



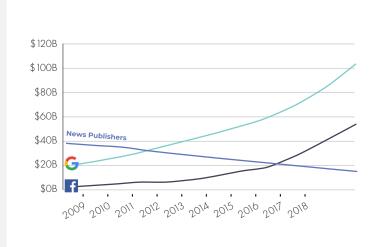


EXECUTIVE SUMMARY

Antitrust investigators are finally focusing on the anticompetitive practices of Google. Both the Department of Justice and a coalition of attorneys general from 48 states and the District of Columbia and Puerto Rico now have the tech behemoth squarely in their sights. Yet, while Google's dominance of the digital advertising marketplace is certainly on the agenda of investigators, it is not clear that the needs of one of the primary victims of that dominance—the journalism industry—are being considered. That must change and change quickly because Google is destroying the business model of the journalism industry.

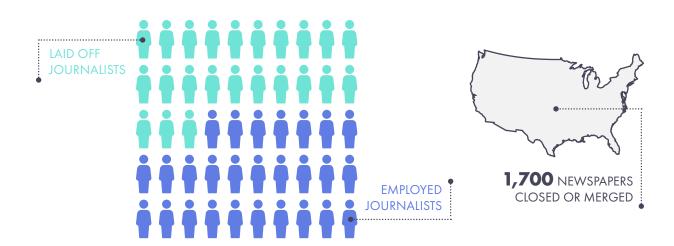
As Google has come to dominate the digital advertising marketplace, it has siphoned off advertising revenue that used to go to news publishers.

The numbers are staggering. News publishers' advertising revenue is down by nearly 50 percent over the last seven years, to \$14.3 billion, while Google's has nearly tripled to \$116.3 billion. If ad revenue for news publishers declines in the next seven years at the same rate as the last seven, there will be practically no ad revenue left and the journalism industry will likely disappear along with it.



The revenue crisis has forced more than 1,700 newspapers to close or merge, the end of daily news coverage in 2,000 counties across the country, and the loss of nearly 40,000 jobs in America's newsrooms. The carnage in the journalism industry has resulted in 1,300 communities in the United States without any source for local news.

JOURNALISM JOBS LOST IN THE LAST DECADE



60% OF U.S. COUNTIES HAVE NO DAILY NEWSPAPER

These drastic cutbacks have negatively impacted communities throughout the United States. News outlets have dramatically scaled back their coverage of governments at the federal, state, and local level. Without a robust news media to hold government officials accountable, corruption has increased. Take Bell, California, for example. It's a small town where two municipal officials were convicted for bilking taxpayers of nearly \$6 million in a scheme that went unchecked for a decade and nearly bankrupted the working-class town. The Bell spectacle, according to Terry Franke of the Voice of Orange County, is what happens to communities without their own old-fashioned, diligent news coverage. Hultiple academic studies have also found a direct correlation between the loss of local news coverage and increasing political polarization and environmental degradation.

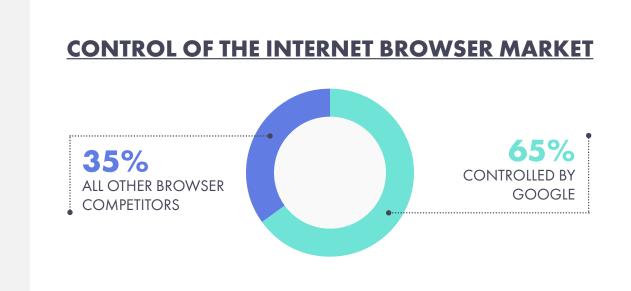
Google's revenue is exploding because the digital advertising market is growing rapidly and will consume two-thirds of all advertising spending by 2024. Digital advertising is a vastly more complex marketplace, however, with numerous intermediaries between the buyers and sellers of ad space online. Through its own development and an aggressive acquisition strategy, the *Wall Street Journal* concluded that, "Google is the major force at every layer between advertisers and websites, providing tools used in the many steps of purchasing and selling online ads." [iii] News publishers have few other choices and as one digital advertising consultant described, Google can use its dominance of the digital advertising ecosystem to "advantage their own platforms or advantage their own properties." [iv]

The raw materials that fuel Google's digital advertising juggernaut are user data, and Google has built, often deceptively, the largest data harvesting operation the world has ever known. It's eponymous search engine acts like a "digital truth serum" and has amassed "the most important dataset ever collected on the human psyche." It even captured all unsecured internet traffic as its Street View cars drove every street in countries around the world. The cold reality is that "Google knows you better than you know yourself."

The immense power that such vast knowledge gives Google on top of its dominance of the digital advertising ecosystem are not the only advantages the tech behemoth enjoys over news publishers (and everyone else).

Google now controls the majority of web traffic on the internet and the data that flows with it.

Its Chrome browser dominates roughly two-thirds of the global browser market, meaning a Google product is how the majority of internet users access news websites. And Google is by far the largest external referrer of visitors to news websites and can unilaterally set the terms for how news articles appear in its search rankings, its news aggregator, or its other domains. Josh Marshall, the founder and publisher of news website Talking Points Memo, said, "running Talking Points Memo absent Google's various services is almost unthinkable."[viii]



All of this leaves news publishers extremely vulnerable to unilateral changes made by Google to its products.



Earlier this year, Google changed its private browsing function, known as incognito mode, to make it easier for web users to circumvent news publishers' article access limits. These access limits, known as metered paywalls, are now viewed by news publishers as the best way to maximize revenue balanced between advertising and subscriptions. This change will likely result in more news publishers moving all of their content behind a paywall, raising the price of news for many Americans.



News websites are also dependent on using Google's Accelerated Mobile Pages, or AMP, to rank highly in search and get referrals. AMP requires a stripped down design so web pages will load faster on mobile devices. One early AMP adopter said if you do not use it, "your search ranking tanks." [X] But the restrictions limit advertising opportunities on the pages and the text loads faster than the ads do, which reduces impressions. AMP pages only generate half the revenue as regular web pages and they are hosted on a google.com domain, not the news publisher's, limiting both internal referral opportunities and data collection on their own readers. Publishers are reluctant to speak against it, as the *Wall Street Journal* reported one publishing executive saying, because of fear that Google might "turn some knob that hurts the company." [X]



One rumored possible future change that Google is considering is limiting or restricting third-party cookies in Chrome. These cookies allow user data to flow to Google's competitors in the digital advertising marketplace and increase the value of ads containing them on news and other websites. When the (small compared to Chrome) Firefox browser recently eliminated third-party cookies by default, ad revenue on news websites in Germany—where it has about 30 percent of the browser market—dropped by 15 to 25 percent overnight.

Google claims that it is making these changes to improve the user experience by protecting their privacy in the case of incognito or changes to third-party cookies and delivering a faster internet in the case of AMP. But those claims are pretextual and the real rationale is increasing Google's data collection advantages against its competitors.

