

OXFORD BIOCHRONOMETRICS

Paid Media | Affiliates

Q1 2022

Benchmark Report

(free version)



OXFORD
BIOCHRONOMETRICS
STOP FRAUD STAY RELEVANT



Introduction

If you run an affiliate program or are thinking of running one, there are a few questions you need to ask yourself:

- What does a successful program mean for you?
- What conversion rate do you expect to see?
- Do different affiliates have similar performance?
- How does an affiliate perform at scale?
- Which media pricing model is the most cost effective?

At Oxford BioChronometrics, we believe in creating transparency around your affiliates and your affiliate program. That's why we created this report – so you can answer these questions for yourself based on actual data, not guesswork.

In order to provide you with a tool to drive decisions that will grow your business, we have analyzed tens of millions of clicks and the subsequent generated leads for fraudulent behavior. We use that data to provide you with hard data based on each affiliate, media type and device type.

Real data, actionable results for a better ROI – that's the pledge we make to you.

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Executive Summary

To determine your business' exposure to risks, Oxford BioChronometrics has analyzed tens of millions of clicks and leads generated by our North American clients in the financial services and insurance industries.

Key findings

- No affiliate is free of fraudulent traffic, regardless of size.
- Some campaigns and affiliates have been the victims of a botnet that is able to click and fill out forms at scale, causing almost all their clicks and leads to be fraudulent.
- Fraud levels on mobile were stable. Desktop fraud levels increased slightly.
- Affiliates perform better when they know they are being held accountable for fraud (i.e. when they know they will not be paid for fraudulent leads)

Methods

This report provides a detailed overview of our clients' affiliates ranked by the quality of the clicks and leads provided by them. To create a fair comparison, the affiliates are split in two tiers based on the number of clicks or leads they were able to generate.

The findings of this analysis are published on a quarterly basis.

Methodology

This report combines research and frontline experience to identify threats and trends that are meaningful to organizations to make long-term growth strategies.

The data for this report has been collected at landing pages and lead generation forms of Oxford BioChronometrics' clients. The results are comprised of tens of millions of genuine and fraudulent clicks, and millions of form submissions as seen during the first quarter of 2022.

The Oxford BioChronometrics team of experts consists of dedicated security consultants, data scientists and researchers conducting research on our clients' traffic. This report shares their findings and insight to provide a ranking of affiliates.

The Q1 2022 Affiliate Benchmark Report is representative of Oxford BioChronometrics clients in North America. We make no claims that our benchmark results can be extrapolated to get the performance of an affiliate at large.

Fraud Landscape

Digital lead generation is supposed to make it easier and more efficient to grow your business. Whether you do this in-house or by outsourcing lead generation to affiliates, monitoring the quality of clicks and generated leads is critical to keeping your data clean. Clean data ensures continuous business growth in changing market conditions.

Proper monitoring means third-party verification of those clicks and leads so that only verified leads are sent to your customer data platform. Filtering out fraudulent leads means your customer data is actionable. It also allows you to immediately return the fraudulent leads to your affiliate so you will not be charged for it.

Our analysis of the clicks and leads reveals the quality of:

- Affiliate clicks
- Affiliate leads, and
- Traffic per device type (desktop vs mobile)
- Conversion ratio (clicks to leads)

Fraud Landscape

What is click fraud?

Click fraud occurs when bots click on your advertisements in order to get attribution. It can also be the result of a competitor clicking on your advertisements to waste your marketing budget.

What is lead generation fraud?

Lead generation fraud occurs when bots or low paid workers fill out lead generation forms with fake or stolen user information bought on the dark web. Since this is real information that is unauthorized to use, these people did not actually provide their consent to be contacted. If it goes undetected, you are at risk of litigation due to violating the TCPA.

What is the cost of fraud?

Fraud costs you real money:

- You paid for fraud because you thought they were genuine.
- You polluted your data, which affects your retargeting efforts.
- You cannot calculate your actual ROI.
- And both short and long-term strategic planning will be based on faulty insights.

Fraud Landscape

Classification of different levels of fraudulent traffic.

