



GLOBAL VIDEO INDEX Q1 2015

TABLE OF CONTENTS

Introduction	3
Executive Summary	4
Discovery Insights	5
Tablet and Smartphone Video Trends.....	7
Engagement Patterns by Device.....	9
Video Advertising Trends	11
About Ooyala and the Global Video Index	15



INTRODUCTION

“How do you create content that connects in a world of total choice?”

ABC ENTERTAINMENT GROUP PRESIDENT PAUL LEE

The question posed by Paul Lee at this year’s TV Upfronts is one that’s in the back of every programmer’s mind, if not on the tip of their tongue. The definition of television has changed forever. Whichever screen is closest to you, whether it’s a phone, tablet or laptop, becomes your TV with one click.

Taking this concept from thought to reality, Comcast Cable’s EVP and GM of Video Services Matt Strauss said this quarter, “You won’t see us define a TV in any of our agreements, because, how do you define a TV? You can’t define a TV by a screen size... it’s any device that can render video securely.”

Screen size is the latest factor to become a non-issue for TV viewers, alongside other non-issues like location (not just the living room) and scheduling. More content is available, and consumed, in an on-demand, a-la-carte fashion than ever before. “The erratic schedules of the past just don’t work anymore,” Fox TV Group Chair Dana Walden said at the Upfronts. As reported in Variety, she and Co-Chairman Gary Fox have vowed to create programming that will “break through and captivate viewers across every platform.”

And it’s about time.

This quarter’s Video Index provides the data behind the dilemma. The data demonstrates the rapid pace at which viewers are increasingly in control, fully in charge of precisely how, when, and where they are watching TV, in a new world of total choice.



EXECUTIVE SUMMARY

Highlights from Ooyala's latest report include:

DISCOVERY INSIGHTS

Content discovery and recommendations are essential tools for creating more of a “lean back” experience, akin to traditional television viewing, where people are offered a steady stream of the programming that they prefer, as well as access to navigation elements that help them find more of that programming. This ease of navigation makes for a “stickier” experience, and creates opportunities for providers to maximize revenue by prolonging viewer engagement.

When offered content by a discovery engine that recommends videos on a personalized basis, consumers will view the new content as often as 50% of the time. Not only do they see more videos — increasing the number of potential ad impressions — but they spend more time on site as well.

TABLET AND SMARTPHONE VIDEO TRENDS

Plays on tablets and smartphones together increased more than 24% in Q1, quarter over quarter, and rose a stunning 100% since Q1 2014. But, that doubling of plays on mobile devices over the past 12 months pales next to the 367% increase over the past two years. That growth suggests more than 50% of all online video plays will be on mobile devices before the end of the year. Smartphones remain the engine of mobile growth, with four times as many plays as tablets.

ENGAGEMENT PATTERNS BY DEVICE AND MARKET SEGMENT

Screen size is becoming democratized as viewers routinely use devices of any shape or size to watch video. Nearly 60% of the time people spent watching video on tablets is with video ten minutes long or longer. On connected TVs, that percentage is 43%, slightly greater than mobile phones (37%) and PC (35%). Access to premium content from TV broadcasters seems to be of great interest to mobile users.

We found striking differences when comparing device engagement across market segments:

TV broadcasters saw more than half (53%) of their content play on mobile devices, compared to 31% for publishers and 31% for brands.



DISCOVERY INSIGHTS

For most people, the main attraction of traditional TV is the “lean back” experience they can enjoy. They turn on a particular network on a particular day of the week, and they know what they’re going to get. The broadcast or cable network takes pains to direct them to upcoming content with promotional ads for programming, hoping to maintain viewer engagement over the course of a night or week.

Online video originally was seen as a “lean forward” experience, one that required users to be more knowledgeable about where they could find the content they wanted to watch. That’s been perceived as a problem for brand advertisers, as they worry about hitting the right target audience with their message.