Even though incognito is sold as private, anonymous browsing, a study from Vanderbilt University showed that, "Google has the ability to connect this collected information with a user's personal credentials stored in their Google Account." Similarly, restricting third-party cookies on Chrome would not impact Google's massive data harvesting operation in any way, even when its domains should be considered third parties on other websites. And if AMP was only about speed, "it would rank pages based on speed alone, not whether they use some special format of HTML."[xi] But you have to use Google's code, which "provid[es] Google far more data than it otherwise could collect."

Google's actions have harmed consumers.

The quality of news available to millions of Americans has been dramatically reduced or even eliminated. This has allowed corruption to go unchecked, pollution to increase, and exacerbated political polarization. And Google's ongoing assault on the advertising and subscription revenue streams for news publishers has pushed up the cost to consumers to access news websites relative to the cost just a decade ago.

Google did not create the internet nor the transition from print to digital media. And it did not set out to undermine the journalism industry. But what is poorly understood is that while Google and the journalism industry produce vastly different products, their business model is constructed around the same concept: capturing the attention of people and then selling that to advertisers.

Google dominates the online marketplace so thoroughly that it can set the rules that govern activity on the majority of the internet. Google uses that power to create advantages for itself in the race to capture the attention of internet users. News publishers have no choice but to use its services and adhere to its rules. The result is that the only industry given special protection by the Constitution is now completely at the mercy of Google, leaving consumers with a lower quality product at higher cost.

[&]quot;Bell, Calif. city manager gets 12 years for \$6 million corruption scheme," The Associated Press. October 16. 2014; available at: https://www.reuters.com/article/us-usa-california-corruption/five-ex-officials-from-bell-california-convicted-in-corruption-trial-idUSBRE92J17M20130320

[&]quot;The Information Needs of Communities," The Federal Communications Commission, July 2011; available at: https://transition.fcc.gov/osp/inc-report/The_Information_Needs_of_Communities.pdf

Haggin and Dapena, "Google's ad dominance explained."
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[[]iiii] Josh Marshall, "A Serf on Google's Farm," Talking Points Memo, September 1, 2017; available at: https://talkingpointsmemo.com/edblog/a-serf-on-googles-farm

[[]ix] Williams, "Google tightening grip."

Marshall, "Google AMP."

[[]xi] Williams, "Google tightening grip."

THE EXISTENTIAL CRISIS FACING THE JOURNALISM INDUSTRY

The Department of Justice and a coalition of attorneys general from 48 states and the District of Columbia and Puerto Rico are now conducting antitrust investigations into Google. This antitrust action comes not a moment too soon for a journalism industry facing an existential crisis.

Technological change — the advent of radio, television, and then 24-hour news channels — has threatened the industry before. But, as former journalist and industry analyst John Morton noted in 2009, the challenge of the digital age is different because, "unlike radio and television the Internet does not depend on listening but on reading, just like newspapers."²

After some trial and error (mostly error) with charging for their content online, most news publishers put their content online for free.³ Alan Mutter, a former journalist and Silicon Valley executive, described that decision as the "Original Sin" that allowed the news aggregators, like Google and others, to profit for free off the work of the journalism industry.⁴

But it's not as simple as winding back the clock to the late 1990s and reversing that decision even if it were possible. As journalism professor Dan Kennedy argued it was unlikely to work given the myriad choices of free news content online from websites and television news channels among other options.⁵ Additionally, Kennedy writes that "newspapers have never asked their readers to pay for content" because the cost of a subscription does not cover the cost of production.⁶ For example, in 2009, it cost \$2.72 per week for the physical paper that the Washington Post was printed on. Yet, it cost only \$1.81 per week for a subscription.⁷

The revenue that supported the journalism industry came from the advertising in the newspaper. This underscores that the business model for journalism is, as described by Peter Kafka, Recode's senior correspondent and the host of the podcast Recode Media, "creat[ing] and aggregate[ing] information and present[ing] it to users in return for their attention, which they sell to advertisers."

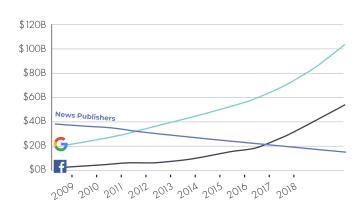
Regardless of the wisdom of most news publishers' decision to put their content online for free, or the viability of other options, it's an academic debate now. It happened. We have to deal with the journalism industry as it is today, not how we wish it would be if different decisions had been made two decades ago.

Morton, Muller, and Kennedy were writing in 2009 following the collapse of newspaper revenue during the global financial crisis. The crisis at that stage was acute, with advertising revenue falling from \$45.4 billion in 2007 to \$27.6 billion just two years later. Such catastrophic losses were at least partially attributable to the economic crash, but the revenue did not rebound when the economy recovered.

That period also witnessed the destruction of the classified ad business. In 2007, classified ads brought in \$14.2 billion, roughly a third of all newspaper ad revenue. Description By 2009, it was just \$6.2 billion. Craigslist is often pointed to as the culprit in the destruction of the classified ad business for news publishers. But while Craigslist did have an impact, it was far from the only player. According to a 2011 Federal Communications Commission report, a fair amount of classified ad "money went to Google, where small businesses could advertise easily and efficiently."

After a brief two-year stabilization, which saw advertising revenue roughly stabilize from 2009 to 2011, the trend turned downward again. Starting in 2012, and continuing for the following six years, news publishers lost about \$2 billion per year in advertising revenue, so that total ad revenue in 2018 was just \$14.3 billion, barely half of what it had been a decade earlier. But it's the trendline that is as alarming as the raw numbers; with ad revenue at just over \$14 billion now, if the rate of decline of the last seven years continues for the next seven, there will be virtually no ad revenue left. The journalism industry will disappear with it.

JOURNALISM AD REVENUE DECLINES OVERTIME



During this period of unprecedented collapse of advertising revenue for news publishers, Google's ad revenue experienced exponential growth. In the decade when news publishers' revenue fell by 50 percent, Google's revenue exploded, increasing to \$116.3 billion in 2018 from \$21.3 billion in 2009, an increase of \$95 billion. Columbia University Law Professor Tim Wu, author of The Attention Merchants on the history of advertising,

said "Google is the most successful attention merchant and profitable attention merchant in the history of the world." 17

The collapse of advertising revenue for news publishers had predictable results. Researchers at the University of North Carolina's Hussman School of Journalism and the Media have been tracking the closures of newspapers across the country and the new phenomenon on "news deserts." They found that more than 1,750 newspapers closed in the United States in the last fifteen years, or nearly 20 percent of all U.S. newspapers. Roughly two-thirds of the more than 3000 counties in the U.S. have no daily newspaper. And 1,300 communities in the United States now have no local news coverage at all. 20

The impact of the loss of these newspapers on the communities has been profound. A landmark study by the FCC examining the "Information Needs of Communities," found that "27 states have no Washington, DC reporters." In the 1990s, Maine had four different newspapers with a Washington, DC bureau. 22 The last Washington bureau for a Maine publication was closed a decade ago. 23 A Pew Research Center study reported that an "Associated Press regional reporter in Washington is assigned to track developments of interest to Maine residents, but he also has other responsibilities, including covering for three other states and national labor issues." 24

Coverage of state and local government has also been dramatically cut back. A 2009 survey by the American Journalism Review found that, "more than 50 newspapers and news companies had stopped covering their statehouses entirely." The FCC report also concluded that "without adequate media coverage, citizens have a hard time taking on city hall." It recounted the example of Bell, California, a working-class town of 37,000 residents where, for nearly a decade, the city administrator paid himself almost \$800,000 a year and the sheriff pulled in \$457,000.

