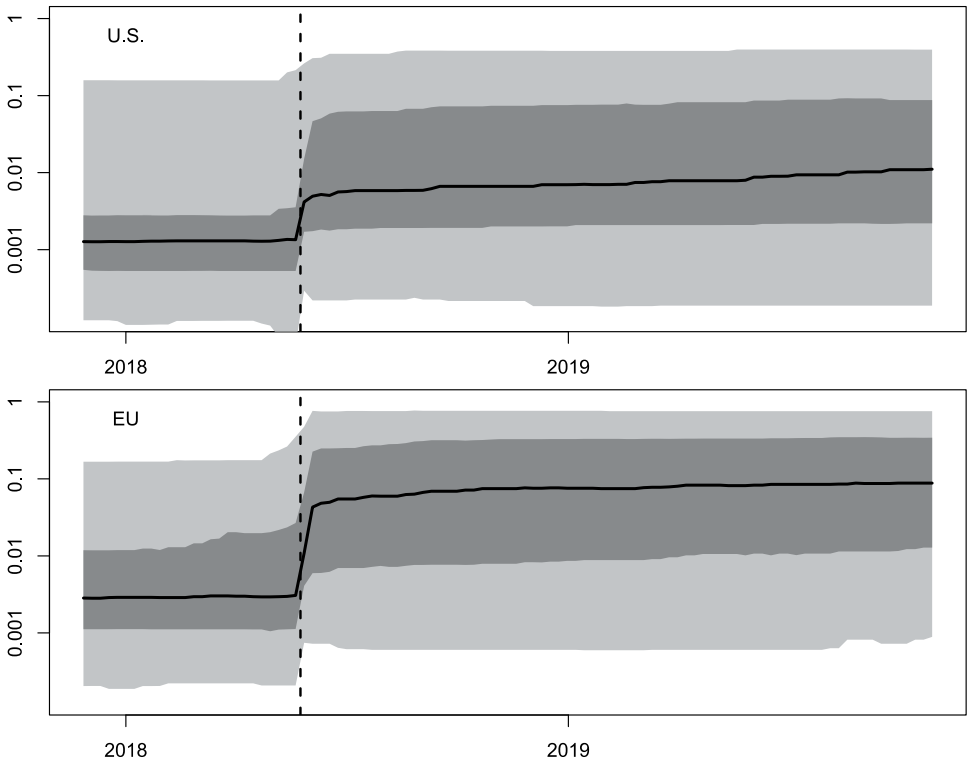
Figure A1: Changes in the text of privacy policies per week (robustness check)



Notes. Similarity between current version of privacy policies and versions from one week earlier. Blue lines represent individual websites in the sample. x-axis: date. y-axis: 1 - (cosine similarity of tri-gram vectors of policies). Measures close to 0 indicate policies that use similar phrases as compared to one week earlier. Measures close to 1 indicate full revisions. Orange line depicts the sample mean. Black dashed line: Date of the entry into force of the GDPR.

Next, I replicate Figure 3 using two different versions of *GDPR_vocab*. The first version (*GDPR_vocab_alt1*) uses the same topic model as the one used for *GDPR_vocab*, but includes all topics whose prevalence increased by at least two percentage points during the time of the entry into force of the GDPR. The second version (*GDPR_vocab_ alt2*) is based on a topic model with a different number of clusters (22) than the original *GDPR_vocab* measure. Figure A2 reports results for *GDPR_vocab_alt1*, Figure A3 results for *GDPR_vocab_alt2.*

