

**Q3**  
2019

**QUARTERLY  
MOBILE INDEX**



**PubMatic's Quarterly Mobile Index (QMI) report was created to provide both publishers and advertisers with key insights into the mobile advertising industry.**

#### **ABOUT PUBMATIC'S QUARTERLY MOBILE INDEX**

By analyzing over 13 trillion global advertiser bids flowing each month through PubMatic's platform, we can observe real-time developments in the mobile space that may allude to broader digital industry trends. We can then compare this information to other published data to further understand changes in the mobile landscape. At PubMatic, we are committed to providing best-in-class mobile tools and services, and believe that information sharing is crucial in aligning the digital industry towards best practices and, ultimately, growth in mobile advertising.

Note that directional data might not be comparable with prior reports.

# THE FOLLOWING KEY TRENDS EMERGED IN Q3 2019:

KEY TREND

01

The next wave of mobile advertising is cropping up

KEY TREND

02

Video and mobile are intertwined, driving industry expansion

KEY TREND

03

Mobile header bidding has evolved to standard practice

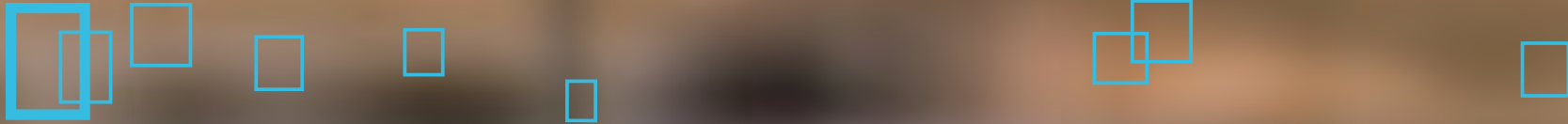


# WHAT DOES THIS MEAN FOR PUBLISHERS AND ADVERTISERS?

## 1

### **Expect varied KPIs and benchmarks between different stages of programmatic penetration.**

Distinct stages of programmatic development are forming between developed and emerging markets. While there is certain expansion among all regions, local mobile device behaviors dictate the way automated buying evolves. Emerging markets who have leapfrogged desktop internet connectivity are jumping into mobile programmatic advertising headfirst. This urgency for adoption drives mobile eCPMs into a seesaw and creates a surge in demand. Mobile-first economies can expect faster mobile programmatic adoption than developed markets.



## 2

### **Adopt a symbiotic technology strategy with mobile and video.**

Advertisers worldwide are expected to spend \$39 billion on mobile video advertising in 2020 and will more than double to \$83 billion by 2024.<sup>1</sup> Video ads create incremental value to publisher revenues, and mobile is the preferred platform for consumption. Ensuring a strong mobile video monetization partner requires a holistic look at capabilities across reporting, quality tools, unique demand, and having the integration flexibility that fits in the short and long-term goals.

## 3

### **App publishers who invest in header bidding will likely tap into rapid revenue growth.**

Header bidding technology is making progress into apps. After a slow start, in-app header bidding growth is now on par with mobile web. There were several barriers that prevented effective implementation in the app environment: difficulties with server-to-server (S2S) setups and software development kit (SDK) integrations, as well as a lack of header bidding technology understanding.<sup>2</sup> Header bidding benefits are now being better realized in-app; there is much room for in-app inventory growth well into 2020.

<sup>1</sup> "Ad Buyer Survey VII: Advertisers More Bullish on 2019 US Ad Spend, Led by Digital Video Ascendancy", Cowen and Company, January 2019

