

# User Tracking on E-resource Platforms

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Eresources Minnesota, Oct. 4, 2019



**PRIVACY**



# ALA Code of Ethics

III. We protect each library user's right to privacy and confidentiality with respect to information sought or received and resources consulted, borrowed, acquired or transmitted.



THE NEW WEB





## *As Facebook Raised a Privacy Wall, It Carved an Opening for Tech Giants*

Internal documents show that the social network gave Microsoft, Amazon, Spotify and others far greater access to people's data than it has disclosed.





Opinion | [THE PRIVACY PROJECT](#)

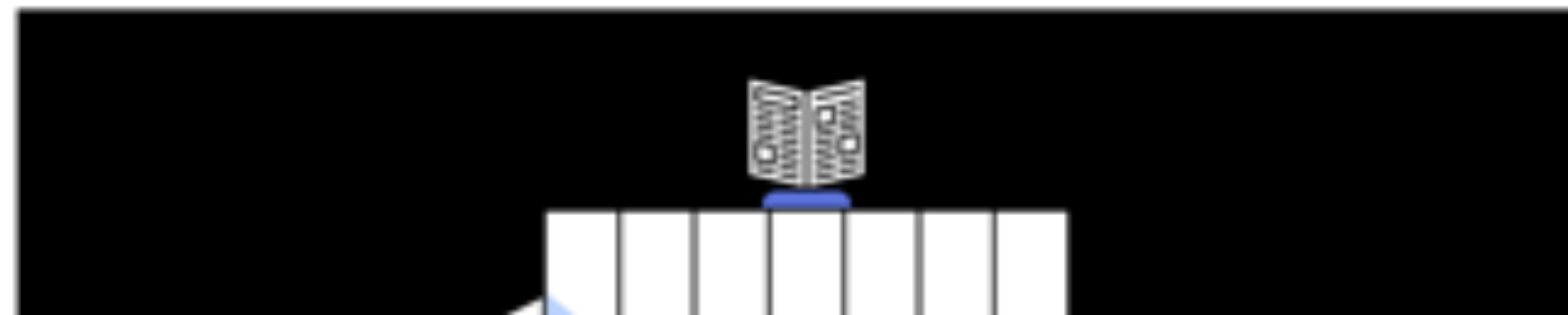
# This Article Is Spying on You

The same news organizations that do a great job of reporting on privacy problems — have privacy problems.

By Timothy Libert

Mr. Libert is a faculty member in computer science at Carnegie Mellon University.

Sept. 18, 2019







THE SLATEST

# Sensitive Personal and Financial Data of What's Likely an Entire Country Leaked Online

By ELLIOT HANNON

SEPT 17, 2019 • 7:15 AM



TWEET



SHARE



COMMENT





NOT GREAT











**“Many shoppers purchase soap and cotton balls, but when someone suddenly starts buying lots of scent-free soap and extra-big bags of cotton balls, in addition to hand sanitizers and washcloths, it signals they could be getting close to their delivery date.”**









*Kelli S. Burns, Ph.D.*

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JUNE 6, 2016 BY KELLI BURNS

## *Is Facebook listening?*

To be honest, I don't know if Facebook is listening. At the request of a local television station, I shared my expertise [about a story](#) they wanted to cover. Although I know that Facebook is tracking what you do on your phone, I can't confirm or deny that they are listening. And one small demonstration isn't going to tell you that.





## Intro



Add a short bio to tell people more about yourself.

[Add Bio](#)

---



Current City



Workplace



School



Hometown



Relationship Status

---



Showcase what's important to you by adding photos, pages, groups and more to your featured section on your public profile.