A study published in the December 2018 edition of the Journal of Communication concluded that the closures of local newspapers has contributed to our current state of political polarization. According to the study, counties in which the local newspaper closed before the 2012 election, split ticket voting decreased by 1.9 percent, which was comparatively larger than findings in other studies of changes in the local media environment. One of the authors of the study Texas A&M professor Johanna Dunaway, said, "[r]eplacing local media with national alternatives and the resulting increase in political polarization has broad implications for everyone. If the information we get about politics is reduced to national party politics, the local issues that affect us most will be neglected by voters and politicians alike.

Multiple academic studies have shown that the loss of local news can negatively impact the environment in the areas that have lost local news coverage. Professor Pamela Campa of the Stockholm School of Economics found a direct correlation between local news coverage of toxic emissions by companies and a reduction in those emissions.³¹ Professor Campa's study showed that companies that received news coverage of their emissions "reduce their emissions by 29 percent."³² Professors from Harvard and Columbia Universities conducted a study in 2012 that revealed that local news outlets were an important factor to hold companies accountable for their public claims about their environmental record.³³ Columbia University Professor Jiun Luo, one of the co-authors of the study, said that without local journalists to serve as "night-watchers," companies are more likely to pollute the environment.³⁴

A cruel footnote to these studies: the Pacific Standard, which itself closed its doors earlier this year, first reported on the harm to the environment that occurs when local newspapers close or reduce coverage.³⁵

These devasting cuts to newsrooms across the country have had real impact on thousands of journalists too, not just the communities they serve. According to the Pew Research Center, American newspapers employed about 71,000 people in newsrooms—reporters, editors, photographers, and videographers—in 2008.³⁶ By 2018, that number had fallen to just 38,000, a 47 percent decline in a little more than a decade.³⁷ Sadly, the pace may be accelerating. Through the first three quarters of 2019, more than 7,200 media professionals lost their jobs.³⁸

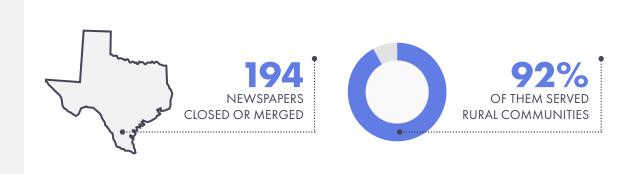
LAID OFF JOURNALISTS LAID OFF JOURNALISTS 7,200 NEWSROOM EMPLOYEES LAID OFF IN 2019 38,000 NEWSROOM EMPLOYEES REMAINING NEWSROOMS EMPLOYEES





STATE OF THE JOURNALISM INDUSTRY IN TEXAS

Texas has been one of the hardest hit states in the crisis sweeping across the journalism industry. The sprawling state of more than 268,000 square miles, a surface area nearly twice the size of Germany, was once home to a thriving network of big city and smaller town dailies buttressed by rural weeklies that serve the thousands of smaller communities across the state. But in the last fifteen years, Texas lost the second most newspapers of any state in the country, the overwhelming majority of which are the weekly newspapers that so many of Texas's rural residents depend on for local news coverage.^[1]



In the last fifteen years, 194 newspapers in Texas have closed or merged. Of that total, 180 were weekly papers that served mostly rural communities.^[2] That has left Texas with a staggering number of news deserts, areas in which there is simply no local newspaper coverage at all. Google and the tech giants' decimation of the economic model of the news industry has left 21 of Texas's 254 counties with no local newspaper serving their communities.^[3]



One of them is Hartley County, located in North Texas and is larger than the state of Rhode Island. [4] Hartley County is in Texas's 13th Congressional district, which represented by Rep. Mac Thornberry. The 13th Congressional district is the second largest in the Texas and is bigger than thirteen entire states. [5] It also is one of the least served local news jurisdictions in America. In addition to Hartley County, four other counties — Collingsworth, Hall, Kent, and Motley — have no local newspaper. [6]

Texas is also ground zero for the private equity takeover of the journalism industry. There is nothing inherently wrong with outside groups pooling resources and investing capital in struggling industries. It can provide much-needed investment, bring greater efficiencies, and be a lifeline for some businesses. But it can also signal that the vultures are circling on a dying business or industry and outside investors are able to buy distressed companies, strip their remaining assets, and make a tidy profit before the business ultimately goes under. Google and other tech giants have decimated news publishers' bottom line and Texan journalists have raised concerns that GateHouse Media's takeover of 12 daily newspapers in the state is a sign that the asset strippers are scavenging the journalism industry.

GateHouse Media is on an "insatiable" acquisition binge across the country. [7] It is now the largest, by a factor of four, newspaper publisher in the United States by circulation after its purchase of Gannett in August. [8] GateHouse is owned by the New Media Investment Group, which is managed by the hedge fund Fortress Investment Group, which itself is owned by SoftBank. [9] SoftBank is a Japanese investment company headquartered in Tokyo, recently making headlines for its \$1.5 billion bailout of WeWork. [10] The Gannett acquisition added dailies in El Paso, Corpus Christi, San Angelo, Wichita Falls, and Abilene to those GateHouse already owned in Austin, Lubbock, Sherman, Amarillo, Stephenville, Brownwood, and Waxahachie. [11] Tokyo is a long way from Amarillo.

