

Brave New World

Best Practices for Planning, Buying and Measuring CTV and Streaming Ad Campaigns

July 2025



About CIMM

The Coalition for Innovative Media Measurement (CIMM) is a nonpartisan, pan-industry coalition of companies focused on cultivating and supporting improvements, best practices, and innovations in measurement and currency; data collaboration and enablement; and the use of new metrics and approaches to understanding the value of media. CIMM embraces the entire media and advertising ecosystem and prioritizes effective collaboration to deliver meaningful change.

As part of our program, CIMM commissions major research studies from industry analysts, experts, and thought leaders to provide insights on issues of critical interest to our members. The growth and development of CTV and streaming TV has had a significant impact on the media and advertising ecosystem, stimulating investment, innovation and change. Marketers have benefited from the proliferation of data, new ad formats, innovative new measurement solutions and metrics, and new sales and execution models. However, the market is also complex and fragmented and can be hard to navigate.

This guide sets out to explore best practices, providing marketers with practical advice, recommendations and inspiration from some of the leading players in the market. It is the result of extensive collaboration with industry leaders — advertisers, agencies, publishers, and technology partners. We would like to extend our gratitude to the project team — Todd Gordon, Bhavana Smith, and Bret Leece — who researched and authored the report. We're also hugely appreciative of the tremendous contributions from the numerous industry executives who shared their experience and expertise with the team.

Finally, many thanks to all of our co-sponsors — Amazon Ads, FOX, Innovid, LiveRamp, Kargo, Spectrum Reach — for their invaluable support. We hope this guide serves as a useful tool for fostering excellence in CTV strategy and execution.

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Research Approach

This guide explores the opportunities presented to advertisers and agencies by the growth and development of CTV and streaming TV, and seeks to identify the practical steps that marketers can take to ensure that campaigns are as successful as possible.

The project team has undertaken 50+ interviews with senior executives directly involved in planning, buying and executing campaigns across the CTV and streaming ecosystem, exploring numerous case studies that help to illustrate success. Research and interviews for this guide took place throughout the first half of 2025. Quotations used in this report have been lightly edited for style and brevity.

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Executive Summary

This guide highlights the most effective practices for planning, buying, and measuring CTV and streaming campaigns, drawn from in-depth interviews, case studies, and operational insights from across the ecosystem. Despite its complexity — fragmented platforms, inconsistent metrics, complex and sometimes very different supply paths — CTV can deliver meaningful results for advertisers who apply the right strategies and approaches.

Overview

A connected TV (CTV) is a television set that has built-in internet capabilities (e.g., Smart TV) or is connected to the internet via a streaming device such as a box/stick (e.g., a Roku box, Amazon Fire Stick, Chromecast device, or Apple TV) or a gaming console — all of which can access a variety of long-form and short-form content. In other words, CTV is a category of device.

Internet connectivity is vitally important, allowing TV and video content and advertising to be delivered over the internet to viewers.

The growth and development of CTV has three practical implications for both buyers and sellers:



CTV dramatically reduces the barriers to entry for TV and video services, leading to a significant expansion in the range available to consumers and advertisers. These are typically delivered as applications (apps), either pre-loaded onto CTVs or downloaded from app stores. As a result, competition for audiences has increased leading to greater fragmentation.



CTV facilitates the growth of addressable, targeted advertising and supports programmatic sales and execution. These capabilities support an entirely new way of buying TV advertising.



CTV dramatically expands the range and quality of data available across the TV ecosystem. CTV is IP-delivered and fully digital, providing granular impression-level data (who saw what, when, on what device), real-time or near-real-time data collection and reporting, and measurement that has the potential to be consistent with other internet connected platforms.

With nearly 70% of the U.S. population using CTV platforms and ad spending exceeding \$30 billion, CTV has evolved from a niche channel into a mainstream advertising platform that combines television's premium video experience with digital's targeting and measurement capabilities.

CTV advertising delivers the "holy grail" for marketers by merging television's expansive reach with granular targeting, creative personalization, and real-time optimization capabilities. For larger advertisers, CTV extends linear TV reach, while smaller brands gain access to premium national inventory previously out of reach. It offers the ability to bridge brand and performance by enabling measurement against business outcomes (i.e. store visits and sales.)

The fragmented CTV ecosystem operates through distinct sales channels — direct buys, programmatic guaranteed, private marketplaces, and open exchanges — each offering unique advantages in terms of premium inventory access, automation efficiency, audience scale, and cost optimization. This hybrid environment of ad-served streaming inventory alongside traditional TV sales systems creates both opportunities and complexities that require sophisticated planning approaches.

Executive Summary

Challenges

CTV practitioners face nine interrelated technical challenges that significantly impact campaign efficiency and effectiveness. The core issues stem from:

- 1. **Supply fragmentation**, where the sheer number of content providers, apps, platforms, and sales channels, create a highly fragmented inventory landscape that makes consistent reach and frequency measurement nearly impossible.
- 2. **Inconsistent measurement methodologies** across platforms, exacerbated by supply fragmentation.
- 3. Lack of standardization for ad formats and targeting capabilities.
- 4. **Identity resolution complexities** that make it difficult to identify and reach target audiences consistently across different CTV devices and publishers.
- 5. **Brand safety concerns** in dynamic environments.
- 6. Creative adaptation inefficiencies where linear TV assets are repurposed without optimization.
- 7. Frequency management failures across fragmented touchpoints.
- 8. Data silos that prevent holistic campaign views.
- 9. Bidstream data quality issues that undermine programmatic targeting and optimization efforts.

These wide-ranging challenges underscore why CTV requires a fundamentally different planning, buying and measurement approach compared to other media channels.

Beyond the technical challenges inherent in the CTV ecosystem, there are additional complexities related to organizational structures, business practices, and workflows across agencies and advertisers. Highly matrixed client-side organizations, with separate teams or budgets for brand versus performance, traditional versus digital, or upper versus lower funnel, create systemic inefficiencies that are amplified in CTV execution. When clients operate in silos and engage multiple agencies, CTV — which defies traditional categorization — suffers disproportionately from this fragmentation. Functional silos at agencies mirror these client structures, with nominally integrated "video" teams struggling to manage CTV consistently. For instance, some assign CTV to linear TV teams while others place it with digital teams, creating expertise gaps and inconsistent approaches.

The challenges extend to contractual performance metrics that impede experimentation, where Scopes of Work are tied to fixed KPIs (Key Performance Indicators) like ROAS (Return on Ad Spend) or year-over-year benchmarks, all of which dissuade agencies from testing innovative channels like CTV that lack historical data.

Finally, there is a notable lack of investment in training and technology, with understaffed agency teams struggling to keep pace with CTV's increasing complexity while lacking fundamental media knowledge and standardized planning methods.

Executive Summary

Best Practices

The most successful agencies and advertisers are addressing these structural challenges through combined video budgets with clear roles and responsibilities, distinct video planning and investment teams with CTV-specific decision trees, flexible performance incentive plans that encourage innovation, comprehensive CTV training programs, and strategic investments in AI and technology to enable operational efficiencies at scale.

To maximize the success of their campaigns, marketers should pursue eight best practices across the entire campaign lifecycle:

	Best Practice
1	Standardize Deep, Cross-functional Collaboration Processes at the Start of each Project
2	Consider CTV's Capabilities to Increase Power of Creative Assets (e.g. Interactivity, Targeting, Non-skippable) Early in the Process
3	Apply a Zero-based Budget Approach to CTV Ad Spend Allocation
4	Optimize CTV Buying Channels Based on Campaign-specific KPIs
5	Guard CTV Investments with Vigilance and Verification
6	Use a High Fidelity Audience Identity Source Built for CTV
7	Engineer Access to Data for Smarter CTV Decisions
8	Use Multiple Attribution Methods for Clear Insight into CTV's Impact

Defining CTV

For many viewers, it's simple — CTV is just TV on a Smart TV screen. But in our industry, terms like TV, streaming, CTV and Converged TV often overlap or diverge, creating real confusion. In this guide, we define CTV as a television set that has built-in internet capabilities (e.g., Smart TV) or is connected to the internet via a streaming device such as a box/stick (e.g., a Roku box, Amazon Fire Stick, Chromecast device, or Apple TV) or a gaming console - all of which can access a variety of long-form and short-form content. In other words, CTV is a category of device.

CTV services encompass a broad range of offerings, including:

- Subscription-only streaming services (e.g. Netflix and Disney+).
- Ad-supported streaming services (Netflix Basic with Ads tier).
- FAST aggregators (e.g. Pluto TV, The Roku Channel, Tubi).
- Virtual MVPDs (e.g. Sling TV).
- YouTube.

These services are typically delivered as apps that can be accessed on Smart TVs and other connected devices. The growth of Smart TV usage has dramatically lowered barriers to entry for video streaming services, resulting in a fragmented marketplace of hundreds of video applications.

Streaming services can include live and linear TV channels (e.g. ABC streaming on Hulu), as well as on-demand content in either long or short-form. Additionally, many Smart TVs are not broadband-only devices but are also connected to Over-The-Air (OTA) transmission networks or MVPD platforms, allowing viewers to watch linear channels and services. Partly as a result, viewer journeys between different services can be complex.

For advertisers, CTV is often described as the holy grail of media: premium video environments with the potential for addressable, targeted advertising, plus the data range and quality to enable real-time or near-real-time measurement and optimization. "Finally," as a senior sales executive put it, "you can buy the needle in the haystack."



CTV and the Transformation of TV

The CTV ecosystem has developed rapidly, with a wide range of businesses — large and small, buy-side and sell-side — investing in content, adtech, formats, data and platforms, driving innovations and improvements. Nearly 70% of the U.S. population now uses CTV platforms to consume video content, creating a CTV ad market of over \$30 billion.

Figure 1: Growth of the CTV Market

250 \$60 200 \$40 150 100 \$20 50 0 \$0 2022 2023 2024 2025 2026 CTV Ad Spend (billions) CTV users (millions)

CTV US Market Size by Usage and Advertising Expenditure

Source: eMarketer 2022 (users) and Statista 2025 (ad spend)

CTV is not just another distribution channel. It represents a broad shift in how we plan, buy, and measure video. In the linear era, most TV advertisers relied predominantly on standardized demographics, upfront commitments, and GRP (Gross Rating Point) guarantees. Planning was weekly, measurement was panel-based, and success was defined by delivery, cost efficiency, reach and frequency. This system worked because it was simple, scaled, and standardized, in a relatively concentrated market of major TV networks, local stations and cable channels.

The fragmentation introduced by DVRs, streaming services, and digital platforms changed everything. As audiences moved across devices and platforms, the metrics and methodologies lagged behind. Marketing/Media Mix Models, which rely on historical correlations and lagging indicators, often struggle to capture the real-time performance signals generated by CTV.

CTV introduces new complexity — but also new opportunities. It allows for household-level targeting, creative personalization, outcome-based measurement, and dynamic optimization. But it also demands a shift in operating model: from rigid handoffs to integrated collaboration, from siloed datasets to unified identity, and from single-source measurement to multi-method attribution. As one executive put it, "The factory floor hasn't changed — but the assembly line has. Agencies must rebuild it, or risk falling behind."

CTV advertising represents a pivotal evolution in the TV landscape, seamlessly blending the expansive reach traditionally associated with television with the granular targeting and measurement capabilities inherent in digital media. This powerful convergence allows advertisers to move beyond the generalized demographic targeting of linear TV, enabling precision in reaching specific households and audiences. The result is the potential for a dramatic reduction in wasted impressions, ensuring that advertising spend is directed towards the most relevant viewers.

Beyond enhanced targeting, the internet-delivered nature of CTV unlocks a new frontier of creative possibilities. Advertisers can leverage interactive ad formats that invite viewer participation, dynamic ad insertions that personalize content based on real-time data, and non-linear storytelling that adapts to audience engagement. These innovative formats foster deeper connections and more memorable brand experiences than static, one-way traditional advertisements.

CTV also provides advertisers with unprecedented access to rich data insights and new measurement capabilities. Unlike traditional TV, where campaign performance is often measured through delayed and imprecise methods, CTV can, in theory, offer real-time analytics on viewership, engagement, and conversion metrics. This immediate feedback loop allows for continuous optimization of campaigns, enabling advertisers to pivot strategies, refine creative, and allocate budgets more effectively to maximize return on investment.

Put simply, CTV represents the convergence of what we love about television — the lean-back, big-screen video experience — with digital's on-demand flexibility and data-driven precision. It can be used for both upper-funnel awareness and brand-building and lower-funnel performance, delivering the ability to target specific households, minimize wasted impressions, and measure results with granularity.