But, discovery and recommendation technology has been evolving for years and OTT and SVOD service providers have learned how to recreate that traditional TV discovery process and introduce a new “lean back” experience across all devices. And as our data shows, it works.

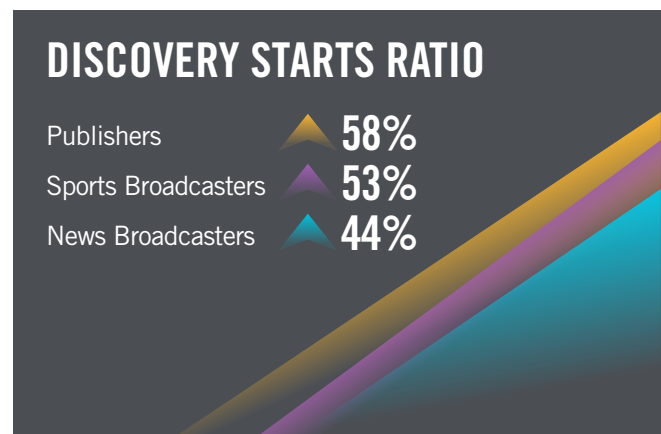
In this Video Index, we share for the first time insights on the impact of personalized recommendations, collected from Ooyala clients utilizing Ooyala Discovery, our data-driven recommendation engine. Discovery presents additional related video options during or at the end of a video.

Here’s what we found in the month of March.

Discovery starts ratio shows how often a recommended video actually plays, relative to the number of times recommended videos are presented to the user. For example, if a viewer is shown recommended videos 10 times and plays four, that’s a Discovery starts ratio of 40%.

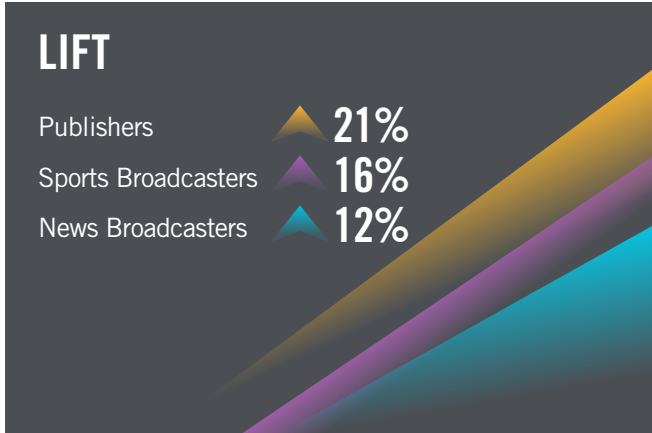
Broadly, the typical Discovery starts ratio in March was 35% to 50%. That led to significantly increased engagement time, and opportunities for additional ad views. Looking at Discovery starts ratios across a few different market segments:

- Among news broadcasters, the Discovery starts ratio was 33% to 44%.
- For sports broadcasters, it was 40% to 53%.
- For consumer publishers, the Discovery starts ratio was at least 33% and as high as 58%.

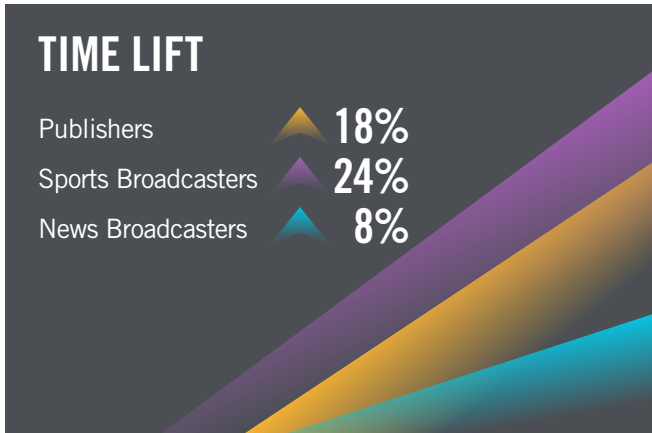


DISCOVERY INSIGHTS

Lift is a related statistic, measuring Discovery-driven plays as a percentage of organic video plays. Among broadcaster sites who used Ooyala Discovery in March, lift generally was 6% to 12%. For sports broadcasters, the lift was higher: 8% to 16%. And for consumer publishers, the lift was higher still, at 13% to 21%.



