TubeMogul

Q3 2015 QUARTERLY UPDATE

UNITED KINGDOM

▤ LETTER FROM THE RESEARCHER

This quarter we continue to see growth in inventory across multiple formats. From desktop to mobile to connected TV, the programmatic world continues to expand. To help marketers and agencies better understand that world, we've made some additions and changes to the metrics we report on.

The biggest change you'll see is in viewability. Rather than focusing on rate, we've shifted to a more valuable metric, viewable CPM (or "VCPM"). As a reminder, VCPM is simply the cost per thousand viewable impressions. This metric is more useful to marketers as it reflects what's really being paid for. If a metaphor helps, imagine this: if you are in the market for oranges, you probably don't care how many apples ship with those oranges. You only care what you paid for the oranges. That's VCPM.

This quarter's data tells an interesting story. Run-of-exchange inventory produces the most affordable VCPMs across desktop video sources, due to high private inventory prices. Mobile and connected TV present opportunities for consistent value, with their notably efficient VCPMs.

Another way to think about value is in terms of cost-per-minute viewed. Looking across quarters, we can see slight changes that outline each ad format's evolution. Pre-roll and mobile pre-roll experienced significant gains in efficiency, prompting cost-per-minute viewed to further converge across formats.

Regardless of channel or customer, inventory continues to grow. Pre-roll and mobile pre-roll inventory increased quarter over quarter, as did impressions placed in private feeds. Private marketplace impressions increased more than four-fold since the same time last year, showing high adoption and underlining the importance of private inventory in programmatic.
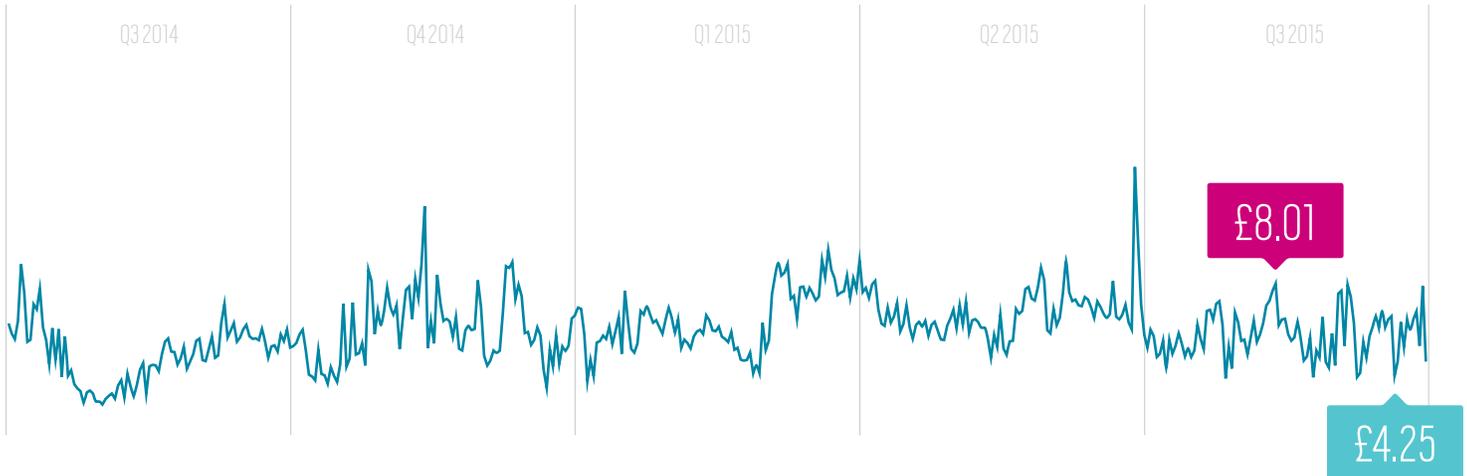
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PRE-ROLL INVENTORY
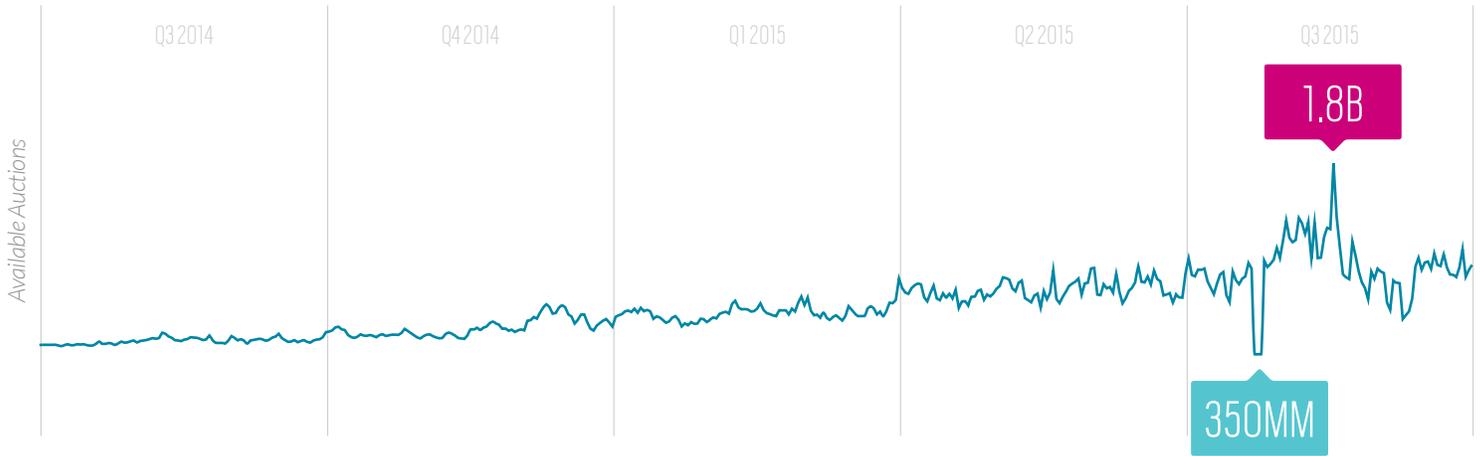
	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015
HIGH	215,269,478	497,038,808	574,539,259	873,525,523	1,897,757,062
AVG	131,783,313	262,128,626	408,561,575	637,601,937	881,521,957
LOW	81,750,871	153,990,272	276,915,530	460,884,295	350,523,079

