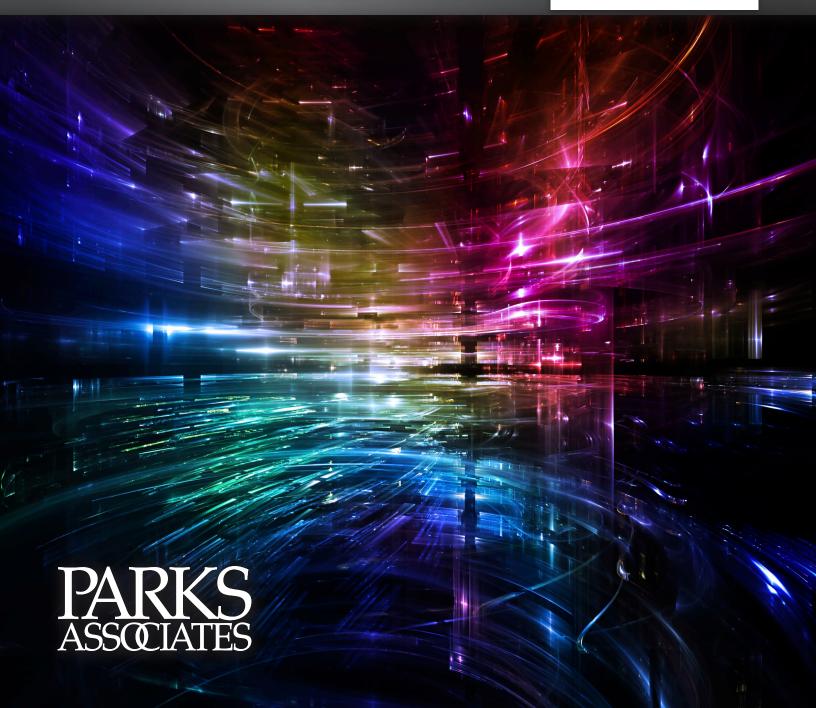
The Impact of Analytics on Video Monetization

A Parks Associates Whitepaper Developed for





Introduction

Online video is exploding in popularity, both with viewers and businesses.

Even the most traditional media outlets are now turning to digital video. Pay-TV operators, premium cable channels, and other content owners are building their online brands by adding platforms like TV Everywhere.

Nearly 90% of pay-TV subscribers in North America now have access to a TV Everywhere-type product, and that number will hit 95% by 2015.

Services like Netflix, Hulu, and Amazon are experiencing booming growth. So are streaming video devices like Apple TV and Roku; the number of homes with a streaming set-top box has doubled over the past two years.

In the U.K., operator BSkyB has announced plans to unbundle its content as it tries to reach viewers who have "cut the cord" to pay-TV operators. Its content will be available at various prices on a variety of devices, eliminating the need for consumers to pay for content they don't want.

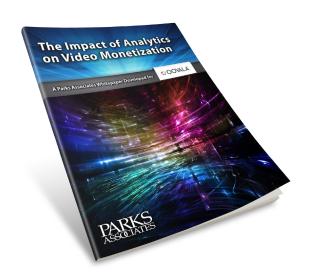
These are major changes.

This whitepaper shows how this evolution in content delivery is generating a gold mine of data from viewers across smart TVs, tablets, and smartphones. It also looks at how advanced analytics and data science can turn that massive harvest of raw metrics into insights about individual viewer habits and trends that have simply never been available before.

Those insights, when used to optimize programming, are already reshaping the media industry.

Topics Addressed in This Whitepaper

- A Changing Landscape
- · New Challenges
- Big Data's Place in Online Video
- The Need for Intelligent Analytics
- How Analytics Can Help Engagement
- Monetizing the Audience
- When 'Value Added'Truly Adds Value
- Line between Premium Video, Cable Channels, and Pay-TV



A Changing Landscape

The online video landscape of today has changed tremendously from just two or three years ago.

In Q2 of 2010, Netflix had 9 million customers streaming video (about 60% of its subscriber base), and nearly all of them also ordered movies on DVDs through the mail. Today, the company has about 36 million subscribers globally and is slowly but steadily making its DVD-by-mail product a memory.

In early 2013, the average video consumer in a U.S. broadband home watched over 6.5 hours of Internet video per week, including 2.3 hours on a television and 3.4 hours on a computer. By June 2013, comScore reported that 183 million U.S. viewers watched 44.7 billion videos during the month. Over 158 million of these viewers watched 15.7 billion videos on YouTube and other Google-backed sites.²

The changes aren't just in the United States.

