





tvOS

# **GLOBAL CONNECTED**TV (CTV) AD SUPPLY

**CHAIN TRENDS** 

Q2.2025

An analysis of the state of open programmatic CTV advertising, including trending categories and ad fraud risk.





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**COMPARE WITH → UNITED STATES** 

## **SCOPE:**

Pixalate's data science team analyzed programmatic advertising activity across over 115 thousand Connected TV ("CTV") apps and over 8 billion global open programmatic ad transactions in Q2 2025 to compile the research in this series. Pixalate's datasets consist predominantly of buy-side open auction programmatic traffic sources.

Pixalate is sharing this data not to impugn the standing or reputation of any person, entity or app, but instead, to render opinions and report trends pertaining to CTV programmatic advertising activity in the time period studied.

# **REPORT AUTHORS**











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# **Q2 2025: Global CTV Ad Supply Chain Trends**

**\$5.7 billion** in estimated global **open programmatic CTV ad spend** was recorded in Q2 2025, reflecting a 3% year-over-year decrease, *inclusive of invalid traffic (IVT)*.



**18%** of global open programmatic CTV traffic in Q2 2025 was identified as **ad fraud (IVT)**, a rate lower than in LATAM (30%), APAC (26%), and EMEA (19%).



Bundle IDs associated with **Fubo** saw the **highest volume of non-IVT open programmatic ad impressions** on Apple TV.



**46K** apps are **listed on the Roku Channel Store** globally, including 11K that have app-ads.txt files. This is more than Amazon Fire TV (39K, 8K), Apple TV (26K, 3K), and Samsung Smart TV (5K, <1K).



**72%** of global Amazon Fire TV ad traffic went to apps in the 'Movies & TV' category, while 15% went to 'Sports' apps and 10% to 'News' apps.





# \$5.78

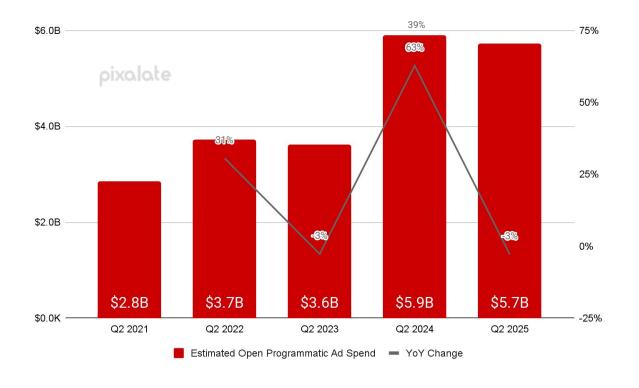
in estimated global **open programmatic CTV ad spend** was recorded in Q2 2025, a 3% YoY decrease, according to Pixalate.



# GLOBAL: Q2 2025 Estimated Open Programmatic CTV Ad Spend



Inclusive of Invalid Traffic (IVT); as estimated by Pixalate.





# 18%

of global open programmatic CTV traffic in Q2 2025 was identified as ad fraud (IVT), according to Pixalate.

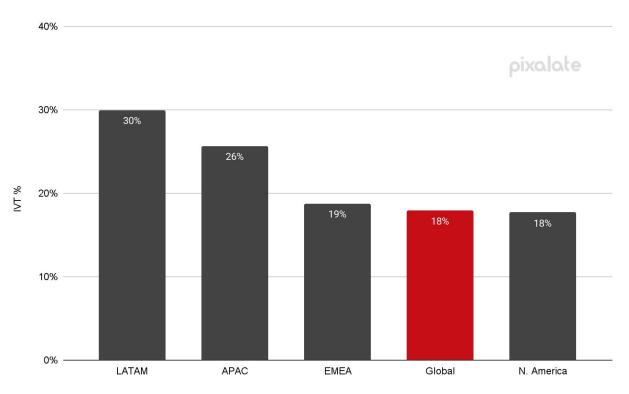


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# GLOBAL: CTV Ad Fraud (IVT) Remains Steady at 18% in Q2 2025



Invalid traffic ("IVT" - inclusive of ad fraud) per quarter in open programmatic CTV; global; as measured by Pixalate.

