



## THE EVOLUTION OF TV

Measuring tv & video across  
all screens

Google

DoubleClick

The traditional tableaux of the family gathering around the TV set after dinner may still hold true in many households across the US, but that's a picture that looks far different today than it did even just a few years ago. Mobile, in particular, has caused a tremendous shift in behavior, with the consumer journey now defined by real-time, smartphone-enabled "micro-moments." 90% of viewers turn to other devices like PC, tablets, and smartphones while watching TV to get more information about the program that's on, communicate with others, or research an advertised product or service. Traditional TV measurement methods have fast become inadequate to provide a complete picture of this new, intent-driven consumer behavior.

Since AC Nielsen began tracking television viewing in thousands of US households with panel-based measurement in 1950, the Gross Ratings Point (GRP) had been largely unchallenged as the currency by which programmers and advertisers estimated audience size (and established advertising rates). Yet while over-the-air or cable is still by far how most people consume video (91% of all video, 90% of which is live), viewership of TV delivered on digital platforms continues its lightning-fast rise: 19% of viewers now have an over-the-top device like Roku or Chromecast in addition to or replacing their cable set top box, with daily time spent viewing with these devices increasing 80% year over year in Q2 2015. Video consumption using smartphones increased 23% (2 hours and 4 minutes per month) in the same period, as did viewing TV over personal computers -- +19% (12 hours and 36 minutes per month).

# Change in monthly viewer reach

Q3 2015 vs. Q3 2014 (p2+)\*



\* Number of overall users by medium  
\*\* "Multimedia Device" includes viewing on an Apple TV, Roku, Google Chromecast, smartphone, computer/laptops, etc. connected to the TV  
Source: The Nielsen Company, "The Total Audience Report: Q3 2015" p. 15, Table 2A



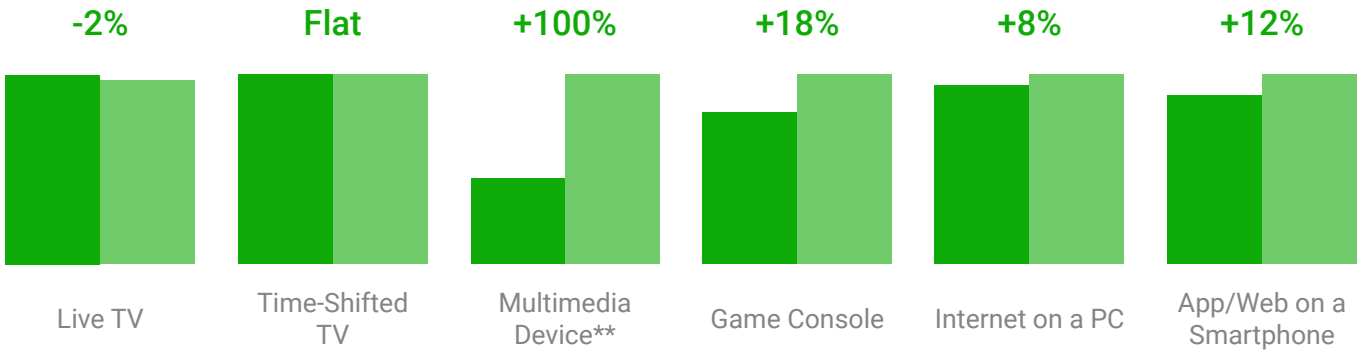
With the ever-greater shift to TV delivered digitally and across so many devices, and the massive amounts of actionable data this provides, is it time to say goodbye to panel-based ratings and the GRP? While we don't believe the industry will ditch the GRP for quite some time, we do believe that it will evolve drastically to incorporate many of the strengths that come with digital viewership. A model of hybrid panel + census measurement is emerging, in which traditional systems and methods are melding with modern census capabilities— which will give broadcasters and in turn advertisers a better idea of who's watching and when, the impact of a program or ad on individual viewers, and most importantly, allows us to tailor more personal ad experiences.