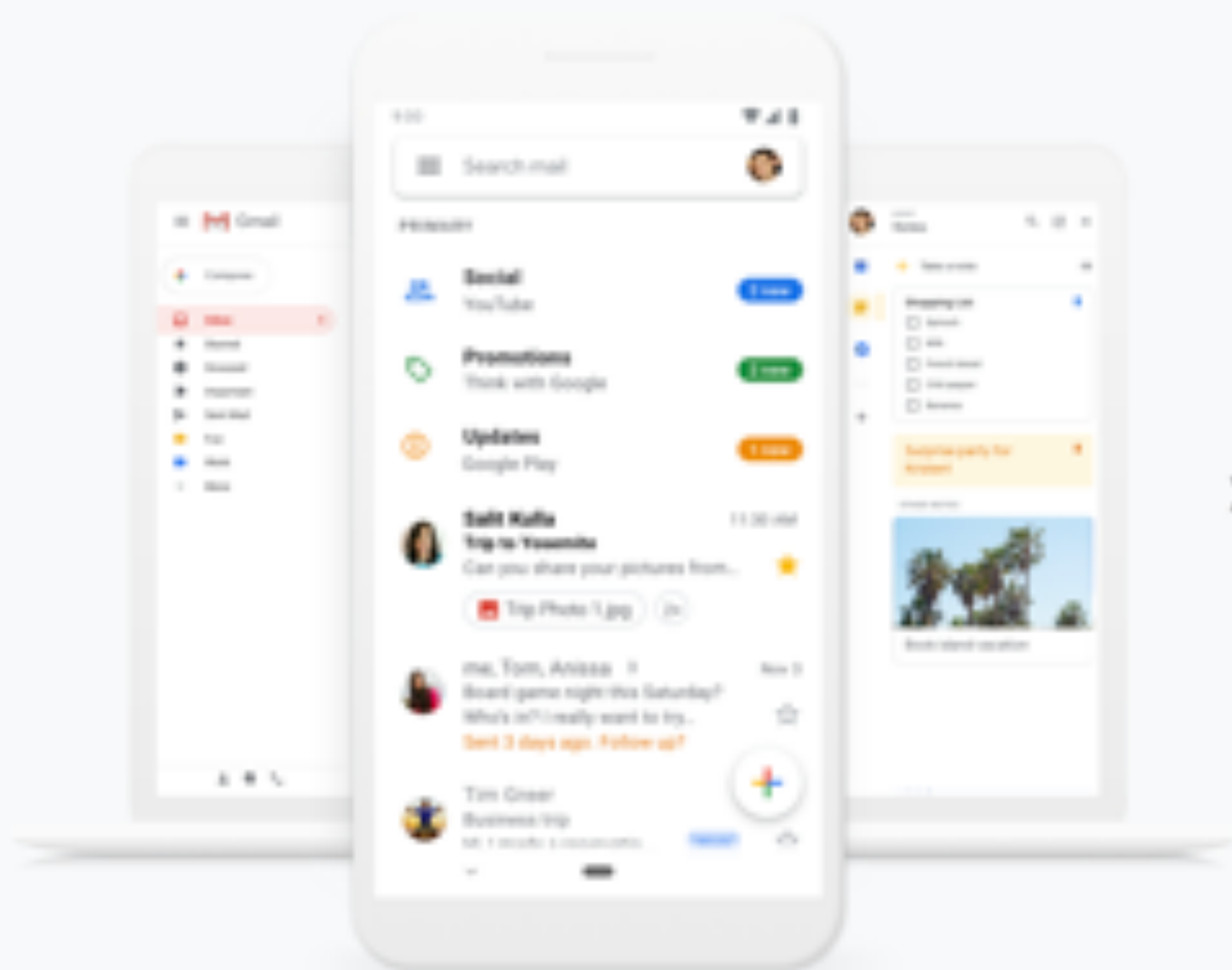
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# Get more done with Gmail

Now more secure, smarter and easier to use—helping you save time and do more with your inbox.

Create an account







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The predicament of Minnesota : an array of facts that shows a ...  
Latzke, Paul.

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# THE PREDICAMENT OF MINNESOTA

