THE EVOLUTION OF TV

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7 dynamics transforming TV

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The convergence of TV and internet video

It used to be that watching TV meant you had to turn on a TV set. But now thanks to high-speed internet-enabled devices—as anyone who's watched a favorite show or sports team on a smartphone or tablet knows—"watching TV" can pretty much happen anytime, anywhere. In other words, TV programming these days is no longer limited to just the TV screen.

This ubiquity and the convergence of traditional linear TV and internet video requires a shift in TV programming from delivery over the air via satellite and via cable to delivery over the internet. Seems simple, right? But it's actually much easier said than done.

The shift to TV over the internet is having a profound impact on television delivery, advertising and the viewer experience driven by the transformation of seven dynamics of the TV industry and advertising marketplace. These seven dynamics (reaching across screens, internet TV streaming, TV distribution and the cloud, measurement, programmatic ad technology, addressable advertising, and viewer engagement) represent new and old challenges that TV programmers and distributors have been dealing with for the past 60 years. The path the industry embarks on today will have a lasting impact on the future of TV as we know it.

7 Dynamics Transforming TV

Delivery

- Reaching across screens
- Internet TV streaming
- TV distribution and the cloud

Advertising

- Measurement
- Programmatic ad technology
- Addressable advertising

User

- Viewer engagement

Definitions

Live TV:
A live or near-live stream of television programming such as live sports or live news.

Smart TV:
A TV set with media storage and internet connectivity like a computer.

Over-the-top (OTT) box:
A device through which television services are delivered over the internet.

TV programmer:
The owner of one or more television channels.

TV distributor:
A service provider that delivers television channels to viewers.

Linear TV:
A predictable schedule of television programming that works like a television channel and streams throughout the day.

On-Demand TV:
Television programs that stream on demand at the request of the viewer.

TV Everywhere:
When distributors extend access to their TV content over the internet to existing customers.

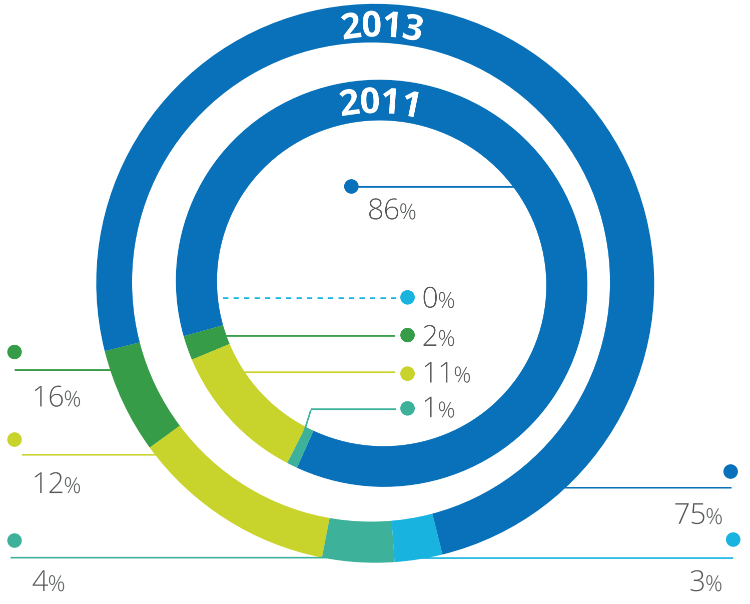
Each of these fundamental dynamics is undergoing transformation and presents its own risks and opportunities. Questions are being raised about who owns the consumer relationship, how viewership should be measured and rewarded, which business models drive the most revenue, and how the consumer can engage with programming.

And we are now seeing the industry proactively take steps to address the changing landscape. More direct-to-consumer ad supported and subscription options are likely, as shown by the launch of CBS All Access in 2014, HBO's planned direct-to-consumer launch in 2015 and the continued growth of TV Everywhere apps. According to the Adobe Digital Index from Q1 2014, **TV Everywhere video consumption grew 246% year-over-year** across devices. Furthermore, since it's recent introduction in 2013, Google's streaming media device **Chromecast has consistently held the #1 spot on Amazon's best-selling consumer electronics ranking**, having sold millions of devices.