Many larger advertisers initially adopted CTV as a linear TV extension, helping to extend the reach of their campaigns as linear GRPs have declined. However, CTV also enhances TV's ability to deliver measurable business outcomes like store visits and sales via better targeting and more granular measurement. As Luca Ledonne of Affinity Solutions notes, "Advertisers can now look beyond who they're reaching on TV to track what actions viewers take afterward."

For smaller brands, CTV provides access to national, premium video inventory that was previously out of reach. It levels the playing field, offering flexibility in targeting and scale, and creates opportunities for year-round visibility on the largest screen in the home. For local advertisers, CTV can offer precise neighborhood targeting, cost-effective access to premium video, measurable results like sales uplift, engagement with home viewers, and real-time campaign flexibility.

In sum, CTV offers the chance to bridge brand and performance — to deliver reach, relevance, and measurable impact in one campaign. But unlocking that value requires operational alignment, not just media dollars.

CTV Sales Channels

CTV inventory is generally ad-served, creating opportunities for programmatic sales and execution, leveraging data, automation, and digital protocols. The programmatic TV ecosystem includes Supply-Side Platforms (SSPs), Demand-Side Platforms (DSPs), ad servers, measurement solutions, and identity resolution providers, all facilitating the buying, selling, and measurement of CTV ad inventory.

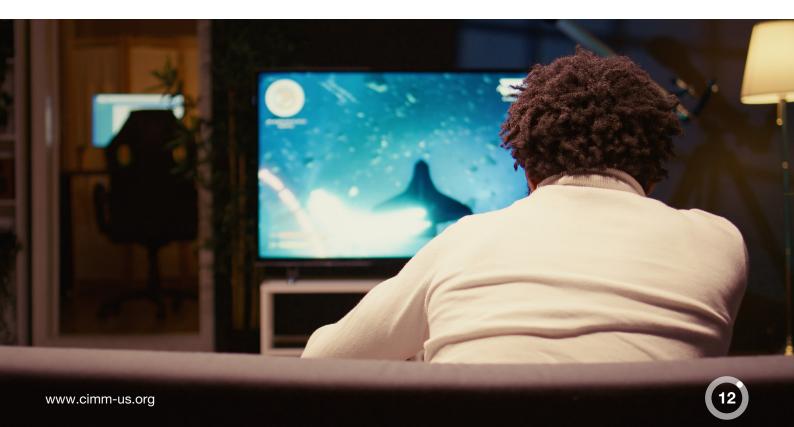
Shifting sales and execution to programmatic platforms, biddable or non-biddable, direct or indirect, can potentially offer considerable benefits for both buyers and sellers. The U.S. TV landscape has evolved into a hybrid ecosystem, with ad-served and streaming inventory increasingly transacted programmatically, side by side with traditional TV ad sales systems. Although these parallel sales models do not appear to have significantly impeded investment to date, they have introduced planning complexities.

The CTV market features multiple advertising sales channels, with distinctive characteristics:

Figure 2: CTV Ad Sales Channels

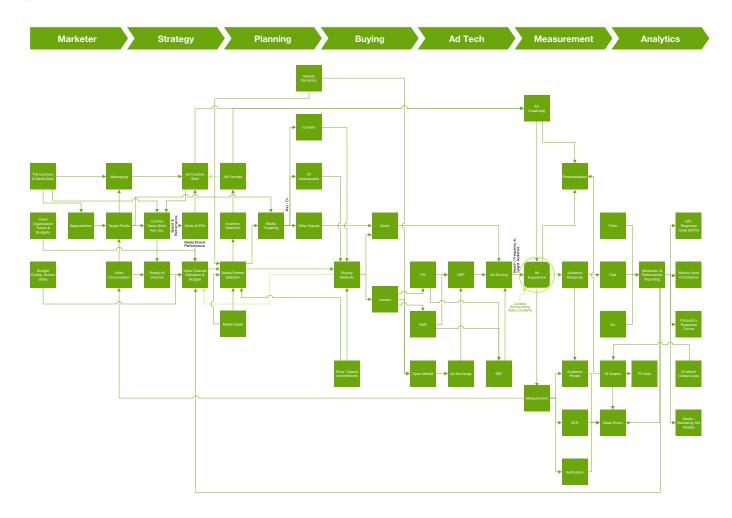
Ad sales channel	Definition	Characteristics	Differences
Direct buys	Advertisers can purchase inventory directly from publishers and content providers.	Often involves negotiated deals, premium inventory, and greater control over ad placement and context.	Offers more bespoke opportunities, stronger brand safety assurances, and direct relationships. However, it can be less scalable and more manual for reaching diverse audiences across multiple publishers.
Programmatic Guaranteed (PG)	A programmatic transaction where impressions are guaranteed and the price is fixed, but the workflow is automated.	Combines the certainty of direct deals with the efficiency of programmatic execution.	Provides guaranteed inventory at a set price, reducing risk for advertisers, while leveraging automation for execution.
Private Marketplaces (PMPs)	Curated deals between one or more publishers and advertisers, often involving specific audience segments or premium inventory not available on the open exchange.	Offers a balance of control and scale, with selected inventory and pre-negotiated terms.	Provides access to higher quality inventory and specific audiences in a controlled environment, offering more transparency than open exchanges but less scale than direct buys.
Open Exchanges	Real-time bidding (RTB) marketplaces where advertisers bid on impressions from various publishers.	Offers broad reach, flexibility, and cost efficiency due to competitive bidding.	While providing extensive scale and potential cost savings, open exchanges can pose challenges related to inventory quality, brand safety, and transparency.

Source: Co-authors



Thousands of advertisers plan and buy CTV campaigns every year to the tune of over \$30 billion. There are numerous sales channels, offering a wide range of options for advertisers, leveraging different data sets, targeting different audiences, and measuring different outcomes.

Figure 3: The End-to-End process to Plan, Buy and Measure CTV



Source: Co-authors

However, the same attributes that make CTV so powerful — flexibility, addressability, connectivity, cross-device reach — have also created a fragmented landscape with a diverse array of content and service providers, device manufacturers and platform operators, technology intermediaries, measurement and data providers, agencies and advertisers.

Put simply, the competitive, innovative, fast-changing and fragmented dynamics of the CTV marketplace can create planning challenges, especially for larger campaigns and higher-spending advertisers.

CTV Planning Challenges

CTV marketers should be aware of nine interrelated challenges that can have significant implications for the efficiency and effectiveness of their campaigns:

- 1. Fragmentation of Supply: The sheer number of content providers, apps, platforms and sales channels leads to a highly fragmented inventory landscape, making it difficult to measure and optimize consistent reach and frequency across the ecosystem. Each major CTV platform and many of the largest services exist within their own ecosystems, with their own solutions for planning and buying, different targeting capabilities, and separate identity offerings. Advertisers looking to execute large CTV campaigns can find themselves working across different audience datasets and identity solutions, juggling numerous insertion orders, interfaces and intermediaries.
- 2. Inconsistent Measurement: As a result of this fragmentation, measurement solutions methodologies and metrics vary across platforms, making it more difficult to assess accurate de-duplicated reach, frequency, and attribution. Incrementality across and between different TV platforms and streaming services remains work in progress and there are no universally available solutions for personification in the CTV market. As a result, it can be extremely challenging to determine the true impact of a CTV campaign and the unique contribution made by each service. These measurement challenges can be further exacerbated if the campaign is running on national and local TV networks, cable channels, and across a diverse range of different streaming services.
- 3. Lack of Standardization: Unlike linear TV, there's a lack of universal standards for ad formats, targeting capabilities, and data sharing, leading to operational inefficiencies and complexity for advertisers. Perhaps most importantly, there is no standardized definition of a view or an impression. Almost all major streaming services count impressions, but these can vary by time, sound, viewability and counts can be compiled very differently. Adoption of core IAB Tech Lab standards remains uneven and adoption of AD-ID is also limited, making it even harder to deduplicate across different channels and streaming services.
- 4. Identity Resolution: Identifying and reaching target audiences consistently across different CTV devices and publishers can be a significant hurdle, due to disparate identity solutions and device graphs. Resolving between households, persons, devices, email addresses and increasingly, accounts, remains challenging. IP addresses are still commonly used, but reliably resolving IP addresses to households can be challenging. Privacy concerns are also an issue, impacting the flow of data through the ecosystem and reducing signal availability. There is also a growing awareness that identity datasets are not always accurate or up-to-date and matching processes can result in reduced accuracy and poor quality targeting.
- 5. Brand Safety and Ad Quality: Ensuring ads appear in brand-safe environments and are of high quality can be challenging in a dynamic and diverse CTV ecosystem. Buying direct from major publishers can mitigate this challenge, but many advertisers want to reach audiences across a more diverse range of CTV apps and streaming services and find value in a more diverse range of campaign buys. Brand safety, viewability and verification solutions are considered a must by many marketers, but there are no perfect solutions.
- 6. **Creative Adaptation:** Many advertisers repurpose linear TV assets for CTV without optimizing for the interactive and personalized capabilities of the medium, missing opportunities for enhanced engagement. However, it can be hard to determine how best to balance efficiency and effectiveness, when to use the same assets and when to take advantage of the unique creative opportunities and formats presented by different platforms.
- 7. **Frequency Management:** The fragmented nature of CTV makes it difficult to manage ad frequency effectively across different apps and devices, potentially leading to audience fatigue and wasted impressions. This challenge can be exacerbated by poor quality identity data and the lack of a universally-deployed creative asset identifier.
- 8. **Data Silos:** Data often resides in silos with different publishers and platforms, complicating holistic measurement and hindering a unified view of campaign performance. Although there are standards and typologies for many fields and for data labelling, these are not always widely and consistently used. Moreover, data portability across and between different platforms and walled gardens can be challenging, with many industry participants actively limiting data transfers and portability.

9. **Bidstream Data Quality and Transparency:** Issues with data accuracy and granularity in the programmatic bidstream can undermine targeting, measurement, and optimization efforts. Data quality in the bidstream has become a challenge because CTV inventory flows through a complex web of intermediaries: SSPs, DSPs, ad exchanges and resellers, each of whom can potentially modify, omit, or misrepresent data. There is often no direct relationship between buyers and CTV publishers, making it difficult to verify the authenticity of data. Moreover, CTV lacks universal identifiers, with device- and app-level identifiers varying by platform and often inconsistently shared in the bidstream. Some bid requests omit key fields like app name, device type, or IP address, or intentionally obfuscate them. Some data, like viewability or completion rates, can't be confirmed in real time and are often entirely absent from the bidstream.

These challenges underscore the need for CTV-specific strategic planning, innovative buying methods, and robust measurement frameworks. The end-to-end process for planning and buying a CTV campaign has to take account of diverse stakeholders, diverse platforms and processes, and complex data flows.

Marketing Structures, Practices and Workflows

These challenges are significant, and their impact can be exacerbated by organizational structures, business practices and workflows within agencies and advertisers.

Highly Matrixed Client-Side Organizations

Marketing and media organizations with separate teams or budgets for brand vs. performance, traditional vs. digital, or upper vs. lower funnel, create systemic inefficiencies further down the process. When clients operate in silos, they often engage multiple agencies, further fragmenting the process. CTV, which defies traditional categorization, suffers disproportionately from this fragmentation.

If organizational realignment is not possible, clients should, at minimum, combine the budgets for video and allocate to their agency(ies) with clear roles and responsibilities as to who (client or agency) is responsible for managing the planning and execution for the combined budget. Additionally, marketers should have an in-house media expert and/ or team who understands the nuances of CTV to effectively guide the agency(ies.)

Functional Silos at Agencies

Agencies typically mirror their clients' structures. Teams responsible for brand and performance marketing often report to different client stakeholders with distinct objectives and success metrics. Agencies, at minimum, should require visibility from client teams into how other video dollars are planned and implemented to minimize the overlap in spend and competing bids.

Within agencies, there are nominally integrated "video" teams struggling with consistent CTV management. Some assign CTV to linear TV teams, while others place it with digital teams, creating inconsistent approaches and expertise gaps. Furthermore, having distinct teams negotiating and/or executing direct-to-publisher campaigns versus programmatically purchased campaigns, with limited collaboration, creates numerous challenges.

All agencies should have distinct "Video Planning teams" and "Video Investment teams" with clear roles and responsibilities specific to CTV. Given there will inevitably be client ambiguities and gray areas that exist, agency leadership should establish a clear "decision tree" that helps to determine how budgets between Direct and Programmatic are established and, subsequently, who is responsible for campaign execution.