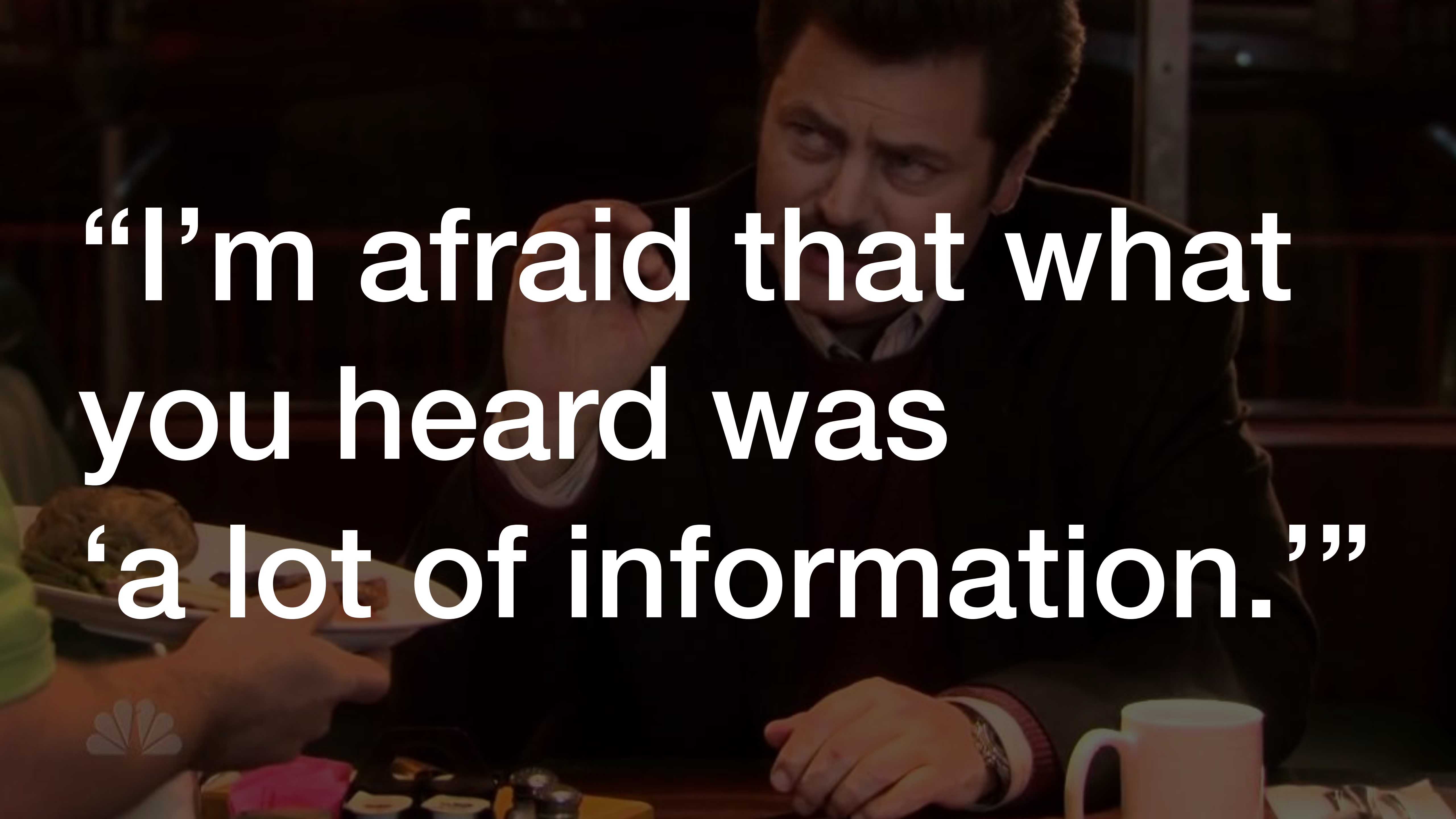
AN ARRAY OF FACTS THAT SHOWS A MOST REMARKABLE  
AND THREATENING CONDITION IN THE  
BREAD AND BUTTER STATE



# Our mission

From the beginning, our mission has been to organize the world's information and make it universally accessible and useful. Today, people around the world turn to Search to find information, learn about topics of interest, and make important decisions. We consider it a privilege to be able to help. As technology continues to evolve, our commitment will always be the same: helping everyone find the information they need.