<sup>2</sup> "Five charts: The State of Header Bidding," eMarketer, October 2019



KEY TREND

01

## THE NEXT WAVE OF MOBILE ADVERTISING IS CROPPING UP

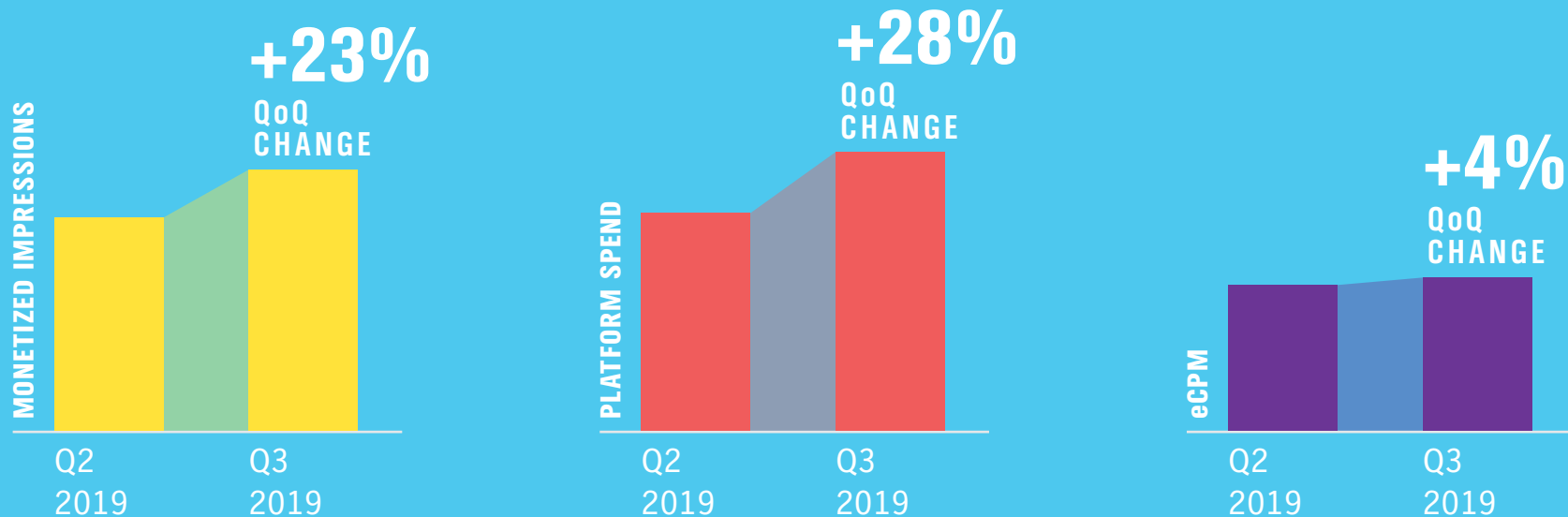
For years, the mobile ad monetization rate fell below the amount of time consumers spent on mobile devices, driving rapid inventory growth and spending.<sup>3</sup> With the critical mass of incremental mobile users behind us, further ad monetization growth will come from more time spent or new formats. Mobile is the driving force behind both notions and it is shaping how programmatic buying evolves. Programmatic practices are refining in developed markets, while its reach is growing rapidly in emerging markets.

<sup>3</sup> "The Mobile-ad Gap Is Shrinking," The Motley Fool, June 2017

# MOBILE CONTINUES TO SEE DOUBLE-DIGIT GROWTH DESPITE ITS MARKET DOMINANCE

Worldwide mobile ads account for three quarters of total digital ad spending in 2019.<sup>4</sup> Despite its high market penetration, mobile ad platform spending continued to grow aggressively in Q3, rising 28% over last quarter, while desktop ad platform spending declined slightly over the same period. Much of this increase is due to increased mobile ad volume—as there was little change in eCPMs—implying a continued shift from desktop to mobile platforms.

## MOBILE VOLUME TRENDS

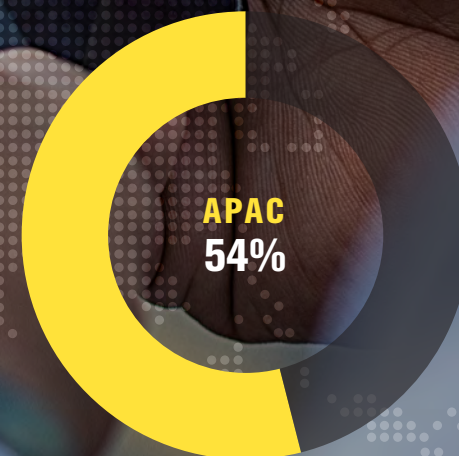
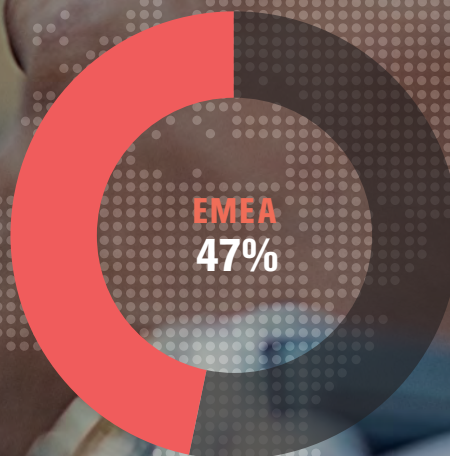
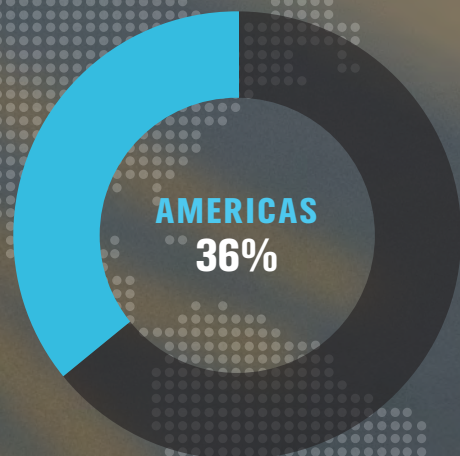