Netflix and Hulu have turned to overseas markets as natural areas of growth. Netflix has pledged to plow its profits into international expansion, and in 2012 it deployed streaming services into the United Kingdom, Ireland, Sweden, Denmark, Norway, and Finland.

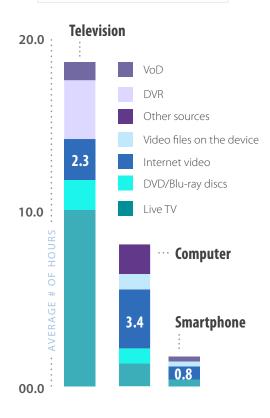
In September 2013, Netflix announced a partnership with U.K. cable operator Virgin Media to allow users to access Netflix's library through Virgin Media's TiVo set-top box. Hulu has expanded its service into Japan and says it intends to grow worldwide.

In Europe, large industry players Amazon and Sky have acquired emerging OTT companies (LOVEFiLM and Acetrax, respectively) and embarked on aggressive growth plans. HBO launched its HBOGO service in 2012 directly to consumers in Western Europe's Nordic countries.

Video Consumption by Platform & Source

U.S. broadband households

"How many hours of video do you watch per week?"



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The BBC product iPlayer continues to be a dominant force in video consumption in the U.K., used by service providers and broadcasters in Europe and elsewhere. Between November 2012 and January 2013, U.K. use of the iPlayer jumped 35%, mainly due to growing use on mobile platforms. The BBC now provides a paid version of the iPlayer to other Western European nations.

European operators have been aggressively deploying TV Everywhere, albeit less frenetically than their North American counterparts.

AVAILABILITY

AT THE BEGINNING OF 2013

Over 70% of pay-TV subscribers in Western Europe were able to receive a TV Everywhere service from their current pay-TV provider.

VIEWING HABITS ARE ALSO CHANGING.

Ooyala's most recent Global Video Index,³ measuring the anonymized viewing habits of nearly 200 million unique viewers in more than 130 countries, showed that the share of viewing on smartphones and tablets is still rising at a pace similar to that of 2012.

About 10% of all video viewed in Q1 2013 was watched on a mobile or tablet device, representing an increase of 19%.

The kind of video being watched online is changing, too; it's shifting to longer-form video. 25% of the content watched on tablets globally in Q1 2013 was 60 minutes long or more. And nearly an additional 20% was at least 30 minutes long. In all, more than 50% of all content watched on tablets was more than10 minutes long or longer. And when desktop viewers tuned into live events, they watched an average of 40 minutes of news, sports and special events.

The bottom line: Online video plays a much bigger role today than just three years ago, and it increasingly features premium long-form video.



New Challenges

The media industry, by its nature, changes from week to week. Business models evolve, content deals shift, and consumer loyalty is tested by new services and economic conditions. And always there is new technology to adopt, adapt or abandon.

Some say the industry is undergoing a "paradigm shift," but recognizing online video as the agent of change may be closer to the truth.

For the advertising industry, the exodus of viewers from traditional media to the Internet has made their audience a moving target. Consumers, once force-fed advertising on their televisions and in their newspapers, are in a far different place today. But brands also have new advantages: they used to buy air time based on a program, region, or demographic, but today's IP-based television offers them a better way to target video ads to individuals.

Ad money is definitely on the move.

U.S. online video ad spending will reach \$3.5 billion in 2013. With moderate growth assumptions, Parks Associates projects the market will see a 13% CAGR for the next few years, reaching close to \$5.8 billion by 2017.4

In an attempt to reconnect with online video viewers, ad networks are testing longer and shorter pre- and post-roll ads. They've adjusted ad types to match the new screens, sensing that viewing experiences are inherently different on different devices. Content owners like TBS have begun to add mid-roll ads and experiment with larger ad loads, testing consumers' tolerance for advertising levels that rival those of traditional broadcasting.

For content owners, advertisers, aggregators, and pay-TV operators...this change has created new challenges

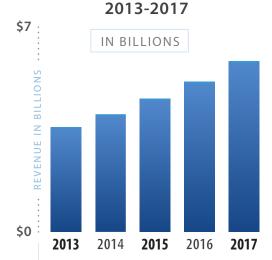
Getting as many eyeballs on content as possible

Keeping those viewers engaged longer

Using them to build a sustainable new business model

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U.S. Online Video Advertising Revenue



Revenue includes In-stream pre, mid, and post roll, overlay, custom units, companion display ads, branded players skins, takeover ads. Excludes in-banner video ads.

