



The cost of ad blocking

PageFair and Adobe 2015 Ad Blocking Report



Introduction

In the third annual ad blocking report, PageFair, with the help of Adobe, provides updated data on the scale and growth of ad blocking software usage and highlights the global and regional economic impact associated with it. Additionally, this report explores the early indications surrounding the impact of ad blocking within the mobile advertising space and how mobile will change the ad blocking landscape.

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Key Insights

More consumers block ads, continuing the strong growth rates seen during 2013 and 2014.

The findings

- Globally, the number of people using ad blocking software grew by **41%** year over year.
- **16%** of the US online population blocked ads during Q2 2015.
- Ad block usage in the United States grew **48%** during the past year, increasing to **45 million** monthly active users (MAUs) during Q2 2015.
- Ad block usage in Europe grew by **35%** during the past year, increasing to **77 million** monthly active users during Q2 2015.
- The estimated loss of global revenue due to blocked advertising during 2015 was **\$21.8B**.
- With the ability to block ads becoming an option on the new iOS 9, mobile is starting to get into the ad blocking game. Currently Firefox and Chrome lead the mobile space with **93%** share of mobile ad blocking.

41%

YoY global growth
Q2 2014 - Q2 2015

45 million

Average MAUs in the United
States Q2 2015

\$21.8bn

ad revenue blocked
in 2015

16%

of mobile Firefox
users block ads

Global Ad Blocking Growth

Blocking ads continues to build on the strong growth rates seen during 2013 and 2014.

The findings

- Globally, usage of ad blockers grew by **41%** YoY (Q2 2014 - Q2 2015).
- As of June 2015, there were **198 million** monthly active users for the major browser extensions that block ads.

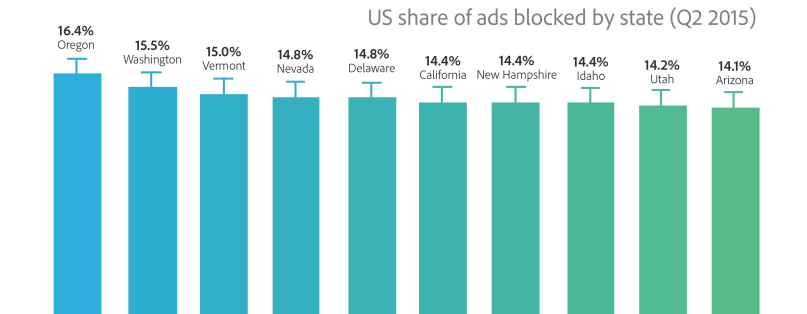
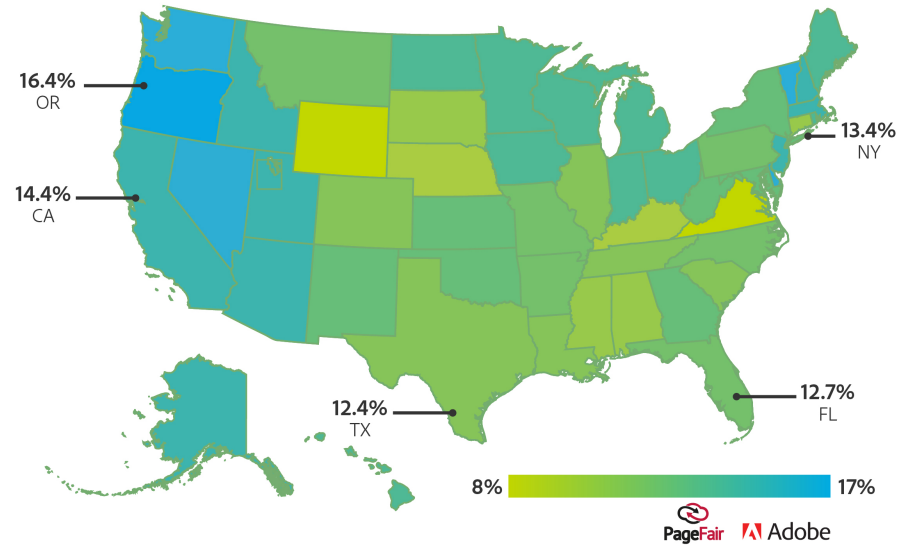


Usage of ad blocking software in the United States

Usage of ad blockers in the United States grew by **48%** during the past year, increasing to **45 million** average monthly active users in Q2 2015.