1 st level	2 nd level	3 rd level	4 th level
Script bots	Headless browsers without interaction	Headful browsers with interaction	Low paid workers using proxies/VPNs
Only use a few IP addresses to execute thousands of visits	Headless browsers are able to maintain cookies and execute JavaScript. Leveraging this enables fraudsters to build profiles and targeted click on ads	User interaction is emulated by moving the mouse, scrolling and clicking links to navigate	Rotate through large number of device fingerprints with matching user agents, each generating only a few hits to avoid detection
Easy to detect due to the repetitive nature		Are not able to solve interaction based challenges such as checking a box to continue or completing a CAPTCHA	Randomized curvy mouse movements and mimic other humanlike characteristics such as using 'paste as human' functions to copy/ paste data as if it were typed
		Are able to fill out forms by replaying pre-recorded human behavioral interaction and does have some level of randomization	Bot traffic is blended in with low paid workers traffic. The workers fill out the lead generation forms, the bots replay recorded human behavior such as swipes, mouse movements, zooming, etc. at the landing pages

Level 1 bots

These bots are built for basic web scraping and are generally unable to execute JavaScript. These bots use a small number of IP addresses and user agents. Their purpose is to scrape text information from web pages and present no threat in the lead generation industry.

Level 2 bots

These bots are based on headless browsers such as PhantomJS, or Chrome and/or Firefox browsers controlled by Selenium or Puppeteer. These bots can be identified through the specific browser and device characteristics. When found, these bots are mostly used to run click fraud schemes.

Level 3 bots

These bots are based on full-fledged headful browsers, controlled by Puppeteer, Playwright, etc. These browsers are run with additional plugins to try avoid being detected as bot. They are able to simulate basic interactions, such as simple mouse movements, scrolls and keystrokes. Newer variants are able to use pre-recorded human behavior and stolen data to fill out your forms at scale.

Level 4 hybrid

The fourth level is a hybrid form and consists of interactions between bots and a human workforce. Bots will do the repetitive work like finding specific advertisements to click on in order to get the attribution. Subsequently, the 'state' of the browser is saved and continued by a human using the exact same device profile and state (cookies). This enables the human to continue the session and fill out the lead generation form.



Benchmark: Generated Clicks

Now let's benchmark click results. This is a typical CPC model where you pay for a click on your ad that leads to your landing page. The fraudulent part of the traffic consists of level 2 and level 3 bots.

The affiliates have been split into two tiers, based on the volume of traffic they sent to the landing page:

- affiliates that generated between 1,000 to 100,000 clicks, and
- affiliates that generated more than 100,000 clicks.

Both tiers are ranked by the percentage of fraudulent visits with the lowest fraud percentage at the top.

Benchmark: Clicks <100k

The table below contains only data from affiliates that generated between 1,000 and 100,000 clicks of CPC traffic. All results are measured on the landing pages the ads were directed to.

The type of fraudulent traffic consists of mostly level 2 and level 3 bots.

Affiliate	% genuine traffic	% fraudulent traffic
Affiliate 001	94.35%	5.65%
Affiliate 002	93.83%	6.17%
Affiliate 003	92.52%	7.48%
Affiliate 004	90.97%	9.03%
Affiliate 005	89.24%	10.76%
Affiliate 006	89.15%	10.85%
Affiliate 007	88.83%	11.17%
Affiliate 008	88.54%	11.46%
Affiliate 009	87.88%	12.12%
Affiliate 010	87.81%	12.19%
...
Affiliate 082	1.45%	98.55%
Affiliate 083	0.99%	99.01%
Affiliate 084	0.83%	99.17%
Affiliate 085	0.82%	99.18%
Affiliate 086	0.69%	99.31%
Affiliate 087	0.58%	99.42%
Affiliate 088	0.37%	99.63%
Affiliate 089	0.17%	99.83%
Affiliate 090	0.05%	99.95%
Affiliate 091	0.01%	99.99%

Benchmark: Clicks >100k

The table below contains only data from affiliates that generated more than 100,000 clicks of CPC traffic. All results are measured on the landing pages the ads were directed to.

The type of fraudulent traffic consists mostly of level 2 and level 3 bots.

Affiliate	% genuine traffic	% fraudulent traffic
Affiliate 001	91.05%	8.95%
Affiliate 002	90.54%	9.46%
Affiliate 003	90.44%	9.56%
Affiliate 004	89.88%	10.12%
Affiliate 005	89.76%	10.24%
Affiliate 006	89.55%	10.45%
Affiliate 007	89.52%	10.48%
Affiliate 008	89.01%	10.99%
Affiliate 009	88.77%	11.23%
Affiliate 010	87.91%	12.09%
...
Affiliate 041	67.21%	32.79%
Affiliate 042	66.27%	33.73%
Affiliate 043	61.63%	38.37%
Affiliate 044	60.87%	39.13%
Affiliate 045	41.28%	58.72%
Affiliate 046	30.26%	69.74%
Affiliate 047	20.21%	79.79%
Affiliate 048	20.06%	79.94%
Affiliate 049	14.13%	85.87%
Affiliate 050	11.37%	88.63%

Benchmark: Lead Generation

This benchmark ranks affiliates based on the quality of traffic converted to a lead using a CPL or CPA model. The fraudulent traffic consists of level 3 bots and level 4 hybrid bots.