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Even online video's greatest strength the ability to target individual viewers with personalized content and monetization methods—comes with its own challenges.

"Online video has a scale problem when targeting comes into play," Tod Sacerdoti, CEO of BrightRoll, told an industry group recently.

"What's most attractive for online advertisers is advanced targeting, but when you start getting narrow, that's when there are constraints on inventory.

Advertisers don't understand, generally, what they are getting for their money online."

Earlier this year—

IN AN OPEN LETTER TO THE INDUSTRY

Media buyers from several top brands and agencies challenged content owners and distributors to "help consumers discover" the plethora of new video content on the Internet and to make measurement and ad buying easier.

The letter says that the industry has an..."opportunity to reinvent the way we work together" and to "leverage measurement—across the now and next screens—that elevates digital video beyond an extension of TV."

More importantly, it calls on the industry to... "Give us hope (backed by metrics) that you will find new audiences who are as irresistible to brands as they are engaged with your programs."



Big Data's Place in Online Video

Online video is a numbers game. The game starts with measurements: how users watch (in time, content, and screens) and how they interact with the video and ads they watch.

Every platform and product that touches content as it passes along the distribution chain to the consumer is capable of gathering this kind of data. OVPs and CDNs, set-top boxes, and even security software—like digital rights management and conditional access platforms—generate remarkably detailed data points.

This data can help publishers better understand the types of content that generate views and also help them measure quality of service (QoS) and viewers' quality of experience (QoE).

Better viewer engagement and retention, of course, lead to bigger profit margins.

But the fragmentation of video distribution can interfere with that outcome if companies are unable to understand whether the data collected indicates good or bad performance overall.

The "analytics" offered by many providers really is raw data:

—Number of plays —Percentage of a video viewed

—Frame rate —The point at which viewers leave a video

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These are valuable numbers—as far as they go.

They reveal, for example, how many online videos are viewed each month, at least using a census-based approach. This figure is an estimated data point collected by comScore in its Video Matrix. It reveals that YouTube, Hulu, or AOL has "X" number of visits. It can even infer how many minutes of video the average American broadband user watched in a given month.

When breaking out data on ad networks, comScore can determine that a given network, say Tremor Media, supplied "Y" ad impressions in a month.



DEMOGRAPHICS

Other third-party metrics providers, like Nielsen, offer more demographic data points, using a broad if somewhat inexact census approach.

NIELSEN

Nielsen tracks the number of TV households in a given region of the U.S., the hours of TV watched in a week, and, perhaps, what screen viewers watch most often. As big data has begun to leave a bigger footprint on the industry, companies like Nielsen have responded. This year, Nielsen launched Nielsen Online Ratings, which is designed to measure the online and digital ecosystem more accurately.

The data available about online video viewers now compared to three years ago is as different as the 1930s handwritten census is from today's computer-collected data. But the metrics are often still generally shallow. More precisely, they tend to focus on aggregate viewing habits instead of the habits of individual viewers.

THIS IS THE KEY POINT —there's no need to guess at viewership when we can now measure actual habits and preferences user-by-user.

Measuring (and satisfying) those individual viewers is what online video has the capacity to do best if only we will gather the data and apply smart analytics to the problem.

The Need for Intelligent Analytics

Virtually all online video platforms and content delivery networks now generate a vast amount of raw data. But powerful analytics are needed to interpret it to suit the needs of a specific business and its viewers.

Analytics are the refinery that turns data into dollars.

For example, real-time feedback can show the demographic makeup of a viewer or audience, what they're watching and when they stop, and the devices they use.

That's a useful snapshot of the audience at one point in time. But understanding how millions of those snapshots unfold into telling insights over time is immensely more valuable. That level of information can show a company where it stands in relation to its audience and its competitors.

Different business models have different needs for actionable analytics

SUBSCRIPTION SERVICES	Common among video providers like Netflix and Amazon
AD-DRIVEN MODEL	Likely to become more prevalent as more viewers move to the Internet for their entertainment
HYBRID MODELS	A mix of subscription revenue with advertising revenue (e.g., Hulu)

© Parks Associates

An ad-supported online video business might target a specific demographic or geographic population or go a step further to hyper-target viewers by location and filter by time of day. For particular times in a day, the provider can infer the best set of devices on which to reach a user. That kind of granular detail is the way for brands to find and target the "right" consumer most efficiently.