Services such as Netflix and Hulu have proven that direct-to-consumer subscriptions can work. Forty-seven percent of households subscribe to Netflix, Hulu Plus and/or Amazon Prime Instant Video, according to the Emerging Video Services VIII report by Leichtman Research Group. TV over the internet also provides a tremendous opportunity to transform viewing from a one-way broadcast model to a two-way interactive model. We've seen YouTube creators engaging with their audiences to create content relevant to their global fan bases and supply them with infinite choice. This approach to content has resulted in more than **1 billion unique users visiting YouTube each month.**

People are choosing to watch TV how and where they want. The increased flexibility seems to be driving the entire TV industry's growth.

Time Spend by Format / Device



Source: Luma Partner, May, 2014, Future of (Digital) TV

Advertisers follow their audiences, so ads will continue to be a primary source of revenue from programming delivered over the internet. This undoubtedly will have major implications for what eMarketer reports as $68 billion in annual US TV ad spending. The TV sell side (programmers and distributors) and TV buy side (marketers and their advertising agencies) are highly motivated by their bottom line to create and operate the internet TV ad market as efficiently and effectively as possible. As traditional TV and internet video converge, television ads can be more relevant, engaging, and effective. Through advances in video ad decisioning and dynamic ad insertion, campaigns can deliver the right message to the right user at the right time in the highest-quality context. Cross-channel campaigns can be measured holistically and advertisers will discover new insights, all at internet scale.

Embracing this shift can benefit each player in the TV ecosystem. By assessing each of the dynamics in transition, we can better understand the multiple risks and opportunities that the shift to internet delivery creates. Our hope is to provide a perspective that will help marry what users want—ubiquity of TV programming in a user-friendly way—with what TV programmers, distributors and advertisers require for success: accountability, monetization, efficiency, scalability, and engagement. We'll provide this detailed perspective in this eight-part series, diving into each in-dustry-disrupted dynamic that the shift to anywhere, anytime programming will affect.

To kick off the series, let's dive more deeply into this notion of consumer demand for anytime, anywhere programming by looking at how TV has evolved to where it is today. Then we'll explore in detail the complexity, risks, and opportunities that this shift creates for programmers, distributors, and advertisers.

The Future of TV:

Infinite viewer choice—The content, information and people that viewers want to watch, when they want to watch it and where they want to watch it.

Built on fans, not just audiences—The move toward engagement and lean-forward viewing.

Viewed on demand—Time-shifted viewing and catch-up TV will make it critical for content owners to focus on content discovery and UI.

Global—With access to billions of viewers worldwide, the internet will make it easier to deliver content and programming to viewers globally.

Streamed over the internet across all screens—Television programming being delivered over the internet will become one of the dominant modes of TV delivery to enable viewing across all screens.

Addressable—The convergence of TV and internet video will result in more addressable and relevant advertising.

Television: An industry of innovation and change

As the TV industry navigates this shift to anywhere, anytime programming, it's important to ground that shift in the history of change in the television industry. The pace and nature of change have raised people's expectations of how and when they get their programming.

Innovation is nothing new to the TV industry. And the industry continues to demonstrate tremendous growth—both in scale and in form. TV size and form factor aren't the only noteworthy changes to which the industry has adapted. Delivery is another massive shift that continues to evolve. We've gone from broadcast to cable and then from analog to digital. Now the industry is making a third huge change in delivery with its transition to TV over the internet.

Three waves of change in TV Delivery

1st — First big transition: Over-the-air broadcast to analog cable and satellite TV

Beginning in the early '80s, the industry shifted from traditional broadcasting dominated by three networks to the far more numerous choices offered by cable and other multiple video program distribution providers (MVPDs).

2nd — Second big transition: Analog cable and satellite TV to digital

From 1996 to 2009, the TV industry transitioned again from analog to all-digital broadcasting, in response to a mandate from the Federal Communications Commission (FCC). And while digital TV didn't directly affect the TV viewer experience it did have a major impact on how TV is actually made and distributed.

