

Is the Sky Falling on Cookies?

A Comparative Analysis on the Health of the Internet Cookie

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Executive Summary

The Atlas Institute has conducted an analysis that compares self-reported cookie-deletion estimates with the average cookie “lifespan” of the survey respondents. While the responses to the survey questions were similar to those found in comparable surveys by Jupiter, Nielsen, and others, our analysis reveals a disparity between user responses to cookie deletion and their actual behavior. For example, respondents who claimed to delete their cookies weekly—with an expected average cookie lifespan of 7 days—actually had an average cookie lifespan of 45 days. This report provides a detailed analysis that compares survey responses to actual behavior. We also examine the implications that cookie deletion has on conversion tracking, reach and frequency, and profile targeting.

Survey Response vs. Actual Behavior

The average cookie lifespan of people who claimed to delete their cookies weekly was 45 days.

Background

Consumer privacy on the web has drawn a lot of attention recently. Fear of spyware and identity theft has heightened consumer anxiety. As a result, Internet cookies have come under increased public scrutiny. Jupiter recently announced survey results in which 39 percent of the respondents claimed to delete their cookies at least monthly. Their report—along with a host of others—have cast many questions on the metrics and technologies that rely on cookies.

Source	Percent of users reporting they delete their cookies at least monthly
Belden	39.0% – 46.5%
RedEye	55%
Nielsen NetRatings	43.7%
Jupiter	39%

Table 1: Results from recent cookie deletion surveys

The Problem with Survey-Based Measurement

It’s clear that there is heightened public awareness and concern over online privacy issues, and this public perception likely has an impact on cookies. The studies have produced some shocking and consistent numbers. However, it’s important to point out that the studies have all been based on surveys. While surveys can often identify trends, they don’t always correctly quantify the size and rate of the changes. Simply put, *what people say and what they do is often not the same*. Just as people often believe they have better credit ratings than they really do, or that they claim to get a certain amount of exercise each week, measuring true behavior can often yield very different results.

Measuring Behavior vs. Survey Responses

In a recent survey, the Atlas Institute compared cookie-deletion survey responses with the average cookie “lifespan” of the survey respondents. In this case, “lifespan” means the duration between the first and last instance that Atlas saw the respondent’s cookie. Cookie lifespan is an excellent proxy for the stability of a user’s cookie because Atlas serves ads and tracking pixels on behalf of more

than a thousand advertisers across thousands of sites, translating to almost 100 billion impressions, clicks, and page-views each month. The results from the survey and lifespan analysis are shown at right in Table 2.

How Often Do You Delete Internet Cookies?	Percent of Respondents	Cookie Lifespan	
		Self-Reported	Actual Behavior
Every week	42.6%	7 days	45 days
Every month	13.7%	30 days	59 days
Every 3 months	9.6%	90 days	127 days
Every 6 months	7.8%	180 days	117 days
Less than once per year	6.5%	365 days	164 days
Never	7.7%	N/A	172 days

Table 2: Comparing self reported vs. true behavior

Responses to the survey question were very similar—if not more dramatic—than surveys by Jupiter, Nielsen and others. Over half the

respondents (56%) claimed to delete their cookies at least monthly. However, when comparing the lifespan of the respondents’ cookies to their responses to the survey, the true behavior of those respondents was revealed. Users who claimed to delete their cookies weekly—with an expected average cookie lifespan of 7 days—actually had an average cookie lifespan of 45 days. Respondents who indicated that they delete their cookies monthly—with an expected average cookie lifespan of 30 days—actually had an average cookie lifespan of almost two months.

Measuring Behavior Over Time

As part of our analysis, we also wanted to understand how consumer behavior has changed over time as spyware and cookie issues have become increasingly publicized. If there was a significant shift in users deleting their cookies, we would witness a growing proportion of impressions being delivered to short-lived cookies (i.e., lifespan of less than 30 days). Over the past six months, Atlas has not seen dramatic increases in the percentage of impressions delivered to short-life cookies. Despite the publicity around spyware and the increasing popularity of over zealous anti-spyware software, the percent of impressions that have shifted from stable cookies to short-lived cookies amounted to a 0.5% drop in the last 6 months.

What This Means for Advertisers

The Effect of Cookie Deletion on Conversion Tracking

Much of the attention on cookie deletion has led to concern over losing conversion data. Widespread cookie deletion translates to an undercounting of conversions (both click and view-based). However, Atlas regularly conducts a time analysis on conversions, often referred to as “Time-to-Convert Analysis.” We have consistently found that the vast majority of conversions—generally 70%–90%—occur within a 24-hour window of the corresponding click or impression. Thus, even in a future where users are deleting cookies once a week, cookie-based conversion reporting will capture a large majority of conversion activity.

The Effect of Cookie Deletion on Reach and Frequency

Atlas has long recognized that users who reject or regularly delete their cookies will cause an overestimation of reach and an underestimation of frequency. Atlas Reach & Frequency reports have long contained a statistical filtering methodology that corrects for this bias. Our reach metrics are not a simple count of cookies. Rather, we base the analysis on massive samples of stable cookies that we

know have been “alive” for some period of time. Consequently, we are able to minimize the impact of cookie deletion and provide reliable reach and frequency reporting at very granular levels. We believe that this technique of basing reach and frequency on stable cookies is a best practice that every marketer and publisher should employ.

The Effect of Cookie Deletion on Profile and Behavioral Targeting

Profile and behavioral targeting (e.g., reaching car shoppers on run of network inventory) allow marketers to segment and reach audiences outside the traditional box of content targeting. Users that regularly delete their cookies will continually fall out of profiled segments. If the trend continues, that may translate to less available profile inventory, which could result in higher prices or under-delivery. Nonetheless, cookie deletion should not diminish the value of the targeted impressions that publishers are currently able to deliver. There’s even an argument that cookie deleting may actually increase the value of targeted inventory since recency is a dominant driver of effectiveness in behavioral targeting. The fact is: the impact of cookie deletion is already built into the targeted media that is available today. Our best advice is to continue buying targeted inventory so long as the volume and expense justify the effort.

More Research is Needed

Our intent here is not to trivialize the results of the survey studies. They highlight a growing concern that can have an impact on technologies and methodologies for measuring digital marketing effectiveness. However, we believe that a more complete study which incorporates actual user behavior is a much better way to formulate a true picture of what’s going on. The Atlas Institute has launched several additional studies, including one in partnership with the Advertising Research Foundation (ARF). Our goal is to understand cookie deletion behavior reliably and advise marketers on how to effectively manage and optimize their campaigns.

Is the Sky Really Falling on Cookies?

No. Cookie-based reporting and analysis continue to provide reliable metrics to measure and optimize online campaigns. Will technologies and methodologies need to continually evolve in order to keep pace with industry dynamics? Absolutely. Smart marketers must continue to employ new best practices like the reach and frequency filtering described above to ensure they maintain an accurate picture of their marketing effectiveness.

About the Atlas Institute

The Atlas Institute is the research and education arm of Atlas, a provider of accountable marketing tools and expertise for agencies, marketers, and publishers. The Institute publishes Digital Marketing Insights, a series of publications by Atlas senior marketing analysts and digital marketing experts that help our customers improve their digital marketing effectiveness. Many of these findings are also made available to the digital marketing industry at large. Each Digital Marketing Insight report is designed to help marketers more successfully build value with their customers, throughout the customer lifecycle: from awareness to acquisition and from retention to growth. The Atlas Institute also provides education in digital marketing to Atlas customers and partners. To view a full listing of the Atlas Institute’s Digital Marketing Insights, please visit www.AtlasSolutions.com/insights.