Contractual Performance Metrics Impede Experimentation

Most Scopes of Work (SOW) and compensation structures are tied to agency performance, which typically include a combination of quantitative goals (pricing reductions, inflation mitigation, ROAS) and qualitative performance (thought leadership, innovation, quality of service). The challenge is that these remain as fixed KPIs to measure year on year performance, which dissuades experimentation with innovative channels such as CTV which don't always have a previous year's data to benchmark against.

Agencies that have their performance tied to ROAS, ROI-driving media or maintaining year on year KPIs will not take risks by testing and learning or scaling channels that are difficult to measure via traditional measurement models. The same is true for internal Client Marketing/Media teams and which metrics are used to evaluate and reward those team members.

Client Marketing/Media and Procurement teams need to establish their "north stars" for marketing and media outcomes but also encourage innovation. This requires greater flexibility on how agency performance related incentive plans (PRIP) are developed and measured.

A Lack of Investment in Training and Technology

There's a notable lack of training and fundamental media knowledge among many junior planning and investment teams. While linear TV and digital have established planning and buying methods, CTV lacks comparable standardization.

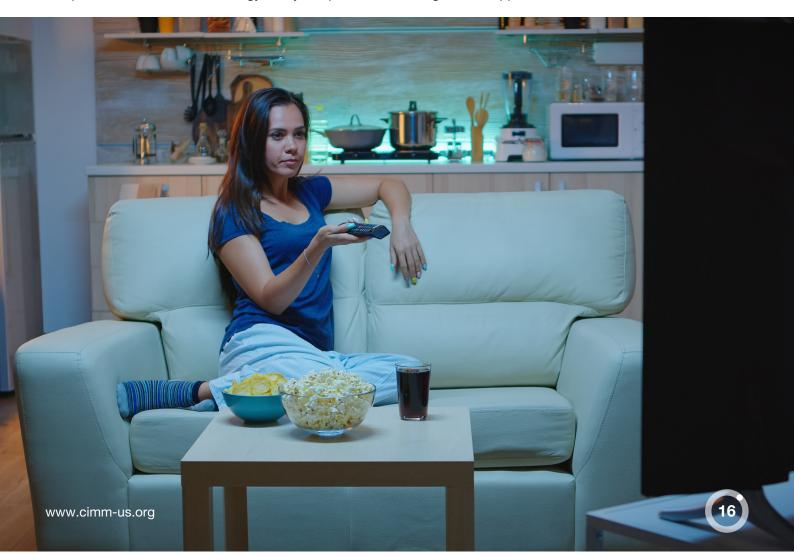
Agency teams, already understaffed due to client cost pressures, are trying to keep pace with the increased fragmentation in the CTV space (proliferation of publishers, capabilities, creative formats, measurement capabilities), undermining the ability to conduct proper due diligence at the planning phase.

However, some data-driven agencies have developed CTV "playbooks" that include the fundamentals to enable quality planning at scale. All agencies should pursue this smart practice, and, in addition, agency leadership must ensure there is adequate training on how to effectively plan, buy and measure CTV relative to linear and digital video. This training should occur at least twice a year to keep pace with the changes in the market.

Given the ever-increasing cost pressures that prevent agencies from increasing staff, they must invest heavily in technologies that support and enable teams onshore and offshore. Of the dozen or so agencies we spoke with, only two (one HoldCo and one Independent) proactively mentioned utilizing Artificial Intelligence to help with planning. For example, one agency is experimenting with ChatGPT to provide options for allocating budgets by CTV publisher.

Agencies that are doing well are rethinking their staffing needs beyond the traditional roles of Planning, Analytics, etc. and are hiring more Product and Al Engineers to enable operational efficiencies.

A note on Planning: Planning's role seems to be diminishing but it's important to ensure there is a team that is media and platform agnostic. However, Planners must expand their skill set and knowledge base to incorporate essential competencies such as data strategy, analytics, platform knowledge and Al applications.



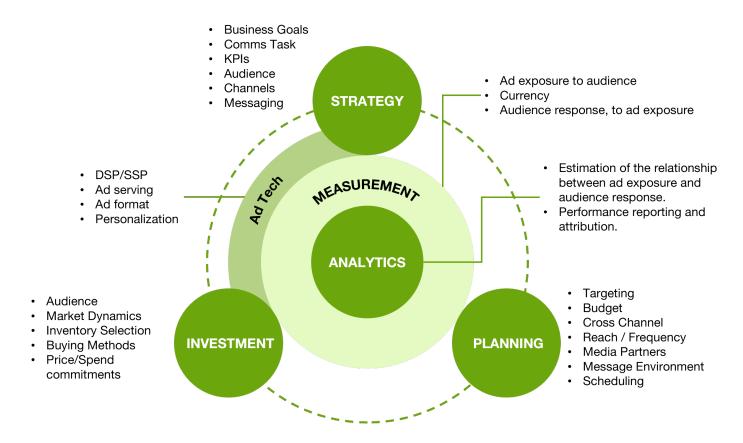
The challenges outlined above are not easy to resolve. Sophisticated solutions might involve cross-media measurement solutions, first-party data assets, identity and device graphs, clean rooms and data collaboration platforms, MMMs, attribution and outcomes solutions, and experiments. Different marketers may need to deploy different solutions.

However, there are other approaches — and some are better than others.

An Organizing Framework

It is useful to first identify the advertiser / agency stakeholder teams involved and their key areas of responsibility. Within an agency, campaigns are developed and delivered via the Measurement, Analytics, Strategy, Planning and Investment teams, and enabled by Ad Tech partners.

Figure 4: Key Teams in the CTV Planning and Buying Process



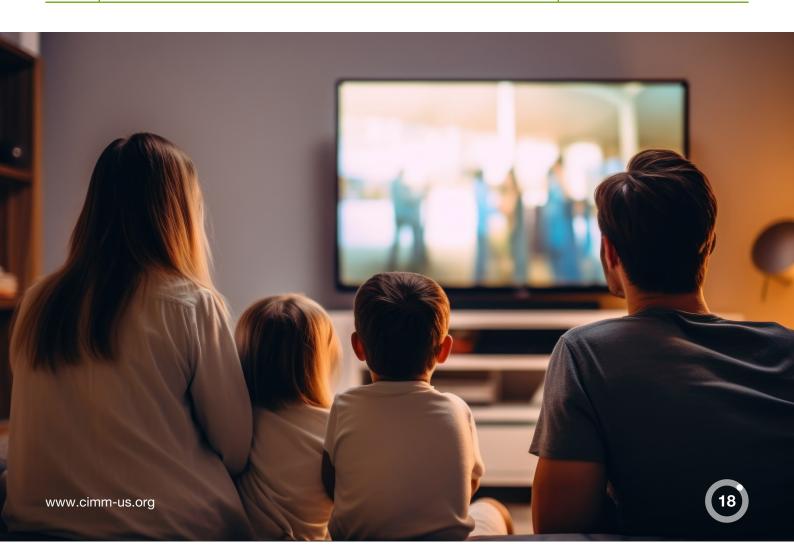
Source: Co-authors

To achieve exceptional results for advertisers, each stakeholder must understand:

- 1. Not just their own role but what's required of others, enabling them to ask the right questions and ensure prerequisites are in place.
- 2. The process isn't linear, simply flowing from strategy and ending with measurement.
- 3. Vendor capabilities can and should influence strategy and planning.

Summary of Best Practices

	Best Practice	Lead Team
1	Standardize Deep, Cross-functional Collaboration Processes at the Start of each Project	Spread across all teams
2	Consider CTV's Capabilities to Increase Power of Creative Assets (e.g. Interactivity, Targeting, Non-skippable) Early in the Process	Strategy
3	Apply a Zero-based Budget Approach to CTV Ad Spend Allocation	Planning
4	Optimize CTV Buying Channels Based on Campaign-specific KPIs	Investment
5	Guard CTV Investments with Vigilance and Verification	Investment
6	Use a High Fidelity Audience Identity Source Built for CTV	Measurement
7	Engineer Access to Data for Smarter CTV Decisions	Measurement
8	Use Multiple Attribution Methods for Clear Insight into CTV's Impact	Analytics



#1. Standardize Deep, Cross-functional Collaboration Processes at the Start of each Project

The importance of deep cross-team collaboration is well-known, but it still doesn't occur consistently and reliably when it comes to CTV planning. CTV straddles the line between linear and digital and as a result, requires upfront collaboration more so than any other channel. It is a medium that has the ability to uniquely:

- Deliver against multiple objectives from awareness to conversion.
- Target broad-based audiences to niche segments.

The Problem

Dynamically serve messaging in real-time.

Given these complexities, teams can no longer rely on the typical process of briefing via sequential handoffs — from client to account leads, from planning to buying, and from agency to external partners. These traditional patterns lead to fragmented knowledge sharing, as less and less information flows through the process, particularly among the teams responsible for executing on the strategy.

We heard widespread frustration from publishers and measurement providers that there is a consistent lack of shared context and/or campaign fundamentals, resulting in confusion on what to care about beyond budgets and impressions.

"It's clear there's planning happening upstream, but there's a disconnect in how it gets shared downstream to publishers."

- Kyle Turner, Philo

CTV requires uniquely tight collaboration across internal and external stakeholders that must initiate at the start of the briefing process:

- Between client and agency.
- Across agency partners (brand/performance, media/creative).

The Best Practice

- Within agencies.
- With external partners (publishers, measurement, adtech, creative services, etc.).

We propose using two important tools — a CTV Campaign Design and Measurement Workshop summary document and a Critical Context Brief — to ensure all stakeholders are operating with the same information and engineering the campaign to deliver on the client goals.

The Cost of Inaction

Already limited agency resources are wasted duplicating efforts because they have misaligned views on what success looks like. Collaborating upfront and sharing critical context with all stakeholders saves time in the long run because there are less 1:1 briefing meetings and fewer redundant responses to the same questions on fundamentals.

In addition, there are inefficiencies in media spend, because siloed teams result in missed opportunities for creative or targeting optimizations, and a disconnect between strategic objectives and execution and measurement, undermining campaign effectiveness.

Use two tools to facilitate collaboration — a CTV Campaign Design and Measurement Workshop (<u>link</u>), and a Critical Context Brief (<u>link</u>) — which will help agencies systematically collect and document essential campaign planning information.

At the outset of each campaign, at least one representative from the client, agency and external partners should convene in a formal, organized CTV Campaign Design and Measurement Workshop to sync on key strategic objectives of the campaign, encompassing business goals, target audience, key communications tasks, and detailed KPIs for the campaign. Coming out of this Workshop should be a summary document.

Next, a Critical Context Brief should be created that deepens coordination by defining the critical parameters for a campaign. This Critical Context Brief serves as a universal template to capture the fundamentals all CTV campaign participants need to know.

The Critical Context Brief is designed as a 1-pager that takes key components from *existing briefing documents* that clients and agencies already use and puts them on a page. It is not meant to be specific to any partner or include deal terms, but rather for each partner to receive information to synchronize their involvement.

The two documents work together — the Measurement Workshop generates a detailed measurement strategy, while the Critical Context Brief places select components of the Measurement plan in the context of the wider campaign plan.

1. CTV Campaign Design and Measurement Workshop

At least one representative from client, agency and external partners should convene at the outset of each campaign in a formal, organized Workshop to sync on a) feasibility of execution and b) how to enhance the strategy/planning/execution/measurement of the campaign.

We recommend a senior person in either the Measurement, Analytics or Planning teams to lead each CTV Campaign Design and Measurement Workshop. If there are multiple agencies, then the Workshop should be led by the Client.

Key participants at each workshop should include stakeholders from:

- Strategy provides a clear definition of objectives, messaging and what success looks like.
- Planning shares a total plan approach on how all channels will work together.
- Investment details why certain platforms were selected and buying methods.
- Measurement, Analytics provide previous results and measurement frameworks.
- Creative agencies, publishers/partners provide relevant context.

2. Critical Context Brief

Agency teams may develop and include Critical Context Briefs along with the Insertion Order (IOs) to partners with a "flow-down" provision to share with any additional partners that are subcontracted. Partners may also request this document be completed by their agency partners as part of the kick-off process.

There needs to be an assigned lead to ensure Critical Context Briefs are developed and shared. Our recommendation is that the person best positioned to lead this collaboration should have the following attributes:

- Ability to see the bigger picture.
- Media channel/platform/device agnostic.
- Understands and is comfortable with data.
- A connector with influence to encourage compliance (critical).