Even before it bought Gannett, GateHouse was criticized by local Texas reporters for "gutting" the newspapers it owns. [12] The Texas Monthly reported that the GateHouse-owned Amarillo Globe News was down to just one reporter covering a community of 200,000 people. [13]

An article in the American Prospect, co-authored by someone writing under the pseudonym Hildy Zenger, who works at "a small-city paper owned by GateHouse," likely in Texas, highlights the issues with Gatehouse. [14] According to this account:

"Although GateHouse management claims to be aggressively pursuing a 'hyperlocal' digital ad strategy, its newspapers' websites—all with close to identical design—are stunningly ugly, hard to use, and filled with dated, soft feature stories of zero local interest. Its subscriber services—all outsourced—are even worse. At Zenger's office, the editors get calls from readers who are having trouble with their subscriptions and can't reach anyone for help. 'Sorry, the editors have to say. 'There's nothing we can do.'"[15]

Total newspaper circulation in the state has dropped by nearly 3 million copies per week—from 6.5 million in 2004 to just 3.7 million this year. Much of that loss is attributed to the closure of 180 weeklies across the state that mostly served rural communities. [17] Texas A&M University Professor Joanna Dunaway said of this loss of local news coverage, "we have this loss of engagement at the local level." [18] Zenger reports that the circulation of this small-city daily is down 40 percent and half the advertisers have abandoned the paper. [16]

One bright spot over the last decade has been the launch and growth of the non-profit, Texas Tribune. The Austin-based publication founded in 2009 with a mission to provide Texans "access to non-partisan news and information about statewide issues and elections" has thrived while the rest of the journalism industry in the state has struggled. [19] It raised more than \$9 million from individuals, foundations, and members in 2018 and has experienced double-digit revenue growth every year since it launched. [20] It has used that increasing revenue to triple its staff and expand coverage to other cities in Texas and even Washington, D.C. [21]

That Texas' only growing news publication is a non-profit underscore the extent that Google and other the tech giants have destroyed the business model that used to sustain high-quality local journalism, with profits flowing to Silicon Valley rather than local community newspapers. That has been a signal for Wall Street and foreign investors to sweep in and make a tidy profit off the collapse of local newspapers across Texas, leaving hundreds of thousands of Texans little or no local news coverage.

- Penelope Muse Abernathy, "The expanding news desert: Texas," University of North Carolina Hussman School of Journalism, 2019; available at: https://www.usnewsdeserts.com/states/texas/#1536357227273-1fcd2118-6dc6
- [2] Abernathy, "News deserts: Texas."
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- [21] Texas Tribune, "Annual Report."

GOOGLE'S DOMINANCE OF THE DIGITAL ADVERTISING ECOSYSTEM AT THE EXPENSE OF NEWS PUBLISHERS

The advertising marketplace for print publications was (and remains) direct and simple. A certain amount of advertising space is available on the pages of newspapers. The advertising sales department at the paper sells that ad space to companies. The revenue from those sales then goes directly to the newspaper. But the marketplace for print ads is shrinking rapidly, with eMarketer projecting that newspapers and magazine print ad revenue will decline by 18 percent in 2019.⁵⁷

The digital advertising market, however, is exploding. The same publication projects total digital ad spending in the United States will climb by 19 percent this year and eclipse traditional print and broadcast ads in total spending for the first time in 2019.⁵⁸

In five years, digital advertising will capture fully two-thirds of all ad spending in the United States.⁵⁹

If the digital advertising marketplace is where the money is, it is also substantially more complicated than the traditional print ad market, with numerous steps and intermediaries between the buyer and seller of ad space. The Wall Street Journal broke it down in an article earlier this year in light of the antitrust investigations of Google. When a news publisher wishes to sell advertising space on its website, it uses an ad-serving tool to deliver its ad space to the marketplace. This is a supply side platform, or SSP. It then goes into an ad exchange to auction off the ad space. On the other side of the purchase, an advertiser uses an ad campaign manager to plan and track its advertising campaign. It then uses an ad buying tool that feeds into the ad exchange to bid on ad space. This is a demand side platform, or DSP.

This results in a situation where, "Google is the major force at every layer between advertisers and websites, providing tools used in the many steps of purchasing and selling online ads." Google's DSP is now called Google Ads, formerly AdWords. Its SSP is Google Ad Manager, formerly DoubleClick for Publishers. And its ad exchange, which used to be called AdX, is now also under the Google Ad Manager brand. Each of those is the largest in their respective categories, with Kevin Mannion, the

chief strategy officer at advertising industry research firm Advertiser Perceptions, saying, "Google is the clear leader." And the fact that its SSP and ad exchange are now under the same brand only underscores the depth of the control of the marketplace that Google enjoys. Google is in such a dominant position throughout the digital ad marketplace that it can "advantage their own platforms or advantage their own properties," according to digital ad consultant Ratko Vidakovic. 63

There are two main types of digital advertising relevant to news publishers: contextual and behavioral. According to the digital advertising company Criteo, contextual ads are largely based on information related to the website's content and are designed to place ads next to relevant information displayed on a webpage. An example of contextual advertising would be placing an ad for skin care products next to an article about makeup. Behavioral advertising draws on information about an individual web user, based on their browsing history and other data collected on that individual, and targets ads specifically to them based on a prediction about their likelihood to click on the link.

As early as 2007, eMarketer was projecting "tremendous growth" for behavioral targeting, noting major acquisitions in the field, including Google's purchase of DoubleClick.⁶⁷ The publication expected spending on behavioral targeting to reach \$1 billion in the United States in 2008 and nearly quadruple by 2011.⁶⁸ With digital ad spending projected to reach \$129 billion in the United States in 2019 (not all of it behavioral), eMarketer if anything undersold the prospects for "tremendous growth."⁶⁹

Google's share of digital ad revenue in 2018 was a mindboggling 38 percent in the United States.⁷⁰

Google's acquisition of DoubleClick is not the only digital advertising company it has purchased. In fact, Google bought up at least a dozen businesses to enhance its digital advertising products or to buy out a potential rival. The acquisitions are listed in the table below.

Company Name	Date of Purchase
Applied Semantics Applied Semantic	April, 2003
Sprinks	October, 2003
dMarc Broadcasting	January, 2006
DoubleClick doublecli	April, 2007
AdMob	November, 2009
Teverest	November, 2009

Invite Media	invite media [®]	June, 2010
Admeld	Admeld	June, 2011
Autofuss	ar	December, 2013
Spider.io	spidecio	February, 2014
Adometry	ad ometry	May, 2014
MDialogue		June, 2014

Google's dominance of the digital advertising ecosystem limits the choices available for news publishers when they sell their digital ad inventory. It is also forcing smaller ad tech companies to merge to both avoid being gobbled up by, and compete with, Google. Adam Singolda, CEO of Taboola, an ad tech company that just acquired another similar firm called Outbrain, told CNBC that, "you have to" get bigger. And that too limits the options for news publishers. There remains some hope, as Singolda goes on to say that "publishers, I believe, will make double and triple returns with us," which will lead to "hopefully more advertisers will consider the open web rather than just Facebook and Google." But there is no question that Google's current dominance of the digital advertising ecosystem is crushing news publishers.

Google's dominance of the infrastructure of the digital advertising ecosystem is one of the components of its monopolistic power that harms news publishers. The next component of that monopoly power is data collection.

GOOGLE KNOWS YOU BETTER THAN YOU KNOW YOURSELF

Google's core business is based on a fundamental deceit. Google is known primarily for its suite useful products for consumers at the unbelievably low price of \$0.00. Not all of Google's products are free, but certainly the best-known ones are. Starting with its eponymous search, or google.com, and then add Gmail, Google Maps, Google Earth, its Chrome browser, and its video streaming service YouTube all are free to consumers. Even its Android mobile operating system is free to mobile device manufacturers.