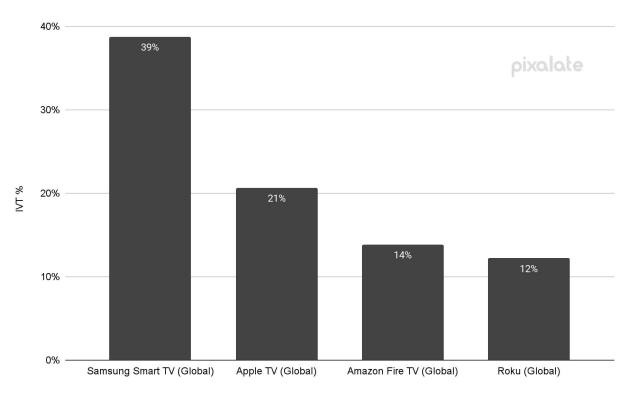


**COMPARE** → <u>United States</u>, <u>United Kingdom</u>, <u>Canada</u>, <u>Mexico</u>

# **GLOBAL: Roku Apps Have the Lowest Ad Fraud (IVT) Rates**



Invalid traffic ("IVT" - inclusive of ad fraud) by device type in open programmatic CTV; global; Q2 2025; as measured by Pixalate



**COMPARE** → United States, United Kingdom, Canada, Mexico



# Fubo

Bundle IDs associated with fuboTV Inc. saw the highest volume of non-IVT open programmatic ad impressions on Apple TV, as assessed by Pixalate.



## **GLOBAL: Top CTV Bundle IDs by Platform**

Jun. 2025; based on volume of non-IVT open programmatic ad impressions by platform; as estimated by Pixalate.







Hulu

by Hulu LLC

**Bundle ID:** com.hulu.plus.roku **Top Seller:** Magnite



The Roku Channel by

Roku

**Bundle ID:** 151908 **Top Seller:** PubMatic



Tubi

by Tubi, Inc

**Bundle ID:** 41468 **Top Seller:** Magnite



Fubo

by fubo

**Bundle ID:** 43465 **Top Seller:** PubMatic

**SEE MORE** → <u>Latest Rankings</u>



fulco

Fubo

by fuboTV Inc.

**Bundle ID:** 905401434 **Top Seller:** Nexxen



Peacock TV

by Peacock TV LLC

Bundle ID: 1508186374
Top Seller: Screencore



MLB

by MLB

Bundle ID: 493619333 Top Seller: Sonobi



Plex

by Plex Inc.

**Bundle ID:** 383457673 **Top Seller:** Nexxen

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**Pluto TV** 

by Pluto TV

**Bundle ID:** b00kdsgipk **Top Seller:** Sovrn



Fubo

by fubo TV

Bundle ID: b019dchdzk
Top Seller: Nexxen



Lifetime

by A+E Networks

**SEE MORE** → Latest Rankings

**Bundle ID:** b00e5nh6yg **Top Seller:** PubMatic



Plex

by Plex, Inc.

Bundle ID: b004y1wcde
Top Seller: Nexxen



SAMSUNG TV PLUS

by Samsung Electronics Co.,

SMART TV V

Ltd.

**Bundle ID:** g15147002586

**Top Seller:** Magnite



ESPN

by Disney Electronic Content,

**Bundle ID:** g17243010190

Top Seller: TVIQ



Fubo

by fubo

**Bundle ID:** g19068012619 **Top Seller:** PubMatic



Plex

by Plex, Inc.

**Bundle ID:** g00002687241 **Top Seller:** PubMatic

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# 37%

Roku had the highest **CTV device market share** in North America in Q2 2025, according to Pixalate.

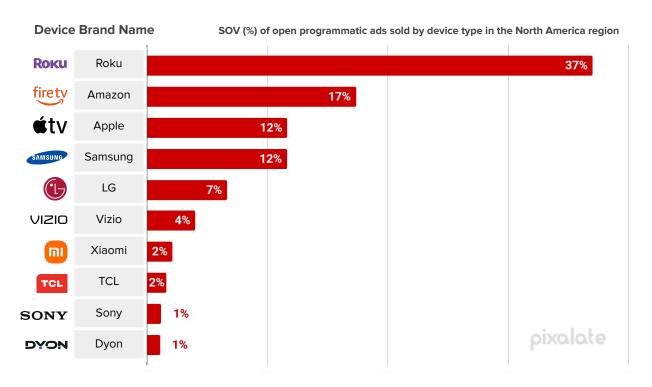


# N Ba

# NORTH AMERICA: Top 10 CTV Devices by Share of Voice (%)

Based on open programmatic advertising traffic in North America; Q2 2025; as measured by Pixalate.