3rd — Third big transition: Digital cable, satellite and over-the-air TV to delivery over the Internet

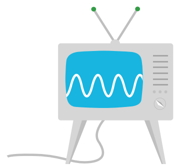
Now, the TV industry is making another major transition from digital delivery of content via over-the-air, cable and satellite to include delivery over the internet.

75.2% of all U.S. households will have an internet-connected TV device by 2018 according to a June 2014 eMarketer report.

Within this third wave of change, the TV industry is making more and more content available on any internet-capable device, while experimenting with varying combinations of ad and subscription revenue models. It started with TV clips, then on-demand episodes, then TV apps. Now, it's "live, linear, and on-demand TV anytime, anywhere."

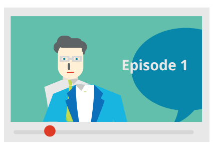
1980 — 1996 — 2010

Third big transition: Evolution of TV over the internet.



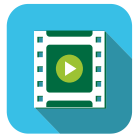
Phase 1: TV clips

Programmers offer short clips for the web to promote full-episode shows that viewers can watch only on TV sets.



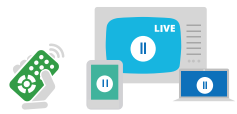
Phase 2: On-demand TV episodes

Programmers deliver full episodes on the web, inserting mid-roll ad breaks at the same points in the episode as on TV. Each episode is typically available for a short time.



Phase 3: TV apps

The massive growth of the smartphones and tablets market, through ease of use and advancements in streaming video, drove personal TV viewing to custom apps on devices. This is changing how a new generation grows up with TV.



Phase 4: Live, linear, and on-demand TV anytime, anywhere

Programmers and distributors, realizing they've tapped into a massive, on-demand TV audience across connected devices, begin to add live and linear TV to their successful on-demand programming.

Phase Future: The best of TV and internet content formats converge

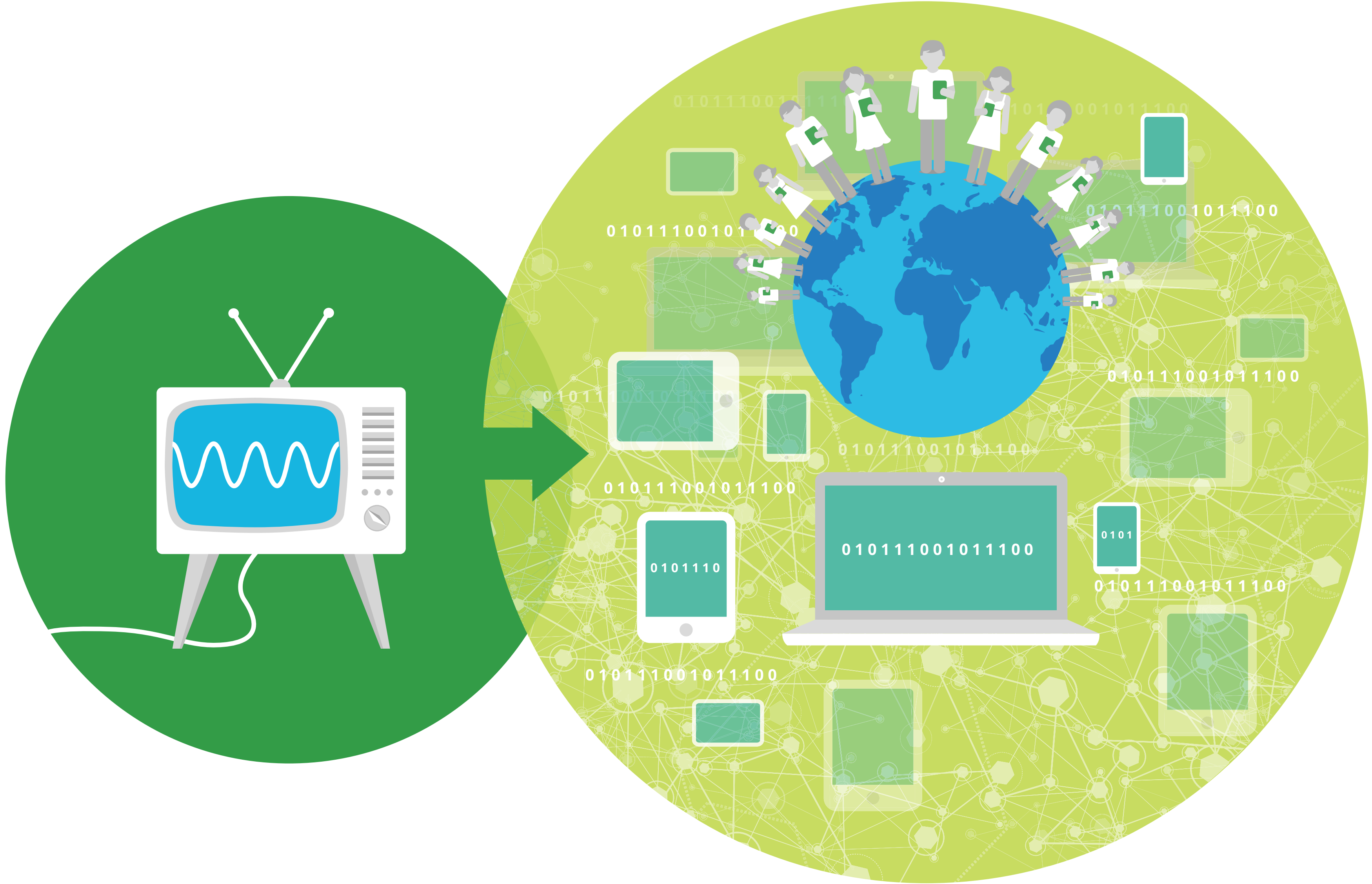
Recognizing the success and reach of video content made specifically for the internet, programmers and distributors develop or acquire next-generation internet video creative agencies or multichannel networks, delivering a blend of TV and internet content, blurring the lines between traditional TV formats and newly developed "snackable" internet video formats.