If you listen to Google's executives, its these free products that are the core of Google's business. Google co-founder Larry Page said Google's "mission was to <u>organize global information</u> and make it accessible and useful to everyone."⁷³ Former Google CEO Eric Schmidt said one way of describing

Google's business is "as this end-user system, the search, email, and other applications <u>Google delivers to users</u> through an Internet browser."⁷⁴ Google's current CEO, Sundar Pichai, said earlier this year, "[w]e've always had an ambitious approach at Google. We want to work on things billions of people will use every day."⁷⁵

Billions of people around the world do use Google's tools, and it requires enormous resources to develop, deliver, update, and sustain these software products in the marketplace. Google derives virtually no direct revenue from them, and yet just reported that it earned \$40.5 billion in revenue in the third quarter alone, a twenty percent increase on the previous year. On top of the \$75 billion it earned in the first half of the year, the company is on track to amass more than \$150 billion in revenue in 2019. So how does Google make that much money when its products are free?

Google derives the overwhelming majority of its revenues from digital advertising. On its own, it pulled in approximately 37 percent of all digital advertising revenue worldwide in 2018.⁷⁷ It operates the largest digital advertising exchange, with 53 percent of the market.⁷⁸ And it has pursued an aggressive acquisition strategy in the digital advertising space, gobbling up at least a dozen digital advertising companies in the last fifteen years.⁷⁹

But Google's dominance of the digital advertising marketplace is not only because it buys up its rivals. It is built on Google's core business: data collection.

Google's eponymous search engine, google.com, is an incredibly powerful tool of knowledge for web users. It retrieves information in a fraction of a second that would have previously required a trip to the library or a rummage through the encyclopedia. Google is so ubiquitous that printed encyclopedias hardly even exist anymore, even the 244-year run of the Encyclopedia Britannica came to an end with the 2010 edition.⁸⁰

Google.com controls more than 90 percent of all search engine traffic.⁸¹ It clearly meets the lofty goal set out by Larry Page to "organize global information and make it useful and accessible to everyone." If that's all google.com did, it would be a genuine triumph of imagination and engineering.

But that isn't all google.com does.

Google search records every entry into its search bar. And because of a combination of factors about how we interact with google.com that make people more honest—it is online, users are typically alone, and no human

is monitoring their inputs—it acts like a "digital truth serum." People ask google.com things that they would never ask another person. The information collected by Google from its search function reveals far more accurate data about peoples' prejudices, sexual orientation, fidelity, and subconscious bias than any previous survey data.

Former Google data scientist Seth Stephens-Davidovitz concluded that "Google searches are the most important dataset ever collected on the human psyche."⁸³ These search queries, when matched with other data collected by Google, can reveal things about people that they may not even admit to themselves. This has led one writer to argue that "Google knows you better than you know yourself."⁸⁴

It's probably true that most google.com users are more or less aware that Google is recording the text they input into the search bar. But are they aware that the depth of information from Google searches allows researchers to pinpoint the gay male population of Mississippi at 4.8 percent?⁸⁵ Or that Google knows that parents are twice as likely to think their daughters are overweight than their sons even though actual weight measurements show boys are 25 percent more likely to be overweight than girls?⁸⁶

Let's look at another popular Google free product: Gmail. Launched in 2004, Google announced that Gmail passed 1.5 billion active monthly users at the end of 2018.87 According to Vanderbilt University Professor Douglass C. Schmidt, Google "scanned the contents of Gmail emails to improve ad targeting" from its inception.88 From almost the moment Gmail debuted on April Fool's Day, concerns were raised about Google's use of email content to serve contextual ads alongside the messages. A coalition of organizations warned in a joint letter that scanning email content in this way was "letting the genie out of the bottle."89 Google responded that there was no privacy violation and that the scanning of email content for ads used the same technology common on other email services for "spam filtering or virus detection."90

Google also always pledged to keep its massive digital ad business separate from the personally identifiable information, or PII, it collected from Gmail and other of its domains. When it bought the digital advertising exchange DoubleClick in 2007, Google co-founder Sergey Brin even declared that privacy would be "the number one priority when we contemplate new kinds of advertising products." ⁹¹

Yet, ProPublica reported in 2016 that "Google quietly erased the last privacy line in the sand" when it changed its privacy policy to say that your PII may be associated with data it collects from its other domains.⁹² That would

mean that Google could "build a complete portrait of a user by name, based on everything they write in email, every website they visit and the searches they conduct."⁹³



The warnings from 2004 would prove correct and the statements from Google at the time of Gmail's launch and Brin three years later were shown to be part of the deception at the core of Google's business. Gmail lured in users with promises of privacy, only for them to later have their emails used to "build a complete portrait" of them linked to their PII and used in Google's programmatic ad business.

But at least with Gmail, Google was harvesting data from users of its products. The was not the case with Google Street View.



Street View is the added feature to Google Maps that allows users to view the actual physical environment of the corresponding location on the maps. According to a Google spokesperson, "Street View cars have special cameras that take photographs as they drive down public streets." Tech publication CNet reported that the technology involves a "camera mounted on top of a moving vehicle that both records video and geodata simultaneously." They go on to say, "it's one of those Web services that just works."

Sounds pretty cool.

The only problem is that taking pictures and collecting geodata was not all the Street View cars were doing. Street View cars began driving up and down streets in the United States and around the world in 2007. It was not until 2010 that Johannes Caspar, a German data privacy official, finally forced Google to show him all that the Street View cars were collecting. Caspar learned that Google was collecting "e-mails, photographs, passwords, chat messages, postings on Web sites and social networks—all sorts of private Internet communications," as its Street View cars drove up and down streets around the world.

On its official blog, Google initially claimed that all of this private data was "mistakenly collected." The Federal Communications Commission investigation into Street View's secret data collection, however, found that it was the result of a "deliberate software design," and that Google had "deliberately impeded and delayed its inquiry." Australian communications minister Stephen Conroy called the Street View secret

data collection program, "probably the single greatest breach in the history of privacy." ¹⁰¹

All of those free products that Google offers to consumers are actually part of the largest data harvesting operation the world has ever known.¹⁰² User data are the raw materials that fuel programmatic digital advertising. Google is able to harvest this data from people who use their free products, and even some who don't.

Data collection is not necessarily a bad thing. Consumer data existed long before the internet. News publishers collect data on their readers and subscribers, and it helps them produce a better product. What sets Google apart is the deception involved and the scale of its data harvesting. Google's claim to make privacy their "number one priority" was simply not true. And there was never a bargain, explicit or otherwise, between the public and Google in which we obtained easy access to information on the internet in exchange for giving Google the power to know more about us, individually and as a whole, than we know about ourselves.

