

Desktop Web Click Fraud Benchmarks Report

Impact of Invalid Traffic (IVT) on Clicks
Across Desktop Web Traffic

Q3 2024



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ABOUT THIS REPORT:

In this report, Picalate explores the various types of click-related invalid traffic (IVT), with a focus on open programmatic ad traffic on Desktop Webs. Ad campaigns contracted on click-throughs rather than impressions often drive a market premium, making them a common target for fraud schemes such as bot traffic. This report provides a variety of insights, such as the most common types of click-based IVT, associated ad unit sizes, and app store categories with the highest click IVT rates.

For this report, Picalate's data science and analyst team analyzed more than 4 billion open programmatic advertising transactions across more than 71 million websites, in the third quarter of 2024.



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DEFINITIONS

CTR

CTR stands for Click-Through Rate. It is the ratio of clicks by a user to the number of times the ad was shown. It is essentially a measure of how frequently users appear to interact with an ad.

Click Fraud

Since click-throughs often drive a market premium, they are a common target for fraud schemes such as bot traffic. However, determining IVT (including fraud) for click traffic is challenging because regular click traffic and IVT click traffic look similar in many ways. In addition, mapping clicks to impressions is challenging due to timing considerations. Pixelate is able to map clicks to impressions, and flag clicks for IVT using our Click Fraud Detection technology. Pixelate supports detection of a number of click related IVT types that could be generated by suspicious users, ad creatives or publishers.

$$\text{CTR} = \frac{\text{Clicks}}{\text{Impressions}} \times 100$$


Types of click-related IVT opinions rendered by Pixelate:



Suspicious Users

- Click Farm
- Display Click Fraud
- Video Click Fraud
- Fast Clicker



Suspicious Ad:

- Duplicate Clicks



Suspicious Publishers:

- High CTR Traffic

Desktop Web Click Fraud Benchmarks Report Key Insights:

Global open programmatic click-related invalid traffic ("IVT") rates Q3 2024; as measured by Pixalate



23% of clicks on global desktop web traffic were found to be **invalid** in Q3 2024, according to Pixalate's data.



45% of desktop web invalid clicks in Q3 2024 were for **Datacenter IVT**.



970x250 ad size had the highest desktop web click IVT rate, **55%**, in Q3 2024.



36% of clicks from desktop web traffic from **APAC** region were found to be **invalid** in Q3 2024.

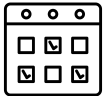
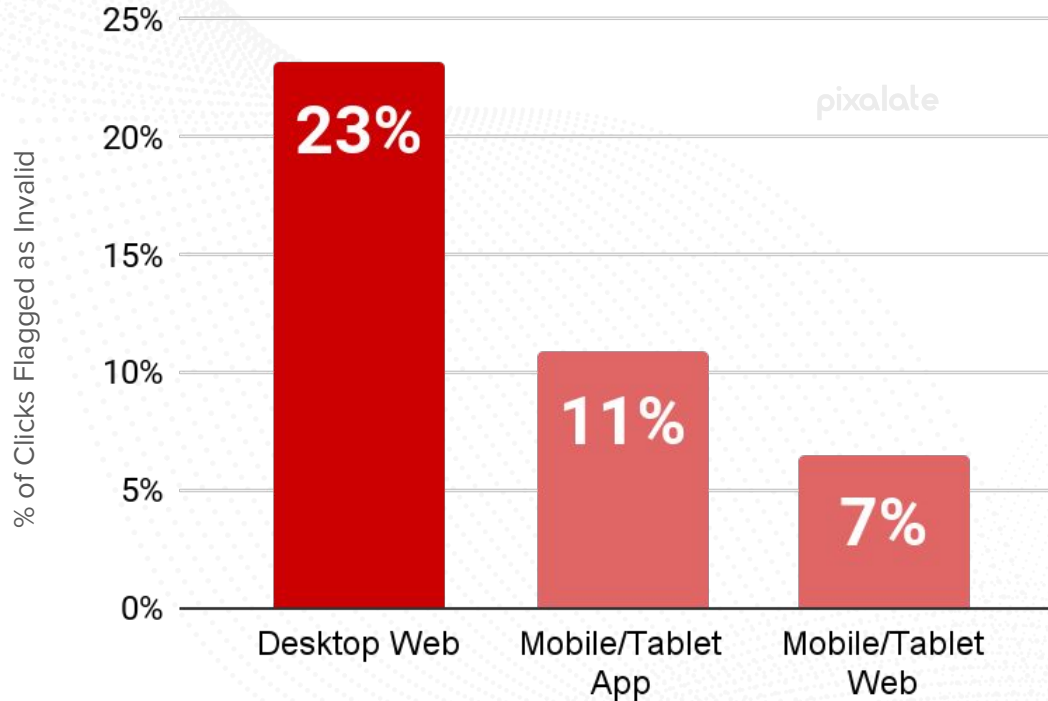


