

GLOBAL VIDEO INDEX Q4 2014

TABLE OF CONTENTS

Introduction	3
Executive Summary	4
Tablet and Smartphone Video Trends	5
Engagement Patterns by Device	7
Long-Form Video Consumption	8
Video Advertising Trends1	0
About Ooyala's Global Video Index1	.4



INTRODUCTION

"...It's about how do you get to all screens. It's not a question of 'Can TV migrate to online?' If that's the question, you're already dead, because online is mobile, and that's the future."

SHANE SMITH, VICE MEDIA CO-FOUNDER AND CEO, FROM A GUEST COLUMN IN VARIETY

Shane Smith's words echo a mantra we hear frequently here at Ooyala, on most days from CEO Jay Fulcher: "Video is video." While the industry may fuss over terminology, people don't think of TV in terms of "linear television" or "online video." We think, "What's the most convenient way for me to find and watch something good?"

More often than not, the answer is mobile. This quarter's Global Video Index continues to affirm this, and adds an exclamation point: More than a third of all video consumed online was watched on a mobile device during the quarter. Driven by a plethora of new premium overthe-top services, continued adoption of iOS and Android tablets, TV companion devices and mobile phones — such as the iPhone 6 family with its large displays for better video viewing — mobile is in fact not only the future as Smith suggests, but an increasingly dominant part of the present.

And as mobile becomes a primary form of video consumption, ad impressions are starting to follow suit. European market data included in this report from Videoplaza, an Ooyala company, shows that for broadcasters and publishers, next to desktops, mobile saw the highest percentage of video ad impressions as compared to all other devices. And for the publishing sector, mobile phones saw the second highest percentage of ad fill rates, behind connected TVs.

In his article, Smith calls attention to the impact predictive data will have on the markets for buying, selling and distributing video. One thing is clear: as video becomes more mobile, and as a dizzying array of options and a dizzying array of programming makes competition for audiences increasingly stiff, data will make all the difference for any provider looking to build highly engaged audiences across all screens while maximizing revenue for each and every video view.



EXECUTIVE SUMMARY

Highlights from Ooyala's latest report include:

TABLET AND SMARTPHONE VIDEO TRENDS

- 34% of all video plays in Q4 were on tablets and smartphones.
- Tablet and smartphone plays grew 2X in the past year, 5X since 2012 and 16X since 2011.
- December saw the highest percentage of video plays on smartphones and tablets at 38%.
 That's the highest since the Global Video Index began publishing. In fact, December mobile plays were 15% higher than in November and 114% higher than in the preceding December.

ENGAGEMENT PATTERNS BY DEVICE

- "Content mining," search and consumption of shortform videos, occurs across all screens.
- Tablet users spent most of their time (70%) watching video longer than 10 minutes.

LONG-FORM VIDEO

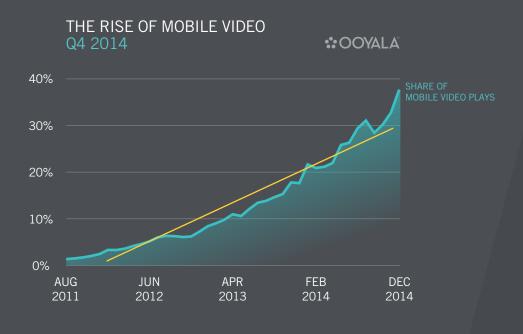
- Tablet users watched long-form video for 70% of the time they spent viewing on their device. That's more than for any other device. Tablets also lead in the percentage of time spent watching content from 30–60 minutes long.
- Connected TV users tended toward the longest video sessions: 41% of their time on CTVs was spent watching video longer than 60 minutes.

VIDEO ADVERTISING TRENDS

- PCs led all devices in the number of ad impressions for broadcasters and publishers, followed by mobile phones. In this category, mobile phones continue to gain ground and take share from PCs.
- PCs had the highest fill rates of all devices across all segments measured, reaching 80% for broadcasters and 69% for publishers.
- Broadcasters see the highest rate of ad completions (87%), followed by publishers (71%).
- Tablets have the highest ad completion rates for broadcasters, followed by PCs and mobile phones.



TABLET AND SMARTPHONE VIDEO TRENDS



The rise of mobile continues.

Q4 has traditionally been the most active quarter for mobile phones and tablet views, and 2014 was no exception.

In the quarter, the share of mobile and tablet plays increased to nearly 34%. That's roughly double the number of plays in Q4 2013, more than 5X the number of plays in 2012 and 16X the number of mobile and tablet plays in 2011, the first year Ooyala produced its Global Video Index.