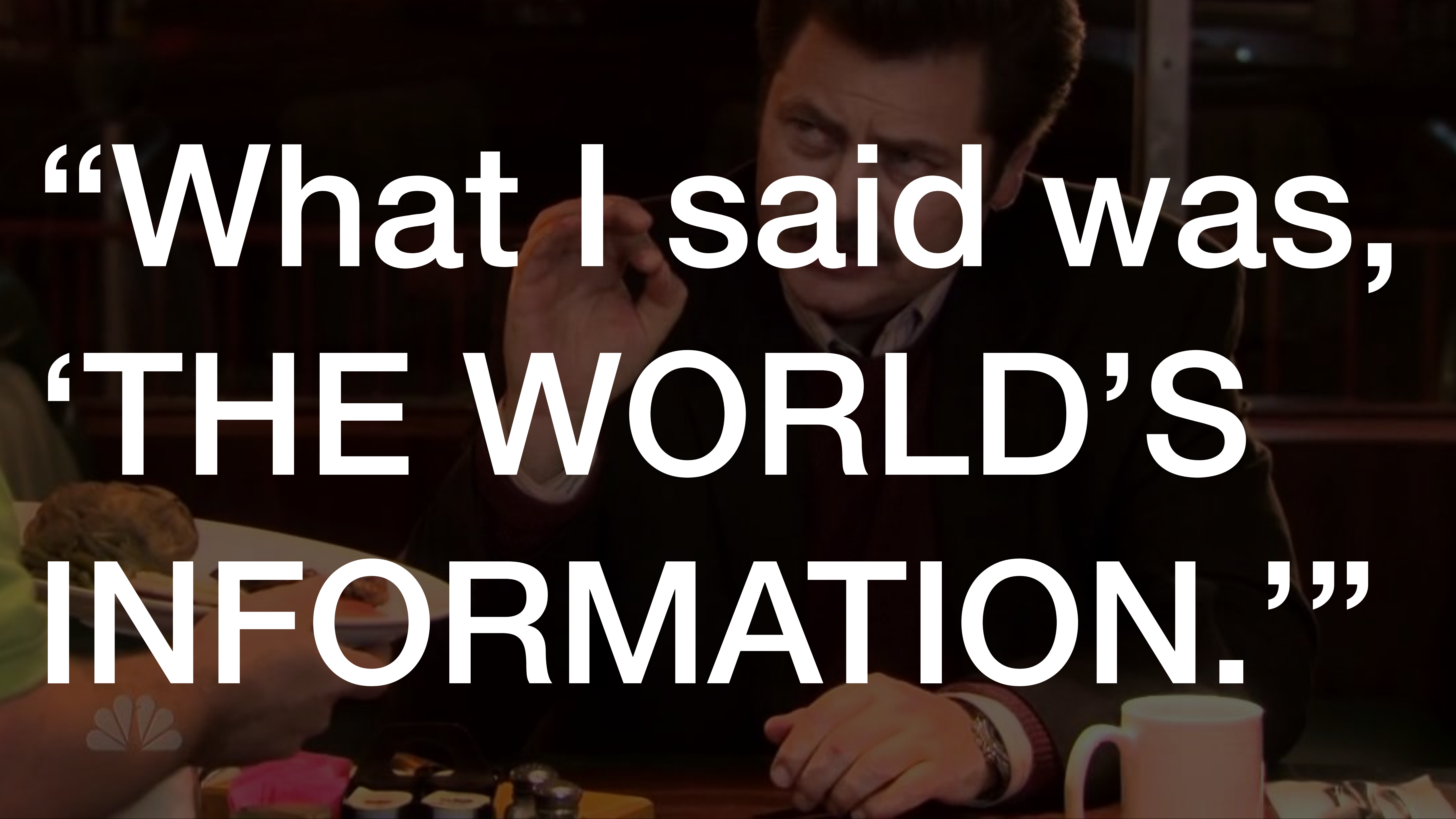


A man with dark hair, wearing a dark sweater, is seated at a table. He has a concerned or distressed expression, with his right hand raised to his face. The background is dark and out of focus. The text is overlaid in large white font.

“I’m afraid that what  
you heard was  
‘a lot of information.’”







“What I said was,  
‘THE WORLD’S  
INFORMATION.’”





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Sign In

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Forgot your password? [Reset it](#)

Sign In with Your Google Account

We'll never post anything without your permission.



Sign in with Google

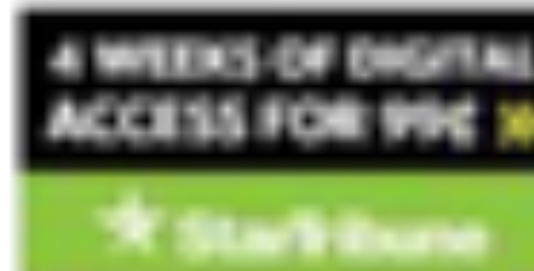
Don't have an account? [Create one](#)