As brands hyper-target customers this way, big data becomes essential for publishers who need to fulfill their ad campaigns.

A suite of data with summaries such as "here are viewers who come from Canada and watch video on smartphones between 4 and 6 p.m." can be critical to driving a multiplatform ad campaign.

For subscription-driven providers, keeping viewers engaged for longer periods of time might be their mission-critical key performance indicator (KPI).

Traditional broadcasters using a TV Everywhere product, for example, likely want to know more about how subscribers consume content in order to better understand the pathways their customers follow to particular assets. Whichever model an online provider uses, they're almost certainly doing less content marketing than traditional broadcasters would. A service provider with thousands of online video titles available on demand often does less to market them than a TV network does for a handful of shows each week.

The use of detailed data to "discover" and present appropriate shows to individual viewers is critical for all online video players in the battle to increase viewer engagement.



How Analytics Can Help Engagement

Smart content discovery is the path to greater online viewer engagement.

While traditional broadcasting and pay-TV providers often rely on the familiar programming guide listing time, date, and program, online video can offer better options to viewers. Analytics and sophisticated data science can tee up other shows viewers may enjoy, based on current and past viewing habits.



On the simplest level, this means offering more tennis highlights to someone who's watching tennis now.



On a more sophisticated level, it might mean knowing that a viewer likes 15 minutes of stand-up comedy clips on a tablet before bed every night at 10:30 p.m.

These types of offerings are a proven way to increase viewer engagement and make a video product stickier.

Some operators are investing in personalized interactive programming guides (IPGs or EPGs), like TiVo and AT&T's U-Verse IPTV-based guide, that allow viewers to navigate programming menus more easily and search for programs based on time, genre, or other variables. They also can use viewer data and habits to generate program recommendations.

Enhancing the user experience, extending engagement time, and allowing easier content discovery by optimizing analytics: all are useful ways to enhance revenues for content owners and providers.

Monetizing the Audience

Until recently, one big difference between online video operators and pay TV was simply the amount of premium content available. While online content still has a long way to go before it has the volume of professional-grade content available on pay TV, it is rapidly closing the gap.

How can advertisers reach this fast-growing but fragmented audience in online video?

Reaching targeted audiences can actually be easier and more economical through online video, where new business intelligence applications can sort through the noise of fragmentation and use both advertising analytics and content analytics to better match an audience to a product.

On the buy-side, as an agency or advertiser, such insights can dramatically reduce "waste"—ads shown to viewers who aren't interested. This benefit reduces costs and maximizes profits. The difficulty, of course, is that the sell-side and buy-side of advertising have very different goals. So, while they may use the same data, their perspectives on the data are often worlds apart. Thus, information that can provide insights for both constituencies, yet still remain unified in purpose, can be immensely valuable.

When 'Value Added' Truly Adds Value

A constant refrain in the online video industry is the phrase "value-added service." Bring video to a new device? Value added. Incorporate a new codec? Value added.

But really, aren't most of these "additions" just part of the basic job? Don't data analytics fall into the same category? The ability to collect volumes of raw data is not really a value add; it's just data that, sometimes, can be used to make basic decisions and, sometimes, can create as many issues as it solves.

The amount of data that companies can collect today is enormous; what's done with that data isn't always as impressive.

When this data stays shallow and content-centric, the value add is minimal. It's like a road-map that shows cities but not the connecting routes.

Value is truly added by providing an ability to compare multidimensional views of that data with the needs of a given user.

Data tools should allow nuanced insights into video consumption. Publishers can use such tools to optimize program ad buys for better impact and ROI.



For technology players in the media space, being able to deliver the basics—content ingestion, transcoding, playback, and storage—quickly and economically, without sacrificing speed, remains mission critical.

As more users move toward Internet TV and the space begins to generate more revenue, with premium cable channels and even cable networks themselves eyeing IP delivery, those functions become the minimum requirement. And today that's not good enough. In the very near future, the ability to collect, digest, and consolidate data into truly insightful, actionable business intelligence will be not only a differentiator but also a disruptor for the industry.

Increasingly, the most important function in the tech stack is big data and the ability to make sense of it.

CONCLUSION

The online video industry has hit a tipping point. The line between premium video, cable channels, and pay TV is blurring. Consumers will continue to have a variety of options for accessing interesting content. In this environment, understanding the user experience and being able to capitalize on that understanding will be key to success—or even basic survival.