But it was the month of December that stood out in the quarter. Among the December highlights:

- More than 38% of video plays occurred on smartphones and tablet devices. That's the highest monthly total we've seen in more than a dozen quarters.
- December mobile and tablet video plays showed a 15% increase from November. This month-to-month increase is the largest in mobile and tablet video plays since the Global Video Index began reporting video metrics.
- December also showed the largest monthly year-overyear increase. At 38%, it was up a whopping 114% from just under 18% in 2013.



TABLET AND SMARTPHONE VIDEO TRENDS

The growth of mobile, of course, isn't unexpected; it's a segment that has been trending consistently upward throughout the past 13 quarters.

But the acceleration of the growth is a crucial factor.

That hasn't escaped service providers, broadcasters and content producers, who are increasingly looking for ways to reach an on-the-go audience expecting to consume content wherever and whenever they want.

In the U.S., for example, Verizon is planning a mobile OTT video service to debut this summer. Competitor AT&T, meanwhile, also hinted at a potential mobile video play during its Q4 earnings call.

U.S. cable company Cablevision said in January that it is launching an all-WiFi phone that will use the operator's 1.1 million WiFi hotspots in the metro area to stay connected. That's a huge boon for online video fans worried about data caps on mobile data plans.

In the United Kingdom, meanwhile, Europe's largest pay-TV provider, Sky, said it will start selling a mobile voice and data plan. Sky will join BT and other major U.K. operators in offering quad-play services to customers, again looking to leverage mobile video.

There's plenty of other data supporting the growth of mobile video and its traction with consumers. We need look no farther than Apple's January announcement of its best quarter ever at the end of 2014: the company sold nearly 75 million iPhones, most of them with much larger displays than previous editions.

THE BOTTOM LINE

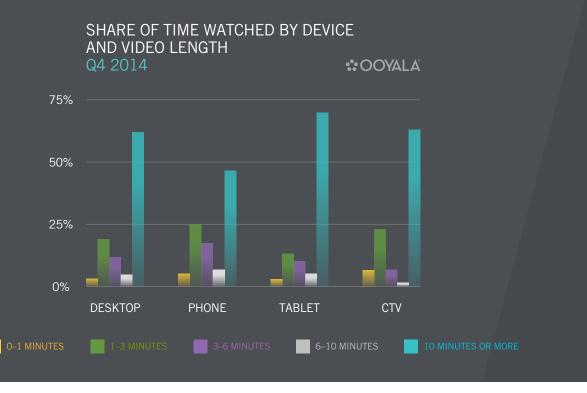
Traditional TV is still the primary form of viewing... but it is evolving daily and becoming more blended with over-the-top services, with an intensifying focus on mobile phones and tablets.

As phone screens grow in size and quality, they are joining tablets to become the "screen of choice" for viewers both young and old.

Publishers need to make sure they have not just a business tactic but a core business strategy for addressing what has become a tidal wave of mobile viewing.



ENGAGEMENT PATTERNS BY DEVICE



Consumers engage in "content mining" on all devices. They search for that next piece of content to watch, preview content they've discovered and, of course, view selected content of all lengths.

Mobile phones remain the device of choice for watching short-form content. More than half (54%) of the time users watch video on a mobile device is spent watching content less than 10 minutes long.

Connected TVs and PCs have similar short-form content profiles, with viewing percentages of 36% and 33% respectively for video up to 6 minutes in length. Those numbers rise to 37% and 38% for video up to 10 minutes.

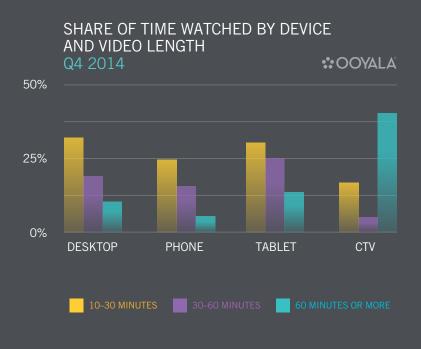
Tablet viewers, surprisingly, buck those trends. They spend a smaller share of their time watching short videos than any other device. They also show the highest percentage of time spent watching video longer than 10 minutes (70%). That outstrips connected TVs (63%), PCs (62%) and mobile phones (46%).

THE BOTTOM LINE

The time viewers spend with short form content up to 10 minutes long varies by device from 30% for tablets to 54% for mobile phones. But it's the sheer volume of content pieces that should be most interesting to content owners, since each piece can be monetized with pre- and post-rolls. In the case of content between 6 and 10 minutes long, an ad strategy might include a mid-roll ad, as long as the content engages the viewer — something that's more likely if their search, recommendation and discovery can be personalized.



LONG-FORM VIDEO CONSUMPTION



How viewers watch long-form content — generally videos that are longer than 10 minutes — has been evolving. This quarter shows that evolution is far from complete.