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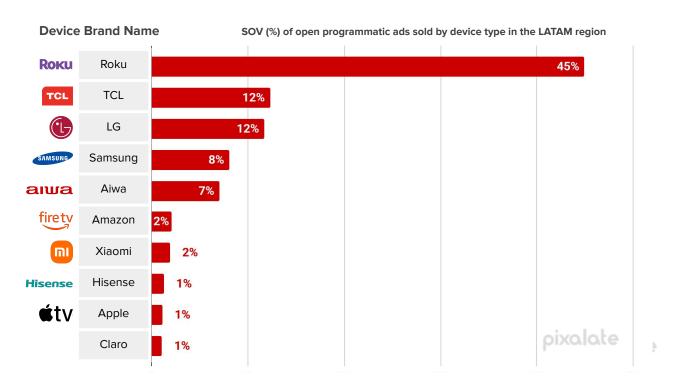


# L

# LATAM: Top 10 CTV Devices by Share of Voice (%)

Based on open programmatic advertising traffic in LATAM; Q2 2025; as measured by Pixalate.





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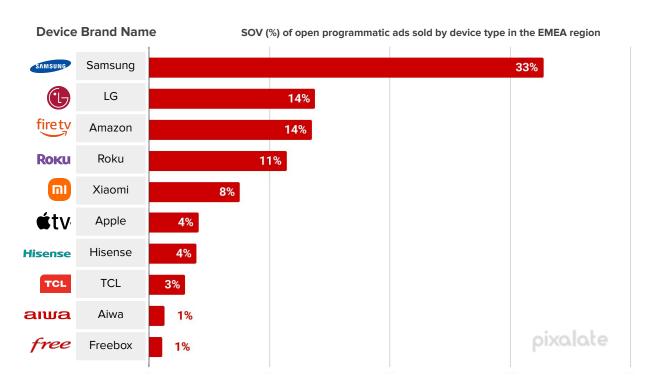


# EME Based on

# **EMEA:** Top 10 CTV Devices by Share of Voice (%)

Based on open programmatic advertising traffic in EMEA; Q2 2025; as measured by Pixalate.





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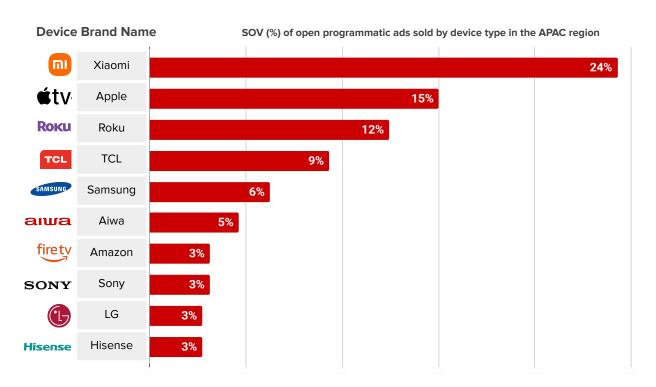


# A

# **APAC: Top 10 CTV Devices by Share of Voice (%)**

Based on open programmatic advertising traffic in APAC; Q2 2025; as measured by Pixalate.





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# 466

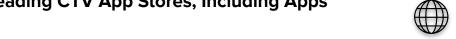
apps are **listed on the Roku Channel Store** globally, including 11K that have app-ads.txt files, according to Pixalate.



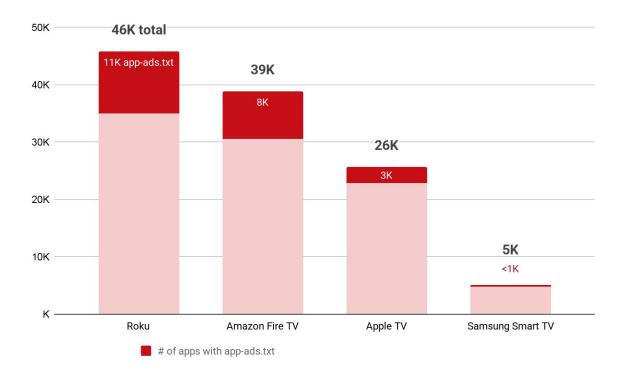
# • D D

# **GLOBAL: Count of Apps in Leading CTV App Stores, Including Apps** with app-ads.txt

Apr. 2025; as estimated by Pixalate.