<sup>4</sup> "Mobile Ad Spending, Worldwide, 2019-2023," eMarketer, October 2019

# RISING MOBILE MEDIA COSTS PUSH MOBILE GROWTH IN APAC

The number of mobile users is still a moving target in emerging markets like APAC, leading to spikes in eCPMs.<sup>5</sup> Mobile platform spending in APAC is outpacing its impression growth, growing 26% and 16% over last quarter, respectively.

MOBILE SHARE OF PLATFORM SPEND,  
BY REGION, Q3 2019



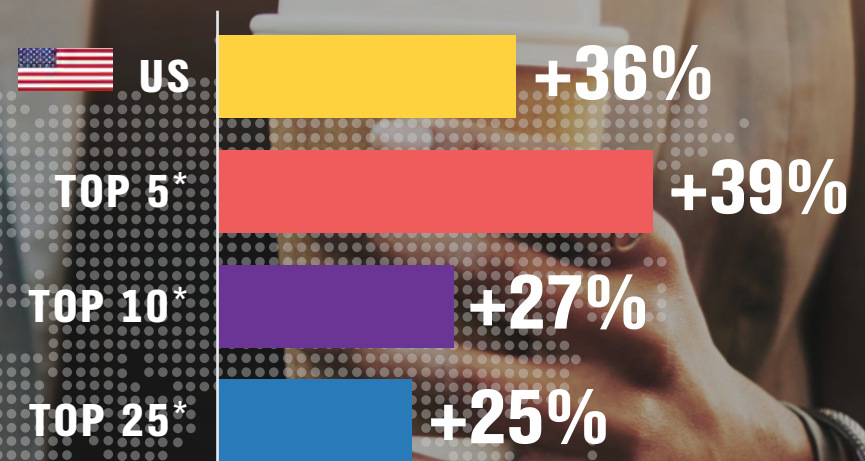
<sup>5</sup> "Global in-app advertising trends," Smaato, H1 2019



# TOP GLOBAL COUNTRIES CONTINUE TO DRIVE MOBILE AD BUYING

As the largest spender in mobile advertising, the US is the bellwether for how programmatic is evolving overall. US mobile ad volume grew 36% over last quarter, and the following top five countries grew even faster—increasing at a combined 39%. Since the top global markets—such as UK, Canada, Germany, Japan, etc.—are still expanding rapidly, the room for growth looms large with the rest of the world when their programmatic potential becomes unlocked.

MONETIZED MOBILE IMPRESSION VOLUME, BY TOP COUNTRIES, Q2 2019 VS. Q3 2019



\*excluding US

A photograph of a man with dark hair, smiling and looking down at a smartphone he is holding in his right hand. He is wearing a dark, textured coat. The background is a blurred city street with buildings.

KEY TREND

# 02

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## VIDEO AND MOBILE ARE INTERTWINED, DRIVING INDUSTRY EXPANSION

Digital video growth played a key role in giving 2019 the strongest opening six months in digital's history in the US.<sup>6</sup> Mobile video continues to be the fastest growing format across all environments, with inventory increasing 31% in Q3 over last quarter. We can expect continued expansion over the next 18 months as ad buyers plan additional digital video ad spending in 2020.<sup>7</sup>