Time lift measures the amount of viewing time of Discovery-recommended videos, as a percentage of organic view time. For broadcasters as a whole, time lift averaged from 3% to 8%. For sports broadcasters specifically, that time lift was 16% to 24%. Consumer publishers saw time lift in the range of from 7% to 18%.



THE BOTTOM LINE

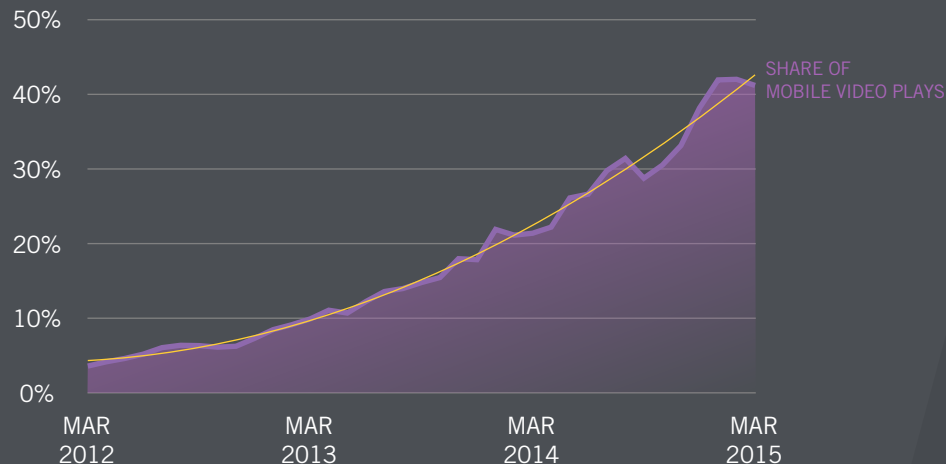
Discovery makes content easier to find and sites more sticky. Discovery algorithms can learn a viewer's likes and dislikes effectively, and can take into account videos that are trending across the provider's entire catalog or network of sites. Well-implemented discovery tools upgrade a user's experience, which is crucial when trying to keep viewers and boost the number of times they return to a site.

Extending the time viewers stay on a site and adding new video plays also drives revenue by significantly increasing the number of ads shown per viewing session.



TABLET AND SMARTPHONE VIDEO TRENDS

THE RISE OF MOBILE VIDEO
Q1 2015



The first half of this decade will be remembered in the media industry as the “Rise of OTT,” highlighted by Netflix and a plethora of other global, regional and national OTT, VOD and SVOD services. These services have collectively whittled away at the time people spend with traditional television.

That time shift is accelerating as more mainstream content owners — companies like HBO and CBS — turn to broadband to deliver their best content to a rising tide of younger viewers looking to watch video on their own terms.

Deloitte, for example, in its most recent “Digital Democracy Survey,” said more people prefer to stream TV content (53%) than to watch it live (45%). What that’s meant for publishers, broadcasters and service providers is a shift of their own focus, a retargeting of their premium assets and a change in both their strategy and tactics. Nowhere has that been as evident as in mobile video, where the trend will define the latter half of this decade.

What does this mean for ad dollars? Antonio Lucio, Visa’s chief marketing officer, told attendees of February’s Digital Entertainment World conference that “for the first time in the United States” the company would spend more than 50% of its marketing budget on mobile in 2015, because “that’s where the consumers are.”