Analytics is a major tool—the major tool—in finding new ways for premium content to increase the bottom line of content owners, pay-TV operators, and other companies in the ecosystem. A generalist approach won't be adequate to the task of earning game-changing revenues for those premium content owners. Success depends on deep data analysis and the insights and powerful hyper-targeting that can flow from it.





Founded by Google veterans, Ooyala has believed from the start that data should drive content programming and monetization for online video.

Ooyala has the largest and most robust real-time video analytics infrastructure in the global video marketplace. Unlike most other offerings, our analytics engine is deeply integrated with our core streaming, discovery and monetization tools. Customers can monitor every video play network-wide, and use what they learn to boost views, keep viewers engaged longer and maximize the value of their inventory.

Video providers of all kinds need to know which pieces of their content drive the most revenue; which types of devices are most popular; and what times of day create spikes in viewership that can be leveraged with advertising and sponsorship partners. Ooyala Analytics provides these capabilities and more.

We publish the quarterly Ooyala Video Index, which analyzes billions of data events collected from hundreds of millions of users from 100+ countries. This analysis guides our understanding of, and development toward, the next-generation TV market. One Ooyala customer—an influential print publication discovered that its viewers were more likely to watch video on tablets, with a higher engagement rate, during specific hours of the day. Armed with this insight, they adjusted their editorial approach to promote videos during those specific hours to earn a significant boost in revenue.

Another publisher of mid- to long-form content suspected they weren't making the most of their ad opportunities. Using data from Ooyala Analytics, they experimented with various ad loads and types to reach a strategy which increased revenue by more than 900%, with an acceptable loss in total video engagement of a modest 7%.

A key product of our analytics focus is Ooyala Discovery, which finds and recommends the videos from a customer's content library that each viewer is most likely to watch.

Our Discovery engine applies real-time analytics processing to numerous inputs related to content, playback and individual viewer, to provide a continuous stream of recommendations that are locally, personally and socially relevant. By integrating recommendations seamlessly within the playback experience, Ooyala helps customers maximize revenue opportunities from advertising or video on demand transaction. Ooyala Discovery helped one online news publisher to increase viewer engagement 47%, translating directly to increased video completions, ad fill rates and revenue.

Businesses that rely on video can spend up to a year and millions of dollars trying to build out those kinds of analytics capabilities. Ooyala can get businesses to that level in far less time and money, with powerful and easily-integrated features that are built right into our video delivery platform. We help businesses deliver the sort of hyper-targeting that earns higher ad rates and makes both advertisers and viewers happy.

Ooyala continues to build upon its award-winning video analytics platform, leading the charge toward ever more actionable insights. We see unlimited potential for digital video, for consumers, and for the providers building the next great entertainment industry.

About Ooyala



Ooyala delivers personalized video experiences across all screens and is a leader in online video management, publishing, analytics and monetization. Ooyala's integrated suite of technologies and services gives content owners the power to expand audiences through deep insights that drive increased viewer engagement and revenue from video.

Companies using Ooyala technology include Telstra, ESPN, Pac-12 Enterprises, Miramax, Bloomberg, Telegraph Media Group, Telefonica, The North Face, Rolling Stone, Dell, Sephora and Yahoo! Japan. Headquartered in Mountain View, California, Ooyala has offices in New York City, London, Sydney, Tokyo and Guadalajara, Mexico. The company works with premier reseller and technology partners throughout the Americas, Europe, Africa, Japan and the Asia-Pacific region.

For more information, visit www.ooyala.com.



About Parks Associates

Parks Associates is an internationally recognized market research and consulting company specializing in emerging consumer technology products and services. Founded in 1986, Parks Associates creates research capital for companies ranging from Fortune 500 to small start-ups through market reports, primary studies, consumer research, custom research, workshops, executive conferences, and annual service subscriptions.

The company's expertise includes digital media and platforms, entertainment and gaming, home networks, Internet and television services, digital health, mobile applications and services, support services, consumer apps, advanced advertising, consumer electronics, energy management, and home control systems and security.

For more information, please visit www.parksassociates.com | 972.490.1113 | info@parksassociates.com

ATTRIBUTION

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END NOTES

¹ Parks Associates: TV Everywhere—Growth, Solutions and Services

² comScore: June 2013 Video Metrix

³ Ooyala: Q1 2013 Global Video Index

⁴ Parks Associates, Advertising Trends & Converged Media, 2013





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