# StarTribune



Local

Sports

Business

Opinion

Variety



Obituaries

Classifieds

Autos

Housing

Jobs



DevTools - www.startribune.com

Elements Console Sources Network Performance Memory Application Security Audits

Cookies

Filter

X

	Name	Value	Domain	Path	Expires / Max-Age	S...	HTL...
http://www.startribune.com	__cfduid	d8ce49f81be448ebb8a4439c61422...	startribune.com	/	2020-10-02T14:20:29.453Z	51	✓
http://tpc.googlesyndication.com	_luid_	M9n25YTi	knxd.net	/	2020-03-31T14:22:05.000Z	14	
https://ide.tynt.com	optimizelyEn...	oeu1570112430683v0.6694441551...	startribune.com	/	2020-03-31T14:20:30.000Z	54	
https://cdn.knxd.net	_fbp	fb.1.1570112431325.589457886	startribune.com	/	2020-01-01T14:21:00.000Z	32	
http://s.amazon-adsystem.com	CMPRO	1071	casalemedia.com	/	2020-01-01T14:20:49.436Z	9	
https://ads.pubmatic.com	CMPS	1065	casalemedia.com	/	2020-01-01T14:20:49.436Z	8	
https://rtb.gumgum.com	d	EikBCwH00HvqAA	quantserve.com	/	2020-01-01T14:20:38.811Z	15	
https://s.amazon-adsystem.com	uid2	810478666764889671	adnxs.com	/	2020-01-01T14:20:38.642Z	23	✓
http://us-u.openx.net	fr	0Bnt8WEFTJiEgm3e_BdigOv...1.0...	facebook.com	/	2020-01-01T14:20:31.308Z	41	✓
http://ap.ijit.com	snwp_first_...	homepage	www.startribune.c...	/	2019-11-02T14:20:31.000Z	29	
https://cdn.districtm.io	univ_id	537072971[75492f39-abb1-4da0-b...	openx.net	/	2019-10-18T14:20:33.613Z	70	
https://image2.pubmatic.com	pd	v2[1570112433]KbwuYe8gahEkWf...	openx.net	/	2019-10-18T14:20:33.311Z	36	
https://p.adasymptotic.com	AWSALB	071o66kt4AuXciEmqMp5DgwUb84...	startribune.blueco...	/	2019-10-10T14:21:31.941Z	1...	
https://secure-assets.rubic	AWSALB	Pxo3C3RtDQuuoUt2KMPPMndvZ...	counter.scribbleliv...	/	2019-10-10T14:21:28.364Z	1...	



# PANOPTICCLICK<sup>3.0</sup>

Is your browser safe against tracking?

How well are you protected against non-consensual Web tracking? After analyzing your browser and add-ons, the answer is ...

Yes! You have strong protection against Web tracking, though your software isn't checking for Do Not Track policies.

Help us defend the Web against tracking:



# PANOPTICCLICK<sup>3.0</sup>

Your browser fingerprint appears to be unique among the 231,207 tested in the past 45 days.

Currently, we estimate that your browser has a fingerprint that conveys at least 17.82 bits of identifying information.

The measurements we used to obtain this result are listed below. You can [read more about our methodology, statistical results, and some defenses against fingerprinting here](#).



NOT ENOUGH





Add your contacts to see who  
you already know on LinkedIn



We'll periodically import and store your contacts to suggest connections and show you updates about your contacts. You can turn off the sync and manage your contacts. You choose who to connect to and who to invite. [Learn more](#)

**Sync my contacts**

Skip for now



IP address

Browser fingerprint

Account info

Cookie data

Browsing history

Contact info

Shadow profile



NOT ENOUGH



# Target the Right Customers Using the Right Data

The more you know about your customers the more impactful your marketing can be. And in today's connected world where consumers move rapidly across devices and touchpoints, having the wrong data will not only produce a bad experience, it can put you and your organization at risk. It's time to stop guessing and start knowing with accurate and verified customer identity data.

Neustar's Customer Identity File gives you access to the most accurate and complete name, address and phone data available. Over 150 million USPS Delivery Point Validation (DPV®) households - compiled, verified, and enhanced with 450+ fields of demographic, behavioral, financial, property, segmentation and geographic attributes. Whether you are sitting on mountains of customer data or looking to build your own repository from scratch, Neustar gives you the power of true consumer intelligence.

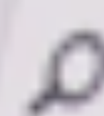
## Benefits

### UNCOVER GREATER INSIGHTS

Obtain a complete consumer profile of all U.S. households with their names, addresses, phone numbers, demographics, and more! Gain a more complete understanding of your existing customers to deliver a better experience for retention.



Trait Storage



Audience Traits

CRM

DMA

Demographic + / x

Gender

Platform

Products

Purchases

Social

Subscription

Campaigns

Channels

Company - LF

Customer Onsite

Option A


<input type="checkbox"/>	Trait ID	Name	Description
<input type="checkbox"/>	74624	Age 20 - 29	Age range trait
<input type="checkbox"/>	74625	Age 30 - 39	Age range trait
<input type="checkbox"/>	74627	Age 40 - 49	Age range trait
<input type="checkbox"/>	4056508	Age 50+	Age range trait
<input type="checkbox"/>	74621	Income - \$100,000 to 124,999	Income range trait
<input type="checkbox"/>	74622	Income - \$125,000 to \$149,999	Income range trait
<input type="checkbox"/>	74623	Income - \$150,000+	Income range trait



The Oracle ID Graph “ingests massive amounts of IDs across cookies, login, HH [household], email, and mobile ad IDs...”