“TV is a communal appliance and getting beyond household estimation to personal preferences will drive the next generation of TV viewing”

-Sean Harvey, Senior Product Manager, Google Fiber

Average time spent per day

Q3 2015 vs. Q3 2014 (18+)





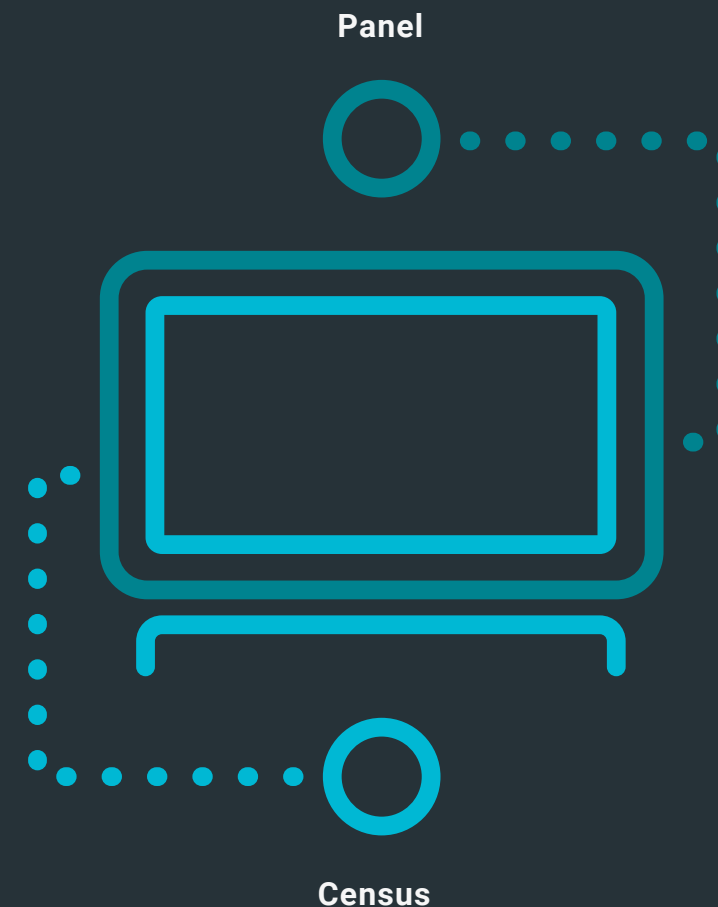
# Challenging the status quo

While traditional TV ratings continue to decline - cumulative viewership was down 8% for 2015 fall premieres overall, including a 20% decline in 18 to 24-year-olds - the \$70 billion per year in TV ad dollars continue to exhibit some modest growth. However, the ratings decline and ad growth provide an incomplete picture as they don't take into account the tremendous growth in over-the-top viewership of TV content and the broader growth of digital video.

So, while viewers are shifting their viewing behavior, ad dollars have yet to follow as quickly, which can be attributed to the fact that brand marketing on television has been practiced and honed for generations. The entire ecosystem—from research and creative to planning, buying, and measurement—is a lucrative and well-oiled machine.

However, the fountain of Internet-driven audience census data is what marketers have perhaps always craved. As Internet-enabled “performance advertising” and programmatic buying techniques have become important tools of the trade. And this is increasingly being made available across video and clients are challenging agencies in terms of what data agencies can and should deliver (and when) -- changes that agencies may not be prepared to deliver on or monetize.

While traditional ratings panels seem small in size—~50,000 people in the US (out of a total population 300MM)—they are considered statistically sound, with a 95% confidence level achievable with just under 800 people. Given this level of trust, the panel-driven GRP will continue to be relied upon to provide insights on reach and frequency. As TV delivery becomes increasingly digital and set-top boxes become fully addressable, however, the reliance on the GRP is evolving toward a trusted “census + panel” approach. Age and gender reach targets will become more granular; today's frequency-agnostic ratings points will transition into “frequency-optimized” reach points. Longer-term, the viability of the GRP as we know it today is in question.



## Measurement approaches

### Panel measurement

An estimation approach where the viewing habits of a small panel of viewers is used to estimate what everyone in the country is watching.

### Census measurement

The ability to count and gain insights from every individual ad that has been delivered and viewed on a digital platform. Measurements come directly from the ad server or website analytics software.