23%

23% of Clicks on Global Desktop Web Traffic were found to be Invalid in Q3 2024, according to Pixalate's data.

CLICK IVT RATE BY PLATFORM

Global open programmatic click-related invalid traffic ("IVT") rates Q3 2024; as measured by Pixalate



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45%

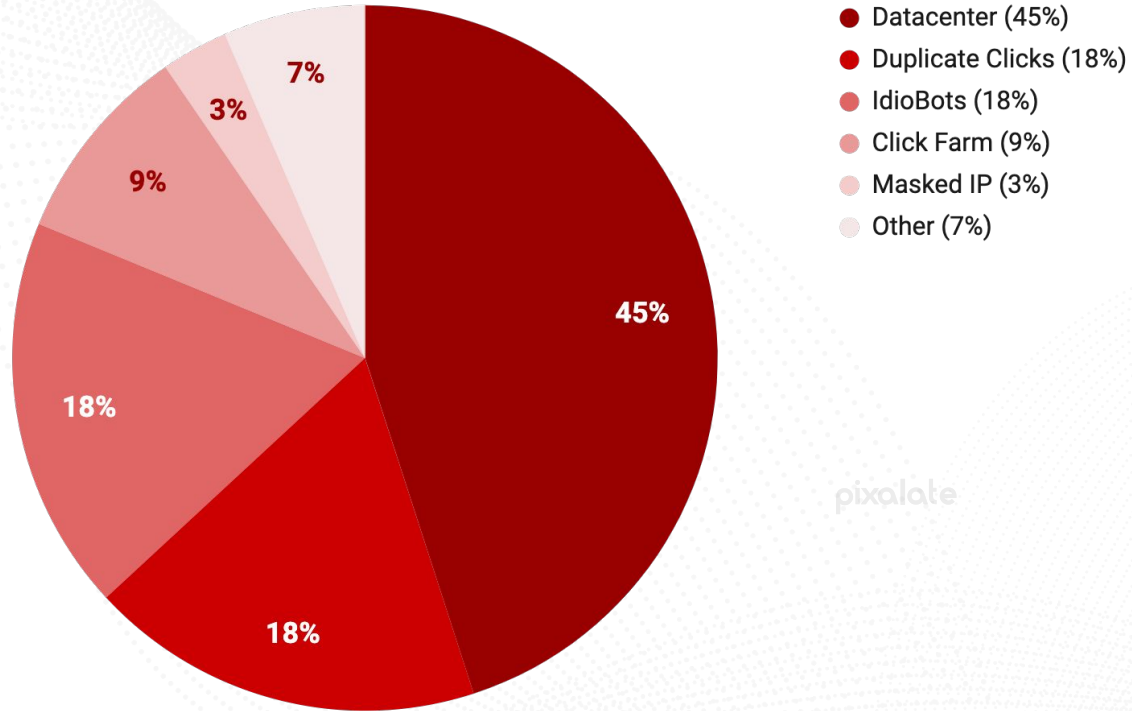
45% of Desktop Web Invalid Clicks were for **Datacenter IVT** in Q3 2024, as measured by Pixalate.



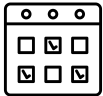


TOP IVT TYPES ASSOCIATED WITH DESKTOP WEB CLICK TRAFFIC

Global open programmatic desktop web click-related invalid traffic ("IVT") rates Q3 2024; as measured by Pixalate



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* "Other" is composed of various measured IVT types like Datacenter, Fast Clicker IVT, and Video Click Fraud.