**Numbers denote daily auctions

PRE-ROLL CPMS

	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015
HIGH	£8.78	£11.08	£9.34	£12.63	£8.01
AVG	£5.27	£6.17	£6.55	£6.90	£6.00
LOW	£3.22	£3.88	£4.14	£5.07	£4.25

**Numbers denote daily average CPMs

DIRECT RESERVATION IMPRESSIONS
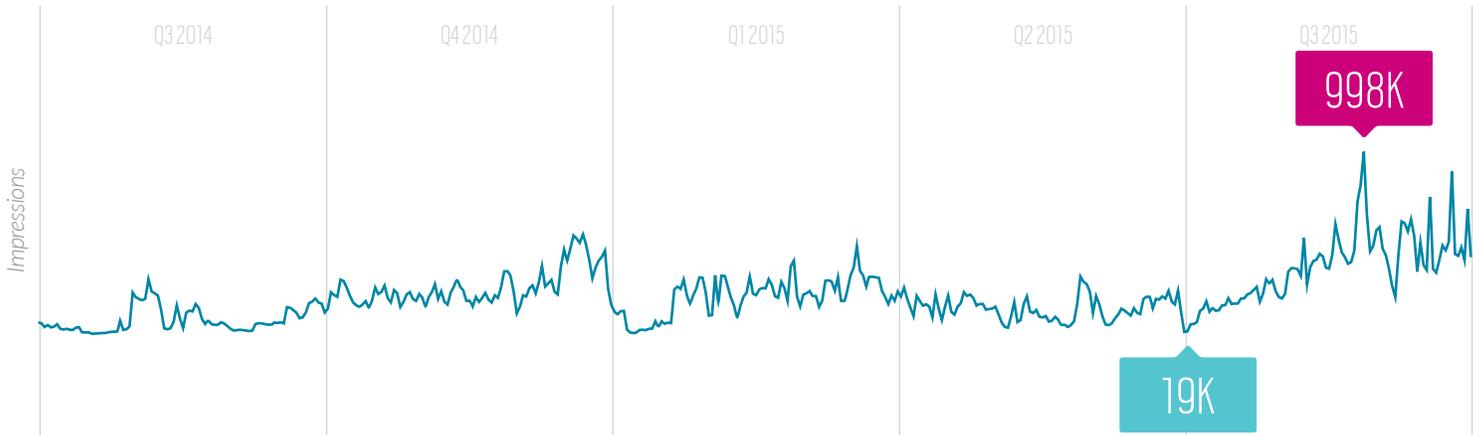
	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015
HIGH	305,748	549,107	484,802	320,703	998,145
AVG	84,401	260,245	212,020	150,925	370,228
LOW	9,544	120,380	14,176	43,128	19,659