The findings

- Oregon has the highest ad blocking rate in the United States at **16.4%**.
- Washington DC has the lowest ad blocking rate in the United States at **8.2%**.

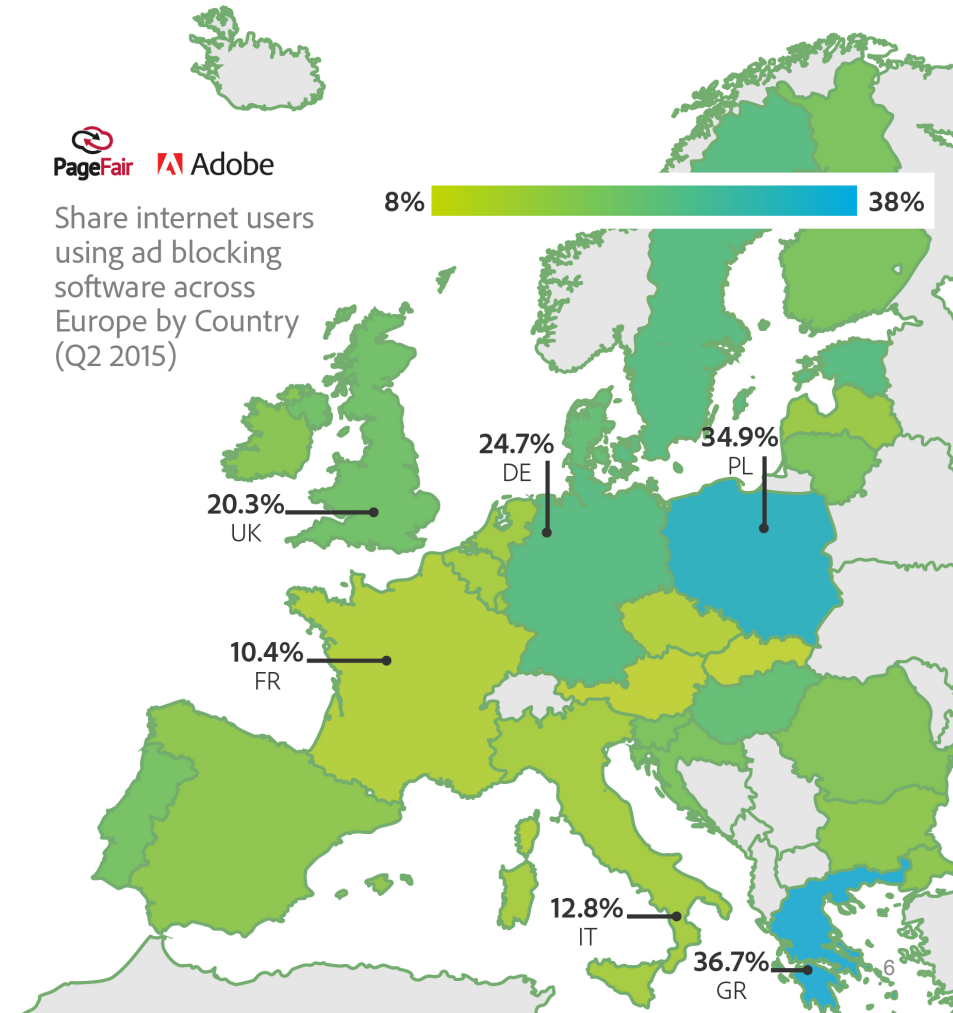


Usage of ad blocking software in Europe

Ad block usage in Europe grew by 35% during the past year, increasing to 77 million monthly active users in Q2 2015.

The findings

- Ad block usage in the UK increased by **82%** during the past year, reaching **12 million** average monthly active users in Q2 2015.
- Ad block usage in Germany increased by **17%** during the past year, reaching **18 million** average monthly active users in Q2 2015.
- Greece has the highest rate of ad block usage in Europe.
- Slovakia has the lowest rate of ad block usage in Europe.