“The Oracle ID Graph can reach over 90% of people online in the US and in markets that matter internationally...”



A man with short brown hair, wearing a blue jacket, is speaking to another man whose back is to the camera. They are on a ship's deck, with a railing and other crew members in blue uniforms visible in the background.

-We're listening?  
-Yeah.



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May 21, 2014

## A New, Optional Way to Share and Discover Music, TV and Movies

When writing a status update – if you choose to turn the feature on – you'll have the option to use your phone's microphone to identify what song is playing or what show or movie is on TV.

### Contact Us

[press@fb.com](mailto:press@fb.com)


### Categories

[Safety & Well-Being](#)

[Social Impact](#)





A medium shot of two men in blue hooded jackets standing outdoors. The man on the left is facing the camera and speaking, while the man on the right is seen from the back, listening. The background is a blurred natural setting with trees and a fence.

But it's just to, like,  
maximize the user experience.



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E-RESOURCES



E-RESOURCES  
ARE WEBSITES



# User Tracking on Academic Publisher Platforms

Cody Hanson  
@codyh  
codyhanson@umn.edu

*Prepared for the Coalition for Networked Information Spring 2019 Member Meeting, April 8-9, 2019, St. Louis, Missouri. [Slides](#) | [Video \(YouTube\)](#)*

I studied the page source from fifteen different publisher platform sites and found that publishers of library resources use technology on their platforms that actively undermine patron privacy. This advertising and marketing technology makes it impossible to ensure that the use of electronic library resources can be private.



[https://www.doi.org/  
10.3758/BF03208840](https://www.doi.org/10.3758/BF03208840)



[https://www.doi.org/  
10.1002/ppul.20162](https://www.doi.org/10.1002/ppul.20162)



[https://www.doi.org/  
10.1371/  
journal.pone.0177388](https://www.doi.org/10.1371/journal.pone.0177388)



top

- link.springer.com
- adservice.google.com
- beacon.knxd.net
- cdn.cookiecutter.org
- cdn.knxd.net**
- cdn.polyfill.io
- consumer.knxd.net
- event-tracker.springemature.com
- geo.moatads.com
- media.springemature.com
- optanon.blob.core.windows.net
- pagead2.googleadsyndication.com
- published-with-public.springemature.app
- px.moatads.com
- recommended.springemature.com
- securepubads.g.doubleclick.net
- www.google-analytics.com
- www.googletagmanager.com
- www.googletagservices.com
- <iframe>
- event-tracker.springemature.com/
- google\_osd\_static\_frame (about:blank)
- proxy.3d2100fd7107262ecb55ce6847f01fa5.html
- uptodate-client (client.html)

🔍 P Open file

🔍 ⚙ P Run command

Drop in a folder to add to workspace

[Learn more](#)



## Application

- Manifest
- Service Workers
- Clear storage

## Storage

- Local Storage
- Session Storage
- IndexedDB
- Web SQL
- Cookies
  - https://link.springer.com
  - https://cdn.knx.net
  - https://event-tracker.springemature.com
  - https://recommended.springemature.com

## Cache

- Cache Storage
- Application Cache

## Background Services

- Background Fetch
- Background Sync
- Notifications
- Push Messaging

Filter

Name	Value	Domain	Path	Expires / Max-Age	Size	Ht...	Secure
_kuid_	M9YrP-lqD	.knxd.net	/	2020-03-29T15:48:30.000Z	14		
pi	5978151503554848220	.ml314.com	/	2020-10-01T15:47:22.899Z	21		✓



top

- onlinelibrary.wiley.com
- adservice.google.com
- assets.adobedtm.com
- beacon.knd.net
- cdn.knd.net
- connect.facebook.net
- content.readcube.com
- crossmark-cdn.crossref.org
- dfbaf8a51mna7.cloudfront.net
- dfuo4w7k3f45mn.cloudfront.net
- googleads.g.doubleclick.net
- injections.readcube.com
- m.addthis.com
- px.mostatds.com
- rum-static.pingdom.net
- s.yimg.com
- st.addthis.com

