

The Hidden Cost of Adblock

Adblock's impact on website traffic

Foreword

This whitepaper presents the primary findings of new research by Professor Benjamin Shiller (Brandeis University), Professor Joel Waldfogel (University of Minnesota and the National Bureau of Economic Research), and Dr. Johnny Ryan (PageFair).

Research of 2,574 websites over three years reveals that adblock has a hidden cost: it not only reduces small and medium publishers' revenue, it also reduces their traffic.

Studying the changing rate of desktop adblock usage and traffic rank from April 2013 – June 2016 reveals that adblock usage is undermining many websites' ability to invest in content. Affected websites then attract fewer visitors, and so their traffic declines. The full paper is [available from NBER](#), the U.S. National Bureau of Economic Research.

This is the adblock paradox: users may avoid ads in the short term, but ultimately undermine the value they can derive from the web. To reverse this phenomenon, publishers must listen to users' legitimate grievances about online ads and respond by fixing the problems. Once they have remedied the users' grievances, publishers can choose to serve their ads using technology that adblock companies cannot tamper with.



Sean Blanchfield
CEO & Co-Founder, PageFair
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Adblocked traffic

Adblock usage on a website hurts traffic too.

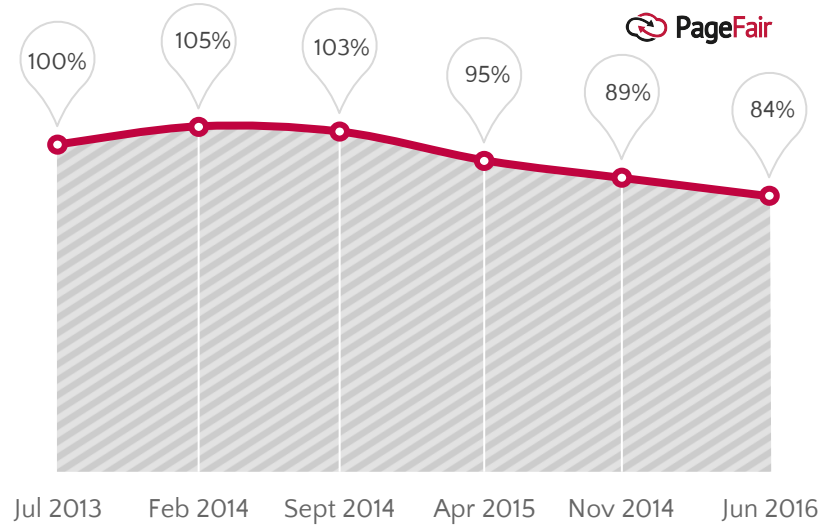
Key finding

- Every **1% increase** in the number of visitors that use adblock software produces a **0.67% decrease** in traffic for small/medium sites.

Analysis

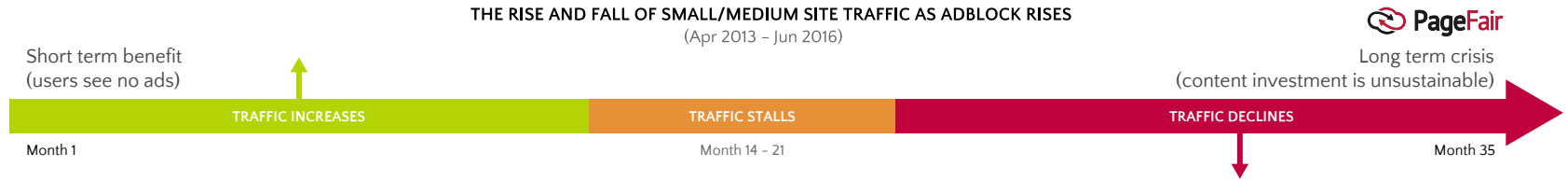
Small and medium websites suffer a hidden cost from adblock that compounds its direct impact on their revenue. These publishers must respond to adblock not only to protect their revenue, but to continue to attract their audience.