Here again, affiliates have been split into two tiers, each having its own ranking:

- affiliates that generated between 1,000 and 10,000 leads, and
- affiliates that generated more than 10,000 leads.

Both tiers are ranked by the percentage of clicks converted to a lead with the lowest fraud percentage at the top.

Benchmark: Leads <10k

The table below contains only data of affiliates that generated between 1,000 and 10,000 leads. The conversion percentage shows how many clicks have been converted to a lead. These leads are split into two groups: genuine leads and fraudulent leads. If two affiliates have the same percentage, their volume is used as second ranking criterion.

Affiliate	clicks converted to lead %	% genuine leads	% fraudulent leads
Affiliate 001	15.74%	99.98%	0.02%
Affiliate 002	8.10%	99.97%	0.03%
Affiliate 003	2.54%	99.97%	0.03%
Affiliate 004	5.49%	99.95%	0.05%
Affiliate 005	14.48%	99.95%	0.05%
Affiliate 006	12.88%	99.95%	0.05%
Affiliate 007	18.00%	99.90%	0.10%
Affiliate 008	21.67%	99.90%	0.10%
Affiliate 009	16.01%	99.89%	0.11%
Affiliate 010	9.12%	99.89%	0.11%
...
Affiliate 024	11.38%	95.89%	4.11%
Affiliate 025	0.29%	85.58%	14.42%
Affiliate 026	5.36%	84.32%	15.68%
Affiliate 027	5.91%	72.98%	27.02%
Affiliate 028	13.13%	68.48%	31.52%
Affiliate 029	14.96%	59.70%	40.30%
Affiliate 030	11.37%	58.60%	41.40%
Affiliate 031	0.40%	33.14%	66.86%
Affiliate 032	9.95%	29.56%	70.44%
Affiliate 033	18.54%	7.32%	92.68%

Benchmark: Leads >10k

The table below contains only data of affiliates that generated more than 10,000 leads. The conversion percentage shows how many clicks have been converted to a lead. Subsequently, the leads are split into two groups: genuine leads and fraudulent leads. If two affiliates have the same percentage, their volume is used as second ranking criterion.

Affiliate	clicks converted to lead %	% genuine leads	% fraudulent leads
Affiliate 001	2.65%	99.99%	0.01%
Affiliate 002	7.62%	99.97%	0.03%
Affiliate 003	6.04%	99.97%	0.03%
Affiliate 004	2.77%	99.97%	0.03%
Affiliate 005	12.61%	99.96%	0.04%
Affiliate 006	16.46%	99.95%	0.05%
Affiliate 007	14.03%	99.94%	0.06%
Affiliate 008	7.03%	99.94%	0.06%
Affiliate 009	11.27%	99.92%	0.08%
Affiliate 010	15.16%	99.92%	0.08%
...
Affiliate 035	15.11%	97.15%	2.85%
Affiliate 036	29.72%	96.90%	3.10%
Affiliate 037	1.71%	96.61%	3.39%
Affiliate 038	3.81%	95.75%	4.25%
Affiliate 039	13.57%	95.57%	4.43%
Affiliate 040	11.61%	77.35%	22.65%
Affiliate 041	18.28%	49.86%	50.14%
Affiliate 042	14.72%	19.26%	62.89%
Affiliate 043	25.88%	9.27%	90.73%
Affiliate 044	38.24%	2.19%	97.81%

Benchmark: Click Performance Trends

While any marketer would like to believe that the quality of traffic remains constant, the following pages show just how reliable and consistent affiliates are.

In these charts – which we will add on to every quarter – if an affiliate's line goes down, it means their quality of traffic did, too. If it goes up, it means they improved. And, of course, if it stayed flat, their performance did not change. The top of the list has the least amount of fraud. As you go down the list, the percentage of bots goes up.

What you'll see is why it's important to stay on top of your affiliates and keep tracking their performance.