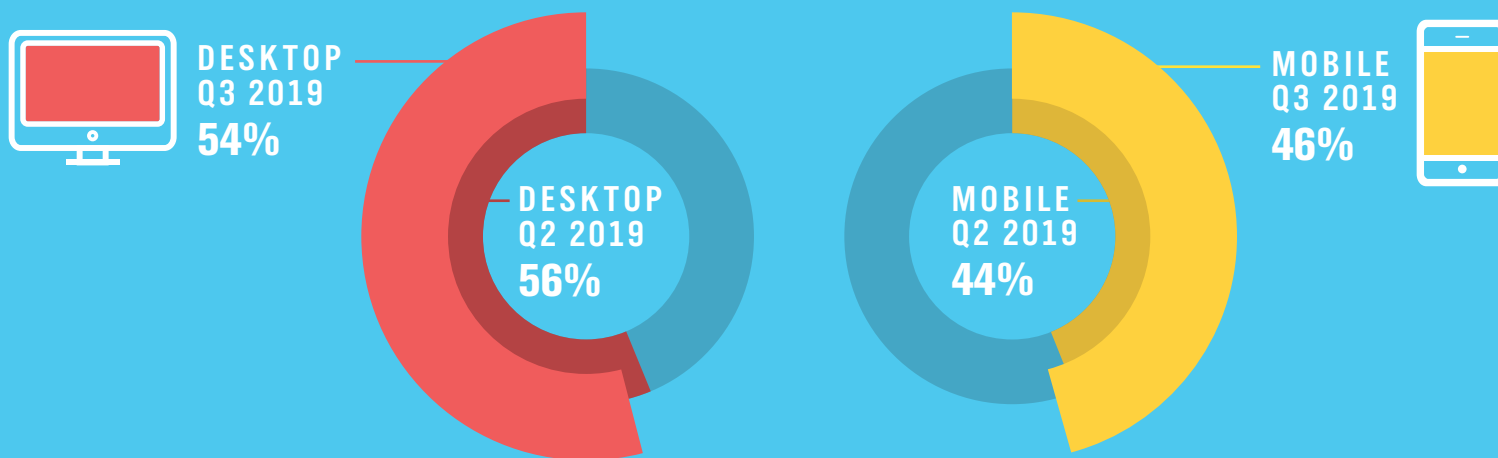
<sup>6</sup> "Internet advertising revenue report," eMarketer, October 2019

<sup>7</sup> "Ad Buyer Survey VII: Advertisers More Bullish on 2019 US Ad Spend, Led by Digital Video Ascendancy," Cowen and Company, January 2019

# MOBILE VIDEO CONTINUES TO OUTPACE DESKTOP VIDEO GROWTH

Overall mobile ad volume increased 23% over last quarter, and mobile video ad volume rose 31% over the same period. The mobile share of video ad volume is growing moderately but consistently. Therefore, we can expect mobile to overtake desktop by early 2020.

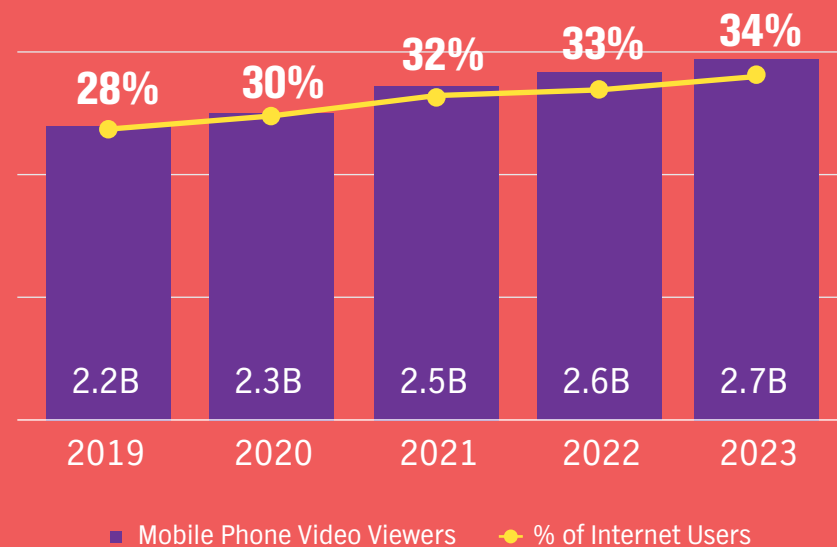
## MONETIZED VIDEO IMPRESSION SHARE, BY DEVICE