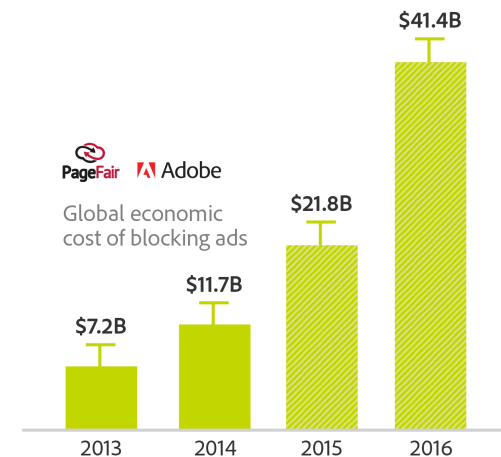
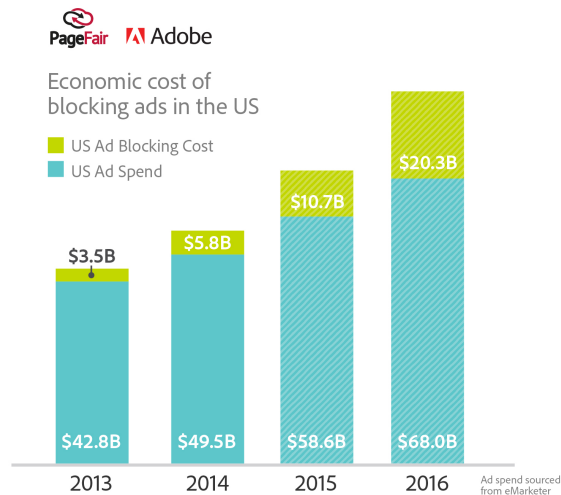
The Cost of Blocking Ads

The findings

- Ad block usage in the United States resulted in an estimated **\$5.8B** in blocked revenue during 2014. It is expected to cost **\$10.7B** in 2015 and **\$20.3B** in 2016.
- The global cost of ad blocking is expected to be **\$41.4B** by 2016.

The bottom line

Although the 198 million MAUs in Q2 2015 represents only 6% of the global internet population, ad blocking is estimated to cost over \$21B in 2015, which is 14% of the global ad spend..



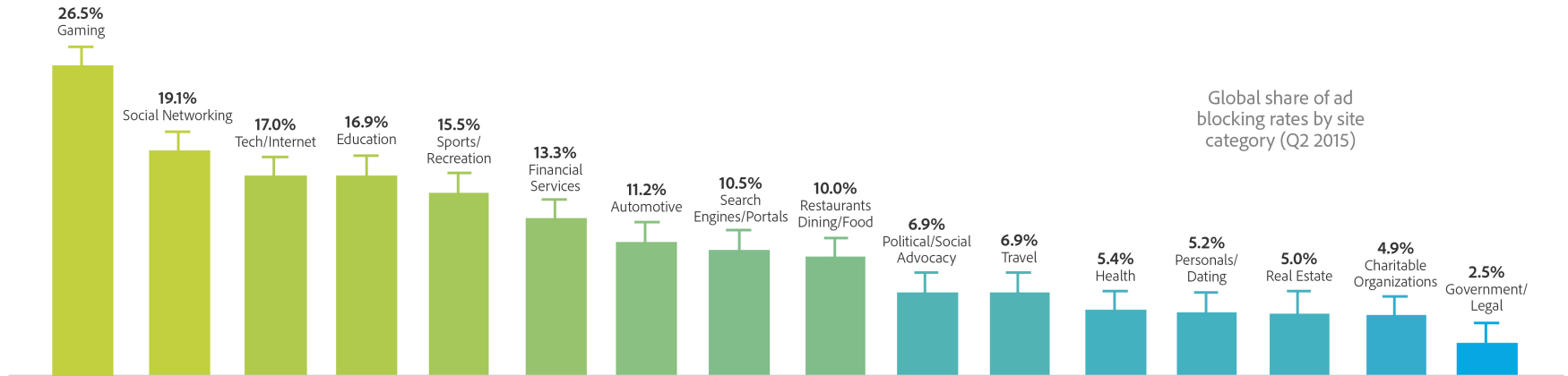
Effect of ad blocking by industry

The findings

- Visitors to gaming websites are significantly more likely to block advertising.
- Visitors to health, charity, and government/legal websites are significantly less likely to block advertising.