People prefer TV on their terms

TV delivered over the internet offers control over when, where, and on what devices people watch. Limited options, such as being able to watch TV programming only live or as DVR are no longer enough. OTT content consumption has seen steady growth on the backs of services such as Netflix, Hulu Plus, HBOGo, WatchESPN and YouTube, among many others, and is evidence of the viewers desire to watch TV on their own terms. People want a full selection of TV programming, including live sports, live news, linear channels, and complete on-demand archives. Anything less will disappoint.

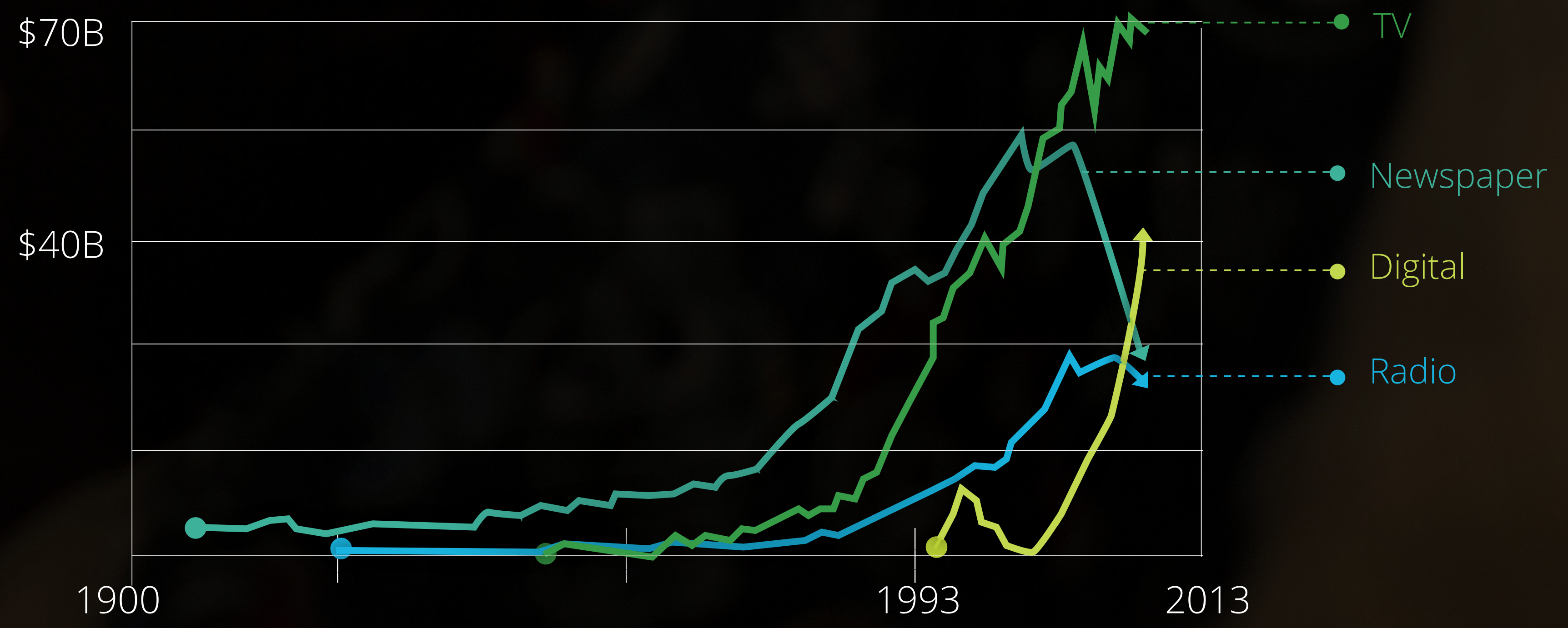
Why? Think about how far technology and its adoption have come in a short time. Just a few years ago, conventional wisdom was that no one would watch TV on a smartphone. The screen seemed too small. But the convenience of essentially having a TV in your pocket trumped form factor. So much so that **we are now seeing 50% of all YouTube views coming from mobile devices,** and from the Adobe's Digital Index we are seeing that 58% of authenticated TV Everywhere streams in Q1 2014 coming from iOS and Android devices. Couple this with the fact that eMarketer reported that in 2014, for the first time ever, time spent on TV was outpaced by time spent on digital mediums—with mobile driving the shift. So it turns out that people are very comfortable watching TV on any screen that suits them.

The continued growth of TV over the internet seems inevitable. The willingness to use nearly any connected device to watch TV, combined with widespread access to high-speed connectivity, means that TV will move to internet delivery very rapidly. People already stream content to an incredible variety of devices, including smartphones, tablets, laptops, desktops, smart TVs, over-the-top (OTT) boxes, game consoles, streamcasters and more.