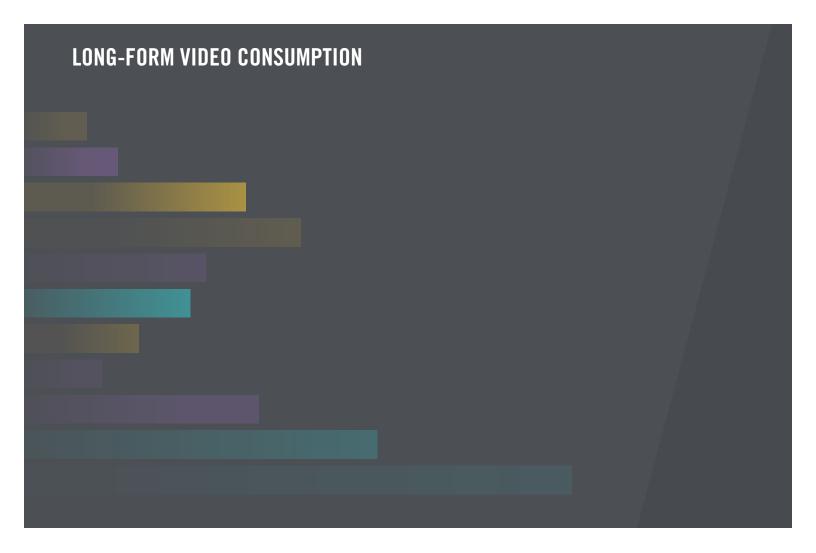
While content that's 60 minutes-plus in length remains within the purview of connected TVs — 41% of all time viewers spend watching content on CTVs is spent with content longer than 60 minutes — premium content has flooded to smaller screens.

70% of all video watched on tablets in Q4 2014 was longer than 10 minutes, the most of any device. PCs (52%) were second and mobile phones third (41%).

Content in the 10 to 30-minute range often consists of shows like comedies and other episodic offerings. That's a length that appears to be best-suited to tablets and PCs, although mobile phones also see significant usage for the genre. 32% of all the time users spend watching video on PCs is spent in this category, followed by tablets (31%), mobile phones (25%) and CTVs (17%).

For content between 30 and 60 minutes (dramas, for example), tablets are the top device of choice: viewers spend upwards of 25% of their time watching on the portable screen. Desktops (19%), mobile phones (16%) and connected TVs (5%) follow.





THE BOTTOM LINE

Consumers are spending less time in the living room watching the biggest screen in the house as content continues to flow online and to all devices.

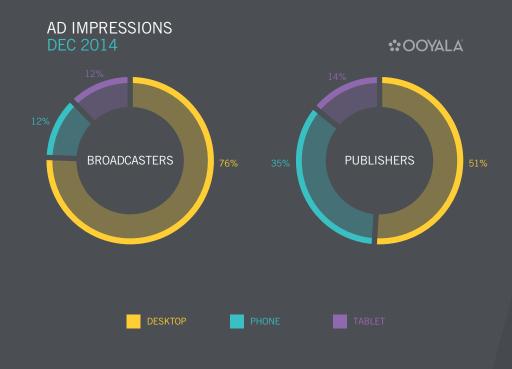
As mobile broadband prices continue to drop, and as robust WiFi solutions increasingly offer users a way to avoid onerous wireless data caps, more will flock to mobile devices to consume all sorts — and lengths — of premium content.

Using data and predictive analytics to measure viewer engagement — and to minimize churn — will enable publishers to find optimal ad loads. In many cases, those loads may be far higher than they're currently running.

That, in turn, will allow them to maximize monetization on every screen, from the largest to the smallest.



VIDEO ADVERTISING TRENDS



The following trends are based on Videoplaza data from a sampling of premium broadcasters and publishers across Europe, where Videoplaza technology powers the ad serving business for over half of the broadcasters. This data is from the month of December 2014 and relates to pre-roll ads only, which today make up the majority of video advertising.

AD IMPRESSIONS

PCs recorded more ad impressions in December 2014 than mobile phones and tablets, which ranked 2nd and 3rd respectively.

Broadcasters again counted heavily on PCs for ad impressions; 76% of ad impressions came from PCs. Tablets and mobile phones equally shared the remaining impressions.

For publishers, almost half of all ad impressions were non-PC during December 2014. Mobile made up almost 35% and tablets 14%.

PCs still have a large portion of all ad impressions for many reasons, one being the often higher ad load (number of ads in an ad break) for PCs than for mobile and tablets, which drives the ad impression figures upward.



VIDEO ADVERTISING TRENDS FILL RATE BY SEGMENTS AND DEVICE GROUP Q4 2014 **∷**OOYALA° 75% 0% 25% 50% 100% **BROADCASTER PUBLISHER** 0% 25% 50% 75% 100% ALL DEVICES

FILL RATES

For both publishers and broadcasters, PCs have the highest fill rate: 80% for broadcasters and 69% for publishers. For broadcasters, the fill rate reached 55% for both mobile phones and tablets.