The bottom line

Ad blocking behavior on websites is a function of audience demographics. Websites that cater to young, technically savvy, or more male audiences are significantly worse affected.



Google Chrome still the main driver of ad block growth

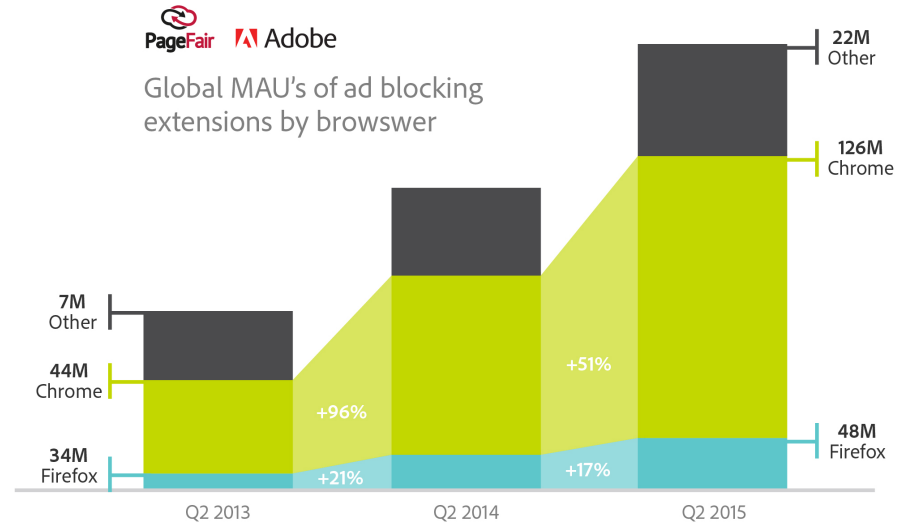
The ease with which ad block extensions can be installed on Google Chrome, combined with the continuing shift of internet users to Chrome for browsing, are major drivers of ad block growth.

The findings

- Ad block use on Chrome increased **51%** from Q2 2014 to Q2 2015, reaching **126 million** average monthly active users.
- Ad block use on Firefox increased **17%**, reaching **48 million** average monthly active users.
- Ad block use on Safari increased **71%**, reaching **9 million** average monthly active users.

The bottom line

Over the last seven years, Chrome has steadily captured mainstream browsing market share away from Internet Explorer. It is well known that Google's primary business is in online advertising; ironically, Google's own browser appears to be bringing ad blocking to the masses.



Mobile is yet to be a factor in ad blocking growth

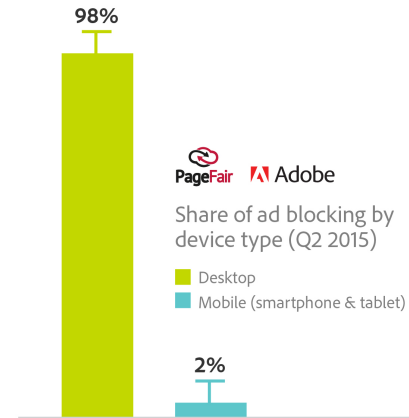
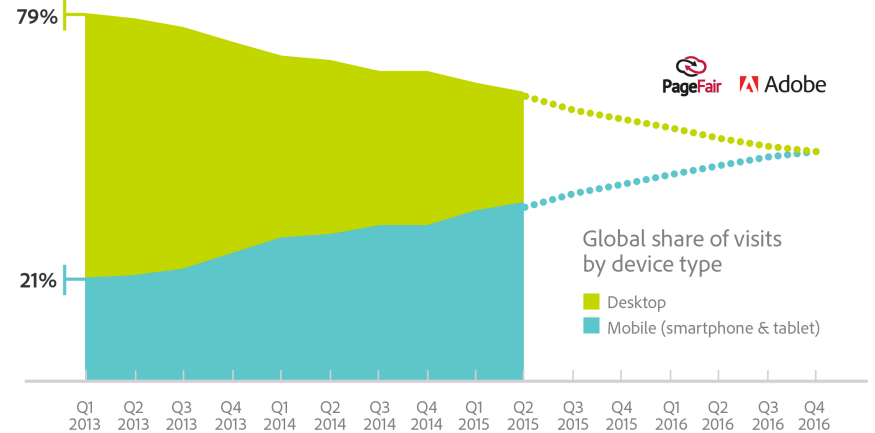
Although a large portion of online browsing is performed from mobile devices, mobile ad blocking is still very underdeveloped. The release of iOS 9 in the Fall of 2015 may be a game changer, as it will allow users to easily install ad blocking from the App Store.