How to Execute

The intangible benefit of expanded upfront collaboration is clear: a defined process with streamlined ways of working is a better experience for everyone involved. Clients receive consistent messaging from brief to outcomes, more ideas on new opportunities, and clearer insights into what's working.

The Benefits

Collaboration fosters a shared understanding of client goals, enabling teams to challenge and improve briefs and accelerate alignment on strategy, creative, and implementation among agency partners.

Early collaboration with Investment teams ensures a more efficient strategy and planning process with better outcomes due to their up-to-date marketplace view and knowledge of external partners' capabilities.

"The greatest opportunity across the board is to elevate collaboration — on both the agency and client sides. At its core, this is a process challenge, not a people problem. In fact, most issues we encounter — I'd say 90% — stem from process breakdowns rather than intent or capability."

- Sean Heinke, Choreograph

CTV How to: Designing a Measurement Framework

We propose using two important tools - a CTV Campaign Design and Measurement Workshop summary document and a Critical Context Brief - to ensure all stakeholders are operating with the same information and engineering the campaign to deliver on the client goals.

CTV Campaign Design and Measurement Workshop — summary document (PDF here)

CTV Campaign Design and Measurement Workshop summary document				
Business Objective	Specific, measurable business obj	iectives (acquire X new customers)		
Target Audience	Demo, Geo, Context/Content, Intent Signals			
Media Goals	Reach / Frequ	uency / Period		
Comms Tasks (guidance provided)	#1 Think or Feel or Do	#2 Think or Feel or Do		
Message(s)				
Comms Task KPI	Awareness, Consideration, Trial, Purchase	Awareness, Consideration, Trial, Purchase		
KPI Measurement & Attribution Method	Brand Lift, Closed Loop, MMM, Experiment	Brand Lift, Closed Loop, MMM, Experiment		
KPI Goal / Benchmark	Goal # / Benchmark # / Timing	Goal # / Benchmark # / Timing		
Measurement Sources / Partners				
Reporting Cadence	Daily, Weekly, Post-Campaign	Daily, Weekly, Post-Campaign		
In-Campaign Optimization	KPI + Cadence (Daily, Weekly, Monthly)	KPI + Cadence (Daily, Weekly, Monthly)		

Critical Context Brief (PDF here)

Advertiser / Campaign

Start – End dates Point of contact:

Business	Data	Planning	Execution	Measurement & Attribution
Goals Specific, measurable business objectives (acquire X new customers) Campaign Objectives & KPIs Comms tasks for CTV(Upper-Mid-Lower Funnel with measurable KPIs)	Audience Data Strategy 1st, 2nd & 3rd party data partners Measurement Data Sources Ad exposure, funnel outcomes	Channel Role How does CTV deliver on goals & campaign objectives? Target Demo, Geo, Context/Content, Intent Signals Media Mandates	Buy Path Direct, PG, PMP, Open Exchange, SSP, Curator Currency Set the impression measurement criteria for all partners Brand Safety	Data Consolidation Data warehouse, clean rooms Reporting Cadence Ad exposure, funnel outcomes In-Campaign Optimizations
Historical CTV Performance	Creative	Reach/Frequency goals & optimization(Reach	What tools for verification	Ad exposure, funnel outcomes
What's worked and hasn't (CTV audience response)	Messaging, customization to CTV, variations, scheduling strategy	of X, Frequency of 'Y' per) Environments Quality/premium, Live Sports, Genres, Pop Culture	Amplification Tent pole events	Attribution Methods & Timing Methodologies, partners

#2. Consider CTV's Capabilities to Increase Power of Creative Assets (e.g. Interactivity, Targeting, Non-skippable) Early in the Process

Despite the enhanced creative capabilities that CTV offers, creative is not considered early enough in the planning process (if it all).

The Problem

Many advertisers simply repurpose linear TV or digital video assets for CTV without considering the expanded viewing environment and technical capabilities. This approach treats CTV as just another distribution channel rather than a unique medium with its own creative potential and premium environments.

Additionally, there's a knowledge gap about CTV-specific creative opportunities among both clients and agencies. Many stakeholders aren't aware of the full range of creative possibilities, from interactive elements to personalization.

"Creative isn't just an asset — it's a strategy — especially in CTV media planning and buying. Creative is the only thing that the audience sees."

- Danny Reuben, Kargo

The Best Practice

Creative for CTV has to be considered during the strategy and planning process and not treated as an afterthought. This acknowledges that CTV offers unique creative opportunities — including personalization, interactivity, and non-skippable formats — that are fundamentally different from traditional linear TV.

Data from Upwave demonstrates that creative quality can double CTV Brand Lift effectiveness, with a 2.3 point brand lift difference between strong and weak creatives, compared to an average 2-point lift. Creative significantly impacts KPIs, showing a 91% relative lift range for Ad Recall and over 300% for Consideration, making it a crucial performance driver.¹

Figure 5 below outlines a wide-range of innovative CTV creative formats, their pros and cons, and their best practices.

"The most successful campaigns I've seen are those where the client, agency, and partners are in the same room from day one, aligning on the business problem, audience, the solution, and what success looks like."

Kris Magel, Freewheel

The Cost of Inaction

Campaigns without CTV-optimized creative often underperform on both brand and response metrics, resulting in inefficient media spend.

When implementing creative strategies, advertisers should follow these overarching best practices:

- Define clear campaign goals and target audiences before developing creative concepts.
- Develop custom CTV assets or update existing ones for CTV viewing contexts.

How to Execute

- Personalize ads to different audience segments.
- Implement frequency caps to prevent ad fatigue.
- Integrate CTV ads into full-funnel campaigns that connect with other channels.
- Test and optimize creative, experimenting with the full range of unique CTV creative ad formats.

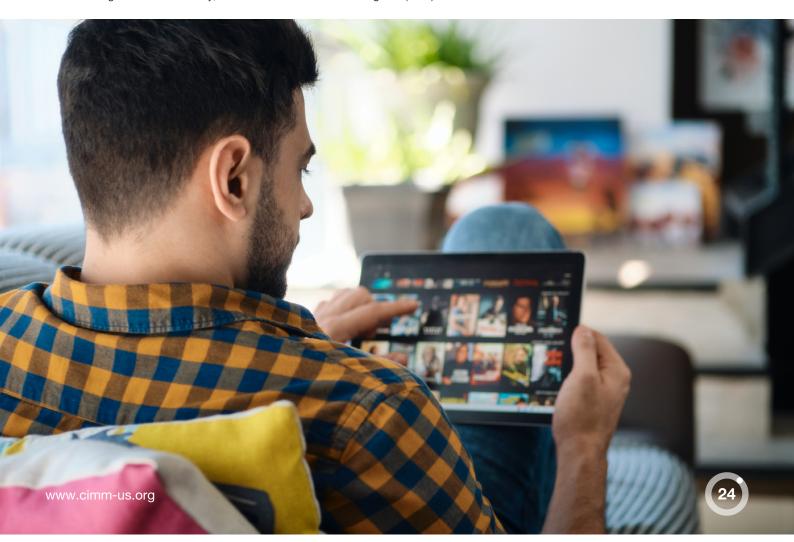
¹ Interview with George London, Upwave (February 2025)

Strategy plays the lead role to elevate innovative creative formats, as they typically own the communications framework. They are responsible for ensuring there isn't a disconnect between the goal and the message. Planning and Investment teams understand the creative offerings that are available for each platform and their technical requirements. They should also identify partners that offer **Primary Lead &** creative support and capabilities. **Dependencies** Measurement, Analytics sets up the measurement framework to include creative aligned to outcomes. Creative agencies collaborate on interactive elements and personalization strategies. Media partners share performance data on different creative approaches. Deploying creative formats unique to CTV improves resonance with audiences and improves advertising effectiveness. The Benefits A case study from Kargo testing a new enhanced CTV format showed a 54% attention lift versus a traditional 15 second TV ad spot.2

"CTV has the ability to enhance storytelling and impact. The new formats in CTV are compelling so test it and see if it's worth a premium."

- Senior Planning Executive, Large Media Agency

² Source: Kargo blinded case study, Start Smarter for Peak Performing Ads (2025)



Best Practice in Action

CTV offers a creative canvas unlike any other, yet too often, creative is bolted on at the end - missing the chance to drive real business outcomes. Advertisers frequently repurpose linear TV or digital video assets for CTV, ignoring the unique viewing environment and technical possibilities.

Pete Crofut of Wurl highlights a key industry blind spot: "The industry relies heavily on audience targeting while neglecting the timing and emotional context of ad delivery. True personalization requires understanding viewer emotional states at the scene level, on top of who they are demographically."

His advice: allocate at least 5% of budgets to testing creative-context alignment — a small investment for outsized returns.

Case Study: Kargo and Sierra Nevada

Situation: Sierra Nevada needed to launch a brand refresh but hit a wall when video production delays threatened their CTV campaign.

Solution: Kargo's Al-powered Narrative format transformed static brand assets and audio into CTV-ready ads, complete with QR codes for added interactivity. These ads ran alongside traditional video spots on major streamers.

Benefits:

- Cost savings: Estimated \$500k saved on production.
- Brand safety: The ad looked and felt premium, meeting Sierra Nevada's high standards.
- **Performance:** Kargo's CTV ads outperformed industry attention benchmarks by 29% (CTV) and 20% (linear), with even higher attention among millennials (46% for CTV).
- **Efficiency:** Kargo's approach was 75% more cost-efficient in driving attentive impressions, assuming equal CPMs.

Case Study: Innovid, WURL & PMG (QSR Brand)

Situation: A major quick-service restaurant (QSR) faced declining sales and needed to break through with fewer, more discerning consumers.

Solution: PMG, working with WURL and Innovid, developed custom creative segments targeting emotions like craving and hunger. Innovid's dynamic creative optimization delivered regionally personalized ads, while WURL timed delivery with programming evoking anticipation and joy.

Benefits:

- **Performance:** Third-party measurement (InMarket) validated a 40% lift in incremental restaurant visits and a 48% increase in sales.
- Evergreen strategy: The campaign's success led PMG to adopt it as an ongoing "evergreen" part of their marketing mix.

CTV How to: Creative Formats

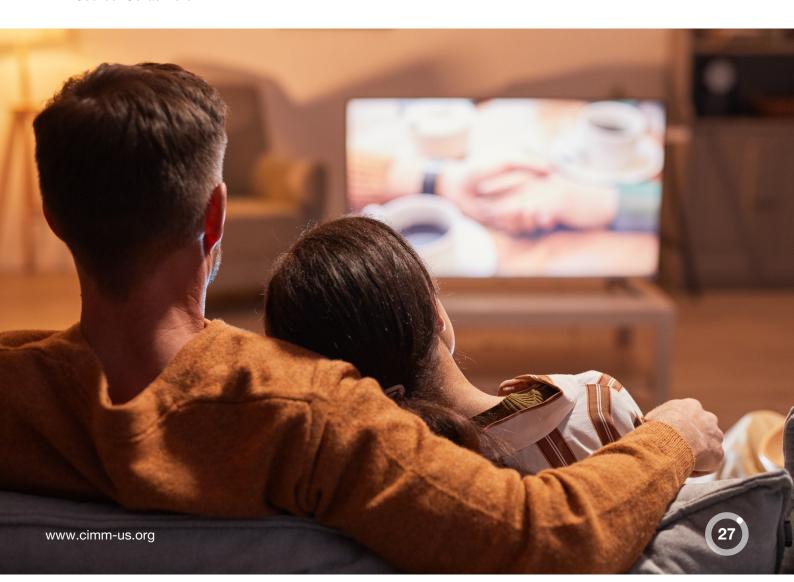
Choosing the right creative formats that both perform and scale across platforms is critical to achieving positive returns.