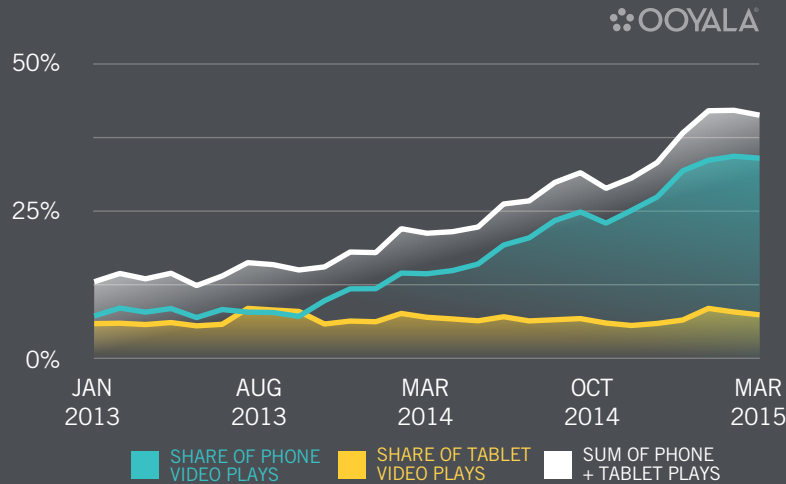
Wise words, but brands aren’t the only ones to react. Content owners and broadcasters increasingly are pushing content over the top directly to consumers. Operators, like Verizon and Dish (via Sling TV), are stepping to the forefront, offering skinny bundles of content meant to be consumed on mobile devices.

That surge of content online — especially to mobile devices — has been especially appealing to younger consumers. Viewers 14 to 25 watch more content on mobile devices than they do on traditional TVs, Deloitte said.



TABLET AND SMARTPHONE VIDEO TRENDS

SHARE OF MOBILE VIDEO PLAYS
Q1 2015



More telling, however, is the 100% year-over-year increase since Q1 2014, when mobile video plays accounted for just 21% of all online video plays. Going back to the start of 2013, when mobile video made up just 9% of video plays, that year-over-year increase becomes an astounding 367%.

The main driver for this mobile video growth is the smartphone category. As recently as Q3 2013, video plays on tablets and smartphones were, essentially, equal: about 8% each.

But, while plays on tablets have been flat, the growth in video plays on smartphones has been extraordinary. In Q4 2013, smartphone plays outpaced tablet plays by nearly 2 to 1. During the first quarter of 2015, that ratio increased to more than 4 to 1, with 34% of all plays occurring on smartphones, with still only 8% on tablets. Much of this can be attributed to larger screen sizes in phones such as iPhone 6 and iPhone 6 Plus, as well as other “phablets” that are eating into or supplanting overall tablet usage.

THE BOTTOM LINE

As faster, bigger, and less expensive smartphones come to market, and as wireless providers continue to relax their data caps and supply more opportunities to connect to WiFi, the growth of mobile as a first screen will continue. Mobile video is on pace to exceed 50% of all online video plays by the third quarter of this year, perhaps sooner.