**Numbers denote daily impressions

MOBILE INVENTORY
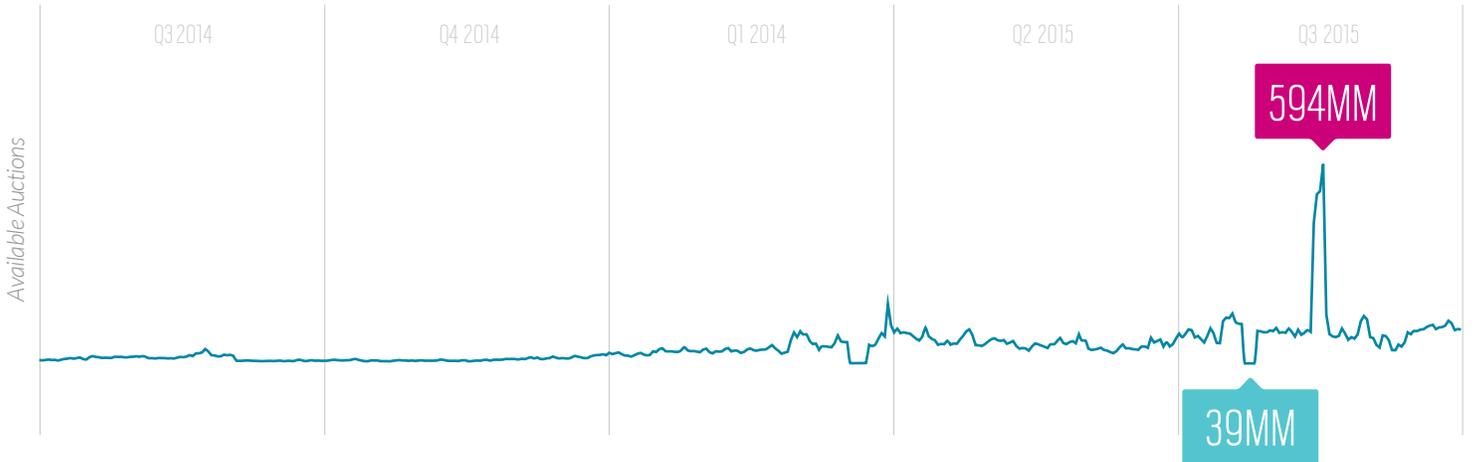
	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015
HIGH	42,805,906	27,362,655	177,306,302	113,590,709	594,473,094
AVG	15,366,850	11,878,235	43,693,071	62,271,602	112,250,606
LOW	6,662,650	6,339,028	763,197	30,568,484	39,320,647

**Numbers denote daily auctions

MOBILE CPMS

£12.97

£4.17
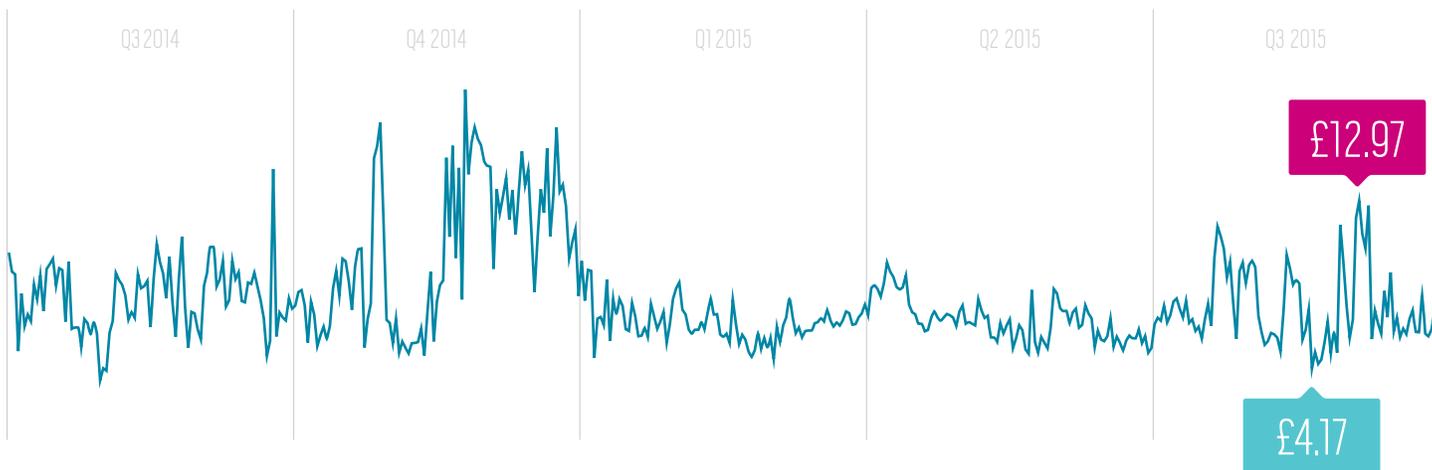
	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015
HIGH	£14.64	£18.81	£9.81	£9.73	£12.97
AVG	£7.84	£10.32	£6.61	£6.71	£7.42
LOW	£3.55	£4.85	£4.66	£4.94	£4.17