Figure 5: CTV Creative Formats

The state of the s					
Creative Format	Format Description	Pros	Cons	Best Practices	
Dynamic Overlay	Creative that uses data to personalize the ad with an overlay using location, demographic, or behavioral data while maintaining the original video asset.	Increases relevance without creating new video assets; easily implemented and scalable.	May distract from main message if poorly designed; requires data integration capabilities.	Keep overlays simple and unobtrusive; use relevant data points that enhance the story.	
Sequential Creative	Telling a brand story that unfolds across multiple CTV creatives instead of within a single ad.	Builds narrative over time; creates curiosity among target audience.	Requires multiple creative assets; more complex to implement and measure.	Develop clear story progression; ensure each creative can stand alone.	
Creative Extensions & End Cards	Short-form content displayed before or at the end of existing CTV creative, can include trivia, explainers, or other engaging elements.	Sparks interest and conversation; extends engagement time.	Requires additional production; may feel disconnected if poorly integrated.	Keep extensions concise and relevant; ensure visual consistency with main creative.	
Choice- Based Ads	Ads that allow viewers to control their experience by choosing which ad they want to see or selecting longer pre-roll for fewer interruptions.	Gives viewers control over their experience; increases engagement through active participation.	Requires multiple creative options; more complex to implement.	Make options clearly distinct; limit choices to prevent decision fatigue.	
Voice- Integrated Video Ads	Ads allowing audiences to use voice commands to interact with a brand by speaking into their remote.	Creates novel interactive brand experiences; leverages growing voice technology adoption.	Still an emerging technology; limited adoption.	Include clear instructions for voice activation; provide non-voice alternatives.	
Shoppable/ Actionable Video	Interactive ads designed to connect consumers with products or services within the ad itself, enabling exploration and sometimes direct purchase.	Drives immediate action; reduces steps between awareness and purchase.	Technical implementation varies by platform; may interrupt viewing experience.	Keep interactive elements simple and intuitive; ensure smooth transition to purchase path.	

Creative Format	Format Description	Pros	Cons	Best Practices
CTV with QR Code	Traditional TV commercials with QR codes that viewers can scan with smartphones to access websites, apps, or special offers.	Bridges TV to digital experience; provides measurable actions.	Requires second device (smartphone); QR code must be visible long enough to scan.	Make QR codes large enough to scan from the couch; keep codes visible for sufficient duration.
Dynamic Personalized Creative	Tailoring creative elements based on various targeting strategies (geo, behavioral, contextual, retargeting).	Increases relevance across funnel stages; improves engagement through personalization.	Requires robust data strategy; needs multiple creative variations.	Personalize based on viewing context; tailor to geographic location when relevant.
Pause Ads	Static or dynamic ads that appear when viewers pause content, typically displayed alongside the paused video frame.	Non-intrusive viewing experience; captures attention during natural break moments; cost-effective alternative to video production.	Limited engagement time; requires compelling static creative; may feel intrusive if poorly designed; lack of standardization.	Create visually striking static creative; include clear call-to-action; ensure brand consistency with main campaign.

Source: Co-authors



#3. Apply a Zero-based Budget Approach to CTV Ad Spend Allocation

In the course of evaluating how CTV makes it onto the plan, the industry uses a wide range of different budget allocation methods. However, none are definitive on what is the "right" amount.

The Problem

Many advertisers use Marketing/Media Mix Models as the main method to allocate spend levels, but most recognize that these models undervalue CTV's contributions for many reasons, including lag time of data and KPIs that reward high(er) ROI.

Other advertisers use a year on year approach for budgeting, designed to maintain CPMs and/ or spend levels with existing partners — especially if there are joint business partnerships (JBPs) in place with spend requirements. Such an approach either inherently limits potential spend or allocates too much, either by partner or overall in CTV.

"The 2- yr lookback doesn't keep pace with consumer preference, and intangibles like audience targeting don't get picked up by the models either. This makes marketers nervous to add more money into streaming and not want to touch linear TV because they can see it performs."

- Marketing Executive, Pharmaceutical Company

Advertisers need to take a "blank slate" approach to budgeting to account for ongoing shifts in consumer behavior, the market, and technologies, rather than rely on historical spend as their baseline.

Apply a zero-based budgeting (ZBB)* approach to CTV — starting from \$0 and building budgets from the ground up based on media objectives and strategies first, with historical spending levels, MMM outputs, and JBPs as secondary considerations to better rationalize spending levels.

This approach takes into account current dynamics that can affect spend:

The Best Practice

- Shifts in consumer viewing habits.
- Increase in the number of ad-supported streamers and available inventory.
- Evolving technologies (such as AI) used to optimize creative, targeting, reach and frequency.
- Advances in creative capabilities.

*Zero-based budgeting is a budgeting method where all expenses must be justified and approved for each new period, starting from a "zero base" (meaning no funding allocation), rather than relying on past spending as a baseline.

The Cost of Inaction

Not budgeting enough spend towards CTV misses opportunities to reach audiences who have shifted to streaming.

Spending too much on CTV risks wasting spend on excessive frequency (creating poor viewer experience) and/or poorly targeted impressions.

"CTV in MMM models is undervalued; clients see this and are taking it out of plans and putting spend into other channels, especially if they're rewarded based on MMM/ROI results. GRPs are dropping in linear but the money is not going to CTV; industry data is dated but that's what everyone is relying on."

- VP Programmatic Sales, Publisher

This approach requires two considerations:

How to Execute

Primary Lead &

Dependencies

- Clients and agencies should analyze budgets ideally across all channels or, at minimum, linear and digital video, to determine the maximum threshold available for CTV.
- 2. One video Purchase Order (PO) should be created to enable fluid optimization across video platforms and buying methods (publisher to publisher or direct to programmatic).

"With media investment and performance being top of mind for advertisers, buyers and planners don't want to explain the dramatic CPM increases due to CTV's precise targeting and reduced waste. In many cases, JBPs (joint business partnerships) and bigger deals at Holdcos are driving investment decisions."

- Stacey Deziel, Senior Digital Executive

• Investment

- Planning leads CTV budget allocation and should challenge the status quo. They should
 integrate multiple data sources and create scenario planning that demonstrates expected
 outcomes based on different allocations. Along with Investment teams, they should
 work towards building a plan based from the "ground up" to determine what levels of
 impressions and frequency are required to achieve specific outcomes.
- Investment provides realistic inventory forecasts (e.g., what can be cleared in a given time period) and pricing expectations.
- Measurement should continuously update planning reach curves with estimates on audience and supply, and support scenario modeling efforts.
- Analytics develops custom attribution approaches that better capture CTV's contribution.
- **Publishers & Adtech** partners can provide transparency into inventory and performance expectations (e.g., what can be cleared in a given time period).

"I think we need to go back to more of that critical thought, to more pressure testing, to more running scenarios, using our tools to make more informed decisions."

- Senior Planning Executive, Large Media Agency

The Benefits

Advertisers benefit as their spend is better aligned with media objectives and changing viewership patterns.

A zero-based budgeting approach removes an artificial ceiling on CTV allocation and unlocks greater spend to test and learn on CTV.

CTV How to: Guide for Planners

Zero-based budgeting requires advertisers to justify every dollar spent based on campaign objectives, audience insights, and expected outcomes, rather than being a simple function of the prior year's spend. Establishing the optimal budget for CTV can be determined through a set of key campaign questions, as follows:.

Figure 6: Determining Optimal CTV Budgets

		———
	Lower Guide to Determin	ne Budgets Higher
1. Define Campaign Objectives		
What is the primary goal of the campaign? What KPIs will measure success?	Small incrementality between starting point and goal	High incrementality between starting point and goal
2. Analyze Audience		
Who is the audience and what is the universe?	Small audience universe,High	Large audience universe, Minimal overlap with
How much overlap exists between linear TV and CTV audiences?	overlap with linear/other channels	linear, unreachable in other channels
3. Assess Inventory		
Which platforms do they frequent? What is level of inventory	Limited # platforms, quality of inventory not prioritized, low to	Multiple subscriptions to platforms, premium inventory only, seasonal
quality required? Are there seasonal factors affecting pricing and avails?	no seasonality or high profile content needs	and/or high profile content considerations
4. Establish Reach/Frequency Goals		
What percent of the audience needs to be reached?		
What frequency is needed to achieve objective?	Low monthly/cume Reach with 3-5x Frequency	High monthly/cume Reach with 5x+ Frequency; What is frequency cap?
Are there enough impressions available to reach R/F goals?		matic negaciney cap.
5. Set budget floor		
What is the min/max viable budget required based on platforms utilized?	What is minimum spend for impact per platform?	What is available inventory to clear and hit frequency cap?

Source: Co-authors

#4. Optimize	CTV Buying Channels Based on Campaign-specific KPIs
The Problem	In CTV, supply paths are often chosen out of habit, not strategy. Teams default to programmatic guaranteed (PG), direct IO, or curated Private Marketplaces (PMPs) without considering the primary KPI. This disconnect results in mismatched inventory, inefficient spend, and campaigns that underperform on core objectives. Without early alignment on KPIs across strategy, investment, creative, and measurement, decisions are made in silos and results suffer.
The Best Practice	Let the primary KPI define the supply path. Awareness campaigns should lean toward high-quality, premium PG or direct deals. Consideration objectives can use curated PMPs with contextual signals. Performance goals demand flexible deals, outcome-based buying, and agile PMPs. Involve cross-functional teams early to align on success metrics and supply implications.
The Cost of Inaction	Without aligning KPI to supply path, teams risk overpaying for inventory that can't deliver, underutilizing high-performing platforms, or forcing creative into mismatched environments. Campaigns fail to optimize, and missed collaboration leads to wasted spend and strategic misfires.
How to Execute	Begin with the <u>Critical Context Brief</u> and the <u>Measurement Workshop</u> to formally establish collaboration between strategy, planning, investment, analytics.
	Planning and Investment should align on inventory types, environments and pricing that match to the primary KPIs. They also need to choose methods of securing inventory that create the flexibility to deliver the established goals.
Primary Lead & Dependencies	Investment should approach supply paths holistically with the capability to execute direct and through various programmatic channels. Curating quality supply is a full time job and should happen outside of individual campaign execution.
	Planning, Investment, Measurement and Analytics should guide the data requirements necessary to deliver and measure a successful campaign, and these data needs should be a factor in the supply paths that are utilized.
	Supply path optimization delivers many benefits:
	Clearer supply strategies that align to campaign goals.
	Improved ROI through precision buying.
The Benefits	Better in-flight optimization and responsiveness.
The benefits	Increased collaboration and shared accountability.
	Stronger link between media decisions and business outcomes.
	When evaluating supply path options, Upwave's analysis provides valuable context on the relative impact of different choices. Upwave found minimal brand lift performance differences (average 0.6%, max 2.1%) between PMP and Open Exchange media, a smaller gap than that between different creatives. ³

"The key is maintaining flexibility so you can maximize efficiency or reliable access to inventory based on client needs."

- Kevin Cahn, Kepler

³ Source: Interview with George London, Upwave (February 2025)

CTV How to: Supply Path Matching

CTV buying paths should be determined based on campaign goals.

Figure 7: CTV Supply Paths and Goals

1. Supply Path	2. KPI Goals	3. Benefits	4. Risks / Watchouts
Premium Direct (e.g., Hulu, Disney+, Peacock)	Brand campaigns, tentpoles, sponsorships.	High brand safety, premium environments, strong attention.	Expensive, inflexible, fragmented reach/ frequency.
Standard Direct IO	Linear extension, R/F campaigns, inventory testing.	Guaranteed access, efficient pricing, consistent delivery.	Limited targeting, slow to optimize.
Programmatic Guaranteed (PG)	Awareness + performance with trusted partners.	Automated, scalable, improved R/F control, competitive pricing.	Limited flexibility mid-flight unless prenegotiated.
Private Marketplace (PMP)	Audience-based campaigns, segment or content testing.	Targeting flexibility, curated quality, nimble optimization.	Varying quality, possible overlap, not always scalable.
Open Exchange (OX)	Testing, budget extension (with safeguards).	Massive scale, low CPMs, high flexibility.	High risk, weak brand safety, poor frequency control.
SSP Direct (e.g., Magnite, FreeWheel)	SPO-aligned buys, cost- conscious performance campaigns.	Transparent supply, SPO efficiency, direct publisher access.	Requires hands-on management, inconsistent SSP quality.
Aggregators & Value-Add SSPs (Roku, Kargo, etc.)	Platform-based, creative-led, contextual performance.	Creative innovation, contextual scale, native insights.	Opaque packaging, platform bias, higher cost.
FAST Channels (e.g., Pluto, Tubi)	Cost-effective awareness, cord-cutter targeting.	Efficient reach, expanding content, strong value.	Inconsistent quality, duplication risk.
YouTube	Performance, sequential storytelling, mid-funnel activation.	Massive reach, targeting, attribution-ready.	Overlap with CTV/TV, variable content quality.

Chart key

Direct Buys
Inventory curators

Programmatic
Expanded Scale

Source: Co-authors

#5. Guard CTV Investments with Vigilance and Verification

The Problem

Validating viewability/attention, detecting fraud, and ensuring brand safety in CTV campaigns is complicated due to fragmented inventory sources, lack of standardization, limitations in bidstream data and varying definitions of brand safety across advertisers.

"As higher CPMs in CTV continue to draw fraud, implementing robust safeguards are critical to ensuring advertiser budgets are protected and directed toward high-quality, authentic inventory."