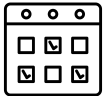
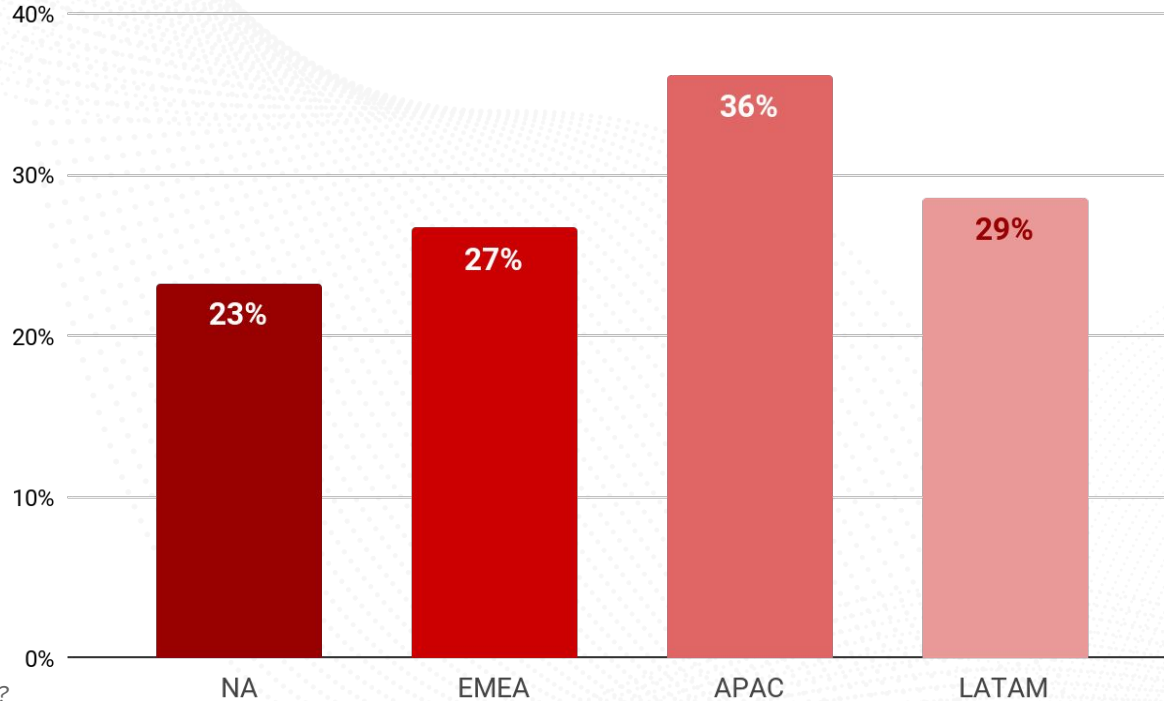


36%

36% of Desktop Web Clicks originating from LATAM region were found to be Invalid in Q3 2024, according to Pixalate's data.

MOST IMPACTED REGIONS BY DESKTOP WEB CLICK IVT

Global open programmatic desktop web click-related invalid traffic ("IVT") rates Q3 2024; as measured by Pixalate