# 19%

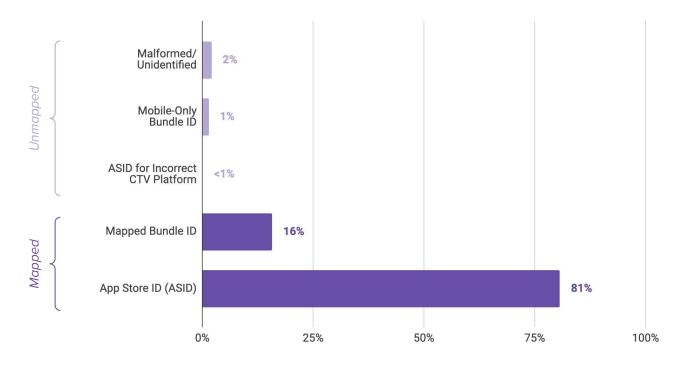
of global Roku open programmatic advertising traffic did not use official App Store IDs in Q2 2025, according to Pixalate.



# Roku: 19% of Ad Traffic Did Not Use Official App Store IDs

Roku (

Roku global open programmatic advertising impressions, Jun. 2025, as measured by Pixalate.





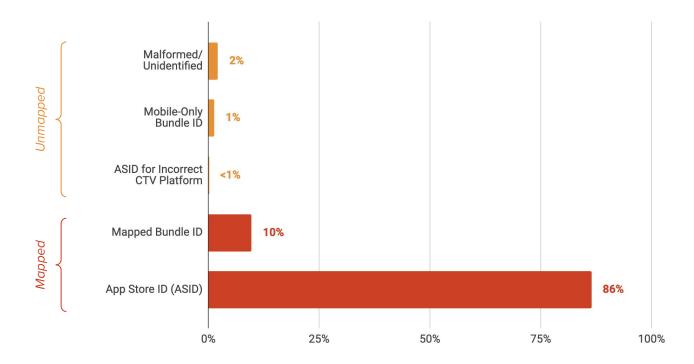


# Amazon Fire TV: 13% of Ad Traffic Did Not Use Official App Store IDs





Amazon Fire TV global open programmatic advertising impressions, Jun. 2025, as measured by Pixalate.



SEE MORE → Amazon Fire TV Malformed and Fraudulent CTV Bundle ID Risks

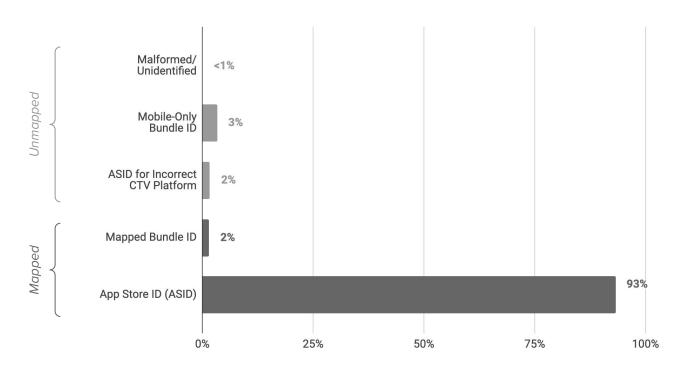


# Apple TV: 7% of Ad Traffic Did Not Use Official App Store IDs





Apple TV global open programmatic advertising impressions, Jun. 2025, as measured by Pixalate.



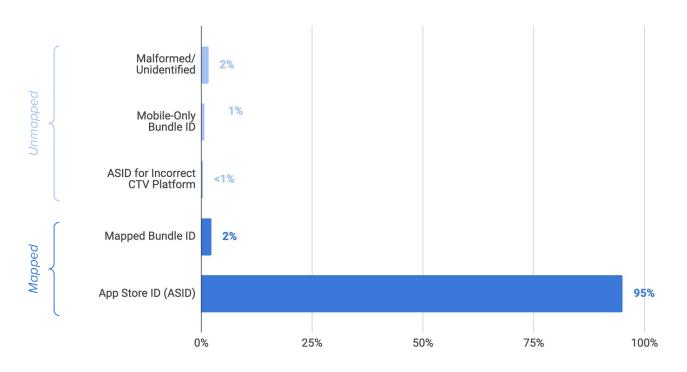
SEE MORE → Apple TV Malformed and Fraudulent CTV Bundle ID Risks



# Samsung Smart TV: 5% of Ad Traffic Did Not Use Official App Store IDs



Samsung Smart TV global open programmatic advertising impressions, Jun. 2025, as measured by Pixalate.