EXAMPLE: SMALL/MEDIUM WEBSITE TRAFFIC DECLINE UNDER SUSTAINED ADBLOCK GROWTH
(0% to 25% adblock rate, 36 months)



A small or medium website that experienced adblock growth from 0% in July 2013 to 25% in June 2016 would suffer a 16% decline in traffic, despite an initial 5% traffic boost.

The adblock paradox



Key findings

- Significant adblock usage by a website's audience usually causes a temporary boost to its page traffic. This short term effect occurs because adblock users can enjoy the site without advertising.
- However, traffic then declines significantly after approximately **1.5 years**. This long term effect occurs because sites can no longer sustain their investment in content.
- Average site traffic declined by **8%** over 35 months due to adblock.

Insight

The reduction to site traffic occurs because adblock reduces a website's revenue, which in turn reduces the website's ability to invest in content to attract visitors. Over the space of three years this was shown to significantly reduce website traffic. This is the "adblock paradox," a paradoxical situation in which an adblock user benefits in the short term by avoiding advertising, but reduces the quality and variety of content available to them over the longer term.

Impact on small and medium websites

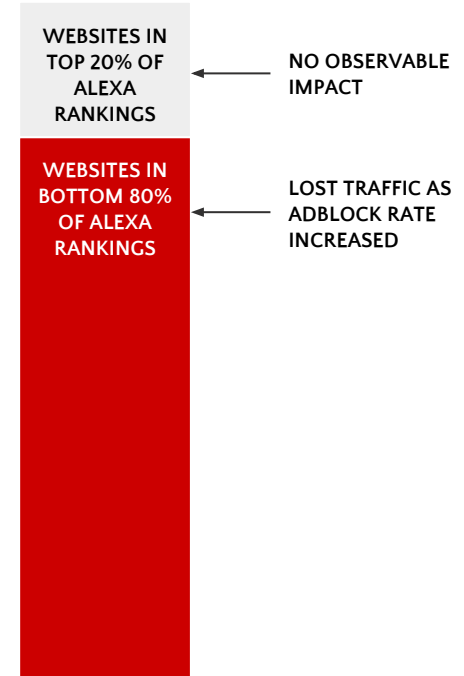
Key findings

- Over three years the majority of websites sites with high adblock rates saw their traffic levels significantly decrease relative to other websites.
- However, this was not observed among the 20% most popular websites.

Analysis

Large websites generate the majority of their revenue by selling a small part of their impressions directly to advertisers at a high price. Smaller websites do not have this premium direct revenue, and rely entirely on ad networks to sell all of their impressions. This means larger sites have a buffer against the full impact of adblock for as long as the number of their visitors who do not block ads is large enough to view their directly sold ad impressions.

IMPACT ON SITES BY ALEXA RANK (2,574 websites)



Methodology & references

1. Data were collected for the study
 - a. The 2,574 web sites in the sample are a range of websites that signed up to use PageFair Analytics. The websites in the PageFair sample are skewed toward more popular websites than the average, and covered a mix of categories.
 - b. Traffic ranks for each site were taken from Alexa.
2. The impact of adblock on website traffic was determined in three ways:
 - a. First, a regression of websites' Alexa ranks from April 2013 – June 2016 on the same websites' adblock block rate.
 - b. Second, a longitudinal study of Alexa rank before 2013 (when adblock usage started to grow) to discount the possibility that Alexa rank of websites with more adblocking were worsening anyway, irrespective of adblock.
 - c. Third, an instrumental variable strategy to discount the possibility that some other factor is causing the worsening of websites' Alexa ranking.

See the full research paper by Professor Benjamin Shiller (Brandeis University), Professor Joel Waldfogel (University of Minnesota and the National Bureau of Economic Research), and Dr Johnny Ryan (PageFair) for a lengthy discussion of methodology.

The full paper [“Will Ad Blocking Break the Internet”](#) (NBER Working Paper No. 23058) is available at the U.S. National Bureau of Economic Research.