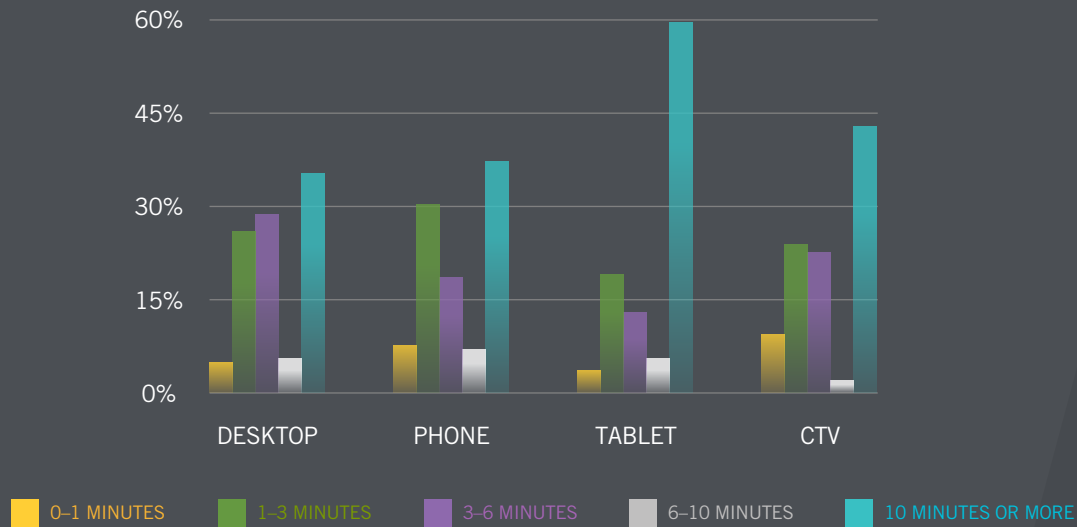
Publishers, broadcasters and service providers should view this as a critical juncture, the point where a majority — rather than a plurality — of online video views occur on mobile devices. Some operators have taken tactical steps to address the broad consumer trends that are growing mobile video — like pushing more content over the top, creating better user interfaces and improving mobile monetization. But with many providers still waiting on the sidelines of the OTT game, it's become increasingly obvious that in large part, the industry is lagging in execution of mobile initiatives. As our data shows, the audience is clearly ready and waiting for more.

Any long-term plan should address quality of delivery, service and user experience, improved and expanded search and discovery and universal monetization strategies.



ENGAGEMENT PATTERNS BY DEVICE

SHARE OF TIME WATCHED BY DEVICE
AND VIDEO LENGTH
Q1 2015



ENGAGEMENT PATTERNS BY DEVICE

Screen size is being democratized by online video content. Online viewers are spending more time watching long-form content over ten minutes in length than ever before. More than half (59%) of the time people spend watching video on tablets is spent with video 10 minutes long or longer. That's the most of any device, trailed by connected TVs (43%), mobile phones (37%) and PCs (35%).

For content up to 10 minutes in length, once the domain of mobile phone snackers, PCs surprisingly had the highest percentage of viewing time spent in Q1, 65%, closely followed by mobile phones (63%), connected TVs (57%) and tablets (41%).



ENGAGEMENT PATTERNS BY DEVICE AND MARKET SEGMENT

ENGAGEMENT PATTERNS BY DEVICE AND MARKET SEGMENT

This quarter, we compared engagement across PCs and mobile devices (phones and tablets) for different market segments, including broadcasters, publishers and brands.

During the quarter, broadcasters saw more of their content play on mobile devices than on PCs, a major shift in the distribution of video play that likely is being driven by younger viewers, Millennials in particular. Content from broadcasters played more than 53% of the time on mobile devices compared to 47% on PCs.

The broadcaster segment, more than any other, is leading the swing to mobile devices. The trend wasn't as pronounced for the two other segments studied, publishers and brands.

Still, relative to PC plays, publishers saw nearly a third (31%) of their content plays on mobile devices, as did brands.

Mobile devices likely are being used by viewers on the go, looking to catch up on the news of the day, sports highlights and entertainment options.

Content from publishers and brands, meanwhile, may be most conducive to more leisurely content grazing by users on their laptop or PC in the office or at home.

THE BOTTOM LINE

As we said earlier, mobile devices — whether smartphone, feature phone or tablet — are becoming ubiquitous among consumers. And, as those screen sizes increase, viewers are becoming less parochial in their designation of what constitutes the “first screen,” opting instead to use whatever screen happens to be nearby.