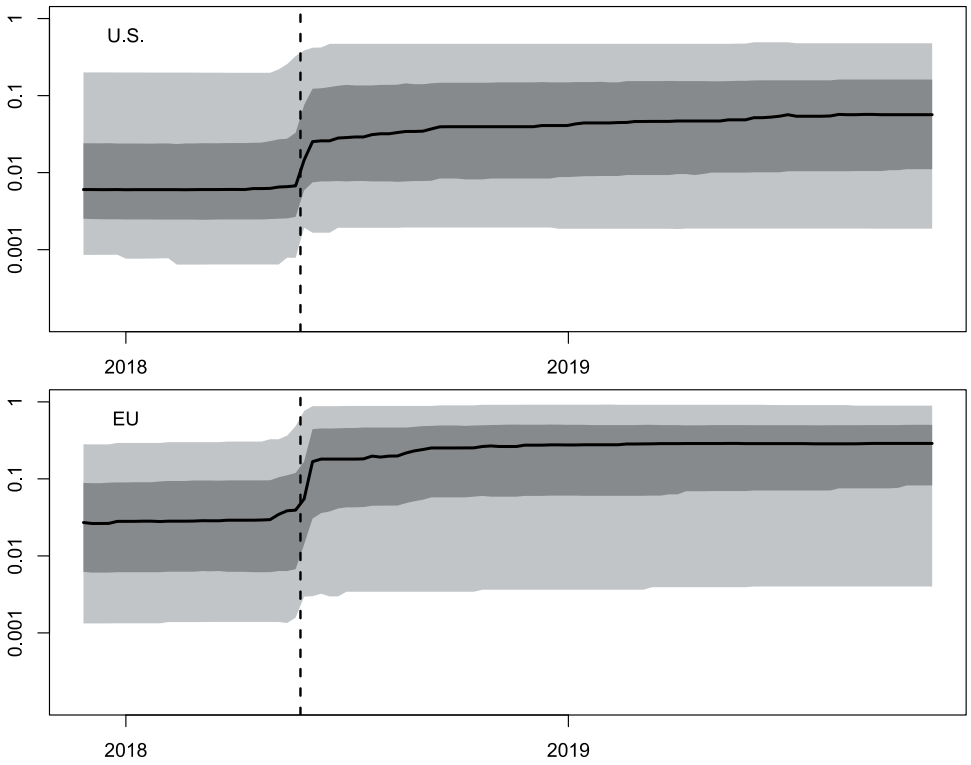
FigureA2: Use of GDPR-specific language over time (*GDPR_vocab_alt1*)



Notes. Distribution of the use of GDPR-specific language (*GDPR_vocab_alt1*) at different points in time. x-axis: date. y-axis: use of GDPR-specific language. y-axis uses a logarithmic scale. Light grey areas represent the area between the 2.5th and 97.5th percentile. Dark grey areas represent the area between the 25th and 75th percentile. Black line represents the sample median. Black dashed line: Date of the entry into force of the GDPR.

It can be seen that both Figures show roughly the same pattern that is also evident from Figure 3. The use of GDPR-specific vocabulary on U.S. websites increases markedly during the entry into force of the GDPR. However, this increase pales in comparison with the increase observed for EU websites.

Figure A3: Use of GDPR-specific language over time (*GDPR_vocab_alt2*)



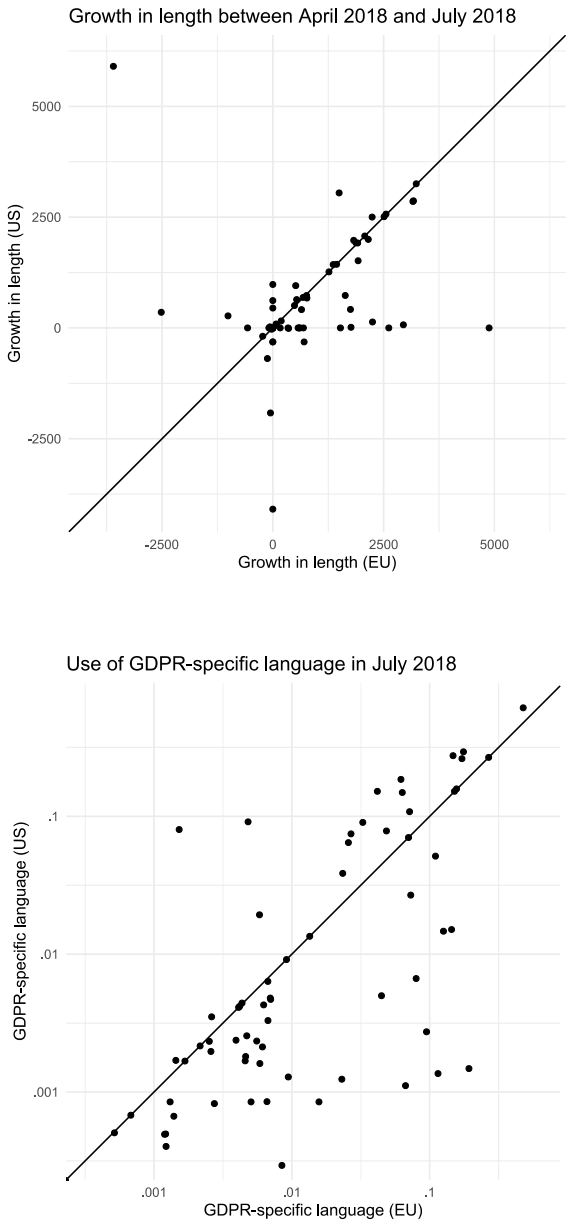
Notes. Distribution of the use of GDPR-specific language (*GDPR_vocab_alt2*) at different points in time. x-axis: date. y-axis: use of GDPR-specific language. y-axis uses a logarithmic scale. Light grey areas represent the area between the 2.5th and 97.5th percentile. Dark grey areas represent the area between the 25th and 75th percentile. Black line represents the sample median. Black dashed line: Date of the entry into force of the GDPR.