To make it easy to compare, we have again split the group into two tiers:

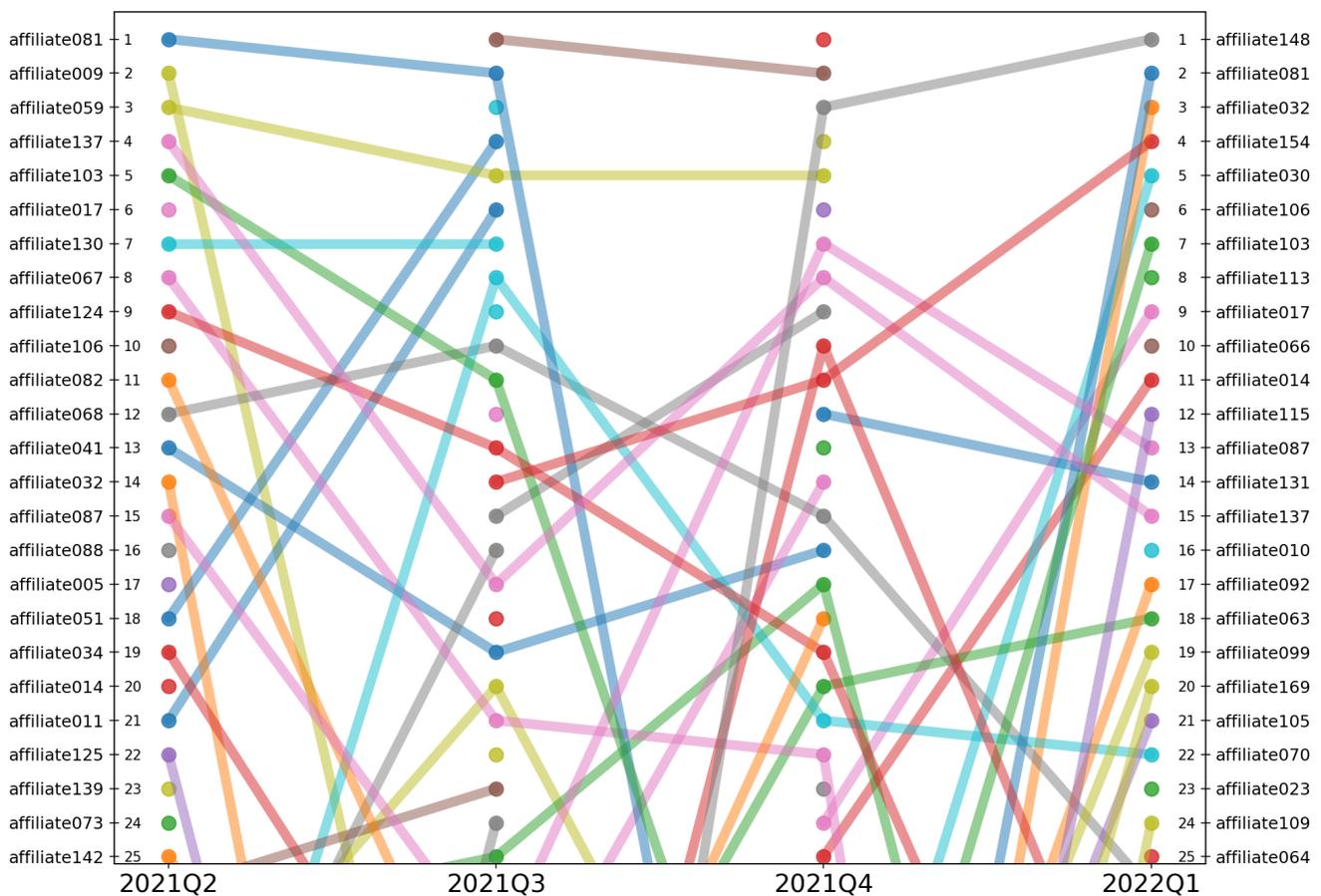
- affiliates that generated between 1,000 and 100,000 clicks, and
- affiliates that generated more than 100,000 clicks.

Follow the lines to see who improved, who got worse and who didn't change at all.

Clicks <100k Performance Trends

Let's compare click performance between Q2, Q3, Q4 2021 and Q1 2022 for affiliates that delivered under 100,000 clicks. Follow the lines to see who improved, who got worse and who didn't change at all. Affiliates are listed from best to worst performance.