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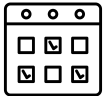
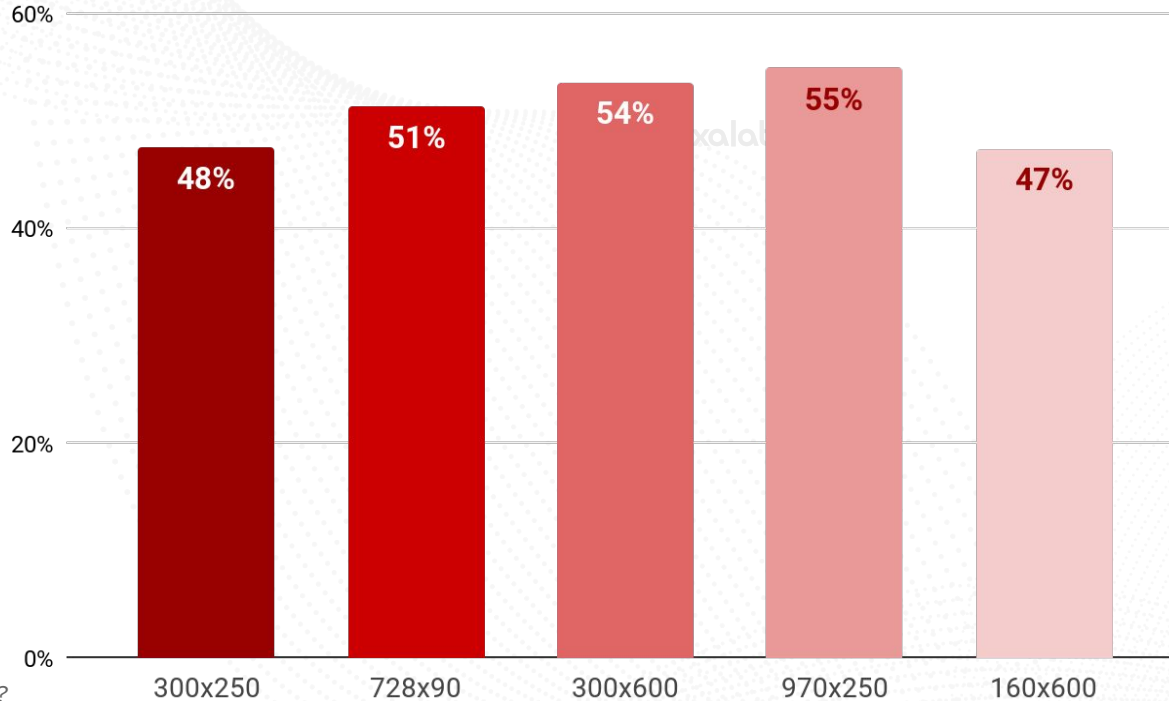


55%

55% of Desktop Web Clicks on the 970x250 ad size were found to be Invalid in Q3 2024, according to Pixalate's data.

CLICK IVT RATES ON POPULAR AD UNIT SIZES

Global open programmatic desktop web click-related invalid traffic ("IVT") rates Q3 2024; as measured by Pixalate



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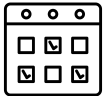
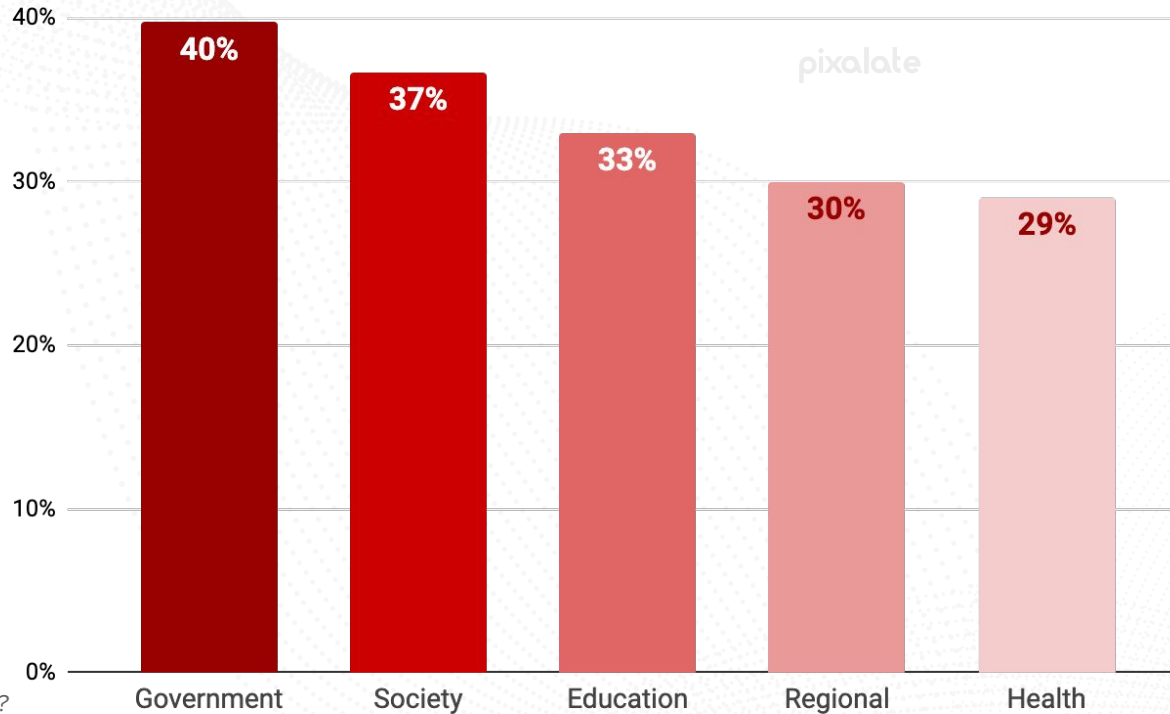
40%