Finally, I replicate the test presented in Section IV.B.1.b.ii. using *num_words* and *GDPR_vocab* instead of *compare_docs*. Figure A4 shows the results from this analysis.

The upper panel replicates Figure 4 using the growth in number of words as the variable of interest. While the graph is dominated by a number of outlier services that drastically changed the length of at least only one of their policies, the overall result is the same as in Figure 4: on average, online services added more text to their EU privacy policies than to their U.S. privacy policies. A paired samples Wilcoxon test indicates that the differences between the growth of EU policies and U.S. policies are statistically significant, with a p-value of .0339.

The lower panel replicates the analysis for the logarithmic version of *GDPR_vocab*. The differences between the samples are even starker than the ones observed in Figure 4. For this measure, paired samples Wilcoxon test strongly suggests that the observed differences are not the result of chance (p-value: .0013).

Figure A4: Changes for services with U.S. and EU privacy policies



Notes. Scatterplots showing (a) in the top panel, the growth in number of words between April 2, 2018, and July 2, 2018 for a service's EU (x-axis) and U.S. privacy policy (y-axis), and (b) in the bottom panel, the amount of GDPR-specific language on July 2, 2018 in a service's EU (x-axis) and U.S. privacy policy (y-axis).

Manual Coding

Coding Scheme

In Section IV.B.2. of the paper, I analyze a subsample of privacy policies that were manually coded. As described in the paper, the coding scheme used in the manual coding captures nine different items that have to be included in a privacy policy to achieve compliance with the GDPR. Table A3 describes the different items included in this analysis.

Table A3: Coding Scheme

Item	Description
cons	Reports whether, according to the privacy policy, personal information is processed or shared based on consent (Art. 6(1)(a), 13(1)(c) GDPR). While there is no obligation to inform about consent, consent is only valid if it is targeted at specific purposes. The service thus has an indirect obligation to reveal the consent-specific purposes. *cons* is only coded as 1 if policy specifies which data is covered by consent. *cons* is coded as 2 if consent only required for personal information of consumers located in the EU.
legbase	Reports whether, according to the privacy policy, the provision of personal information is a statutory or contractual requirement (Art. 13(2)(e), 13(1)(c) GDPR). *legbase* is only coded as 1 if policy specifies which legal basis refers to which kind of data. *legbase* is coded as 2 if legal basis is only provided for consumers located in the EU.
rect	Reports whether, according to the privacy policy, a consumer has a right to access and rectify personal information (Art. 16, 15, 13(2)(b) GDPR). *rect* is coded as 2 if only consumers located in the EU have a right to access/rectify personal information.
withd	Reports whether, according to the privacy policy, a consumer has a right to withdraw his/her consent (Art. 7 (3), 13 (2)(c) GDPR). Sometimes policies use the word "revoke" which is equivalent. *withd* is coded as 2 if only consumers located in the EU have a right to withdraw their consent.
forg	Reports whether the privacy policy specifies the period of storage and a consumer's right to erasure (Art. 17, 13(2)(a) GDPR). Sometimes policies use the words "deletion" or "right to be forgotten," which is equivalent. *forg* is coded as 2 if only consumers located in the EU have a right to erasure.
port	Reports whether the privacy policy specifies that personal information is portable (Art. 20(1), 13(2)(b) GDPR). Sometimes policies use the word "transfer," which is equivalent. *port* is coded as 2 if only consumers located in the EU have a right to data portability.
hum	Reports whether the privacy policy specifies the existence of a right not to be subject to automated decisions including profiling (Art. 22(1) and (4), 13(2)(f) GDPR). If no information is provided, either the service does not use automated decisions or an exception under Art. 22(2) GDPR applies. This variable also takes value 1 if policies merely inform users that profiling is used. Only a very small number of services actually provide a "right to a human decision". *port* is coded as 2 if only consumers located in the EU have a right to a human decision.
obj	Reports whether the privacy policy specifies the existence of a right to object when processing is based on public interest or legitimate interests (direct marketing) (Art. 6(1)(e, f) or profiling = Art. 21, 13(2)(b) GDPR). This variable is also coded as 1 if a policy provides some other form of opt-out. In the US, this option usually only covers cookies or targeted ads. In the EU, new policies refer more broadly to a right to object. *obj* is coded as 2 if only consumers located in the EU have a right to a human object.
compl	Reports whether the privacy policy specifies the existence of a right to lodge a complaint with the supervisory authority (Art. 77(1), 13(2)(d) GDPR). *compl* is coded as 2 if only consumers in the EU have a right to a lodge a complaint.