VIDEO ADVERTISING TRENDS


Deal ID transactions

 **79%**
monthly growth

RTB impressions

 **150%**
monthly growth

RTB CPMs

 **60%**
above average floor price

Programmatic Trading Update

The video industry is showing progress towards a programmatic way of trading. Advertisers are now enjoying the benefits of a more efficient, effective means of buying, thanks to the scale and data programmatic platforms offer.

Last year, the industry saw unwelcome fraudsters camping on the new spate of programmatic platforms. Brands took note, insisting on higher accountability, and ultimately took more control of their programmatic purchasing, devoting much higher budgets and CPMs for the right type of inventory. This has created substantial new opportunity for premium publishers, who are now making larger portions of their inventory available through programmatic SSPs (supply-side platforms).

Many top executives agree the shift toward programmatic is a must. Warner Bros. CEO Kevin Tsujihara said, “On the buy side, we view programmatic as a big opportunity. We’re focusing on a number of different trials today across a number of different opportunities across the studio... [TV] is really something that is in the very, very near future because these trials so far are showing some really, really positive things.”

Turner CEO John Martin, meanwhile, said, “We’re continuing to explore, obviously, many new advertising models. That includes programmatic. In digital, it’s clearly a much bigger opportunity, and we’re using programmatic a lot more. And we’re going to continue to sell a bigger portion of our digital inventory through programmatic partners.”

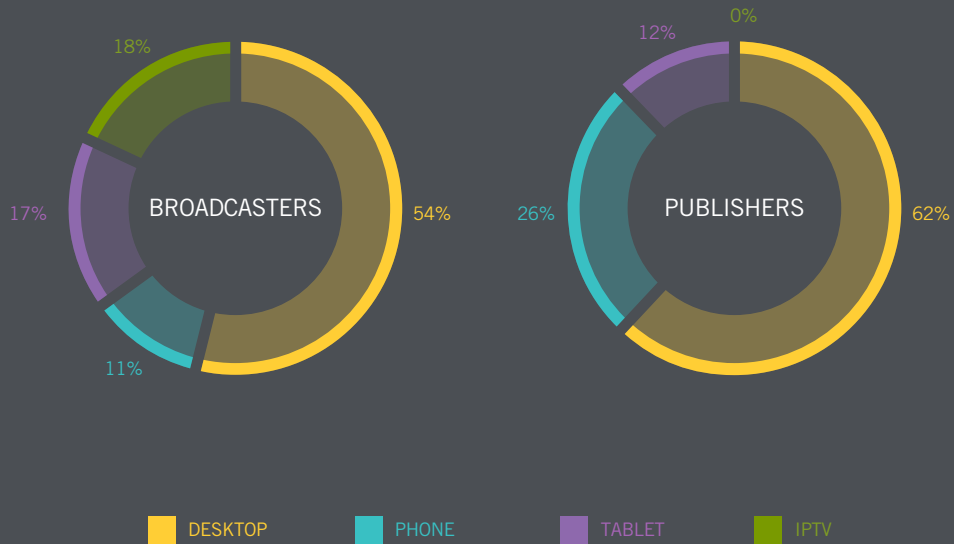
Insights derived from a cohort of broadcasters and publishers using our programmatic trading platform during Q1 further illustrate the trend:

- Deal ID transactions (the identifier used to facilitate programmatic private marketplace transactions) among broadcasters and premium publishers, grew 79% from January through March. This is a testament to premium content owners automating their direct sales through programmatic and their increased confidence in this form of trading.
- RTB (real-time bidding) impressions, primarily through private marketplaces on the premium end, grew at a staggering 150% monthly rate throughout Q1, where traditional network traffic actually dropped by 21% on a monthly basis. This comparison demonstrates how transparency is beginning to win the race, and indirect channels are moving towards greater automation.
- During Q1, RTB brought average CPMs that were 60% above the floor price. As more budgets move to programmatic for premium inventory, increased pressure on auctions drives CPMs upward for publishers.