scholar.google.com

- securepubads.g.doubleclick.net
- wt.google-analytics.com
- v1.addthisedge.com
- wiley.grapesoft.co.uk
- wileypublishing.at.cdn.net
- wol-prod-cdn.literaturonline.com
- www.googleadservices.com
- www.googletagmanager.com
- www.googleadservices.com
- www.youtube.com

about:blank

about:blank

destination\_publishing\_iframe\_wileypublishing\_0\_name (dest5.html)

google\_ads\_iframe\_0215/wileyrespimed\_000107/ped-pulmonology\_ppul\_0 (ppul.20162)

google\_ads\_iframe\_0215/wileyrespimed\_000107/ped-pulmonology\_ppul\_1 (ppul.20162)

google\_ads\_iframe\_0215/wileyrespimed\_000107/ped-pulmonology\_ppul\_2 (ppul.20162)

google\_red\_static\_frame (about:blank)

proxy.3d2100a57127262ecb55ce684760fa5.html

sh.148a7a04e4b8dbf021b4cda7d.html

track\_epdf.43d7bc64.html

top/scholar.google.com

satelliteLib-cl...8f78a6fcb6d.js

more never show

```

42 //
43 // - 'elm' - the element to get or set a property to
44 // - 'prop' - the property name
45 // - 'val' - the value of the property, if omitted, it
46 //       returns the existing value of the property, if
47 //       data: function(elm, prop, val){
48 //       if (!elm) return;
49 //       var __satellite__ = '__satellite__';
50 //       var cache = SL.dataCache;
51 //       var uid = elm['__satellite__'];
52 //       if (!uid) uid = elm['__satellite__'] = SL.uid++;
53 //       var datas = cache[uid];
54 //       if (!datas) datas = cache[uid] = {};
55 //       if (val === undefined)
56 //         return datas[prop];
57 //       else
58 //         datas[prop] = val;
59 //     },
60 //     uid: 1,
61 //     dataCache: {},
62 //
63 // 'keys(object)'
64 // -----
65 //
66 // Return all keys of an object in an array.
67 keys: function(obj){
68   var ret = [];
69   for (var key in obj)
70     if (obj.hasOwnProperty(key))
71       ret.push(key);
72   return ret;
73 },
74 //
75 // 'values(object)'
76 // -----
77 //
78 // Return all values of an object in an array.
79 values: function(obj){
80   var ret = [];
81   for (var key in obj)
82     if (obj.hasOwnProperty(key))
83       ret.push(obj[key]);
84   return ret;
85 },
86 //
87 // 'isArray(thing)'
88 // -----
89 //
90 // Returns whether the given thing is an array.
91 isArray: Array.isArray || function(thing){
92   return ToString.apply(thing) === "[object Array]";
93 },
94 //
95 // 'isObject(thing)'
96 // -----
97 //
98 // Returns whether the given thing is a plain object.

```



#### Application

- Manifest
- Service Workers
- Clear storage

#### Storage

- Local Storage
- Session Storage
- IndexedDB
- Web SQL
- Cookies
  - https://onlinebrary.wiley.com
  - https://injections.readcube.com
  - https://t.addthis.com
  - https://cdn.knd.net**
  - https://tags.bluewin.com

#### Cache

- Cache Storage
- Application Cache

#### Background Services

- Background Fetch
- Background Sync
- Notifications
- Push Messaging

#### Frames

- top

Filter

Name	Value	Domain	Path	Expires / Max-Age	Size	HttpO...
_knd_	MNYP-igD	knd.net	/	2020-03-29T15:50:55.000Z	14	



- \* top
  - journals.plos.org
  - adservice.google.com
  - aim.plos.org
  - cdnjs.cloudflare.com
  - code.jquery.com
  - connect.facebook.net
  - crossmark-cdn.crossref.org
  - fonts.googleapis.com
  - fonts.gstatic.com
  - pagead2.googlesyndication.com
  - pbs.twimg.com
  - platform.twitter.com
  - securepubads.g.doubleclick.net
  - stats.g.doubleclick.net
  - widgets-static.gstatic.com
  - widgets.gstatic.com
  - www.google-analytics.com
  - www.googletagmanager.com
  - www.googletagservices.com
  - <iframe>
  - <iframe>
  - fb\_xdm\_frame\_https (xd\_arbiter.php)
  - widget\_frame\_d6364fae9340b0be5f138183701411d0.html







**On average, each platform had 18 third-party assets loaded on their article page**

- **Median was 10**
- **One had none**
- **One had over 100**
- **A total of 139 distinct third-parties across the 15 platforms**



Four of fifteen had Facebook  
code.