- Sean Heinke, Choreograph

The Best Practice

Working directly with publishers and high quality SSP's is a good approach to avoiding ad fraud. However, to ensure you get what you pay for, adopt a forensic investigation mindset to protect your investment.

Consider applying attention metrics to measure the quality of the ad inventory and relationship to audience response.

The Cost of Inaction

- Increased exposure to fraud, leading to wasted budget and inaccurate performance metrics.
- Potential damage to brand reputation if ads appear in unsafe environments.
- Reduced ROI due to low attention inventory poor targeting.

"Transparency into content-level performance post-campaign builds trust and unlocks incremental budgets."

- Sharmilan Rayer, Amazon Ads

How to Execute

Acquire and review all relevant logs and data sources related to your CTV campaigns, including server logs, application logs, network traffic logs, access logs, and any potential third-party service logs.

Routinely review the programmatic bidstream for completeness and accuracy of critical fields such as app/channel IDs, device IDs, IP addresses, and publisher information.

Scrutinize this data meticulously, employing advanced analytics and data mining techniques to identify anomalies, unusual patterns, and any sign of unauthorized access or activity.

"Verification needs to be more of a punitive point tool. When the data is integrated as a signal into your media stack, you get real-time blocking AND recognition of quality inventory - shifting buy and sell side incentives toward performance."

- Eva Papoutsakis Smith, Protected

Primary Lead & Dependencies

- Measurement and media buyers play a crucial role in the advertising ecosystem, as they
 are responsible for selecting and managing the vendors that measure attention and verify
 ad delivery. While these third-party providers can be valuable partners, it is also essential for
 media buyers to establish direct relationships with publishers to remove any doubts about
 inventory source.
- **Publishers** need to provide detailed post buy logs to support transparency while adhering to privacy laws.
- **Agencies** must educate buyers on the importance of using accredited tools and negotiating beyond price for value extraction.
- AdTech Providers like DoubleVerify or IAS must continuously innovate to meet evolving fraud detection and privacy compliance needs.

Monitoring potential CTV fraud has many clear benefits:

Improved campaign effectiveness through validated impressions and enhanced brand safety.

The Benefits

- Reduced risk of wasted spend on fraudulent inventory.
- Greater trust in measurement metrics leading to better optimization decisions.

Applying attention metrics can also improve inventory selection and ad response measurement.

"By analyzing our S-chain objects in SSP logs we exposed 120 reseller paths to a single CTV ad placement — so, we're now actively limiting unnecessary hops using SPO deals with our preferred supply partners."

- Moe Chughtai, MIQ

Best Practice in Action

Protecting CTV investments requires constant vigilance and robust verification to ensure advertisers are getting the value that they paid for. In the complex and often opaque CTV ecosystem, simply tracking impressions isn't enough. Advertisers need confirmation that their ads ran in the intended environments, reached the right audiences, and ultimately drove meaningful business results. This means leveraging sophisticated tools and partnerships to verify everything from supply path efficiency to actual sales lift.

An example demonstrating how advertisers and their partners ensure media quality and efficiency through Supply Path Optimization (SPO) can be seen in an Innovid / CMI Media Group ad campaign.

Case Study: Innovid and CMI Media Group

Situation: Complex supply chains with multiple intermediaries can obscure where ad dollars are actually going, often leading to excessive tech fees that erode the budget intended for working media.

Solution: CMI Media Group, working for a major pharmaceutical client, aimed to maximize the effectiveness of their programmatic guaranteed (PG) CTV buys. They sought greater transparency and efficiency to reduce partner fees and to ensure more budgets reached premium publishers. Using Innovid's Harmony Direct, CMI activated substantial PG budgets directly through Innovid's ad server, bypassing unnecessary intermediaries while still ensuring automated activation and comprehensive reporting that could inform targeting for other buys.

Benefits: This Supply Path Optimization strategy resulted in an 80% reduction in ad tech fees, allowing CMI to reinvest savings into 5.3% more incremental impressions for their client. They also gained operational efficiencies, achieved greater supply source transparency, and reduced their carbon footprint by an estimated 40% by eliminating redundant platforms. This case study highlights the value of consolidating activation partners to "add value" beyond just cost savings, strengthening publisher connections and reinvesting dollars into more working media.

Sidebar: Attention Metrics

Protecting CTV investments requires constant vigilance and robust verification to ensure advertisers are getting the value that they paid for. In the complex and often opaque CTV ecosystem, simply tracking impressions isn't enough. Advertisers need confirmation that their ads ran in the intended environments, reached the right audiences, and ultimately drove meaningful business results. This means leveraging sophisticated tools and partnerships to verify everything from supply path efficiency to actual sales lift, with a keen eye on attention metrics that go beyond traditional views to assess true engagement and impact.

The emerging role of attention metrics in CTV represents an increasingly applied approach to ad inventory selection and measurement effectiveness. Unlike traditional metrics focused on impressions or clicks, attention metrics aim to quantify the actual engagement of viewers with an ad, considering factors like eye-tracking, viewability duration, and active engagement. This nuanced perspective offers a deeper understanding of how well an ad captures and retains an audience focus within the diverse and often fragmented CTV landscape.

While the value of attention metrics is gaining recognition, it's important to acknowledge that their adoption is not yet universal among marketers. Many advertisers still rely on established measurement models, such as Marketing/Media Mix Models (MMMs) and attribution models, which have a longer history and more widespread industry standardization. The integration of attention metrics often requires specialized tools and expertise, and the industry is still developing consistent frameworks for their application and interpretation across various CTV platforms.

Nevertheless, attention metrics hold significant potential for optimizing CTV campaigns. By providing insights into which creative elements and placements truly resonate with viewers, they can inform strategic adjustments to improve campaign effectiveness and reduce wasted impressions. While not a standalone solution, integrating attention metrics alongside existing measurement frameworks can offer a more holistic view of campaign performance, helping advertisers to make more informed decisions about their CTV investments and ultimately enhance return on ad spend.



#6. Use a High Fidelity Audience Identity Source Built for CTV

We observe many high quality, promising addressable CTV audience strategies that are never activated. Whether it be publishers providing "free" data in bundles or horrible match rates or excessive fees, there is always some rationale to trade fidelity away.

The Problem

No matter the rationale, fragmenting the buy nearly always results in more work for the agency and more frequency than necessary for the audience.

In the fragmented CTV ecosystem, relying solely on proxy identifiers like IP addresses leads to inaccurate reach, low frequency capping, and poor measurement. That said, IP addresses have played an important role in the development of CTV targeting capabilities and are evolving to improve accuracy.

"Different data providers and measurement providers will get different answers, and you don't necessarily know who's right."

- Senior Planning Executive, Large Media Agency

The Best Practice

Utilizing persistent identity solutions specifically designed for CTV— in particular, CTV app publisher 1st party data — is crucial. This allows for more accurate household and, increasingly, person-level targeting, deduplication across platforms and publishers, and reliable cross-screen frequency management, forming the foundation for trustworthy campaign measurement and outcome attribution.

Build your CTV audience data strategy using a near-census level identity spine with household and people dimensions.

In addition, use the same audience data source to plan, buy and measure.

Finally, connect your identity spine to a currency-grade video measurement service for planning, measurement and analytics.

"Oftentimes, when the data sets originate from a physical address and they're being matched against other data sets that originate from a cookie or an IP address, you're connecting apples and oranges together.

Every hop is a drop in the quality of the source data to the destination."

- Alex Groysman, Spectrum Reach

The Cost of Inaction

Using different audience definitions and sources for each CTV media partner creates additional work. It takes extra time to keep track of different audience definitions and to collate audience response data across CTV media partners.

Beyond the extra work, advertisers waste ad spend due to audience overlap and excess frequency.

"When ad serving and measurement are connected, it becomes much easier to see the full picture – helping marketers understand the true incremental impact of their CTV campaigns."

- Callum Guthrie, Innovid

Implementation requires careful evaluation of a wide range of identity providers based on their CTV graph's scale, accuracy, persistence, and interoperability.

- Prioritize interoperability: Select identity solutions and measurement partners with proven integrations across your existing ad tech stack (DSP, SSP, ad server) and key publisher partners. Identity should be interoperable and should span across clouds, clean rooms and other partner platforms like CDP and CRM systems.
- Evaluate CTV specificity: Scrutinize identity providers on their CTV graph's foundation –
 how is identity resolved across devices, what is the match accuracy, and how persistent
 are the identifiers within the CTV environment?
- Leverage first-party data: Maximize the use of advertiser and publisher first-party data within privacy-compliant frameworks (e.g., clean rooms) to anchor identity resolution.

How to Execute

- Define measurement currency: Align internally and with partners on the definition
 of "currency grade" measurement for your campaigns, ensuring the chosen identity
 solution supports that level of granularity and validation (e.g., co-viewing factored,
 cross-platform deduplication).
- **Test and learn:** Pilot different identity approaches and measurement integrations to validate performance and accuracy before scaling investments.

Key considerations include:

- The ability to resolve identity across different devices (Smart TVs, dongles, consoles, MVPD apps) and environments (programmatic vs. direct).
- Integration capabilities with chosen DSPs, SSPs, ad servers, and measurement partners (e.g., VideoAmp, iSpot, Comscore, Nielsen).
- Adherence to privacy regulations (CCPA, GDPR) and support for privacy-enhancing technologies like data clean rooms.
- Understanding the methodology (deterministic vs. probabilistic matching).

"I think for our industry to realize its vision for a truly addressable CTV advertising market, we've got to move to deterministic matching - for example, matching an advertiser or agency's 1st party audience to publisher subscriber IDs, wherever they are available. Probabilistic signals can also be added to increase scale, but incorporating deterministic matches significantly enhances a campaign's accuracy and effectiveness."

- Kris Magel, Freewheel

Primary Lead & Dependencies

Collaboration between advertisers, agencies, identity providers, publishers (leveraging their first-party data), and measurement vendors is essential for seamless execution.

Planning, Investment, Data and Analytics define use cases for cross-screen measurement providers.

Investment and Measurement leaders evaluate and select currency grade cross-screen video measurement providers.

Measurement leads the integration into strategy, planning and activation tools.

"Marketers stuck in siloed measurement frameworks waste time reconciling mismatched data instead of driving business outcomes."

- Dan Mouradian, Innovid

"First-party direct integrations provide currency-grade measurement where possible. However, signal loss driven by privacy initiatives will continue to impact identity structures. So, use reliably predictive probabilistic approaches to replace deterministic measurement, when necessary."

- Brian Pugh, Comscore

Implementing robust CTV identity connected to measurement yields significant benefits:

 More accurate unique reach estimates across the CTV landscape and other video platforms.

The Benefits

- Effective frequency control preventing audience fatigue and wasted impressions.
- Improved targeting precision leading to less waste and better engagement.
- Ability to connect CTV ad exposure to tangible business outcomes (e.g. website visits, app installs, sales lift, and store visits, as seen in the Spectrum QSR case study below).

"Identity is the foundation for both audience targeting and measurement. Without consistent and persistent identity resolution, there will always be fidelity, transparency, and accuracy issues. We see many instances where audience data signals pass through multiple hops from the seed audience through different partners to publishers and measurement vendors, which result in varying levels of ID matching and accuracy."

- Maggie Zhang, Amazon Ads

"A unified audience source from planning through execution ensures consistency and avoids guesswork at performance stages."

Marketing Executive, Pharmaceutical Company

Best Practice in Action

The challenge of maintaining audience identity in CTV is significant. As an industry expert noted, "IP address resets frequently — about 27% reset every week — so it's not a great signal for targeting." This volatility creates significant challenges for consistent audience identification and measurement. Leading advertisers and their technology partners have responded with innovative approaches that leverage both deterministic and probabilistic methods to create a more complete picture of audience identity.



Several case studies demonstrate how successful implementation of CTV-specific identity solutions drives measurable results:

Case Study: Spectrum Reach and a QSR Brand

Situation: In a national case study for PMG's QSR client, Spectrum Reach demonstrated the power of deterministic identity to preserve fidelity of both reach and measurement that drive real business outcomes.

Solution: By securely matching the client's first-party data from loyalty programs and restaurant apps with Spectrum's authenticated household data, PMG created a privacy-focused, addressable CTV campaign that delivered at scale. This deterministic data foundation enabled precise audience targeting and accurate outcome measurement, with no proxies and no guesswork.

PMG's Doug Paladino explained their approach: "We had various audience tactics — demo targeting, lookalike targeting, retargeting, customer matches for loyalty audiences, and behavioral targeting for people in-market for fast food. But we recognized there was a huge portion of potential users we were missing with IP address targeting. Spectrum Reach's highest fidelity identity solved the IP targeting waste."