GOOGLE'S CONTROL OF WEB TRAFFIC BOXES NEWS PUBLISHERS IN

Google is the dominant player in the infrastructure of the digital advertising ecosystem. It also is unmatched in its voracious appetite to harvest user data to fuel its digital advertising business.

Remarkably, Google has another way to exert undue influence over the online marketplace: control of the majority of the internet's web traffic.

The web browser is the entry point to the internet. From the earliest days of the world wide web, the significance of the web browser led to what became known as the "Browser Wars." The battle between Microsoft and its Internet Explorer Browser and Netscape Navigator would ultimately result in the U.S. government suing Microsoft under antitrust law for trying to leverage its Internet Explorer browser to protect the dominance of its Windows operating system. Microsoft ultimately lost that case and the resulting regulations fostered the open internet that allowed companies like Google to grow (and now face antitrust scrutiny themselves), prompting Columbia's Tim Wu to note that Google "owe[s] a sizeable debt to the antitrust law." To see the significance of the web browser led to what some significance of the web browser led to what led to the antitrust law." To see the significance of the web browser led to what led to what led to the antitrust law." To see the web browser led to what led to web browser led to what led to w

And that brings us to Google's browser, Chrome. Like most Google products it is free to users. And like all of Google "free products," the primary motivation for Google to enter the browser wars with Chrome was data collection.¹⁰⁶

When Chrome launched in 2008, Internet Explorer was still the dominant browser, with roughly 72 percent of the global browser market share.¹⁰⁷ Explorer and Firefox, the descendent of Netscape Navigator, had announced changes to the settings on their browsers that would allow web users to block data collection on their browsing history.¹⁰⁸ Tech industry investment analyst George Askew described Google's introduction of Chrome as "a defensive move as Microsoft is incorporating functionality in new browsers that may block the collection of ad targeting information."¹⁰⁹

Chrome has now completely flipped the browser market, with a roughly equivalent market dominance to Internet Explorer's 2008 dominance.¹¹⁰

This dominance gives Google control over how approximately two-thirds of all people access news websites, or any website, on the internet. And, importantly, control over the data flows over Chrome between web users, host websites, Google itself, and third parties.

Google entered the browser market to protect its access to user data and now it has control over access to user data for the majority of the internet.

The browser, however, is not the only way that Google controls web traffic to news websites. Google drives enormous traffic to news websites through referrals from many of its domains, with google.com being the largest. Internal referrals—links from other pages on a news website—remain the largest driver of users to pages on news websites. But Google is now the largest external referrer, with more than 46 percent of all external referrals to news websites coming from Google in 2018. That is a double edged sword, however, as the traffic is clearly a benefit to news publishers, but it does place them at the mercy of Google and any changes to their proprietary products like Chrome or google.com.



46% OF ALL EXTERNAL REFERRALS COME FROM GOOGLE

Being at the mercy of a referrer is a major problem facing news publishers. Not long ago, just 2017, Facebook was the largest external referrer to news websites.¹¹³ Data analytics firm Parse.ly reported that "Facebook changed its algorithm... [and from] February to October 2017, referral traffic volume from Facebook decreased by 25 percent."¹¹⁴ By the time Facebook finally publicly announced its changed news feed algorithm in January 2018, news publishers had felt the effect for months.¹¹⁵

The publication Slate.com shared the data of the impact of this algorithm change on its viewership. In January 2017, it received 28 million referrals from Facebook, one third of all its external referrals. By May 2018, referrals from Facebook had dropped to less than 4 million, a reduction of 87 percent. Unsurprisingly, "the loss of reliable Facebook traffic has undoubtedly affected Slate's editorial and business strategies."

At least Slate was spared layoffs. The same was not true at other publications like BuzzFeed or HuffPost. In January 2019, BuzzFeed laid off 220 of its journalists and editors, roughly 15 percent of its workforce. The changes at Facebook directly impacted the layoffs at BuzzFeed. A former BuzzFeed employee told Digiday that, "the changes Facebook made to its news feed in 2018 had a substantial impact on the reach of BuzzFeed's content... stories that once reliably gathered 200,000 visits through Facebook were suddenly lucky to get 20,000." 121

In addition to Facebook's algorithm change, one of the reasons that Google was able to become the largest referrer was the advance of its Accelerated Mobile Pages, or AMP, format.¹²² Debuted in 2014, this requires news websites to "create a second, lightweight version of their articles; these versions surface in Google Search and load relatively quickly on mobile devices." The benefit for publishers is that Google elevates the search-ranking of articles that use AMP. This provides a real boost in traffic that has value for publishers. But there's a catch, there's always a catch.

According to news publisher and early AMP-adopter Owen Williams, "AMP is a way for Google to own the browsing experience." AMP takes control away from publishers over their own content, hides the real source of the article under a google.com domain, and places publishers at the mercy of the black box of Google's AMP algorithm, just like they were with Facebook. Williams says that publishers do not really have a choice to not use AMP, because if you do not, "your search ranking tanks." 125

In the wake of the layoffs at BuzzFeed and HuffPost, Matthew Ingram, the chief digital writer at the Columbia Journalism Review argued that it should mean the "death of metric obsessed media" and criticized outlets for "yok[ing] themselves so tightly to Facebook's wagon." 126 News

publishers have adjusted their strategies to rely less on Facebook.¹²⁷ But, as the AMP example clearly shows, the problem with Ingram's recommendation is that Google controls so much internet traffic, news publishers have simply traded dependence on Facebook for dependence on Google. And they have no other choice. As Josh Marshall, the founder and publisher of another digital outlet Talking Points Memo, put it, "running Talking Points Memo absent Google's various services is almost unthinkable."¹²⁸

NEWS PUBLISHERS ARE EXTREMELY VULNERABLE TO ANTICOMPETITIVE PRACTICES BY GOOGLE

The Facebook Newsfeed change showed how vulnerable news publishers are to unilateral changes by tech platforms. But Google has the same power to change its algorithm for google.com that Facebook did with its Newsfeed. Or change something on the Chrome browser that affects news publishers. Or in how it ranks pages in AMP. Or how much content from news stories it puts in Google News. And the list goes on. The dilemma facing news publishers now dealing with Google is the breadth of products and platforms that it controls on which changes could have devastating consequences. And they have no other options.