Four of fifteen had Neustar  
code.



Four of fifteen had Oracle  
Marketing Cloud code.



Fourteen of fifteen had Google  
code.



Eleven of fifteen had AddThis  
code.



Eleven of fifteen had AddThis code.

Which shares data with Neustar, Adobe, Oracle, Google, and two dozen others.



# SPARC\*

## Landscape Analysis

The Changing Academic Publishing Industry –  
Implications for Academic Institutions



"Academic publishing is undergoing a major transition as some of its leaders are moving from a content-provision to a data analytics business."



"Data about students, faculty, research outputs, institutional productivity, and more has, potentially, enormous competitive value."



“...but its capture and use could significantly reduce institutions’ and scholars’ rights to their data and related intellectual property.”



"A set of companies is moving aggressively to capitalize on this data, often by exploiting the decentralized nature of academic institutions."





RA → 21



Safari is a digital library providing on-demand subscription access to thousands of learning resources.

[Sign In](#)

## Sign In

Username (Email Address):

Password:

☐ Stay Signed In[CONTINUE](#)[Forgot Password?](#)

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[START A FREE TRIAL](#) ➡➡

OR

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.....

You can browse Safari Books Online's collection of books as an anonymous user. Your view of our content will be in a limited preview mode.

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## Special policies

[Conduct policies](#)[Workplace and sponsored  
conference conduct](#)[Service and support animals](#)[Photography in Library buildings](#)[Guidelines to counsel &  
researchers seeking discovery from  
Stanford University Libraries](#)[Statement on Patron Privacy and  
Database Access](#)

## Statement on Patron Privacy and Database Access

Many leading providers of digital content to libraries in North America are changing the way they provide access to library patrons. Instead of allowing anonymous access via well-established channels, these providers are increasingly seeking personally identifiable, individual patron data. Often these efforts to gather more patron data are bundled into efforts to "enhance" or modernize platforms as the sector moves towards single sign on, and away from traditional, IP-based access. The providers have many possible drivers to gather this data: personalization, analytics, marketing, et al.

This approach is unacceptable.

Safeguarding patron privacy is a fundamental and longstanding value for libraries. The [ALA Code of Ethics](#) declares that "we protect each library user's right to privacy and confidentiality". This includes their personal data, the subjects of their research, and the information resources they consult. Indeed, readers make an assumption of privacy when they choose to use resources provided through their libraries rather than those available to them on the open Internet, where they expect their reading and searching habits to be tracked.

Privacy and confidentiality are integral to intellectual freedom, to free speech, and to free association. The prospect of monitoring and data mining may have a chilling effect on what a patron searches for, reads, and ultimately, thinks. This is why many states explicitly prohibit disclosing the use of library materials by individuals, including electronic materials (see, for example, New Hampshire Revised Statutes Annotated, Chapter 281-D:11: "... including records of materials that have been viewed or stored in electronic form.") Our library patrons therefore have an expectation of privacy, whether for intellectual freedom, or simply "the right to be left alone—the most comprehensive of



**“Many leading providers of digital content to libraries in North America are changing the way they provide access to library patrons. Instead of allowing anonymous access via well-established channels, these providers are increasingly seeking personally identifiable, individual patron data.”**

**“This approach is unacceptable.”**



**“As research libraries, we do not sell patron data. We do not share it. We object to, and reject, subscription agreements that silently expose it to third-party interests, whether they be commercial or governmental.”**



“As research libraries, we do not sell patron data. We do not share it. We object to, **and reject**, subscription agreements that silently expose it to third-party interests, whether they be commercial or governmental.”



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# Technologies of Surveillance Group

## Advocacy Action Plan

Eliza Bettinger, Mahrya Burnett, Michelle Gibeault,  
Yasmeen Shorish, Paige Walker

September 2019





## **Reader Privacy: The New Shape of the Threat**

**Clifford A. Lynch**, Executive Director, Coalition for Networked Information

### **Introduction**

This essay briefly summarizes the current range of threats to reader privacy and makes some high-level suggestions that research library leadership might consider to address them. It is not comprehensive, and does not go into much technical detail; those interested in a place to start might see my paper “The Rise of Reading Analytics and the Emerging Calculus of Reader Privacy in the Digital World,”<sup>1</sup> keeping in mind that it’s now two years out of date.



Thanks!

Cody Hanson

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[@codyh](#)