Websites and Scores

As described in the paper, the hand-coded sample includes 246 randomly selected websites. Table A4 lists all websites in the hand-coded sample, together with the values for *compl_UScust* and *compl_EUcust.*

Table A4: Manual Coding Websites and Scores

Website	compl_UScust		compl_EUcust	
	Apr 2018	Oct 2018	Apr 2018	Oct 2018
U.S. Websites				
9gag.com	0	1	0	6
Academia.edu	0	1	0	4
Accuweather.com	0	0	0	3
Adoptapet.com	0	0	0	0
Airbnb.com	0	5	2	8
Allrecipes.com	0	0	0	0
Aol.com	0	0	0	0
Apple.com	2	3	2	3
Ask.com	0	1	1	6
Barnesandnoble.com	1	1	1	1
Bestbuy.com	0	0	0	0
Bhphotovideo.com	1	0	1	7
Biblegateway.com	1	1	1	1
Breitbart.com	0	0	0	0
Ca.gov	0	0	0	0
Canva.com	0	0	0	6
Cars.com	0	0	0	0
Cbsinteractive.com	2	2	2	2
Celebrityinsider.org	0	5	0	5
Chaturbate.com	1	1	1	1
Chegg.com	0	0	0	0
Chron.com	0	1	0	6
Citationmachine.net	0	0	0	0
Cnn.com	1	1	1	1
Concursolutions.com	0	2	0	8
Coursehero.com	0	0	0	0
Craigslist.org	0	0	0	0
Crunchyroll.com	3	5	3	5
Dailysnark.com	0	0	0	0
Datehookup.com	0	0	0	0
Dell.com	2	2	2	2
Delta.com	0	3	0	8

Website	compl_UScust		compl_EUcust	
	Apr 2018	Oct 2018	Apr 2018	Oct 2018
U.S. Websites				
Deviantart.com	0	4	0	4
Digitaltrends.com	2	2	2	4
Discordapp.com	0	1	0	7
Docusign.net	2	2	2	8
Ea.com	0	2	0	5
Ebay.com	3	4	3	4
Edmunds.com	2	2	2	2
Envato.com	1	3	1	7
Etsy.com	2	4	4	6
Eventbrite.com	1	0	1	3
Evernote.com	1	1	3	0
Expedia.com	0	0	0	0
Facebook.com	0	3	0	0
Fidelity.com	0	0	0	8
Flickr.com	0	0	0	6
FlipDrive	0	0	0	1
Fool.com	0	2	0	0
Foursquare.com	0	0	6	7
Foxnews.com	1	1	1	1
Geeksforgeeks.org	0	0	0	0
Genius.com	2	1	2	7
Getadblock.com	1	1	1	0
Gizmodo.com	0	0	0	3
Gofundme.com	1	2	1	4
Goodreads.com	0	0	0	0
Google.com	1	3	1	3
Hollywoodreporter.com	0	0	0	7
Homedepot.com	0	0	0	6
Hotels.com	3	3	3	2
Howaboutwe.com	1	2	2	0
Icims.com	2	0	2	2
Iheart.com	2	2	2	3
Imdb.com	0	0	0	8
Imgur.com	2	2	2	3
Imlive.com	0	0	0	0
Indeed.com	0	4	2	1
Instagram.com	0	3	0	0
Instructure.com	0	0	0	7
Irs.gov	1	1	1	1
Jd.com	0	0	0	6
Joinhoney.com	0	1	0	0