The findings

- In Q2 2015, mobile accounted for **38%** of all web browsing
- Only **1.6%** of ad block traffic on the PageFair network in Q2 2015 was from mobile devices.

The bottom line

As technology develops and ad blocking plug-ins become more commonplace, the growth in ad blocking usage will receive yet another catalyst. This has the potential to challenge the viability of the web as a platform for the distribution of free ad-supported content



Mobile will facilitate future ad blocking growth

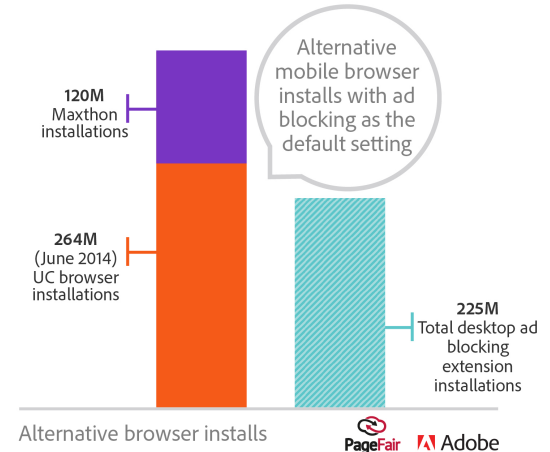
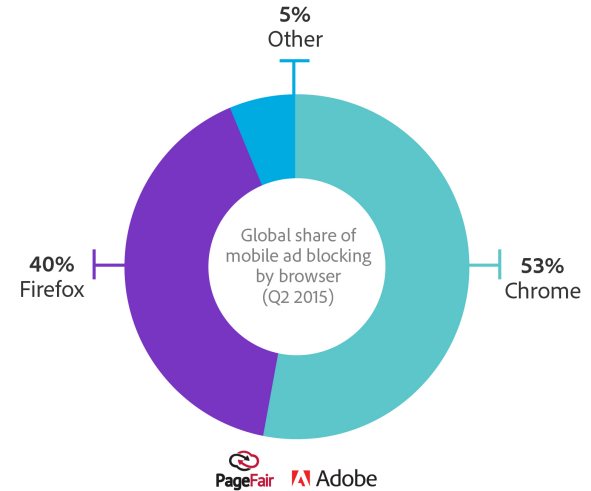
The Adblock Plus app, which can be manually installed on Android devices, enables users to block ads within Chrome. The Firefox mobile browser, which is available directly from Google Play, allows users to install ad blocking extensions.

The findings

- During Q2 2015, **40%** of mobile ad blocking comes from Firefox users who had installed an extension to block ads.
- In June 2015, 16% of Firefox users on Android had configured ad blocking from within their browser settings.

The bottom line

Mobile Safari represents 52% of the mobile browsing market (and 14% of total web browsing). With support for ad block apps in iOS 9, we expect ad blocking on mobile Safari to trend towards the levels seen in the mobile version of Firefox.