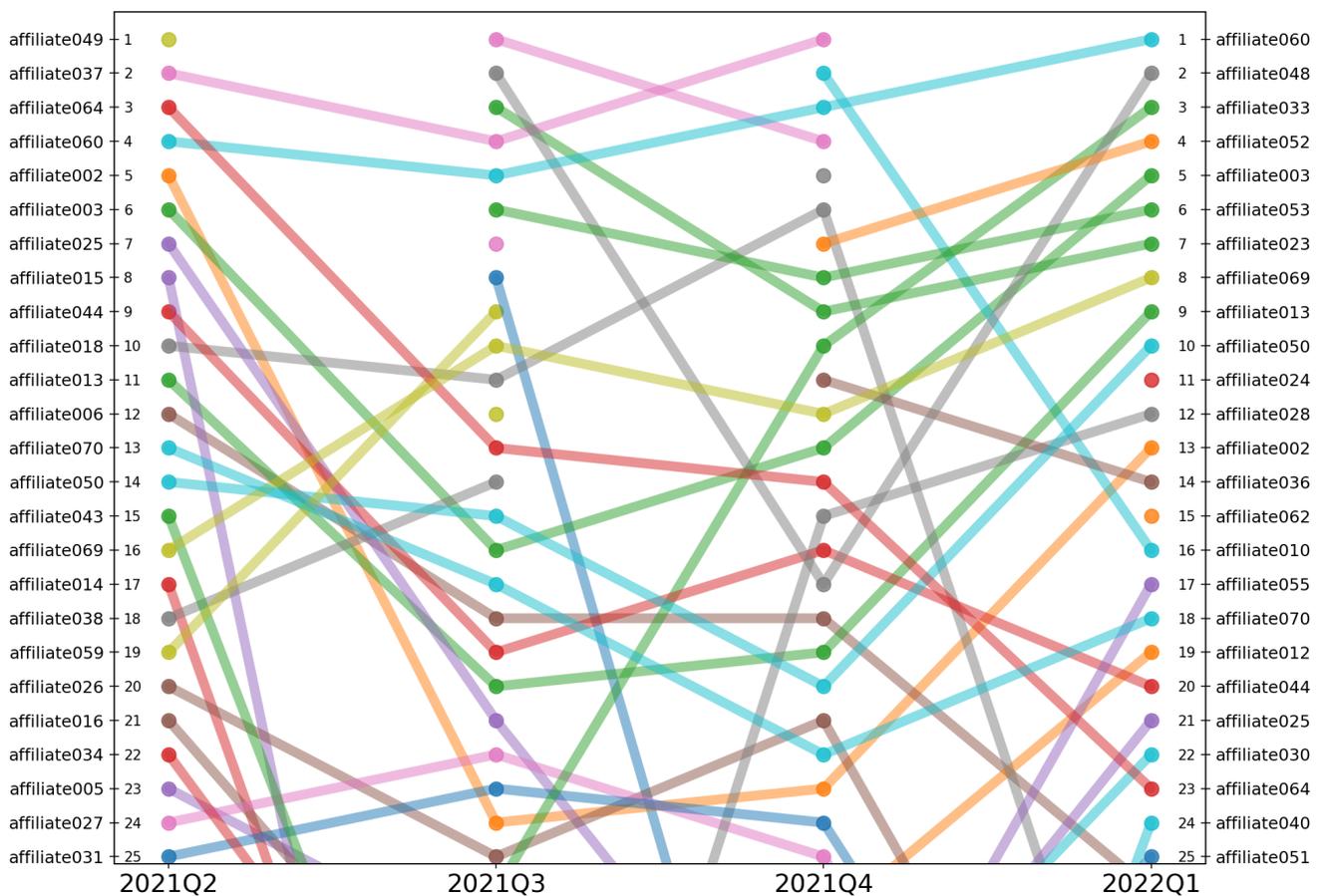
Top 25 affiliates driving <100k clicks per quarter. Ranked by performance



Clicks >100k Performance Trends

Let's compare click performance between Q2, Q3, Q4 2021 and Q1 2022 for affiliates that delivered over 100,000 clicks. Follow the lines to see who improved, who got worse and who didn't change at all. Affiliates are listed from best to worst performance.

Top 25 affiliates driving >100k clicks per quarter. Ranked by performance



Benchmark: Lead Performance Trends

Just like with clicks, you would like to believe that the quality of leads remains consistent from quarter to quarter. See for yourself how lead performance holds up over time. This benchmark compares the data from this quarter to the previous quarter.