Website	compl_UScust		compl_EUcust	
	Apr 2018	Oct 2018	Apr 2018	Oct 2018
U.S. Websites (cont'd…)				
Jpmorganchase.com	1	1	1	0
Kickstarter.com	0	0	0	0
Latimes.com	0	0	0	1
Leagueoflegends.com	2	0	2	7
Mail.com	0	0	0	1
Manyvids.com	1	0	1	6
Mayoclinic.org	1	0	1	6
Merriam-webster.com	0	0	0	3
Mheducation.com	1	6	1	0
Mozilla.org	0	0	0	0
Myshopify.com	0	0	0	0
Nba.com	1	2	1	4
Netease-na.com	0	3	0	8
Newegg.com	0	0	0	0
Newsweek.com	1	1	1	1
Nexon.net	2	2	2	2
Nextdoor.com	0	0	0	0
Nhl.com	0	0	3	3
Nike.com	0	6	0	6
Noaa.gov	0	0	0	0
Nypost.com	1	1	1	1
Nytimes.com	0	2	0	7
Okta.com	2	2	2	2
Ourtime.com	0	2	0	2
Photobucket.com	0	3	0	3
Pnc.com	0	0	0	0
Pof.com	3	5	3	5
Porn.com	1	8	1	8
Powerschool.com	0	0	0	0
Quizlet.com	2	0	2	4
Quora.com	0	0	0	0
Retailmenot.com	1	1	1	1
Reverb.com	2	2	2	2
Rottentomatoes.com	0	0	0	5
Samsclub.com	0	0	0	0
Samsung.com	0	0	0	0
Schoology.com	2	2	2	2
Seekingalpha.com	0	0	0	0
Service-now.com	0	4	0	6
Sfgate.com	0	0	0	6
Signupgenius.com	0	0	0	0

Website	compl_UScust		compl_EUcust	
	Apr 2018	Oct 2018	Apr 2018	Oct 2018
U.S. Websites (cont'd…)				
Slack.com	0	0	0	5
Smartsheet.com	0	0	0	7
Speedtest.net	0	0	0	0
Square-enix.com	1	1	2	2
Squarespace.com	2	5	2	8
Stanford.edu	0	2	0	9
Staples.com	1	1	1	5
Steamcommunity.com	2	4	2	4
Steampowered.co	0	6	0	6
Streamate.com	0	0	0	8
Swagbucks.com	0	0	0	0
Target.com	0	0	0	0
Theepochtimes.com	0	2	0	5
Thefreedictionary.com	0	3	0	3
Thoughtco.com	0	0	0	8
Trello.com	2	4	2	5
Turnitin.com	0	0	0	0
Uber.com	2	0	2	8
Urbandictionary.com	0	0	0	8
Usbank.com	0	0	0	0
Uscis.gov	0	0	0	0
Vimeo.com	1	0	1	6
Vine.com	0	4	0	5
Walgreens.com	1	1	1	1
Washingtonpost.com	0	0	0	7
Webex.com	0	0	2	2
Whatsapp.com	0	0	0	0
Whitepages.com	0	0	0	0
Wikihow.com	0	0	0	0
Wikipedia.org	0	0	0	0
Xfinity.com	0	0	0	6
Yahoo.com	0	0	0	0
Youjizz.com	0	1	0	1
Zappos.com	1	1	1	1
Zoho.com	2	5	2	6
Zoosk.com	0	0	0	0
DE Websites				
Accuweather.com	-	-	0	0
Activision.com	-	-	2	6
Adac.de	-	-	4	9
Aldi-nord.de	-	-	0	8