SEE MORE → Samsung Smart TV Malformed and Fraudulent CTV Bundle ID Risks



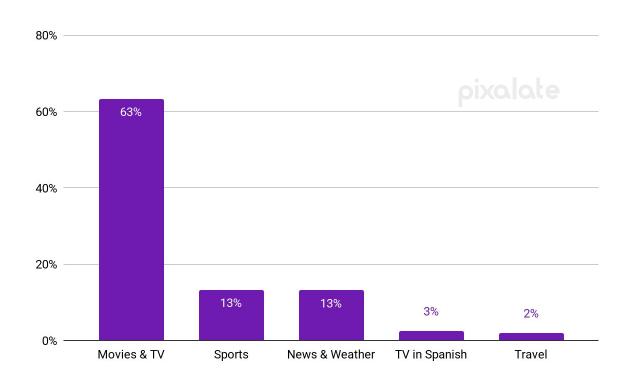
# 72%

of global open programmatic Amazon Fire TV ad traffic goes to apps in the 'Movies & TV' category, according to Pixalate.



# **GLOBAL: Top 5 Roku App Categories (Ad SOV %)**



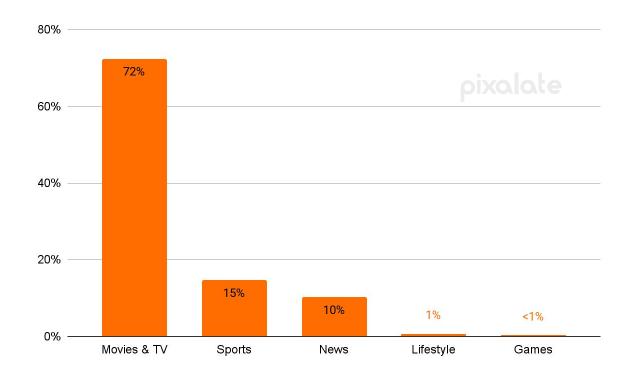




# **GLOBAL: Top 5 Amazon Fire TV App Categories (Ad SOV %)**

firety



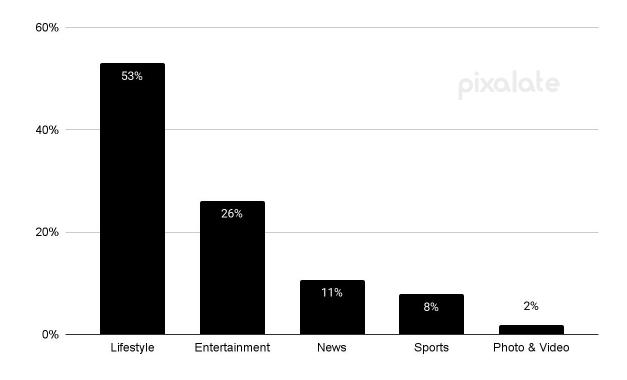




# **GLOBAL: Top 5 Apple TV App Categories (Ad SOV %)**

Étv

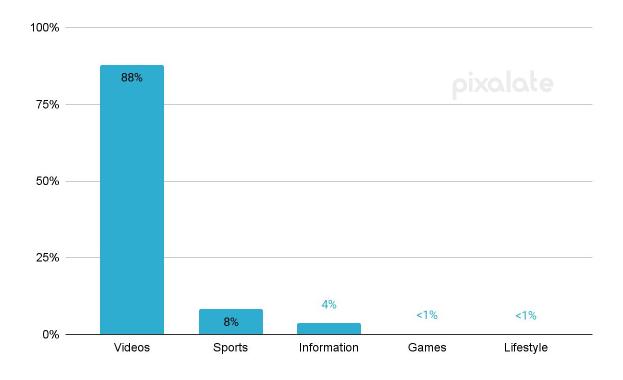






# **GLOBAL: Top 5 Samsung Smart TV App Categories** (Ad SOV %)

Samsung SMARTTV





# **ADDITIONAL INSIGHTS**



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## MFA Benchmarks - Web, Mobile, and CTV

Analyzing global open programmatic advertising traffic on MFA web domains, mobile apps, and Connected TV (CTV) apps.