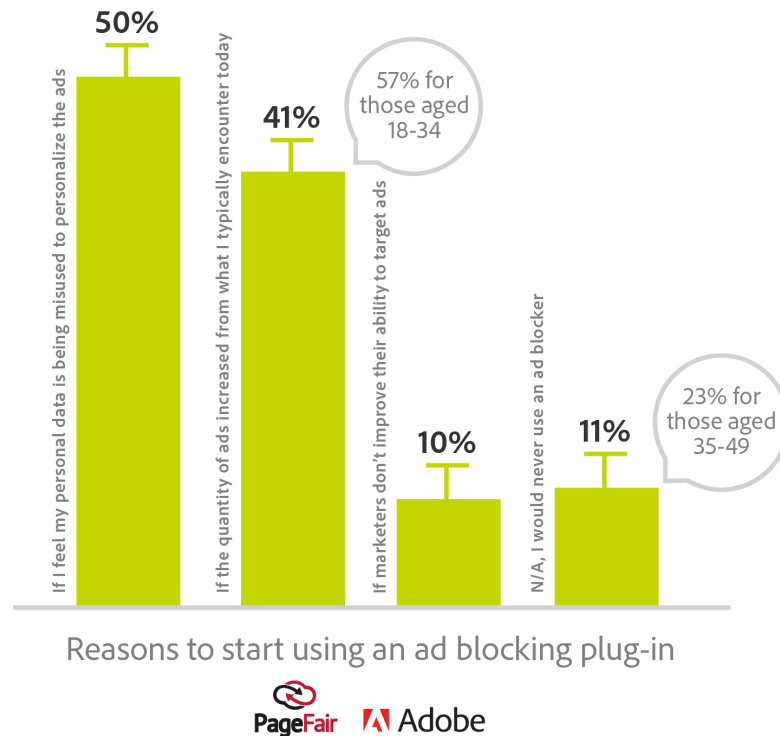


Reasons to start using an ad blocker

We surveyed 400 respondents in the US and asked them to weigh in on ad blocking. Of the respondents who are not currently using an ad blocking extension, we asked what would cause them to change their minds.

The findings

- Misuse of personal information was the primary reason to enable ad blocking
- An increase in the number of ads was more important among millennials
- 1 in 4 respondents aged 35-49 do not have any desire to ever use ad blocking software.



Afterword by Campbell Foster, Director Product Marketing, Adobe



When I first met Sean Blanchfield in March, 2014, I was struck by his level-headed, clear-eyed analysis of ad blocking. At the time, ad blocking was more of an issue in the UK and continental Europe, and I hadn't put too much thought into the potential impact of this innocent browser add-on. Our discussions with Sean and his colleagues at PageFair helped me and my colleagues at Adobe better understand the delicate balance between three constituent rights-holders: Content publishers, who have a right to profit from their legally produced, owned and distributed product; Advertisers, who have a right to communicate with consumers; and Consumers, who have a right to choose what they read, listen to, learn and feel. It remains a delicate balance, with no obvious solutions or easy answers.

Adobe Primetime's customers – the largest broadcasters, cable networks and content distributors in the world – express frustration and ambivalence about the issue, alternating between tacit acceptance of ad blocker installations among a small minority of its users, on the one hand, and on the other, a desire to declare all-out war on the companies that profit from ad blocking. Advertisers wish to continue connecting with consumers, but understand that a broadly targeted campaign, or poorly executed creative, risks alienating more people than it charms. Consumers, for the most part, accept the tradeoff that comes with "free" – I'll give you information about me in exchange for your TV show, film, news article, or service – but draw the line at advertising that's intrusive, annoying, irrelevant or downright creepy. And so it goes.

No matter your views on whose rights trump whose, the economic impact of ad blocking is real and measurable. Our goal with this research is to shed light on the effects of ad blocking so the industry can develop better solutions for content publishers, advertisers and consumers alike. In so doing, we hope we can do our part to make consumption of digital content on any screen a little bit cleaner, friendlier, and more enlightening. We hope you'll help.

Afterword by Sean Blanchfield, Co-founder & CEO PageFair



Between 2009 and 2012, my co-founders and I were in the web-game business. While investigating some advertising discrepancies, we were shocked to discover that nearly 1 in 3 of our loyal visitors were blocking ads. As games publishers, we were merely the canary in the tunnel. Ad blocking had blindsided us, and was about to blindside publishers in every other vertical. By Summer 2012 we had launched PageFair to develop a solution before it put us all out of business.

Nearly three years later, our predictions have been borne out. More than 2000 websites, including many of the Comscore 50, have used PageFair to measure and/or fix their ad blocking problem. In this report we show that usage of ad blocking extensions wiped out approximately \$11 billion of publisher revenue in 2014. It has grown by over 40% in the last 12 months, and is set to move to the mobile web, before going in-app.