Website	compl_UScust		compl_EUcust	
	Apr 2018	Oct 2018	Apr 2018	Oct 2018
DE Websites (cont'd…)				
Aldi-sued.de	-	-	3	7
Alternate.de	-	-	3	8
Apple.com	-	-	2	3
Bahn.de	-	-	3	8
Bayern.de	-	-	3	9
Bild.de	-	-	2	9
Bildkontakte.de	-	-	2	9
Blizzard.com	-	-	0	8
Check24.de	-	-	0	7
Chefkoch.de	-	-	0	8
Chip.de	-	-	1	8
Comdirect.de	-	-	1	9
Datingcafe.de	-	-	2	8
Daybreakgames.com	-	-	2	4
Deviantart.com	-	-	0	1
Dkb.de	-	-	5	6
Edarling.de	-	-	3	8
Facebook.com	-	-	1	4
Faz.net	-	-	2	8
Fernsehserien.de	-	-	0	9
Flaregames.com	-	-	0	8
Focus.de	-	-	1	9
Giga.de	-	-	1	8
Golem.de	-	-	2	9
Goodgamestudios.com	-	-	2	8
Gotinder.com	-	-	1	1
Guildwars2.com	-	-	1	7
Hd-pornos.net	-	-	0	2
Heise.de	-	-	2	9
Hoerzu.de	-	-	2	2
Immonet.de	-	-	3	8
Immowelt.de	-	-	4	8
Instagram.com	-	-	0	4
Joyclub.de	-	-	1	9
Kachelmannwetter.com	-	-	2	8
Leo.org	-	-	0	7
Lidl.de	-	-	5	9
Lovescout24.de	-	-	3	5
Markt.de	-	-	2	7
Meinestadt.de	-	-	2	9
Microsoft.com	-	-	4	4

Website	compl_UScust		compl_EUcust	
	Apr 2018	Oct 2018	Apr 2018	Oct 2018
DE Websites (cont'd…)				
Mmoga.de	-	-	2	8
N-tv.de	-	-	3	7
Netzwelt.de	-	-	1	7
Nexoneu.com	-	-	1	1
Notebooksbilliger.de	-	-	2	8
Nrw.de	-	-	1	8
Pearl.de	-	-	4	8
Porn.com	-	-	0	6
Rewe.de	-	-	5	5
Sachsen.de	-	-	2	2
Single.de	-	-	3	9
Spin.de	-	-	1	6
Springer.com	-	-	2	9
Square-enix.com	-	-	3	8
Strato.de	-	-	2	7
Sueddeutsche.de	-	-	5	8
T-online.de	-	-	0	8
Take2games.com	-	-	4	4
taz.de	-	-	2	6
Tu-berlin.de	-	-	0	0
Twoo.com	-	-	4	4
TZ.de	-	-	2	9
Uni-hannover.de	-	-	1	9
Uni-leipzig.de	-	-	0	0
Upjers.com	-	-	2	8
Visit-x.net	-	-	4	4
WAZ.de	-	-	2	8
Web.de	-	-	0	9
Welt.de	-	-	3	9
Wetter.com	-	-	3	8
Wetter.de	-	-	3	5
Wooga.com	-	-	2	8
Xhamster.com	-	-	0	0
Xing.com	-	-	3	3
Yahoo.com	-	-	0	7
Yooco.de	-	-	0	6
Zoosk.com	-	-	0	8
UK websites				
Cam.ac.uk	-	-	0	0
Ikea.com	-	-	1	8
Indeed.co.uk	-	-	0	7

Website	compl_UScust		compl_EUcust	
	Apr 2018	Oct 2018	Apr 2018	Oct 2018
UK websites (cont'd…)				
Metoffice.gov.uk	-	-	0	8
Myhermes.co.uk	-	-	0	8
Myworldofwork.co.uk	-	-	0	7
Open.ac.uk	-	-	0	6
Shein.co.uk	-	-	0	6
Spareroom.co.uk	-	-	1	7
Thesun.co.uk	-	-	1	7
Topcashback.co.uk	-	-	0	6
Tsb.co.uk	-	-	0	0
Twinkl.co.uk	-	-	0	0
Warwick.ac.uk	-	-	1	1