A deeper look at the data reveals that the mobile video ad maturity and fill rates for broadcasters and publishers in the northern European markets are significantly higher than for other regions in Europe and Asia. In northern Europe, fill rates on mobile and tablet only marginally trail that of PCs.



VIDEO ADVERTISING TRENDS COMPLETION RATE BY SEGMENTS AND DEVICE GROUP Q4 2014 **∷**OOYALA° 0% 25% 50% 75% 100% **BROADCASTER PUBLISHER** 0% 25% 50% 75% 100% ALL DEVICES

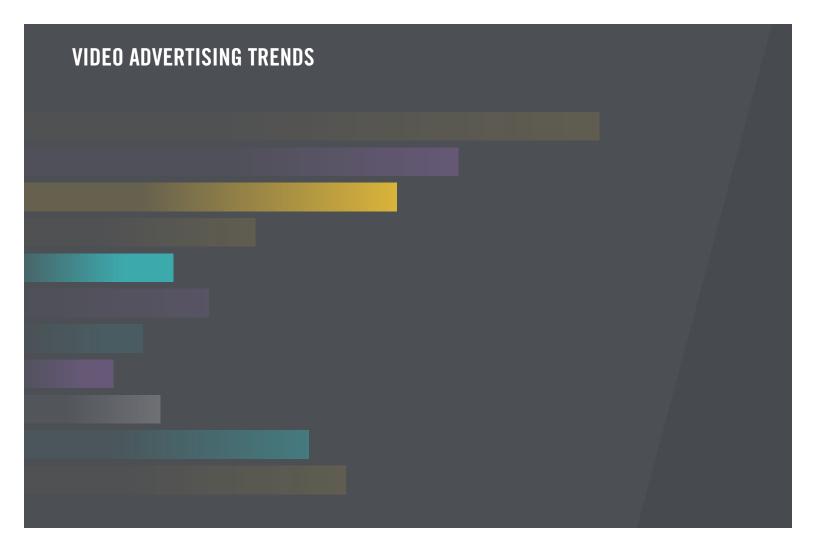
COMPLETION RATES

The ad completion rate — the percentage of all ads started that are played to completion — is pretty stable across device types for broadcasters and publishers. Across client segments, tablets are leading the way with 83%, followed by PCs and mobile with 79% and 76%, respectively.

Broadcasters have the highest completion rates at 87%, followed by publishers at 71%.

These high completion rates, especially for broadcasters, can help differentiate high-valued content in the market. This is particularly true if used in conjunction with other quality metrics such as viewability. The ability to provide better "quality assurance" for video advertising can mean more revenues through higher CPMs.





THE BOTTOM LINE

Mobile devices — both phones and tablets — increasingly are becoming the devices of choice for watching video, both short and long form. That means that brands and advertisers will begin to shift a growing share of ad spend to that segment.

The quality of the ad views, in terms of completion rates, is equally high on tablets and mobiles compared to PCs, but overall the ad fill rate is trailing. Beyond lower fill rates, most broadcasters and publishers have significantly lower ad loads on mobile and on tablets compared to PCs.

But, as online viewing shifts from PCs to tablets and mobile, we will see broadcasters and publishers increasing the number of ad breaks and ad loads on non-PCs. As mobile and tablets increasingly become common viewing ports for longer, premium content, it's likely that viewers will tolerate heavier ad loads, up to, perhaps, even those enjoyed by traditional television.

Broadcasters and publishers are leaving money on the table and need to make sure to have a strategy in place to fully monetize mobile and tablets. One such strategy employed by successful clients is to sell one audience across devices.



ABOUT OOYALA'S GLOBAL VIDEO INDEX

ABOUT THE GLOBAL VIDEO INDEX

Ooyala measures the anonymized content and ad viewing habits of hundreds of millions of viewers around the world. We process billions of video analytics events each day. Our market-leading video platform, video analytics and ad tech solutions help broadcasters, publishers, media companies and brands grow their audiences and earn more money from mobile, multi-screen broadcasting.

ABOUT OOYALA VIDEO PUBLISHERS

Ooyala video publishers and ad tech clients include hundreds of forward-thinking companies like Univision, RTL, Canal+, Sky Sports, ESPN, Telstra, Foxtel, Rolling Stone, Pac-12 Networks, Sephora, and Vice.

This report reflects the anonymized online video metrics of the vast majority of Ooyala's 500+ customers, whose collective audience of over 220 million viewers spans nearly every country in the world.

This report does not document the online video consumption patterns of the Internet as a whole. But the size of the Ooyala video and advertising footprint, along with the variety of our customers, means this report offers a representative view of the overall state of online video.