In these charts – which we will add on to every quarter – if an affiliate's line goes down, it means their quality of leads did, too. If it goes up, it means they improved. And, of course, if it stayed flat, their performance did not change. The top of the list has the least amount of lead fraud. As you go down the list, the percentage of fake leads goes up.

What you'll see is why it's important to stay on top of your affiliates and keep tracking their lead performance.

To make it easy to compare, we have again split the group into two tiers:

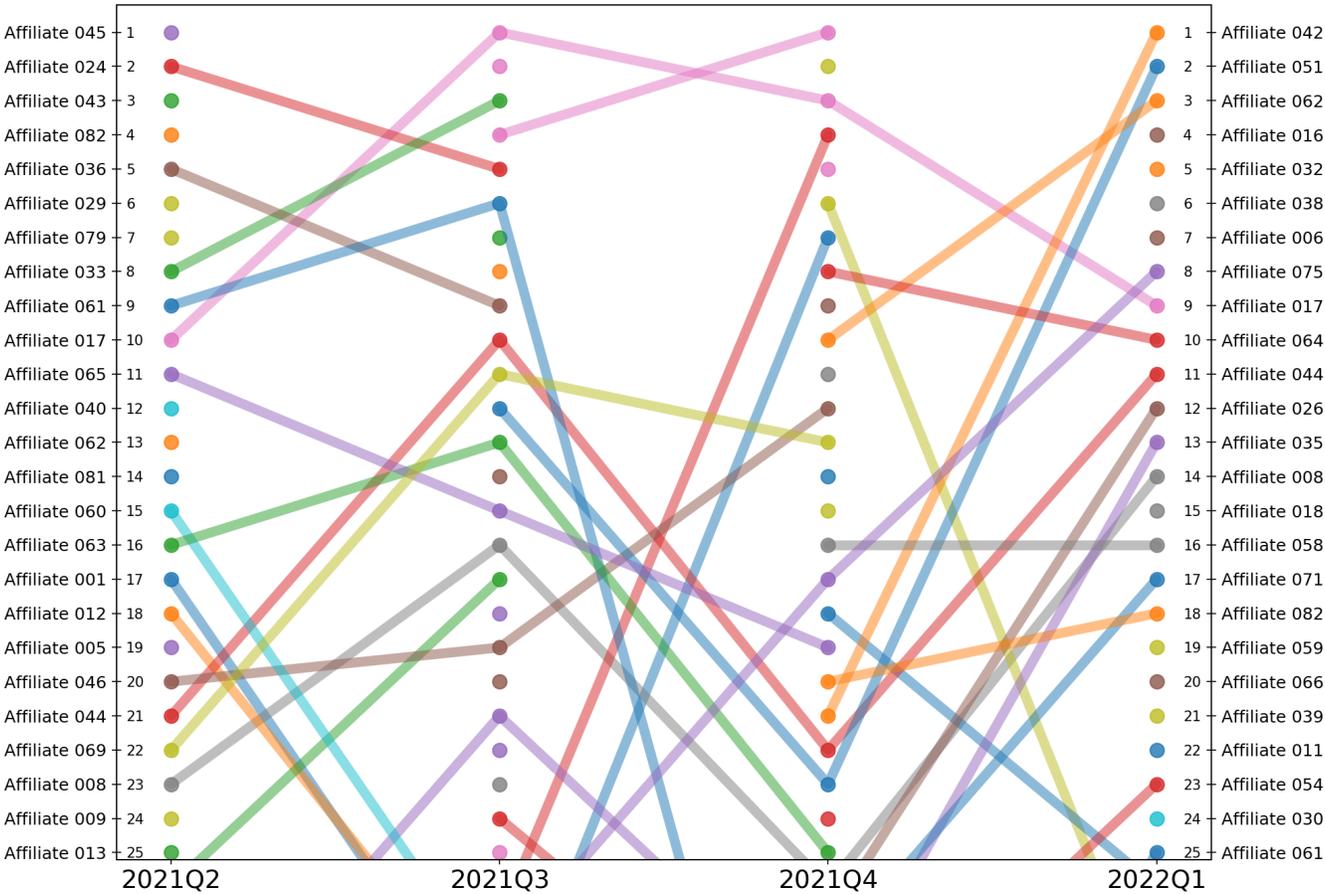
- affiliates that generated between 1,000 and 10,000 leads, and
- affiliates that generated more than 10,000 leads.

Follow the lines to see who improved, who got worse and who didn't change at all.