VIDEO ADVERTISING TRENDS

AD IMPRESSIONS Q1 2015



Key Video Advertising Trends

The following data is derived from customers of Ooyala's sell-side ad serving and management platform — primarily a European sample.

AD IMPRESSIONS

Evolution of the video advertising space continues, with ad impressions gradually swinging away from PCs and toward IPTV (set-top boxes). Also growing: Mobile devices, which should be no surprise given our data on the growth of mobile video consumption.

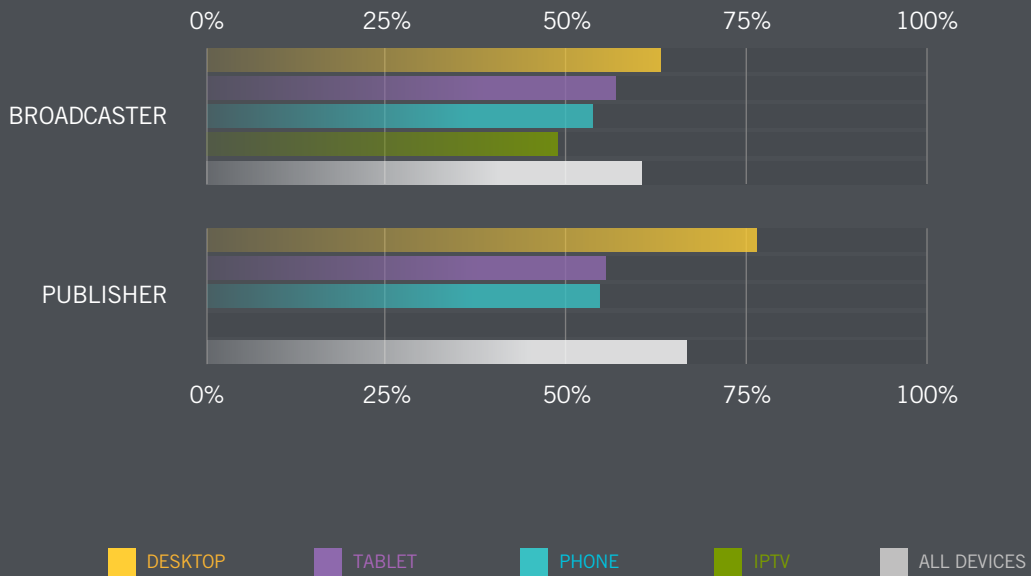
For broadcasters in particular, mobile and tablet devices are getting a bigger share of the pie, likely impacted by increasing views from younger segments of the population, specifically Millennials. Still, PCs remain the device of choice for many, delivering the highest levels of ad impressions.

Publishers, too, have seen an increase in mobile ad impressions, but PCs remain strong and have also shown an increase in the number of ads viewed. Just as consumers often find themselves in a post-holiday lull, ad fill rates also slipped during what is seen as the slowest season for ads.