# Panel vs. Census:

## Bridging the gap

“There will be some conversion calculator or Rosetta Stone to combine Internet-TV census metrics with current TV panel metrics. This adaptation must be something that all sides can believe in and support to enable true cross-screen TV buying and selling.”

-Anish Kattukaran, Video & Brand Measurement Marketing Lead, DoubleClick

One of the primary challenges in bridging the measurement gap is speaking the same language, which has begun to happen on both sides of the measurement coin. “It’s really important for GRPs to continue to extend into the digital role,” says Rany Ng, Director of Product Management, Display, Video & TV Advertising, Google. Being able to speak the same language around audience demographics and GRPs is really important for us to have any type of bridging or convergence.”

The industry is attempting to harmonize panel and census data with companies like Google, Nielsen and Comscore amongst others leading the charge. What is clear through these efforts is that the granularity and precision of digital measurement is the primary driver of change. Native digital platforms such as YouTube, Snapchat, Google Play and Hulu, plus delivery of programming through ISPs like Verizon FiOS and Comcast xfinity, are also helping to move the TV advertising industry much closer to census-level measurements.

Another far more complex challenge is integrating the high degree of measurability of ad effectiveness in the digital world. “GRPs, reach, and frequency describe how many people saw the ad and how many times they saw it. They don’t describe impact,” says Dave Barney, TV Attribution Product Manager for Google. “When we start adding effectiveness and measurement to radio and television, there is nothing in the traditional language to account for that.”







On linear TV, any ad running has a 100-percent share of voice—it's the only thing on the screen. But on digital platforms, ads come in all kinds of formats and several can populate the viewer's screen at once. "That is something that needs to be accounted for, in terms of how comparable an ad view is on TV to an ad view in digital," says Sanaz Ahari, Senior Product Manager of Brand Measurement, Google. "It's not quite apples-to-apples. That is something that needs to be resolved."

Solutions such as Google's TV Attribution\* map users' interactions across devices, from smartphones to desktops, and across channels to provide a broader view of user engagement. Advertisers can get a top-down view of the marketing mix in combination with bottom-up, data-driven attribution—understanding the true effectiveness of an ad with metrics such as Cost Per Attributed Click (CPAC), Cost Per Available Query (CPAQ), cost per conversion, and conversion value. Campaigns can be optimized accordingly.

Measurement of Internet-hosted TV content still presents its own set of challenges, as a portion of Internet and mobile TV viewing remains unattributable or measurable today. In a 2014 Wall St. Journal interview, Alan Wurtzel, President of Research for NBC, cited 17% of viewing of the hit show *The Blacklist* happened outside the realm of Nielsen measurement and for *Parks and Recreation* it was 37%. Viewing on smartphones, tablets, computers, streaming device, or through VOD services more than seven days after air date is likely partially—if not totally—responsible for a 5% year-over-year drop in A18-49 primetime broadcast ratings, and 10% for cable (August 2014 vs. the year prior).

Clearly, closing the measurement gap is critical to the bottom line. TV viewership is shifting rapidly, but measurement—and therefore advertising dollars—have not followed at the same speed.

# Embracing the future:

## Ad effectiveness & the customer journey

"I do think people will still continue to buy on audiences. But both the importance and the emphasis will shift to metrics like brand lift, sales lift, and view metrics to better understand the effectiveness of their campaigns."

-Rany Ng, Director of Product Management, Display, Video & TV Advertising, Google

Creators, networks, and advertisers are scrambling to keep pace with the seismic shifts in content delivery and viewer behavior driven by digital technologies. These changes, however, come with great opportunities to understand viewers at a much deeper level than ever before, and reach them at all parts of the marketing funnel.

Traditional GRP measurement provides advertisers with sound feedback on what the viewer saw. However, through census data and programmatic ad buying capabilities, marketers can understand—with granular detail and certainty—the effectiveness of an ad spend in driving brand awareness, favorability, intent, loyalty, and sales. And with all the real-time data at their fingertips, advertisers can now optimize their campaigns on the fly.

Google is approaching the future of TV measurement in a "see/think/do" paradigm. What did the viewer see? What did they think as a result of what they saw? And finally, what did the viewer do based on what they saw and thought? Understanding viewers within this framework, marketers can now make better decisions at every stage of the consumer journey.