# NEW MOBILE VIDEO USERS ARE THE GROWTH ENGINE TO PROGRAMMATIC EXPANSION

More than 90% of all mobile video ads were transacted programmatically in 2018.<sup>8</sup> While programmatic use is already saturated, the rise in video viewership continues to spur new growth.<sup>9</sup> More than half of all smartphone users view videos on their phones, and this is expected to reach two-thirds of users by 2023.<sup>10</sup>

WORLDWIDE MOBILE PHONE VIDEO VIEWERS FORECAST<sup>10</sup>



<sup>8</sup> "Mobile Video Advertising 2019," eMarketer, January 2019

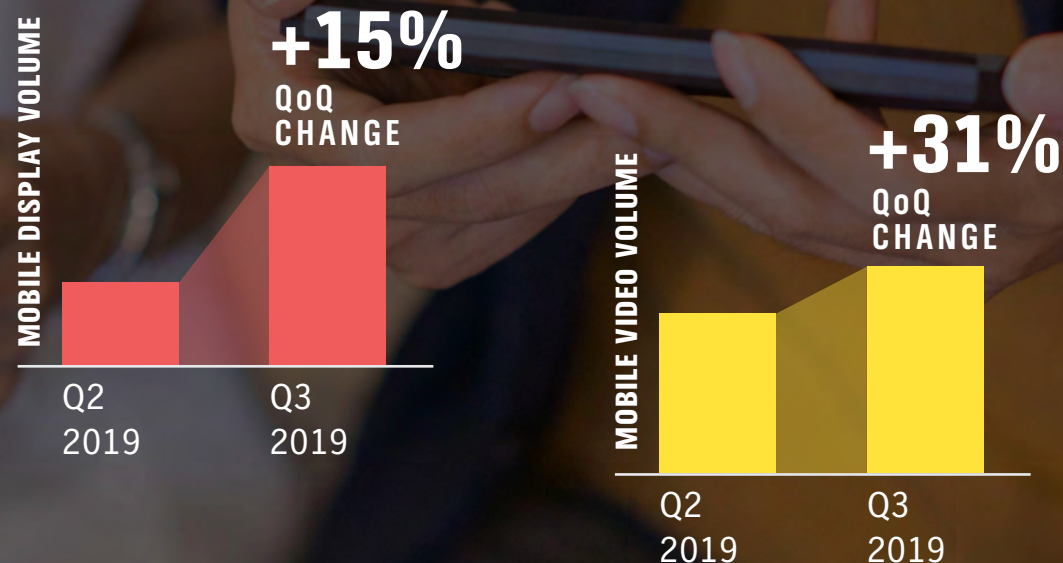
<sup>9</sup> "Global Digital Video 2019," eMarketer, September 2019

<sup>10</sup> "Smartphone Video Viewers," eMarketer, August 2019

# AD EFFECTIVENESS SPURS FURTHER VIDEO DEMAND

Videos are deemed the most effective ad format; average click-through-rates (CTR) for mobile video ads are twice the rate of native CTRs and 10 times that of banner ads on average.<sup>11</sup> In Q3, mobile video ad volume grew twice the rate of display ads over last quarter, rising 31% and 15%, respectively.