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## Invalid Traffic (IVT) & Ad Fraud Benchmarks

Reviewing IVT rates across websites, mobile apps, and Connected TV (CTV) apps, offering insights into the quality and integrity of programmatic ad impressions worldwide.

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## **Click Fraud Benchmarks**

Exploring click-related invalid traffic (IVT), with a focus on open programmatic ad traffic across desktop web, mobile web, and mobile app.

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## **Programmatic Ad Seller Misrepresentation**

Using Supply Chain Object (SCO) data to examine unauthorized sellers in the open programmatic advertising supply chain.

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## Malformed & Fraudulent CTV Bundle IDs

Analyzing a common CTV advertising challenge: the use of Bundle IDs to identify apps and the difficulties associated with reliably mapping these IDs to actual applications.

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# METHODOLOGY, GLOSSARY, & DISCLAIMER



# **METHODOLOGY**

### General

Pixalate's data science team analyzed programmatic advertising activity across over 115 thousand Connected TV ("CTV") apps and over 8 billion global open programmatic ad transactions in Q2 2025 to compile the research in this series. Pixalate's datasets — which are used exclusively to derive these insights — consist predominantly of buy-side open auction programmatic traffic sources.

## **Estimated Ad Spend**

Pixalate calculates estimated programmatic ad spend through proprietary 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.

### Global Ad Spend Estimates - CTV Apps

Pixalate global open programmatic CTV ad spend figures (see pages 5 and 6) were calculated by integrating externally sourced data with Pixalate's internally tracked metrics. In the context of this report, third-party data is used to estimate the annual dollar value in 2025. Pixalate's derived quarterly share is then applied to determine the dollar value for Q2 2025 (\$5.7B), and proprietary estimates are utilized to determine QoQ time series and regional trends in 2025.

- Total estimated global digital ad spend (2023): \$627 billion (<u>Statista</u>)
- CTV's estimated share (2023): 9.5% (eMarketer)
- Upfronts' estimated share (2023): 34% (<u>eMarketer</u>)
- Open programmatic estimated share (2023): 50% (<u>Simpli.fi</u>)
- Estimated share of spend by quarter (Q4 2023, Pixalate): 32.1%
- Yearly and quarterly changes of open programmatic advertising traffic, as measured by Pixalate, are used as a proxy for estimates of changes in ad spend. This is inclusive of invalid traffic.



# **GLOSSARY**

### Ad market share / share of voice (SOV)

This is based on the proportion of sold programmatic ads that go to a certain device, operating system, category, etc. For example, if Device X received 20 of 100 total ads one quarter, its market share would be 20% SOV. If Device X then received 36 of 120 total ads the next quarter, its market share would have increased by 50% (from 20% SOV to 30% SOV). This is not inclusive of invalid traffic.

### **SSP Market Share**

Pixalate defines "SSP Market Share" as the percentage of impressions associated with a given SSP out of all impressions within a country for a given platform. For example, if 100 total impressions were measured in Germany, and 10 of them were sold by Google AdExchange, then Google AdExchange would have a 10% market share. Pixalate's SCO mapping technology identifies instances where multiple sellers should receive market share credit for the same impression (i.e., reselling). This can result in a country's total SSP market share exceeding 100%.

### Connected TV/OTT

Also referred to as "CTV" in this report. Pixalate defines CTV based on the device being used by the end-user. Examples of CTV devices include Apple TV, Roku, Amazon Fire TV, Smart TVs, and gaming platforms.

### **Invalid Traffic**

Per the <u>Media Rating Council (MRC)</u>, "'Invalid Traffic' 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." Certain IVT is also sometimes referred to as "ad fraud." Per the <u>MRC</u>, "'Fraud' is not intended to represent fraud as defined in various laws, statutes and ordinances or as conventionally used in U.S. Court or other legal proceedings, but rather a custom definition strictly for advertising measurement purposes.



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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), mobile app, and website ecosystems. Pixalate is MRC-accredited for the detection and filtration of Sophisticated Invalid Traffic (SIVT).



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