**Numbers denote daily average CPMs

COST-PER-MINUTE VIEWED
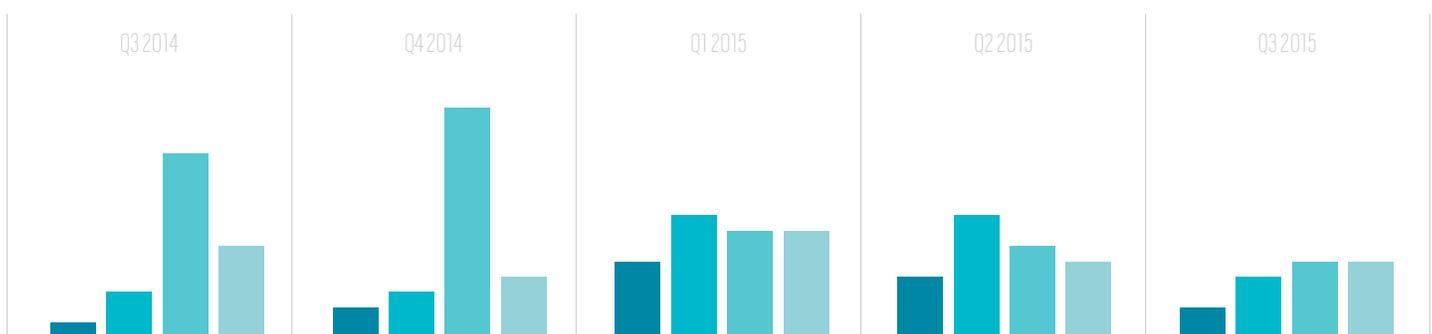
	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015
PRE-ROLL	£0.01	£0.02	£0.05	£0.04	£0.02
MOBILE	£0.03	£0.03	£0.08	£0.08	£0.04
SKIPPABLE	£0.12	£0.15	£0.07	£0.06	£0.05
CONNECTED TV	£0.06	£0.04	£0.07	£0.05	£0.05