Fighting ad blocking is extremely difficult. The ad block community is large, sophisticated and resourceful. Companies who try to play "cat and mouse" against blocked ads quickly lose. A deeper problem is that ad blocking is endemic only because online advertising has become so invasive that hundreds of millions of people are willing to take matters into their own hands. To sustainably solve ad blocking, we must treat these users with respect, not force feed them the popovers, interstitials and video ads that they are trying to get rid of.

After three years of hard work, we have now crafted a set of unique patent-pending technologies that finally solve the ad block problem. We believe our solution is "firm but fair". It allows publishers to recover revenue, while treating ad block users as valued audience members. Meanwhile, it allows users to enjoy a quality experience without inadvertently putting their favourite websites out of business. If this sounds like a solution you need, please get in touch with us.

Background

What is ad blocking?

Ad blocking extensions, browsers, VPNs or DNS solutions act like a firewall between the web browser and all known ad servers. Most ads are blocked by open-source web browser extensions, installed by end users. The database of blocked ad servers is curated by a large and active open source community. The most popular ad block extensions are "Adblock Plus" and "AdBlock". Once installed, these extensions automatically block ads on all websites and are effective against almost all ad formats.

About PageFair

PageFair is the leader in ad block solutions for website publishers. PageFair Analytics is used by over 2000 publishers to measure their exposure to ad blocking. PageFair technology is used by many premium publishers to restore blocked ad inventory. PageFair Ads is a self-serve advertising platform that displays non-intrusive ad formats to ad block users.

Find out more at pagefair.com and follow [@pagefair](https://twitter.com/pagefair) on Twitter.

About Adobe Primetime

Adobe Primetime brings TV to every IP-connected screen. It gives programmers and operators modular capabilities to stream, protect, analyze, and monetize video across desktops and devices. Finally, you can profitably broadcast live, linear, and video-on-demand programming everywhere.

Find out more at adobe.com/primetime and follow [@AdobePrimetime](https://twitter.com/AdobePrimetime).

Methodology

Monthly active ad block users were calculated by combining a number of sources:

1. The number of downloads from Easylist and its supplementary international blocklists between 14 April 2009 - 30 June 2015 were extracted.
2. The frequency at which ad block extensions download updates from these blocklists changed several times during the period. These changes were retrieved from the Easylist version control system, and the changes to the update interval were used to normalize the download data.
3. Historical daily and weekly active user counts from the Chrome and Firefox extension marketplaces were obtained for Adblock Plus.
4. The daily and weekly active user counts were normalized into Monthly Active Installs.
5. The blocklist web analytics data also provided download counts broken down by extension. The ratio of these downloads to Adblock Plus Monthly Active Installs was then used to estimate the Monthly Active Installs of all other major ad block extensions.
6. The historical information on the Monthly Active Installs for each major ad block extension was combined to produce a historical growth chart.
7. The ratio of blocklist downloads to Monthly Active Installs was combined with the number of blocklist downloads per-country to estimate the number of ad block installations in each country*.

8. The number of ad block installations in each country was then compared against global internet population data to estimate ad block penetration in each country.

Potential digital advertising revenue was calculated by dividing the reported revenue for 2014 (source: eMarketer) by (1- the ad blocking rate in a particular country). Blocked advertising revenue was estimated as the difference between potential and reported revenue.

Proprietary information on the web traffic measured by PageFair was also contributed to establish the ad block rate for users in each US State, the ad block rate for visitors of each website category and the browsers used by mobile ad block users. This data reflects ad block usage on sites using PageFair Analytics to monitor their ad blocking levels. These sites are skewed towards publishers in Europe and North America.

**Inaccurate Easylist measurements for Norway were replaced with the PageFair web traffic measurement for the same time period.*