The things is, Google makes changes to its products all the time. The Chrome browser is already on its 78th update in just 11 years, averaging an update every six weeks.¹²⁹ Sometimes, those changes do work to the advantage of news publishers, like when Google abandoned its "first click free" policy in October 2017.¹³⁰ Under that rule, Google required news publishers to offer readers three free articles per day before being hit with a paywall in order for their content to be indexed in Google search.¹³¹

Robert Thomson, the CEO of News Corp, the parent company of the *Wall Street Journal* and numerous other publications worldwide, said, "[i]f you don't sign up for 'first click free', you virtually disappear from a search."¹³² The *Wall Street Journal* opted out of first click free in August of 2017 and said its referrals from Google search dropped by 38 percent.¹³³

First click free was a real challenge for news publishers because the use of metered paywalls was gaining traction as the right balance between providing some free content to attract more readers, and therefore advertising dollars, and obtaining revenue from digital subscriptions.¹³⁴ As Marc Campbell, Tronc's (formerly Tribune Publishing) senior vice president for digital publishing told the Columbia Journalism Review, "[t]he metered paywall is considered the best practice in the industry." ¹³⁵

Tronc has a metered paywall on most of its publications, from big outlets like the *Los Angeles Times* and the *Chicago Tribune*, to smaller papers like the *Hartford Courant* and the *Virginia Pilot*.¹³⁶ But prior to Google dropping first click free, any reader could get around the paywall and read up to three articles a day simply by accessing them through a Google search.¹³⁷ In the "tradeoff between ad revenue and subscription revenue," news outlets could not afford to disappear from Google search.¹³⁸ The end of first click free meant news publishers did not have to decide how to make that tradeoff, at least for Google search.

But with one hand Google giveth, and with the other it taketh away.



Private browsing, what is called incognito mode in Google Chrome, was another way that readers could circumvent a metered paywall.¹³⁹ According to Mashable, "Incognito mode allows users to privately surf the internet without site data and browsing history being saved. It also prevents websites from tracking visitors with cookies."¹⁴⁰ The information page on incognito on Google's support webpage is headlined "Browse in private," with the additional description "if you don't want Google to remember your activity, you can browse the web privately in incognito mode."¹⁴¹

According to Lifehacker's David Murphy, using incognito was, "the tried-and-true method for sticking it to journalists getting around a site's restrictions on how many free articles you can view at any given time." News websites with metered paywalls fought back. They figured out how to detect when a browser was in incognito mode by examining the browser's file system API and then blocked access to any articles when in that mode. 143

Google announced that it was fixing that "loophole" in the 76th edition of Chrome, which rolled out in July 2019. The head of news and web partnerships at Google, Barb Palser, observed dryly, "[t]his will affect some publishers who have used the loophole to deter metered paywall circumvention. David Chavern, CEO of the News Media Alliance, a journalism industry trade group, was far less sanguine, saying the move would, "severely limit access to high-quality journalism for millions of

Americans, while also making it more difficult for publishers to gain valuable subscribers... It's disappointing that Google is again unilaterally imposing its will on news publishers." 146

If incognito is now designed to limit subscription revenue, AMP appears to be designed to restrict advertising revenue for news publishers.



From almost the time it launched, news publishers were concerned about the impact AMP's required strippeddown content would have on its ad revenue. The *Wall Street Journal* reported in October 2016 that publishers were concerned that "AMP pages do not currently generate advertising revenue at the same rate as their full mobile sites," with multiple outlets reporting that revenue was as much as 50 percent lower on AMP pages than their mobile websites.¹⁴⁷

There are a number of reasons why AMP pages do not produce the same revenue, which, according to online media trade publication Digiday, includes concerns that, "AMP's standardization also restricts page design, article recirculation and the type of ad units that publishers can use." ¹⁴⁸ But a major problem is that AMP text loads faster than the ads do, limiting impressions. ¹⁴⁹ Frustration among publishers is rising because Google requires them to adhere to their specs on stripped down content to get into AMP, but it has not, despite its sheer dominance of the digital advertising ecosystem, "forced advertisers or tech vendors to adopt its spec to restrict JavaScript to make AMP ads load faster." ¹⁵⁰

News publishers are being squeezed by Google with little recourse. Google is requiring publishers to use AMP to get referral traffic from Google search but in so doing, the revenue they earn from those page views is dramatically lower. And there is great concern about raising public complaints, the *Wall Street Journal* reported one publishing executive saying, for fear that Google might "turn some knob that hurts the company." ¹⁵¹

That fear may help explain the so far muted response from news publishers on another upcoming change from Google to Chrome; the restriction or elimination of third-party cookies. In May 2019, Google announced in a brief statement at its developer conference that upcoming changes to its Chrome browser would limit the use of third-party cookies, the text that is placed on a web user's hard drive that conveys information about web browsing activity to a domain that is not the host website. This data flows to Google's competitors in the digital adverting business and increases the value of digital ads on news websites.

In a blog post about the upcoming change, Google engineers Ben Galbraith and Justin Schuh wrote that Chrome will require developers to "explicitly specify which cookies are allowed to work across websites," using an attribution method that "will enable users to clear all such cookies while leaving single domain cookies unaffected, preserving user logins and settings." This policy will require news publishers operating a website to identify first-party and third-party cookies, and will make it easier for users to block or clear cookies. Google confirmed that its inhouse marketing data management platform – Google Analytics – "would be treated as a first-party cookie, and will not be blocked if users block third-party cookies in Chrome," giving Google a huge advantage over its competitors. 156

The impact on news publishers of Google making this change in Chrome is easy to predict because we have seen it elsewhere. The Firefox browser made blocking third-party cookies the default setting in a recent update, and the impact on news publishers in Germany (the only country in which Firefox has a major piece of the browser market share) was profound. The average price of ads on the Firefox browser on news websites in Germany fell between 15 and 25 percent. Mike O'Sullivan, Vice President of Index Exchange, said, "this is a big concern for publishers market wide in Germany. This is [ad] inventory that was previously addressable that has gone dark overnight."



Google has or is planning changes that reduce news publishers two avenues for revenue: subscriptions and advertising. As it currently stands, Google has unilateral control over these decisions, there is no way for news publishers to know when or what changes are coming, no clear way to get them reversed, and severe risks for speaking out. Google, frankly, has a stranglehold on the journalism industry. No one company should have that much market power over an entire industry, especially one so central to American democracy that protection of it is literally written in the Constitution.

GOOGLE'S STATED RATIONALES ARE PRETEXTUAL; IT'S REALLY ABOUT LIMITING COMPETITION

Google has made two changes, incognito mode and AMP, and has suggested another is coming, restricting or eliminating third-party cookies; all three have major implications for news publishers. Two of those changes, incognito mode and third-party cookies, are heavily billed as privacy enhancements for consumers. While AMP is also promoted as better for consumers because it's about speeding up page loading on mobile devices. But, similarly to the ulterior motive Google has to attract users to its free products, the real reason is to increase its data collection advantage over its competitors.