The internet TV opportunity: 7 dynamics transforming TV

The TV industry is transforming to meet the opportunity that the internet offers. While it is still early days, the impact that the internet is having on TV appears to be additive as TV dollars continue to grow. The stakes are high, but so are the rewards to programmers and distributors who successfully navigate the internet transformation of TV. We've identified seven TV market dynamics that are in active transformation:



The continued growth in TV and Digital show that advertisers and media agencies are looking at these channels to drive brand engagement.

Source: Luma Partner, May, 2014, Future of (Digital) TV

1. Reach across screens

TV programs can now reach audiences across devices and over time.

The risk: Reducing audience reach

Without addressing the complexities of providing programming across a variety of screens, devices, connection speeds, and video streaming protocols (to name just a few), it will become harder for programmers and distributors to offer advertisers the audience reach that they've come to expect from TV. Additionally, the lack of consistent measurement across screens will make buying complex and could stifle the flow of TV ad dollars.

The opportunity: Increasing audience reach

Programmers and distributors can increase audience reach by pursuing ubiquitous TV programming across screens and devices. Advertisers will value relationships with the programmers and distributors who offer ubiquitous reach to their target audiences across all screens, rewarding them with TV ad dollars. The multi-screen landscape could also offer advertisers a range of new ways to engage with their audiences tailored to the screen or device versus a one-size-fits-all approach.

2. Internet TV streaming

People want a TV-over-the-internet experience that's as good or better than watching the same content on traditional TV.