Benefits: The campaign saw KPI improvements in several areas, when compared to the benchmark.

- 39% lift in store visitations.
- 18% sales lift across geographically diverse markets.
- Highest incremental store lift among all CTV partners.

Case Study: LiveRamp and CPG Brand

Situation: A CPG brand worked with LiveRamp to address fragmentation in their CTV activation and measurement plan.

Solution: Working with LiveRamp, the CPG brand implemented a persistent identity solution that connected first-party data with CTV exposures across multiple platforms.

Benefits: Compared to historical campaigns, the client achieved:

- 176% increase in unique household reach for their OTT/CTV buy.
- 86% increase in ROAS by redirecting impressions to households with little to no linear exposure.
- Significant reduction in waste by suppressing overexposed audiences.

Case Study: Innovid, Davis Elen with McDonald's and Toyota

Situation: Davis Elen Advertising faced a typical challenge of siloed frequency caps across publishers for two major clients, McDonald's of Southern California and Toyota Dealers Association. Each publisher applied their own frequency caps, creating a fragmented view of actual household exposure and limiting optimization opportunities.

Solution: Davis Elen leveraged Innovid's Harmony Reach & Frequency solution, which provided a holistic view of household frequency intelligence across their entire media portfolio. Since Innovid was already the primary ad server for both clients, it had universal visibility into household exposures across every publisher, device, region, and buy-type. The system automated these intelligence signals to their chosen DSPs, enabling real-time targeting logic to find incremental reach and eliminate duplicative impressions.

Benefits: The implementation delivered measurable improvements across key metrics:

- 28% incremental unique household reach compared to historical campaigns by redirecting budgets to underexposed households.
- 35% average CPM savings through improved bid strategy combining ad server insights with first-party data.
- Improved audience experience by minimizing ad fatigue from repeat messaging.

CTV How to: The Fidelity Hierarchy of Identity Targeting Methods

There are several ways CTV campaigns work to determine identity to enable targeting.

Figure 8: Identity Targeting Methods for CTV

Identity Method	Description	Key Considerations
Name & Address	Physical address matching from delivery information, registration data (including MVPD HH identity)	Highest quality identifier; provides stable household-level targeting basis
Email	Logged-in user accounts with verified email addresses	Strong identifier for individual targeting; commonly available in registration data; more persistent than device IDs
Phone Number	Mobile or home phone verification	Good individual identifier; less frequently collected than email but highly accurate when available
Device IDs	CTV device identifiers (Roku ID, Fire TV ID)	Moderately reliable for household targeting; varies by platform quality (Roku, Samsung vs. long-tail)
IP Address	Internet connection identifier	Lowest quality identifier; high volatility with ~27% resetting weekly; problematic for persistent targeting

Source: Co-authors

The quality of the identity method directly impacts audience targeting precision and measurement accuracy. Premium publishers like Hulu or Roku with registration data provide significantly higher-quality identity signals than those relying primarily on IP addresses.

#7. Engineer Access to Data for Smarter CTV Decisions

The traditional linear TV ecosystem was relatively easy to plan against, given standardized panel measurement datasets. By contrast, the CTV ecosystem is highly fragmented, with audience and performance data siloed across streaming platforms, content providers, and measurement vendors. This makes it difficult for marketers and their agencies to estimate CTV audience reach and funnel outcomes like brand lift, website visits and ultimately sales. The CTV publisher/app/ad tech planning tools have better access to actual ad inventory.

Data clean rooms offer a neutral environment for measurement with different CTV (and other) media partners. The proliferation of clean rooms across advertisers, agencies and publishers exacerbates the fragmentation problem, although clean rooms may evolve to be the technical foundation for a unified solution.

The Problem

This proliferation of data sources results in several problematic downstream impacts:

- Inconsistent data formats and metrics across every publisher data set, including walled gardens, makes holistic planning and analytics very time consuming, relative to linear.
- Privacy regulations restrict the use of consistent identifiers that are critical for crossplatform measurement.
- The industry treats clean rooms as point solutions rather than infrastructure, leading to disconnected data and inconsistent measurement across the media process.

"Matching exposure data back to sales was challenging due to platform silos and inconsistent data sharing between CTV publishers."

Lauren Tsevis, Ovative Group

Advertisers should engineer a comprehensive CTV data access strategy that:

- Creates a centralized data architecture connecting planning, activation, and measurement.
- Establishes formal data collaboration agreements with key CTV platforms and measurement providers.
- Ties ad exposures to conversion events like in-store purchases, website visits, etc. for more comprehensive attribution measurement.

The Best Practice

- Implements household and individual-level ID solutions with partners like LiveRamp.
- Leverages data clean rooms for access to ad exposure data through secure, responsible data collaboration.
- Bridges linear and streaming data for a holistic video strategy. This can also be expanded beyond video to include digital, social and audio for more holistic cross-media reporting.
- Develops standardized taxonomies and metrics across platforms.
- Prioritizes deterministic and includes probabilistic matching concatenated with ID solutions.

"Starting with linear and adding CTV for incremental reach is an outdated approach. Consumers watch fluidly, so any cross channel planner must simultaneously evaluate all inventory.

Done right, this can generate 26% incremental reach with the same budget."

Marc Parillo, Deben

The Cost of Inaction

- Campaign inefficiency with wasted impressions due to audience duplication.
- Missed opportunities for creative optimization based on platform-specific performance.
- Increasing manual data processing across disconnected systems.
- Growing vulnerability to privacy regulation changes without proper data infrastructure.

"The planning function leverages VideoAmp's patented clean room technology, software, and API infrastructure. This allows agencies to be hands-on keyboard to run plans in-platform or leverage our tech stack to directly pipe results into their own platforms."

Bryan Goski, VideoAmp

How to Execute

- Conduct comprehensive audit of existing first, second and third party data assets and access points.
- Develop an ID framework connecting household and individual-level identifiers.
- Establish data clean room relationships with major platforms (Amazon Ads, Roku, etc.).
- Build automated pipelines for consistent data integration and processing.
- Implement standardized measurement framework across linear and streaming.

Primary Lead & Dependencies

- Data/Analytics Teams establish technical infrastructure for data access and clean room
 implementation, develop a consistent identity resolution approach (dependent upon the
 ID partner selected), create unified measurement frameworks that work across clean
 room environments, and build APIs that connect clean room outputs to existing planning
 and buying systems. It's key that these teams also align on a standard data schema for
 collaboration with multiple parties.
- Media Agencies provide strategic guidance on which clean room platforms best serve campaign objectives; ensure planning tools can ingest clean room data.
- Publishers/Platforms supply first-party audience and exposure data; maintain data compliance standards.
- AdTech Partners build interoperable solutions that function across clean room environments; abstract technical complexity.
- Privacy/Legal Teams establish governance frameworks ensuring data collaboration use
 cases align with the company's privacy postures, including allowing collaboration partners
 to opt-in/out their data depending on the specific use case(s).

"Our ad serving is connected to our attribution measurement. When we integrated credit card data, linked it to in-home CTV ad exposures and resolved identity across devices, we unlocked massive value - 25x more attributed revenue validated with purchase data."

Dan Mouradian, Innovid

An optimal data access strategy delivers many benefits:

- Holistic audience understanding across fragmented CTV and video landscape.
- Enhanced targeting precision with properly matched audiences.
- More accurate measurement of deduplicated reach and frequency.

The Benefits

- Improved budget allocation between linear and streaming based on performance data.
- In-campaign optimization.
- Creative performance insights by platform, audience segment and content context.
- Future-proofed approach to evolving privacy regulations.

"Clean room adoption accelerated optimization cycles from 14 days to 48 hours for CTV/digital convergence."

- Brian Pugh, Comscore

"Clients with engineered data strategies optimize CTV budgets 4x more frequently than those relying on siloed solutions."

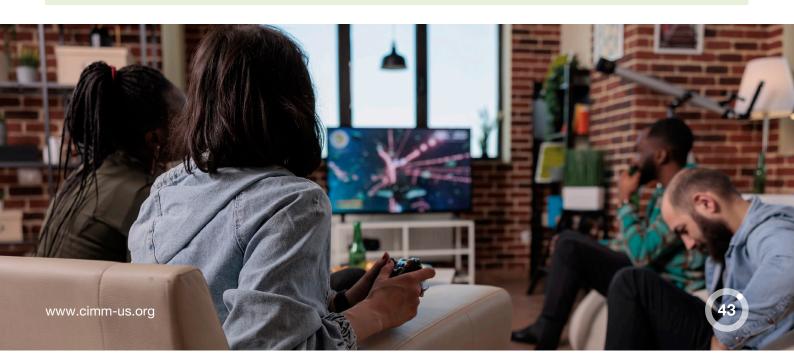
- Mike Bregman

"Estimating audience duplication between CTV and Linear TV with a random-duplication method is incorrect. Using more sophisticated models can reduce over-frequency up to 15%"

- Prasad Joglekar, Deben

Best Practice in Action

In today's fragmented CTV ecosystem, a strategic approach to data access is not optional. Leading organizations have implemented sophisticated data collaboration solutions that break down silos between creative development, audience planning, media activation, and performance measurement while maintaining privacy compliance. The following case studies demonstrate how engineered data access strategies deliver transformative results across the campaign lifecycle.



Case Study: Amazon Publisher Cloud and a CPG Brand

Situation: When a leading CPG brand sought to improve streaming TV campaign efficiency, they faced a common challenge: how to leverage their valuable custom audiences across publishers without sacrificing privacy or control.

Solution: Built on AWS Clean Rooms, Amazon Publisher Cloud (APC) is a collaboration service empowering advertisers to activate signal-enhanced programmatic deals, powered by publishers' unique content data signals alongside trillions of shopping, browsing, and streaming insights from Amazon Ads. By implementing Amazon Publisher Cloud, the brand was able to share custom audiences with broadcasters in a privacy-compliant environment.

Benefits: The results were impressive: campaigns using this data access strategy delivered a 58% more efficient cost to reach desired audiences compared to the control campaign that did not employ APC-enabled targeting. As Sharmilan Rayer of Amazon Ads explains, "APC allowed the broadcaster to curate deals specifically hitting the CPG brand's custom segments more effectively on streaming TV without directly exposing the underlying data."

"For advertisers with rich first-party data, the challenge isn't collection — it's activation. Clean rooms solve this by creating secure environments for collaboration without compromising data ownership," adds Raghu Raman, Amazon Ads.

Case Study: Innovid and a National QSR Brand

Situation: A national QSR chain struggled to connect CTV ad exposures to real-world sales, a persistent challenge in the industry.

Solution: Innovid partnered with Affinity Solutions to implement a data strategy that directly linked household-level CTV exposures to actual credit card transactions. "Today's CMOs aren't just asking about reach, they want to know if their CTV investment actually drove sales" explains Callum Guthrie, Innovid. "To answer that, we need privacy-safe systems that connect ad exposure to real-world outcomes like purchases."

Benefits: The results demonstrate the power of engineered data access: campaigns measured through this approach captured 25x more attributed revenue and 55x more attributed transactions compared to traditional digital measurement approaches. For the QSR client, this translated to 1.9x higher incremental store visit lift and 18% higher incremental sales lift.

As Mike Bregman succinctly puts it: "The difference between good and great CTV campaigns often comes down to data infrastructure. Those with engineered data strategies see higher performance, faster optimization cycles, and better creative relevance."

When properly implemented, a comprehensive data access strategy isn't just about measurement — it transforms every aspect of CTV campaigns, from creative development to audience planning to real-time optimization.

Sidebar: Leveraging Clean Rooms Across the Media Ecosystem

CTV has revolutionized the media landscape, but its fragmented nature creates significant challenges for measurement, targeting, and optimization. One technology has emerged as a critical infrastructure to help address these challenges: clean rooms. A data clean room is a secure, privacy-centric environment where marketers can match and analyze data from multiple parties without exposing personally identifiable information. It ensures that each party maintains control over their data while enabling collaboration under strict governance. With a clean room, marketers can unlock deeper insights into campaign performance, optimize media spend, and build more accurate audiences — all while upholding consumer trust and regulatory compliance.

This sidebar explores how industry leaders are implementing clean room technology across the entire media process, from strategy formulation to attribution analysis, creating a seamless data ecosystem that preserves privacy while enabling powerful insights.

Clean rooms solve a persistent challenge in the industry: bridging the gulf between publisher tools (with specific inventory details) and agency planning tools (with broader audience insights but less specificity).