### What did the viewer see?

We can measure:

- Reach & Frequency
- Viewability & Verification
- Audience Composition



### What did the viewer think?

We can measure:

- Awareness & Consideration
- Website Engagement
- Assisting Credit



### What did the viewer do?

We can measure:

- Online & Offline Sales
- Cross-Device Conversions
- Customer Lifetime Value





Programmatic ad buying helps marketers minimize the potential waste of a large-scale TV buy. Rather than throwing away or discounting a percentage of impressions, these can be monetized by the programmer with a different creative approach by the same brand, or a different brand altogether. Secondary and tertiary audience targets can be programmed in the same moment.

Brand managers can now think more holistically about “brand life” across multiple platforms and in time-shifted environments. Multiple creative treatments, sequencing, and frequency can now be part of a larger story arc. Rather than one treatment playing during a hit reality show on a major network, an advertiser like Coke can go out and commission dozens of ads that target the full spectrum of their customers, hitting them at the right time on the right device with messaging geared exactly for a distinct audience segment.



# The local marketplace

While the idea of local TV ads conjures up images of a used car dealer or furniture showroom across town, national brands are increasing their focus on local TV networks. Not only do “national-local” buys provide scale and reach far more economically than national buys, they are also effective at driving calls to action, such as stimulating foot traffic to retailers. By 2018, more than 43% of all ads seen on local television networks will be by national advertisers. When mobile and online are factored in, local ad spending in the US will reach \$70 billion annually.

To accommodate the growing appetite for national-local buying, Nielsen is responding with an expansion of their Local People Meter panels by 50% in 2016, including the two largest markets, New York and Los Angeles. When thinking of closing the gap between panel and census reporting, however, measurement of national-local TV buys continues to be especially complex. The aggregation of data in multiple formats from various Multichannel Video Programming Distributors (MVPDs) has traditionally caused slow turnaround times, though this is speeding up as event-level ad data can now be passed directly to data brokers and forwarded to advertisers.





# Sharing, trust, and transparency

The future of TV-data measurement will only be as bright as the value it can bring to advertisers and programmers. Closing the loop on attribution across platforms and ensuring that we have a near-perfect, total view of the consumer will require trust and transparency at all points in the ad ecosystem. It will also require cooperation among platforms, hardware manufacturers, operating systems, and content providers.

For advertisers, having a dialogue with the audience is a must. TV is an ever more personal experience—and there must be some benefit for viewers to share their information. Advertisers need to say, “We can provide you with more meaningful experience, if you provide us with some information about you.” A better experience can run the gamut from more relevant and entertaining advertising to meaningful offers, promotions, and discounts that spur the viewer into action.