MOBILE VOLUME TRENDS,  
BY FORMAT



<sup>11</sup> "Mobile Programmatic Advertising Trends 2019," InMobi, 2019



KEY TREND

03

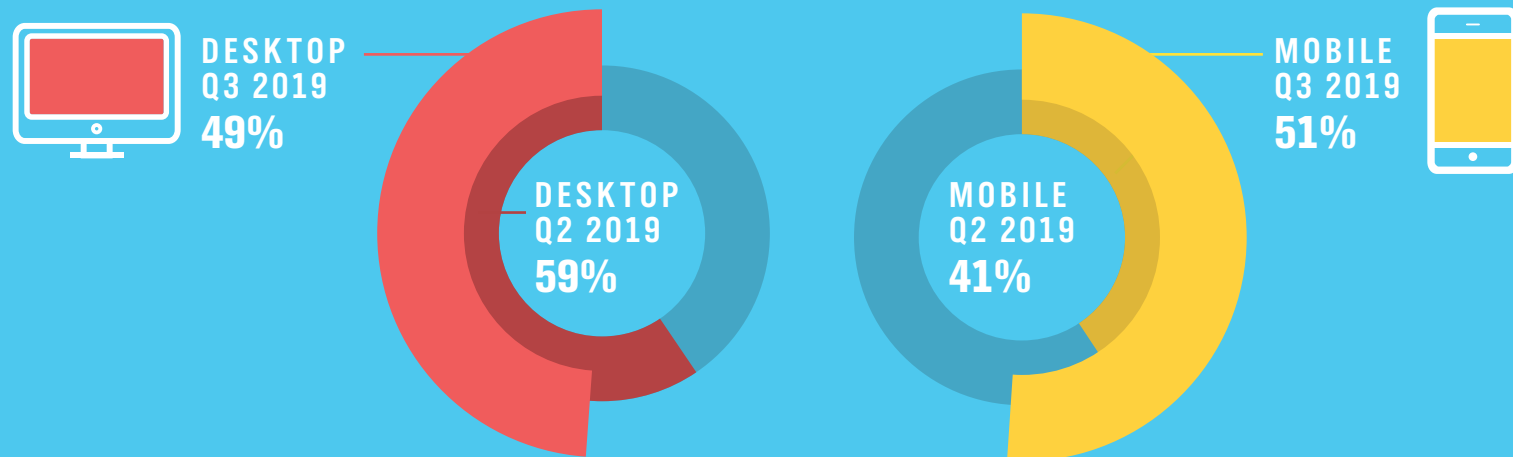
## MOBILE HEADER BIDDING HAS EVOLVED TO STANDARD PRACTICE

Header bidding has reshaped programmatic advertising. It rose to popularity with desktop and mobile web ads but was met with resistance in-app. Further, it made a minimal appearance outside of the developed markets until 2019. Given strides to eliminate fraud in-app, and the high pace of mobile development in APAC, header bidding is finding new life to its expansion through mobile devices.

# OVER HALF OF HEADER BIDDING IMPRESSIONS ARE MONETIZED VIA MOBILE DEVICES

Four years since the introduction of header bidding, 80% of the top 1,000 publishers sites now use the technology to fill their digital ad inventory.<sup>12</sup> Header bidding is spurring further mobile ad monetization, which accounted for more than half of header bidding transactions in Q3 2019, a dramatic rise from 41% last quarter.