VCPM - RUN OF EXCHANGE

£21.44
Q3 2015

£39.35
VIEWABILITY OPTIMIZED

£37.08
DIRECT RESERVATION

£31.62
ON DEMAND

£10.60
MOBILE

£18.79
CONNECTED TV
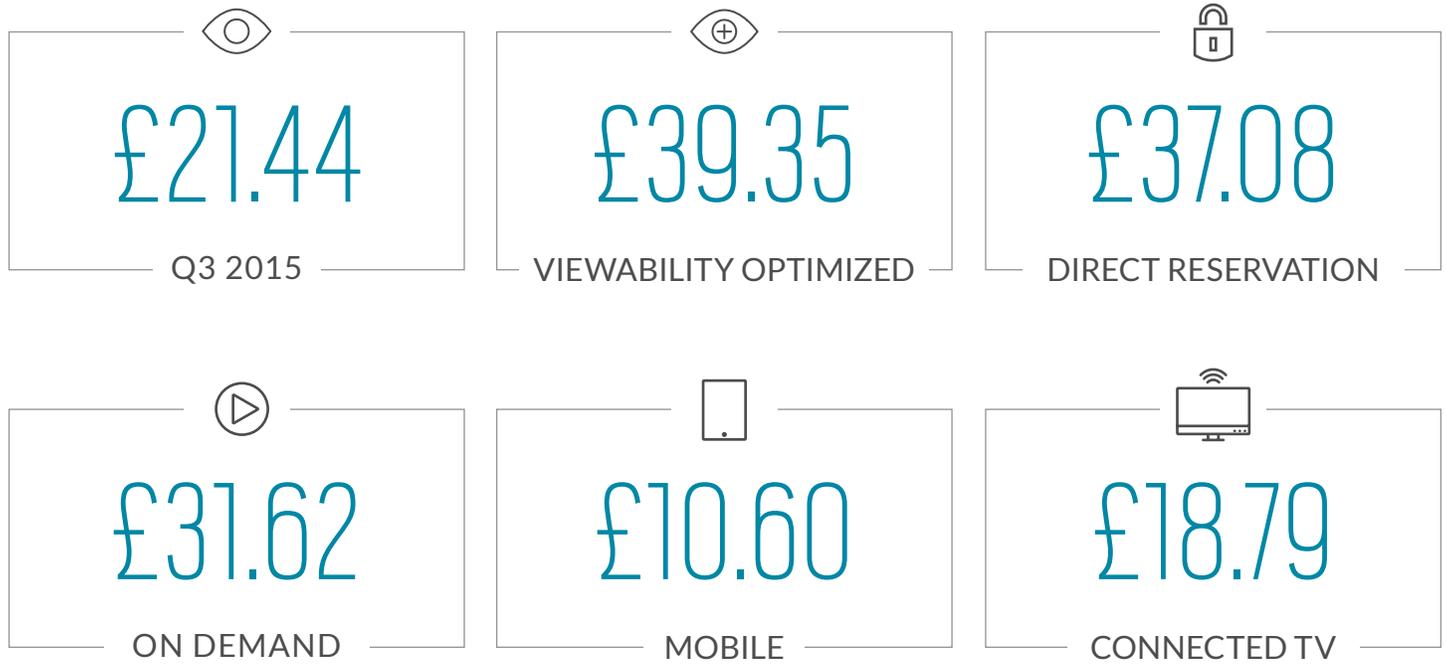
✏ METHODOLOGY

Data for this report is derived from digital video campaigns executed on the TubeMogul Platform from July 2014 through September 2015, spanning millions of mobile and pre-roll video ad views.

BrandAccess refers to measurable inventory purchased directly from a publisher through programmatic channels. "Mobile inventory" is an aggregate of mobile pre-roll inventory and mobile interactive inventory. CPMs are the cost per one thousand impressions. Mobile CPMs are an aggregate of mobile pre-roll and mobile interactive inventory.

Cost-per-minute examines the overall cost after fees of each ad format divided by the total number of minutes played.

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☰ GLOSSARY

Completion

A completion event occurs when a video ad plays through to the end.

Cost-per-Minute

The cost of the ad divided by the number of minutes the ad is played for.

CPM

The price of 1,000 ad impressions.

Interactive In-App Pre-Roll

Video ads containing rich media or interactive functionality running in-app on smartphones or tablets. Interstitial ads playing in-app expand to full screen unless viewer exits.

Interactive Pre-Roll

In-stream video ads that play before video content and feature interactive and rich media elements, such as overlays, video galleries, microsites, zip code locators, etc.

Inventory

The number of available ad impressions.

Lift

The increase in effectiveness measurements (e.g., message recall) between respondents who did not view the ad and those who did.

Message Recall

A measurement used to evaluate an ad's effectiveness at driving a viewer's ability to remember a brand or the message it intended to communicate. Typically measured using a control/exposed survey methodology.

Mobile Pre-Roll

Video ads with standard functionality, such as click throughs, running on smartphone or tablet devices. Can be in-stream (i.e. mobile browser) or in-app (e.g., Words with Friends). Interstitial ads playing in-app expand to full screen unless viewer exits.

Skippable Pre-roll

In-stream video ads that allow viewers to skip ahead to their video content after playing for a few seconds.

Standard Pre-Roll

In-stream video ads that play before video content.

Viewable Completion

A viewable completion event occurs when a video is viewable (see: "viewable impression") at the end of ad play.

Viewable Impressions

Number of measurable pre-roll video impressions that were viewable for any two consecutive seconds in the viewable browser area (at least 50% of the player is in view) of an active tab

Viewability Rate

Percentage of measurable impressions that were viewable

Viewable CPM (vCPM)

A pricing model that accounts for the cost of media and the viewability rate of that media. To calculate vCPM, divide the eCPM by the viewability rating.