40% of Clicks on Ads found on Desktop Web Domains
in the **Government** Category
were found to be Invalid in Q3 2024,
according to Pixalate's data.



TOP 5 (IAB) CATEGORIES MOST IMPACTED BY DESKTOP WEB CLICK IVT

Global open programmatic desktop web click-related invalid traffic ("IVT") rates Q3 2024; as measured by Pixalate



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APPENDIX: IVT TYPES

CLICK FARM: Impressions/Clicks originating from a purported user who has been flagged as being associated with click farm activity.

DISPLAY CLICK FRAUD: Clicks that are generated from the same browser or device at a statistically significant inflated rate.

VIDEO CLICK FRAUD: Video ad clicks that are generated from the same browser or device at a statistically significant inflated rate.

DATA CENTER: The User's IP has a match in Pixalate's known Datacenter list.

MASKED IP: The IP of a user does not match the IP and the associated ISP reported in the advertising transaction.

IDIO BOTS: Bots (or users) that change their User Agent string (spoofing), while keeping the same cookie.

FAST CLICKER: Activity originating from users that generate clicks less than one second apart from their respective impression

DUPLICATE CLICKS: High volumes of clicks with the same "unique" identifier.

HIGH CTR TRAFFIC: Traffic associated with domains or apps demonstrating high-risk CTR behavior.

COOKIE STUFFING: Activity from a cookie that has connected to the internet via a statistically significant inflated number of different IP Addresses.

For more information regarding Pixalate's reported Invalid Traffic Types, please visit our [knowledge base article](#).

METHODOLOGY & DISCLAIMER



METHODOLOGY

Report Context

For this report, Pixelate's data science and analyst team analyzed more than 4 billion open programmatic advertising transactions across more than 71 million websites, in the third quarter of 2024.

Invalid Traffic (IVT)

As used herein, and per the MRC, "Invalid Traffic' (IVT) is defined generally as traffic that does not meet certain ad serving quality or completeness criteria, or otherwise does not represent legitimate ad traffic that should be included in measurement counts. Among the reasons why ad traffic may be deemed invalid is it is a result of non-human traffic (spiders, bots, etc.), or activity designed to produce fraudulent traffic."

Estimated Ad Spend

Pixelate calculates estimated monthly programmatic ad spend through statistical models that incorporate programmatic monthly active users (MAU), the average session duration per user, the average CPM for the category of a given app, and ad density. It is expressed in USD.

Click Fraud

Since click-throughs often drive a market premium, they are a common target for fraud schemes such as bot traffic. However, determining IVT (including fraud) for click traffic is challenging because regular click traffic and IVT click traffic look similar in many ways. In addition, mapping clicks to impressions is challenging due to timing considerations. Pixelate is able to map clicks to impressions, and flag clicks for IVT using our Click Fraud Detection technology. Pixelate supports a number of click related IVT types that could be generated by suspicious users, ad creatives or publishers.

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ABOUT PIXALATE

Pixalate is a global platform for privacy compliance, ad fraud prevention, and data intelligence in the digital ad supply chain. Founded in 2012, Pixalate's platform is trusted by regulators, data researchers, advertisers, publishers, ad tech platforms, and financial analysts across the Connected TV (CTV), Desktop Web, and website ecosystems. Pixalate is MRC-accredited for the detection and filtration of Sophisticated Invalid Traffic (SIVT).



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