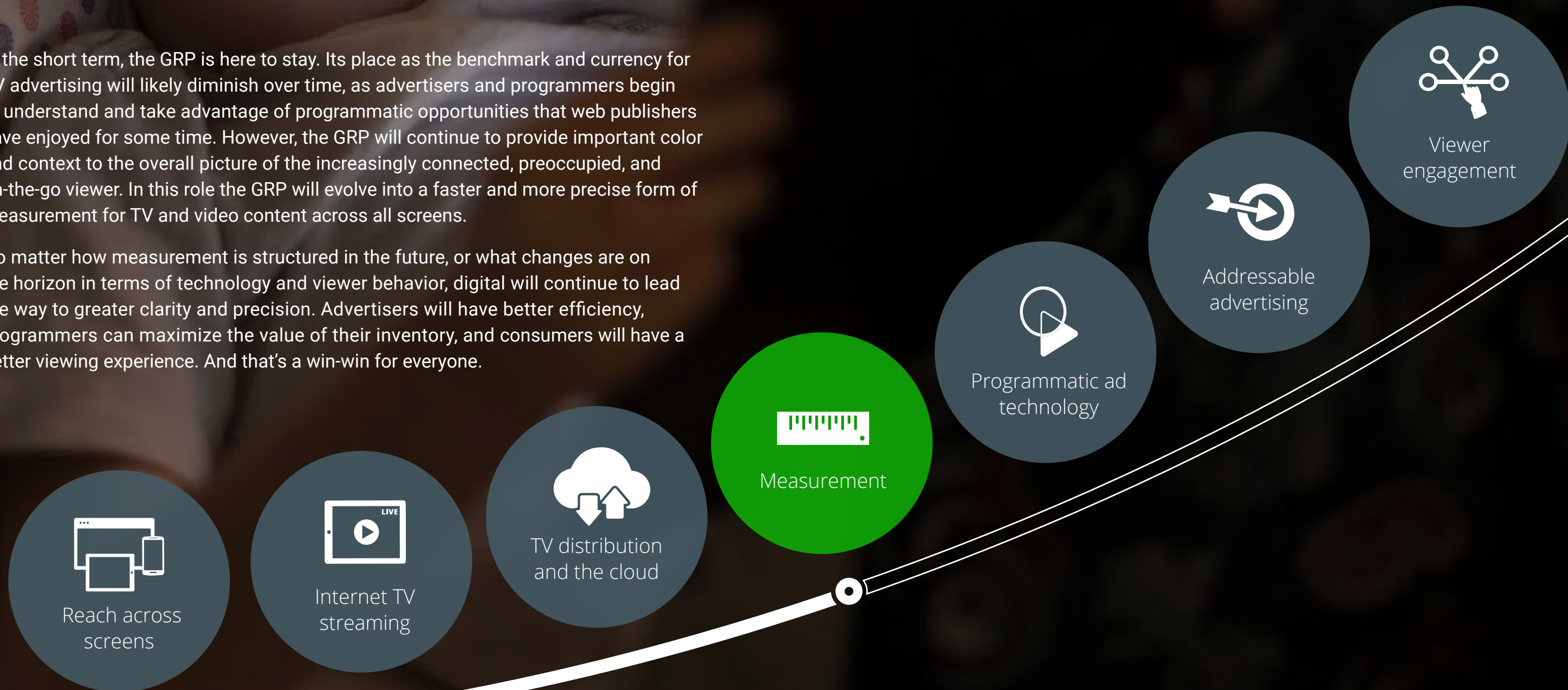
Proprietary data gathering and competing standards of user tracking provide challenges in attaining the ideal of a 100-percent view of the consumer. Apple’s rejection of iOS apps using a Unique Device Identifier (UDID) in favor of its newer Identification for Advertisers (IDFA) standard is just such an example. Purveyors of TV Everywhere apps and Over-the-Top services have a very large advantage in terms of understanding who is watching across the various platforms they control, yet they are hesitant to share data. And holders of other data sources in the attribution ecosystem, such as transactional information from Google Wallet and Apple Pay, are understandably sensitive about privacy, regulation, and competitiveness.












In the short term, the GRP is here to stay. Its place as the benchmark and currency for TV advertising will likely diminish over time, as advertisers and programmers begin to understand and take advantage of programmatic opportunities that web publishers have enjoyed for some time. However, the GRP will continue to provide important color and context to the overall picture of the increasingly connected, preoccupied, and on-the-go viewer. In this role the GRP will evolve into a faster and more precise form of measurement for TV and video content across all screens.

No matter how measurement is structured in the future, or what changes are on the horizon in terms of technology and viewer behavior, digital will continue to lead the way to greater clarity and precision. Advertisers will have better efficiency, programmers can maximize the value of their inventory, and consumers will have a better viewing experience. And that's a win-win for everyone.












# Google's video solutions

## For publishers, programmers and distributors

- Ad server:  DoubleClick for Publishers by Google
- Supply side platform:  DoubleClick Ad Exchange by Google
- Ad network:  Google AdSense
- Mobile apps monetization:  AdMob by Google
- Ad exchange:  DoubleClick Ad Exchange by Google
- Premium programmatic video marketplace:  Google partner select
- Content distribution partner:  YouTube

## For advertisers & agencies

- Digital marketing platform:  DoubleClick Digital Marketing by Google
- Ad creative:  DoubleClick Studio by Google  Google Web Designer
- demand side platform:  DoubleClick Bid Manager by Google
- Ad server:  DoubleClick Campaign Manager by Google
- Ad exchange:  DoubleClick Ad Exchange by Google
- Ad network:  Google Ads
- Premium programmatic video marketplace:  Google partner select
- Media partner:  YouTube