When Google talks about Incognito mode, it's all about privacy and private browsing. The page describing it is titled "Browse in private." The Google blog post announcing the change to fix the so-called loophole that publishers used to protect their metered paywalls is titled, "Protecting private browsing in Chrome," beginning, "Chrome's Incognito Mode is based on the principle that you should have the choice to browse the web privately." ¹⁶¹

But Vanderbilt University Professor Daniel Schmidt suggests that consumers "read the fine print" on Google's site about incognito mode. Data is still collected on users in incognito mode, it is just supposedly anonymous. In Prof. Schmidt's study of Google's data collection capabilities, however, he found that even though, "data is collected with user-anonymous identifiers, Google has the ability to connect this collected information with a user's personal credentials stored in their Google Account." Prof. Schmidt concluded, that this capability "would give them [Google] a relative advantage over anyone else who can't do that correlation." 164

So, Google's private browsing mode is not really private for users after all. It just blocks Google's competitors—and news websites—from being able to collect the kind of data that Google is still able to collect on web users on Chrome.

When Google launched AMP, it described it as a project "for a faster, open mobile web." And it has certainly delivered a faster user experience, delivering "nearly instantaneous loading of web pages." Professor Schmidt concludes that AMP "delivers a much faster and improved

browsing experience to users without the clutter of pop-ups and sidebars."¹⁶⁷ But again, here, Google's claims are disingenuous, because it's not really about speed and it's definitely not about openness.

Google's claims that its motivation is speed is undermined by two inconvenient facts. To qualify for improved ranking in Google search based on speed, the page must use AMP. If all Google cared about was the speed of page loading, publisher Owen Williams argues that "it would rank pages based on speed alone, not whether they use some special format of HTML." And as noted above, Google is not using its overwhelming dominance of the digital ad marketplace to force advertisers to use faster JavaScript, just publishers. Google is only interested in a certain kind of speed.

The kind of speed that forces web pages to be hosted on Google servers, with the address showing up as "a Google.com domain rather than a publisher's own domain." Schmidt discovers that AMP, just as with incognito, "provid[es] Google far more data than it otherwise could collect." The control of the collect." The collect.

We do not yet know the precise specifications of how Google would implement a restriction or elimination of third-party cookies, but it has already been billed as a privacy enhancement.¹⁷² The impact would be clear, however, as it would "further entrench the large consumer-facing platforms," like Google and Facebook.¹⁷³ Eliminating the ability of Google's competitors to have access to user data on Chrome would mean that "audience targeting of nearly any sort would only be available on these platforms."¹⁷⁴ And Google has already admitted that it would preserve its own ability to use third-party cookies by simply classifying them as first party even when they clearly are not.¹⁷⁵

When the smaller browsers made this change, it did not spark the same kind of anti-competitive concerns because they are not connected to the kind of other capabilities that Google possesses. Deutsche Bank analyst Lloyd Walmsley said of this possible change that, "Google could inflame already high antitrust concerns if it does something in Chrome." And Ratko Vidakovic said, "Google's scale and direct relationship with consumers with Google ID," would make any move to restrict or eliminate third-party cookies, "seem anti-competitive." 1777

Everything about Google's decisions and products all comes back to data collection. Their business is built on a deception, luring users in with free products in order to harvest their data. It's the same kind of deception at play in these instances, provide rationales for product changes—like greater privacy or improved speed—when the real motivation is to strengthen Google's data collection capabilities and advantage.

GOOGLE'S ANTICOMPETITIVE ACTIONS HARM CONSUMERS EVEN THOUGH MOST OF THEIR PRODUCTS ARE FREE

Much has been written and debated about whether the current standard applied in antitrust law, the consumer welfare standard, can be applied to the tech giants. The consumer welfare standard was developed as a theory by Robert Bork in a 1978 book, The Antitrust Paradox, and gained acceptance through court rulings in the 1980s. It narrowed the scope of antitrust law to deem an action anticompetitive, "only when it harms both allocative efficiency and raises the prices of goods above competitive levels or diminishes their quality." In the consumer welfare standard, can be applied to the tech giants. The consumer welfare standard, can be applied to the tech giants. The consumer welfare standard, can be applied to the tech giants. The consumer welfare standard, can be applied to the tech giants. The consumer welfare standard was developed as a theory by Robert Bork in a 1978 book, The Antitrust Paradox, and gained acceptance through court rulings in the 1980s. The paradox is a standard was developed as a theory by Robert Bork in a 1978 book, The Antitrust Paradox, and gained acceptance through court rulings in the 1980s. The paradox is a standard was developed as a theory by Robert Bork in a 1978 book, The Antitrust Paradox, and gained acceptance through court rulings in the 1980s. The paradox is a standard was developed as a theory by Robert Bork in a 1978 book, The Antitrust Paradox, and gained acceptance through court rulings in the 1980s. The paradox is a standard was developed as a theory by Robert Bork in a 1978 book, The Antitrust Paradox is a standard was developed as a theory by Robert Bork in a 1978 book, The Antitrust Paradox is a standard was developed as a theory by Robert Bork in a 1978 book, The Antitrust Paradox in a 1978 book, The Antitrust Paradox in a 1978 book, The Antitrust Paradox in a 1978 book in a 1

Debate about whether the consumer welfare standard is the correct way to conceive of antitrust law and whether something else is necessary for the tech giants was sparked by a Yale Law Review article by Lena Khan titled "Amazon's Antitrust Paradox". Khan, deliberately playing off the title of Bork's book, argues that, "current doctrine underappreciates the risk of predatory pricing and how integration across distinct business lines may prove anticompetitive." T81

Many are watching the outcome of this ongoing debate, particularly as it would appear to apply directly to a company like Google, which does not charge consumers for most of its products. But for the purposes of the antitrust investigations against Google, the outcome is unnecessary. Google's negative impact on the journalism industry harms consumers in ways that are consistent with the consumer welfare standard as cited above from *Rebel Oil Co. v Atlantic Richfield Co.* Google is clearly distorting the centuries old market for news, and it is driving the cost of access to news online up, while also diminishing the quality of news for consumers with an array of additional harms.

A great deal of news content online is currently free to consumers. A Columbia Journalism Review analysis found that only one of the top 25 visited news websites have a hard paywall that allows zero free articles without a subscription. But two of the changes Google has implemented or is considering, its modification of incognito mode and possible elimination of third-party cookies, will very likely reduce the amount of free news content available to consumers. News Media Alliance CEO David Chavern said the incognito change would force publishers to adopt a subscription-only model. And Eric Berry, CEO of digital advertising

company TripleLift, said the elimination of third-party cookies would have a similar effect, because "If publishers cannot monetize as they have previously, they could potentially move their content entirely behind paywalls."184

Google's destruction of the economic model of the journalism industry, and the correlated loss of local news outlets, has substantially lowered the quality of the news product.

One of the primary functions of the journalism industry is to hold those in power accountable. Thomas Jefferson wrote, "Our liberty depends on the freedom of the press, and that cannot be limited without being lost." In many cities and towns across the United States, the issue of a "free" press is moot because there simply isn't a press. This has led to the predictable outcomes of more corruption, environmental degradation, and even increasing political polarization.

Google's continued actions will further drive up the cost of news for consumers and lower the quality of journalism for millions of Americans.

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