The risk: A poor advertising experience for new internet TV services may stymie growth

Linear and on-demand TV have a reputation for consistency and quality. And users expect the same level of quality whether they watch the same show on a 50-inch screen or a 5-inch screen. This can be undermined for programmers, distributors, and advertisers if the ad-monetization technology isn't up to the task. Issues such as stream buffering at the beginning and end of ad breaks, low resolution/ pixelated ads and ads with the same creative run back-to-back can quickly drive audiences away to many other choices.

The opportunity: A TV-over-the-internet ad-monetization platform that can deliver the full promise of TV ad quality and personalization at scale

Advancements in technology allow TV over the internet to dynamically adjust the quality of the TV stream, based on everything from device type to screen size to connection speed. Also, ad-monetization platforms will be able to dynamically select the best ad for each viewer in real time and seamlessly insert them into TV commercial breaks so that quality goals are met. The opportunity is to first meet and then exceed the current consistency and quality of linear and on-demand TV.

3. TV distribution and the cloud

To achieve TV scale on the internet, programmers and distributors will need to migrate aspects of their production and distribution workflows to the cloud.

The risk: Failure to design for the cloud will lead to unsustainable costs

To grow TV-over-the-internet offerings, programmers and distributors will need to move key network operations center (NOC) infrastructure and workflows to the cloud, ensuring sustainable cost structures at scale to deliver the programming that TV over the internet requires.

Also, programmers syndicating their product globally will need to change their operation workflows if they want to maximize advertising revenue both in and out of their domestic market. Determining what parts of the workflow belong in the NOC versus the cloud should be solved quickly for TV to successfully transition to the internet.

The opportunity: Cloud services offer agility and elasticity, which are ideal for TV over the internet

The cloud has a history of transforming industries by delivering global scale at much lower operating costs. The TV industry is set to benefit from the cloud.

Distributors can reduce their costs and increase services by designing their operations to scale.

Programmers also benefit from the "cloudification" of their TV syndication workflows and new business models. Now they can syndicate programming with distribution partners while taking advantage of uniquely addressable TV ad spots, even if the stream is being watched on their syndication partners' apps, sites, and devices.

4. Measurement

TV delivery over the internet will increase both the quantity and quality of viewing signals that can be captured as well as the speed with which they are measured. This is driving TV viewership and demographic measurement to shift from purely an estimation approach (where we use small panels of viewers to estimate what everyone in the country is watching) to a combined census + panel approach (where census level insights, or insights from every ad viewed, are calibrated against panels).

The risk: Conflicting methodologies cause uncertainty and inaction

The Gross Rating Point (GRP) has been the standard for measuring the size and demographics of traditional TV audiences for decades. However with digital channels, the real-time feedback loop inherent to digital means that GRPs for TV over the internet and video can be calculated combining both panels and census-level audience insights.

As GRP measurement shifts away from pure panel-based estimation to a combined panel + census approach, all parties must have confidence in the combined measurement approach. The lack of a consistent and trusted set of measurement standards and methodologies across the multi-screen landscape could impede the continued growth of TV over the internet.

The opportunity: Better, more accurate and more actionable audience measurement

With a trusted census + panel approach to digital GRP measurement, the exact size and demographics of an audience can be known in real time. Ad sellers can get paid for every view and never undersell or oversell their audience. Advertisers can improve campaigns with a far deeper, more accurate understanding of audiences.

A GRP that represents the total audience size and demographic across all screens, both traditional TV and TV over the internet, is just the beginning. Real-time GRP insights and waste reduction will set the stage for advanced measurement around brand lift, viewability and other innovative metrics that can help advertisers measure effectiveness instantly instead of after the campaign is over. Advertisers will be able to optimize their TV-over-the-internet campaigns not only to their target audience but also to their key objective, whether it’s awareness, recall or consideration across screens.

5. Ad technology and programmatic

Ad technology and programmatic will dramatically influence how TV ads are bought and sold.