VIDEO ADVERTISING TRENDS

FILL RATE BY SEGMENTS AND DEVICE GROUP
Q1 2015



FILL RATES

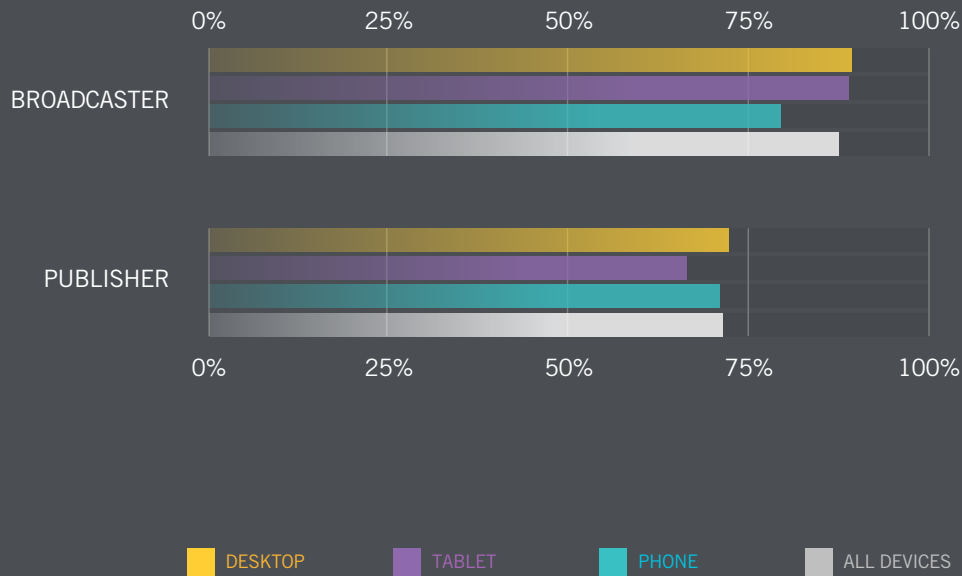
PCs continue to have the highest fill rates for publishers (77%) and broadcasters (64%, down from 80% last quarter). Mobile phones and tablets have fought the fill rate slide that affected PCs, an indication that they may be more resistant to seasonal changes. For broadcasters the fill rate for mobile reached 54% and 57% during the quarter for tablets, compared to 55% for both tablets and mobile in the Q4 index.

Surprisingly, publishers seemed to be impacted less than broadcasters overall. PC fill rates for publishers increased to 77% from 69% in the prior quarter. And their fill rates for mobile and tablets increased from below 50% to 55% for mobile phones, and 56% for tablets.



VIDEO ADVERTISING TRENDS

COMPLETION RATE BY SEGMENTS AND DEVICE GROUP
Q1 2015



AD COMPLETION RATES

Completion rates in the broadcast segment are higher than those in the publisher segment, generally because broadcasters are streaming long-form, premium content.

Nearly 90% of all ads started on PCs for broadcasters are completed, with 89% for tablets and 79% for mobile devices. Tablets are simply better than mobile phones for watching premium content.

Publishers saw slightly lower completion rates: 73% for PC, 71% for mobile and 67% for tablets. Often, the content being consumed on publisher sites is short form, with many brief clips consumed in any given session. That can lead to lower ad completion rates compared to broadcasters.

THE BOTTOM LINE

Publishers and broadcasters with high completion rates should use this type of data to differentiate their content in the market. With the use of viewability or ad completion metrics, publishers can provide more qualitative analysis to advertisers by offering “viewed ads” or “ads played to completion” as opposed to ordinary impressions. This gives publishers and broadcasters an opportunity to increase CPMs, and thereby revenues, and also gives them an edge against YouTube and the TrueView metric.



ABOUT Ooyala AND THE GLOBAL VIDEO INDEX

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

Ooyala captures 3.5 billion analytics events each day. We ingested and transcoded over 100 million minutes of video in 2014. That content was delivered to over 220 million unique users around the world. And those viewers played over 10 billion streams comprising almost 30 billion hours of video. We managed inventory for 30 billion video ad impressions, and delivered over 11 billion ads in 2014.

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.

Every day, hundreds of customers around the world rely on Ooyala to maximize the revenue potential of every digital video asset on every possible device.

ESPN, Univision, Sky Sports, Foxtel, NBCUniversal, RTL (Germany), M6 (France), TV4 (Sweden), Mediaset (Spain), STV (UK) and Singapore's Mediacorp: these are just a few of the hundreds of broadcasters and media companies who choose Ooyala.

Ooyala is a subsidiary of Telstra, the largest telecommunications company in Australia, providing fixed and mobile services to millions of consumers, as well as advanced network applications and services to enterprise clients in Australia and overseas.

The company is headquartered in Silicon Valley, with offices in New York, London, Stockholm, Sydney, Tokyo, Singapore and Guadalajara, and sales operations in dozens of other countries across the globe.