## HEADER BIDDING VOLUME SHARE, BY DEVICE

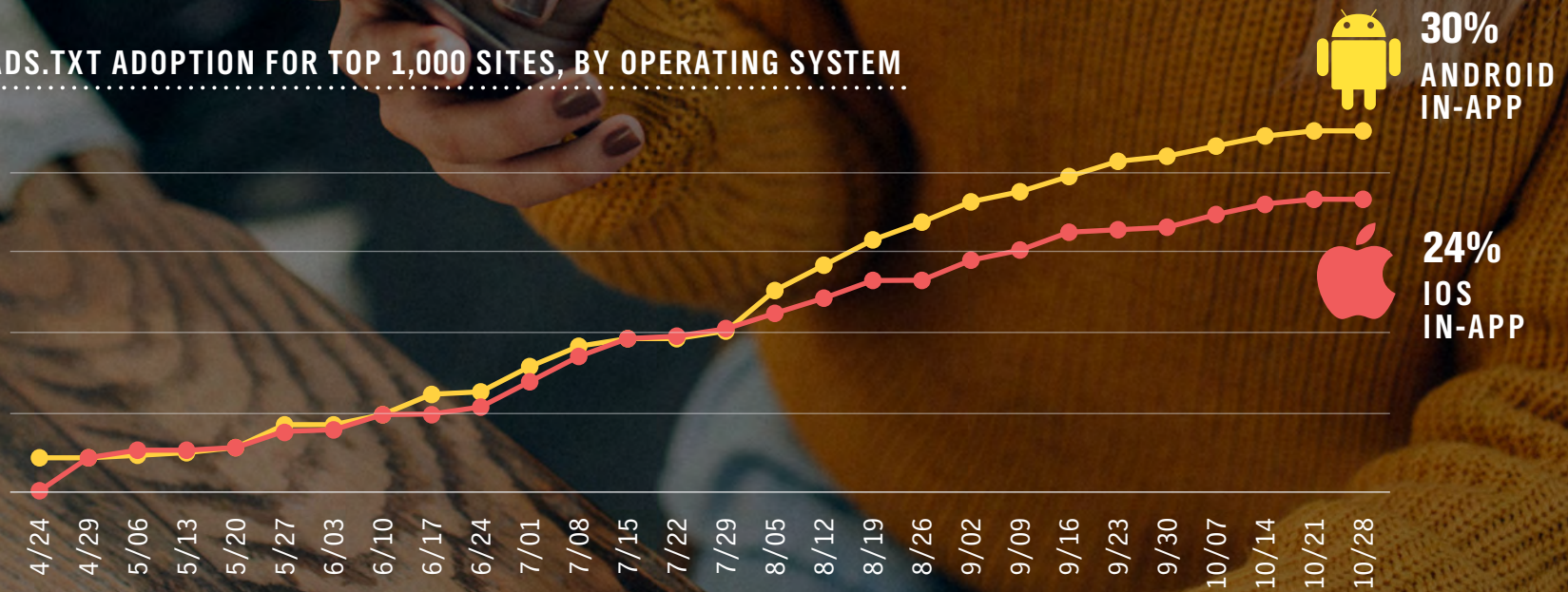


<sup>12</sup> "Ad Tech Insights: Header Bidding Industry Index," Adzerk, August 2019

# HEADER BIDDING EXPANDS INTO APPS

The growth rate for in-app header bidding platform spending mirrors mobile web, growing 20% and 22% QoQ, respectively. Desktop spending, however, fell 17%—reflective of the continual mobile cannibalization of desktop display.<sup>13</sup> Growth across Android and iOS is expanding at similar rates. Thanks to industry fraud initiatives like app-ads.txt, Android is making a remarkable recovery in keeping costly scams at bay after a string of fraudulent activity.<sup>14</sup> As of October 2019, 27% of the top 1,000 sites adopted the app-ads.txt file.<sup>15</sup>

APP-ADS.TXT ADOPTION FOR TOP 1,000 SITES, BY OPERATING SYSTEM



<sup>13</sup> "Ad Buyer Survey VII: Advertisers More Bullish on 2019 US Ad Spend, Led by Digital Video Ascendancy", Cowen and Company, January 2019

<sup>14</sup> "New Android Fraud Warning: 1.5M Users Forced To Click Ads," Thomas Brewster, Forbes, August 2019

<sup>15</sup> PubMatic App-ads.txt dashboard



# MOBILE HEADER BIDDING BEGINS TO TAKE HOLD IN APAC

2019 is shaping up to be a year of mobile advertising for APAC. Mobile platform spending rose strongly in Q3, growing 26% quarter-over-quarter. Header bidding is largely driving much of this increase; mobile header bidding spending rose 71%, and volume rose 35% over last quarter.

## AMERICAS

PLATFORM SPEND

**+17%**

MONETIZED IMPRESSIONS

**+18%**

## EMEA

PLATFORM SPEND

**+16%**

MONETIZED IMPRESSIONS

**+18%**

## APAC

PLATFORM SPEND

**+71%**

MONETIZED IMPRESSIONS

**+35%**



## **QMI Methodology**

PubMatic's yield and data analytics team analyzes over 13 trillion advertiser bids on a monthly basis, utilizing the company's best-in-class analytics capabilities. The Q3 2019 QMI incorporates impressions, revenue and eCPM data from these reports to provide a high-level analysis of key trends within the mobile advertising industry. Analysis is based on PubMatic-sourced data except as noted. Percentages in some figures may not sum to 100% due to rounding. "Monetized impressions" or "paid impressions" are defined as impressions that were sold through the PubMatic platform, and "eCPM" is defined as the cost per one thousand impressions.

**Disclaimer:** This QMI may include inaccuracies or typographical errors, and is based on operational data that has not been audited or reviewed by a third party. It may contain forward-looking statements about future results and other events that have not yet occurred. Actual results may differ materially from PubMatic's expressed expectations due to future risks and uncertainties, and past performance or trends are no guarantee of future results. PubMatic does not intend to update the information contained in this QMI if any information or statement contained herein later turns out to be inaccurate.



## About PubMatic

PubMatic is a digital advertising technology company for premium content creators. The PubMatic platform empowers independent app developers and publishers to control and maximize their digital advertising businesses. PubMatic's publisher-centric approach enables advertisers to maximize ROI by reaching and engaging their target audiences in brand-safe, premium environments across ad formats and devices. Since 2006, PubMatic has created

an efficient, global infrastructure and remains at the forefront of programmatic innovation. Headquartered in Redwood City, California, PubMatic operates 13 offices and six data centers worldwide.

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