The risk: Not adopting programmatic ad technology to automate buying and selling will result in inefficient processes that limit the monetization potential of TV over the internet

Things quickly become unmanageable when you add the complexity of cross-screen, cross-device advertising and uniquely addressable TV ad spots to the already complex TV marketplace, with its upfronts, scatter buys and rider and carriage agreements.

The opportunity: Programmatic ad technology can foster efficient buying and selling to support monetization and ad effectiveness goals

Ad technology excels at simplifying complex processes and making them more efficient and effective. For programmers and broadcasters, it can help with ad decisioning, insertion and monetization across a spectrum of direct, private, preferred or open trading scenarios, maximizing their inventory. For advertisers, the use of audience insights with decision ads can help uniquely address audiences across devices so that every impression matters.

6. Addressable advertising

Advertisers can reach their audiences with greater precision and relevance by investing in TV delivered over the internet.

The risk: Viewers may shift their viewing more quickly than anticipated to devices and platforms where TV content is delivered over the internet

While the number of eyeballs watching TV over the internet is small compared to cable and satellite TV today, viewership is shifting to the internet, and the velocity of this change could increase. If it does, the industry could arrive at a tipping point sooner than anticipated. This may disrupt the progress of any programmers and distributors who aren't prepared for a fast shift in how their audiences watch their TV content and could leave advertisers unprepared to reach viewers across the new TV landscape.

The opportunity: Everyone benefits from a "broadly cast" content stream with an "individually cast" addressable ad stream

Most ads on cable and satellite TV are broadly cast, just as the content is—every viewer nationally, or at best regionally, sees the same content and ads. With TV over the internet, ads don't have to be the same for everyone. Tailored ad breaks open the possibility of improving the value of TV inventory to programmers and distributors, the performance of TV campaigns to advertisers, and the viewing experience for the user.

7. Viewer engagement

TV is shifting to an individual experience on increasingly personal devices. This will continue to influence how advertisers engage their audiences.

The risk: Advertisers who treat all TV programming as a one-way, mass-market broadcast will miss opportunities to directly engage their audiences

The smartphone is a significantly more personal device than the large screen in the living room. In this heightened personal environment, brands will need to ensure that their messages are relevant to each viewer. These tailored brand messages can outperform mass-market messages. And as TV over the internet gains broader support for uniquely addressable TV spots, advertisers who maintain a broadcast mind-set may be at a disadvantage.

The opportunity: TV's burgeoning 1:1 advertising capabilities and engagement models can help advertisers who embrace them

Uniquely addressable TV spots empower advertisers to improve ad performance by delivering a range of messages, depending on circumstance. Imagine different ads for customers versus non-customers, for audiences in snowy regions versus sunny regions, or for past website visitors versus unknowns. It's all possible. TV over the internet is also ripe for ad innovations to engage viewers such as skippable ads, longer-form opt-in advertising, or ads with more direct calls to action. TV over the internet also poses the opportunity to enable two-way conversation between viewers and the brands/programmers.

TV from 2015 to 2020

At $68 billion, the TV ad marketplace represents the largest portion of U.S. advertising spend and has done so for a long time. Will it remain the dominant slice of the ad spend pie, or will it change as the mass media audience attention is fragmented by unlimited media and entertainment choice?

What the TV industry will look like in 2020 is unknown, but if the current transformation is any indication, it will be a much different landscape with TV over the internet at its core. It's not often you get to witness (let alone participate in) an industry this large navigating a transformation of this scale and magnitude in real time. The monetization path programmers and distributors make and the enabling technology partners they choose will have a lasting impact on the future of TV.

Join us over the coming months as we explore the risks and opportunities associated with each of the 7 dynamics undergoing transformation and their impact on the future of television.

To follow the rest of the series, visit **www.thinkwithgoogle.com.**

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Ad exchange:	doubleclick ad exchange by Google
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Content distribution partner:	YouTube

For advertisers and agencies

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Ad creative:	doubleclick studio by Google; Google Web Designer
Demand-side platform:	doubleclick bid manager
Ad server:	doubleclick campaign manager
Ad exchange:	doubleclick ad exchange by Google
Ad network:	Google Ads
Premium programmatic video marketplace:	Google partner select
Media distribution partner:	YouTube