Leads <10k Performance Trends

Now let's compare lead performance between Q2, Q3, Q4 2021 and Q1 2022 for affiliates that delivered under 10,000 leads. Follow the lines to see who improved, who got worse and who didn't change at all. Affiliates are listed from best to worst performance.

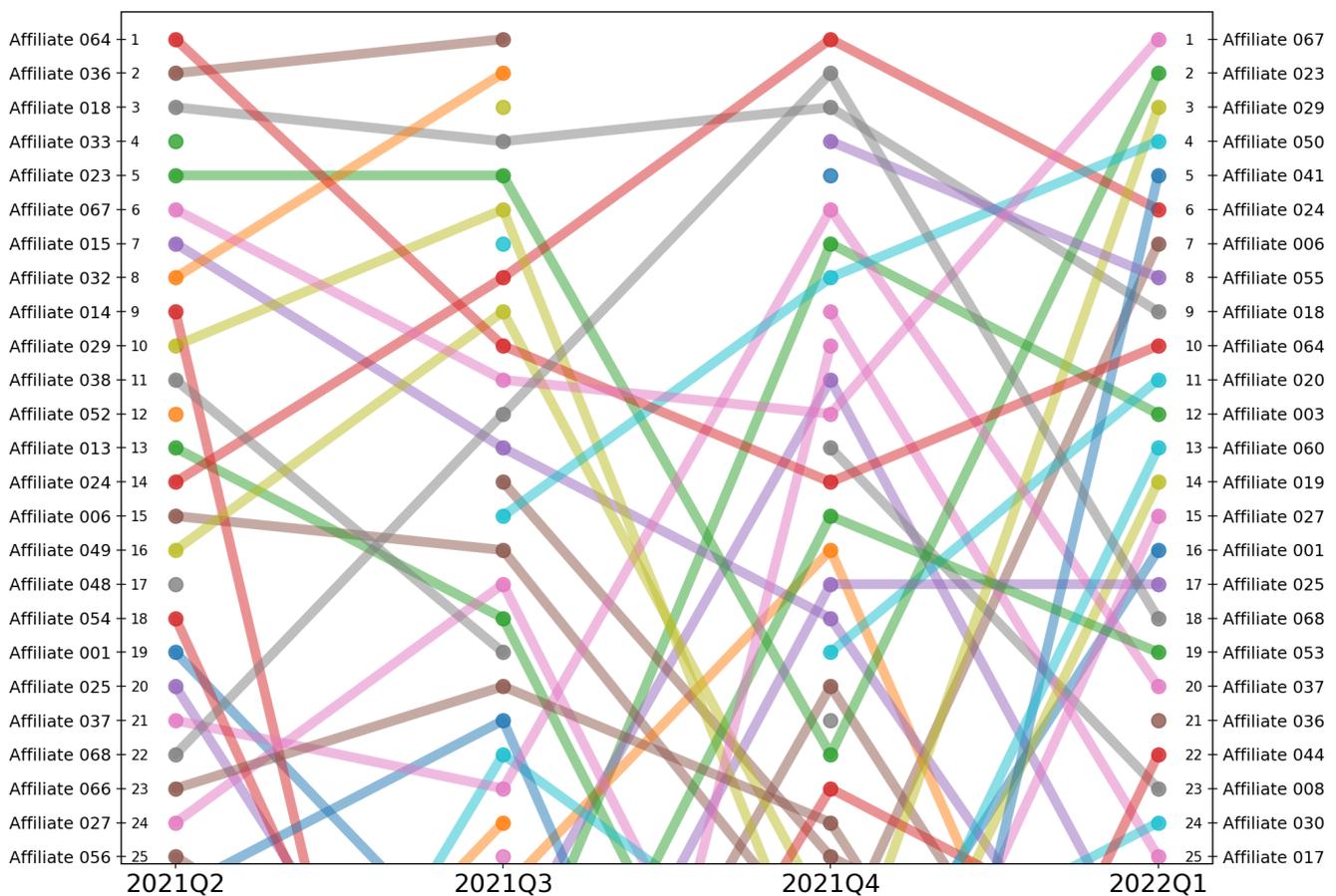
Top 25 affiliates driving <10k leads per quarter. Ranked by performance