Tables

Global monthly active ad blocking software users																
Month	4/1/09	5/1/09	6/1/09	7/1/09	8/1/09	9/1/09	10/1/09	11/1/09	12/1/09	1/1/10	2/1/10	3/1/10	4/1/10	5/1/10	6/1/10	7/1/10
MAU's	20,119,428	20,539,708	20,616,204	20,659,772	21,805,728	23,303,714	24,020,836	24,991,834	22,430,184	21,151,312	23,229,780	24,242,708	27,221,460	31,704,316	32,577,972	28,548,380
Month	8/1/10	9/1/10	10/1/10	11/1/10	12/1/10	1/1/11	2/1/11	3/1/11	4/1/11	5/1/11	6/1/11	7/1/11	8/1/11	9/1/11	10/1/11	11/1/11
MAU's	28,587,468	33,916,960	32,577,272	32,190,130	30,558,220	30,356,649	34,248,592	40,126,100	45,929,128	34,735,120	35,110,964	34,265,336	35,424,004	38,041,794	41,206,480	41,374,494
Month	12/1/11	1/1/12	2/1/12	3/1/12	4/1/12	5/1/12	6/1/12	7/1/12	8/1/12	9/1/12	10/1/12	11/1/12	12/1/12	1/1/13	2/1/13	3/1/13
MAU's	41,941,592	39,018,476	39,235,868	40,619,964	41,932,030	41,887,888	41,530,678	38,441,900	40,276,740	44,108,596	46,668,804	51,957,612	50,350,244	53,779,012	55,460,552	67,338,018
Month	4/1/13	5/1/13	6/1/13	7/1/13	8/1/13	9/1/13	10/1/13	11/1/13	12/1/13	1/1/14	2/1/14	3/1/14	4/1/14	5/1/14	6/1/14	7/1/14
MAU's	72,627,817	78,561,974	89,729,499	95,227,821	90,785,221	101,665,050	108,832,052	114,647,098	113,693,129	121,363,800	123,143,696	122,146,162	135,144,314	142,503,084	141,252,394	142,032,183
Month	8/1/14	9/1/14	10/1/14	11/1/14	12/1/14	1/1/15	2/1/15	3/1/15	4/1/15	5/1/15	6/1/15					
MAU's	144,522,383	157,647,188	164,291,890	167,996,991	172,268,172	181,467,961	187,226,582	189,538,706	191,878,129	200,230,640	198,302,423					

Tables

US share of ads blocked by state (Q2 2015)

State	Oregon	Washington	Vermont	Nevada	Delaware	California	Idaho	New Hampshire	Alaska	Utah	Arizona
MAU's	16.4%	15.5%	15.0%	14.8%	14.8%	14.4%	14.4%	14.4%	14.3%	14.2%	14.1%
Month	Massachusetts	New Jersey	North Dakota	Indiana	Iowa	Wisconsin	Rhode Island	Hawaii	Maine	Minnesota	Michigan
MAU's	14.1%	14.0%	13.9%	13.8%	13.8%	13.8%	13.7%	13.7%	13.5%	13.5%	13.5%
Month	Ohio	New York	West Virginia	Maryland	Oklahoma	Georgia	New Mexico	Kansas	Pennsylvania	Montana	Missouri
MAU's	13.5%	13.4%	13.3%	13.3%	13.2%	13.2%	13.2%	13.0%	12.8%	12.8%	12.8%
Month	Arkansas	Florida	North Carolina	Louisiana	Illinois	South Carolina	Colorado	Texas	Tennessee	Connecticut	Alabama
MAU's	12.7%	12.7%	12.7%	12.6%	12.6%	12.5%	12.5%	12.4%	12.2%	11.9%	11.8%
Month	South Dakota	Mississippi	Nebraska	Kentucky	Wyoming	Virginia	District of Columbia				
MAU's	11.6%	11.5%	11.1%	11.1%	10.7%	10.5%	8.2%				

Share of internet users using ad blocking software across Europe by country (Q2 2015)

Country	Greece	Poland	Malta	Estonia	Germany	Sweden	Denmark	Hungary	United Kingdom	Austria	Portugal	Finland	Slovenia	Croatia
MAU's	37.50%	34.90%	27.70%	25.30%	25.30%	25.10%	23.30%	23.20%	21.10%	20.90%	20.80%	19.30%	19.30%	19.20%
Country	Lithuania	Romania	Ireland	Bulgaria	Spain	Latvia	Cyprus	Netherlands	Luxembourg	Italy	Belgium	Czech Republic	France	Slovakia
MAU's	19.20%	18.00%	17.70%	16.00%	16.00%	14.70%	14.30%	13.90%	13.70%	12.90%	12.00%	10.90%	10.30%	8.90%