Leads >10k Performance Trends

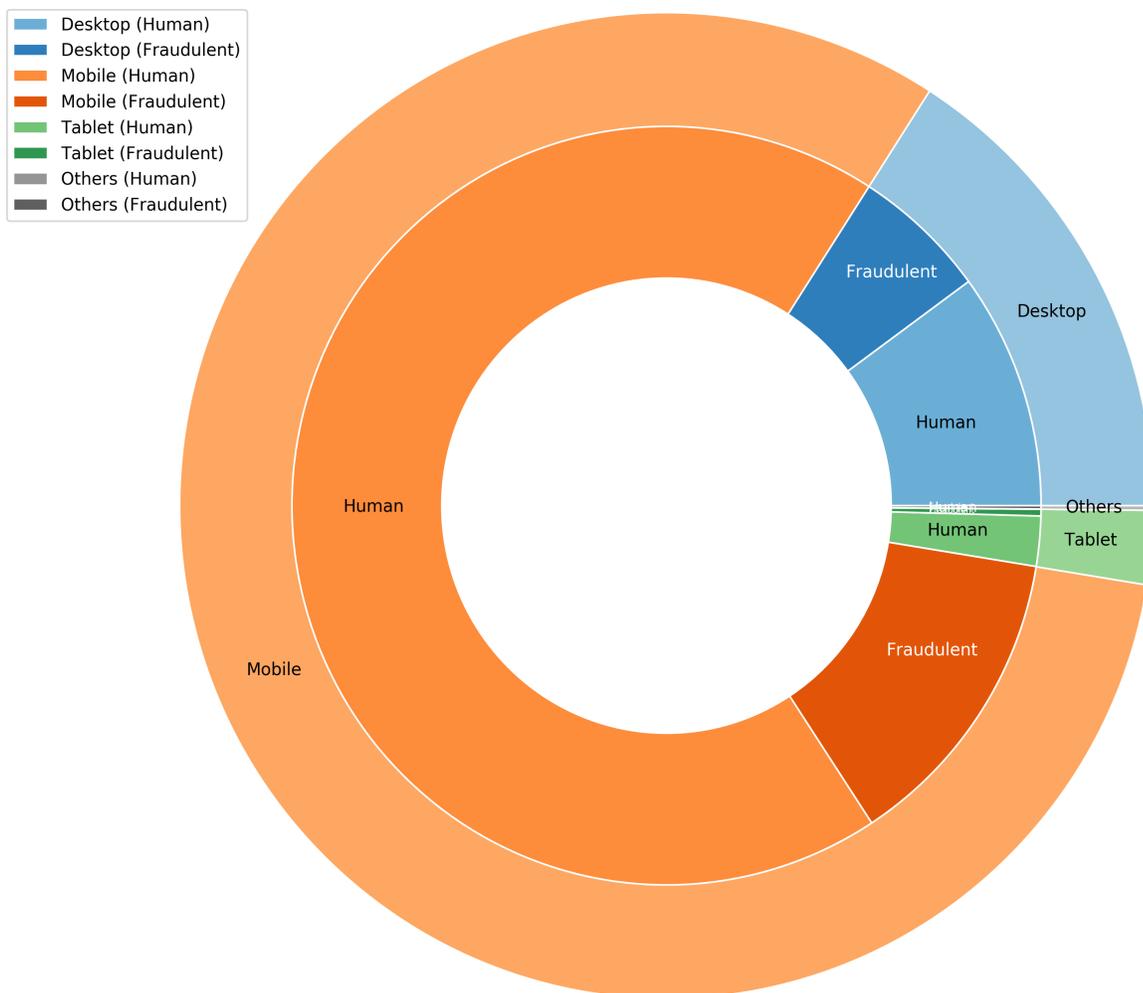
Let's compare lead performance between Q2, Q3, Q4 2021 and Q1 2022 for affiliates that delivered over 10,000 leads. Follow the lines to see who improved, who got worse and who didn't change at all. Affiliates are listed from best to worst performance.

Top 25 affiliates driving >10k leads per quarter. Ranked by performance



Traffic Distribution per Device

This quarter, almost 82% of the traffic came from mobile devices. The fraudulent traffic from mobile was significant less than in the previous quarter. About one sixth of the traffic on mobile devices was flagged as fraudulent.



The distribution of invalid traffic broken down by device type.

About

Oxford BioChronometrics' award-winning solutions secure your marketing budget by providing a real-time feedback on each generated click or lead. Each month tens of millions of clicks and millions generated leads are validated and protected by our technology.

Our clients use our fraud detection to see the real customers behind the generated clicks and leads, increase revenue, and take action to improve their marketing ROI.

If you have questions about the content or the numbers in this report you can contact us at: info@oxford-biochron.com.

For more information, please visit www.oxford-biochron.com.

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