Understanding the Clean Room Revolution

Clean rooms represent more than just a measurement tool; they constitute a new infrastructural design paradigm for secure data collaboration while protecting privacy. Unlike traditional data sharing methods, clean rooms enable parties to analyze combined datasets without exposing raw data, solving critical challenges in a fragmented media ecosystem.

As Peter Nummerdor from VideoAmp explains: "People over-complicate what a clean room is ... They're not doing that many different things. It's like a new interface to interact with data. Once you adopt that design pattern across all of your services ... it doesn't matter if it's audience onboarding or planning or measurement or conversions ... everything can live there, and everything can have the same privacy compliance and simplicity of data collaboration."

This shift in thinking — from viewing clean rooms as isolated tools to understanding them as comprehensive infrastructure — represents an important best practice in implementation.

Strategic Implementation: The Multi-Clean Room Approach

Implementing clean rooms effectively requires a strategic approach that acknowledges the reality of today's fragmented media landscape. A senior executive at a large media agency emphasizes that organizations typically need a "multiple clean room strategy" rather than a single solution: "We have to take into account what walled garden clean rooms, and then wherever we can use a neutral clean room that we can bring in data sources from multiple platforms, we'll typically push clients towards that, to bridge that gap in measurement."

This dual approach — leveraging both walled garden clean rooms (such as Google's ADH or Meta's Advanced Analytics) and neutral clean rooms (such as Snowflake or AWS) — enables organizations to balance platform-specific capabilities with cross-platform integration needs.

Clean Rooms in Media Planning: From Audience Strategy to Execution

Clean rooms are transforming media planning by enabling more sophisticated audience strategy development and activation. The approach enables:

- Integration of first-party data from publishers into planning tools.
- Near-census-level audience insights rather than small panel-based projections.
- Cross-platform planning capabilities that were previously impossible.

Clean rooms provide critical infrastructure for making informed investment decisions across fragmented media channels. By enabling data sharing in a privacy-safe environment, clean rooms help investment teams understand true audience reach across platforms.

This approach enables investment teams to:

- De-duplicate reach between streaming and linear portions.
- Optimize frequency across platforms.
- Allocate budgets more effectively based on true audience exposure.

The ability to analyze overlapping reach between channels, estimated at "50% overlap between the streaming portion and the traditional linear portion," represents significant efficiency potential in media investment.

Measurement and Attribution: Closing the Loop

Perhaps the most mature application of clean rooms is in measurement and attribution. A senior executive at a large media agency explains that clean rooms are essential for "closed loop measurement" where first-party data is matched against ad exposure data.

They go on to say, "For any of those providers that are not walled gardens, a lot of the work that my team does is data collaboration, which involves clean rooms and looking at neutral clean rooms that are multi-party options that we can accomplish some of that measurement."

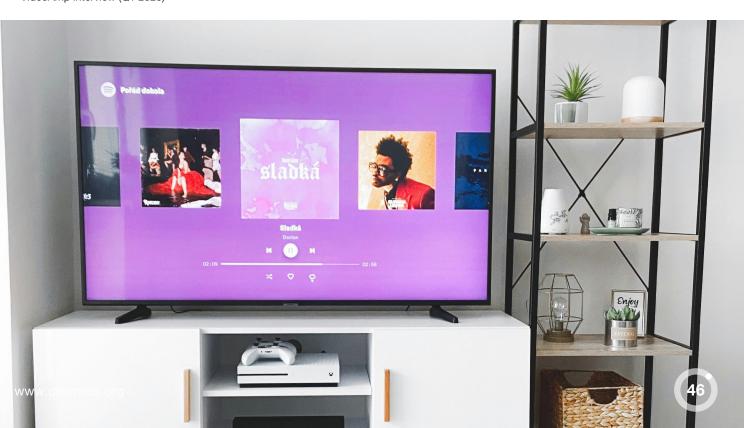
Critical measurement applications enabled by clean rooms include:

- De-duplicated reach and frequency measurement across platforms.
- Sales attribution through first-party data matching.
- Advanced analytics requiring multiple data points.

The implementation of multiple clean room strategies simultaneously allows organizations to bridge measurement gaps between platforms while maintaining privacy compliance.

As the media ecosystem continues to fragment, clean rooms will play an increasingly central role in enabling cohesive strategy, planning, investment, and measurement. The best implementation approach recognizes clean rooms not as isolated measurement tools but as fundamental infrastructure supporting the entire media process.

⁴ VideoAmp interview (Q1 2025)



#8. Use Multiple Attribution Methods for Clear Insight into CTV's Impact

Marketing/Media Mix Modeling is not consistently capturing the impact of CTV advertising. There are a few reasons.

MMM's typical annual or quarterly readouts significantly lag behind rapid shifts in streaming consumption, delaying necessary adjustments in ad spend. In addition, the linear impression volume often floods the measurement zone and makes separating linear from CTV difficult, particularly when the flighting of CTV and linear are the same.

MMM also struggles with CTV's unique characteristics:

The Problem

- Temporal Blindspots: MMM cannot keep pace with fast-changing audience behaviors in streaming and often arrives too late for in-flight optimization.
- Fragmentation & Offline Gap: Measurement is hindered by inconsistent standardization across publishers (e.g., varying acceptance of measurement pixels) and the difficulty of linking CTV ad exposure to offline actions like in-store purchases without integrated data solutions.
- Stitching together fragmented data from walled gardens is labor-intensive without tools like clean rooms or unified platforms.

"MMMs often undervalue CTV because they're calibrated to linear's broad reach."

- Jamie Fellows, Amazon Ads

The Best Practice

Supplement MMM with more granular, timely outcome measurement solutions appropriate to the campaign goals.

Utilize experiments, response codes (like QR codes), and advanced attribution techniques like transaction data match-back (e.g. via partnerships linking ad exposure to credit/debit card data) and platform-based attribution tools to overcome MMM's limitations.

Focus on methodologies that can link CTV ad exposure data directly to specific business outcomes, both online and offline.

"Combining multiple measurement methodologies gives us a more complete picture of performance than any single method. The key is to establish a consistent measurement framework across channels while acknowledging their differences."

Kevin Cahn, Kepler

The Cost of Inaction

An inability to accurately measure CTV's full-funnel effectiveness leads to misallocation of budgets and missed optimization opportunities.

Over-reliance on MMM may obscure CTV's unique contributions, particularly its ability to drive measurable attitude, perception and sales lift, reducing its value in the media mix allocation.

"There is a soup of KPIs - no single metric tells the whole story. We need to establish a clear hierarchy of metrics that aligns with business objectives, not just what's easy to measure."

- Smiti Paul, Canvas Worldwide

Six-step process for applying multiple attribution methodologies:

- 1. Organize a comprehensive CTV Campaign Design and Measurement Workshop.
- 2. Ensure alignment of attribution methodologies with the established measurement plan.

How to Execute

- 3. Conduct a thorough evaluation and comparative analysis of vendor options.
- 4. Implement data collection procedures.
- 5. Execute methodologies and perform a comprehensive evaluation of results.
- 6. Engage in a comparative analysis of the diverse results obtained.

"Different methodologies serve different purposes - MMM for budget allocation, MTA for optimization, incrementality for validation. The key is establishing a consistent measurement framework that can be applied across channels."

- SVP, Growth Analytics, Large Media Agency

Measurement & Analytics

- Develop and implement multi-faceted attribution approaches.
- Integrate insights from MMM, experimental data, response code tracking, and match-back analysis.
- Leverage integrated measurement platforms and data partnerships (e.g., Ad Server and transaction data provider) to establish a connection between ad exposure and definitive outcomes such as credit/debit card transactions.
- Capitalize on granular reporting functionalities provided by selected platforms to conduct detailed performance analysis by creative, placement, publisher, and transaction type.
 This analysis enables real-time optimization during campaign execution.

Primary Lead & Dependencies

Planning

- Provide advertisers with strategic guidance on the implementation of experiments and alternative attribution methods, ensuring close alignment with specific campaign objectives, such as in-store sales lift or website visits.
- Strategically plan for the necessary technology and strategic partnerships to facilitate advanced measurement capabilities.

Publisher & AdTech

- Provide accessible event-level ad exposure data (e.g. through clean rooms, APIs) and facilitate measurement integrations (pixels, SDKs) to support diverse attribution methodologies.
- Ensure seamless interoperability with third-party measurement and verification partners.

"Different measurement approaches serve different purposes - MMM for long-term planning, MTA for tactical optimization, and incrementality testing for validation."

- Sean Heinke, Choreograph

More suited attribution approaches for CTV enable many benefits:

- Enhanced ability to attribute specific funnel outcomes, including offline actions like in-store sales, directly to CTV campaigns, leading to better optimization decisions and budget allocation.
- Enables mid-flight campaign optimization based on granular performance data (e.g., by creative and by placement).

The Benefits

 Delivers greater confidence in investing appropriately in CTV as a distinct and measurable channel within the media mix.

Upwave's data emphasizes the importance of multiple attribution methods for brand lift, enabling mid-flight optimization that significantly improves campaign performance (15-25% increases in brand lift). Creative concept adjustments offer the largest potential gain (22% brand lift increase), followed by publisher and targeting method (17% increase in brand lift), and video length (11% brand lift increase). Mid-flight optimization can recover about 20% of potential improvement, equating to roughly 4,000 more upper-funnel conversions per million exposures.⁵

"The most successful clients measure success using a robust measurement stack that blends deterministic approaches like MTA and outcome match-back with causal methods such as MMM and incrementality testing to capture both granularity and impact."

- Anita Patil Sayed, Canvas Worldwide

"MMMs often miss key drivers of performance — creative, contextual, and psychographic factors — which can account for up to half of all incremental sales."

- Sean Heinke, Choreograph

Best Practice in Action

Relying on a single attribution method like traditional MMM can leave half the story untold. Moe Chughtai at MIQ, is direct: "If you're only using one attribution methodology for CTV, you're getting at best a partial picture and at worst a misleading one." Anita Patil Sayed at Canvas Worldwide adds, "MMM remains an essential strategic tool, but its reliance on impression volume can over-credit linear TV, making it critical to supplement with methods that better capture CTV's precision and outcome-driven impact."

The most successful advertisers are layering methodologies, using experiments, transaction match-back, QR codes, or OEM 'buy now' features and clean rooms to connect CTV exposures to real business outcomes. Here's how leading brands and their partners are putting this best practice to work, and why it's moving the needle.

⁵ Interview with George London, Upwave (February 2025)

Case Study: Innovid and a QSR Brand

Situation: PMG's QSR clients wanted to prove CTV's impact on in-store sales, not just on online actions.

Solution: Innovid's measurement technology, powered by Affinity Solutions data, matched CTV exposures to credit card transactions, enabling mid-flight optimization and full-funnel visibility.

Benefits:

- 25x more attributed revenue than prior methods.
- 55x more attributed transactions compared to online-only approaches.
- 4.3 incremental transactions per campaign.

"By tying ad exposures directly to in-store transactions and online sales, we delivered a meaningful increase in attributed transactions. Combined with granular reporting, we optimized strategy mid-flight, delivering incremental value and strengthening our QSR brand partnerships." – Mike Treon, PMG.

Case Study: Spectrum Reach and Matter Brothers

Situation: Spectrum Reach's client, Matter Brothers, was looking for a provider that offered options for targeting audiences and measuring campaign impact, to improve media effectiveness.

Solution: Using their proprietary tools, including Audience Reach Optimizer (ARO), Spectrum Reach provided audience targeting to extend reach and attribution insights for campaign optimization.

Benefits: Compared to historical campaigns, Spectrum Reach outperformed and delivered

- 11% incremental reach.
- 19% decrease in unexposed audiences.
- 10-15% sales increase.

This case underscores Spectrum Reach's ability to combine scale, identity, and outcome-based measurement – proving that when you start with the right data, you get the right results.

"Spectrum Reach used sophisticated television campaign analytics to provide eye-opening media insights that drove a strategic shift in our ad budget from local broadcast to Spectrum Reach." – Kim Dominguez, Matter Brothers.

Case Study: Amazon Stores and Amazon Publisher Cloud

Situation: Amazon's North American Stores (NAS) business needed innovative, efficient, and scalable addressability solutions to drive incremental sales across all North American consumer retail categories for Amazon's online stores, while also maintaining privacy.

Solution: The NAS team ran a campaign across 12 web publishers using APC-enabled deals.

Benefits:

- 50% uplift in incremental sales on Amazon against the team's internal benchmark.
- 36% more efficient cost per action (CPA) among audiences that were new-to-Amazon.
- 35% of the campaign was delivered to audiences on Safari, which represents traditionally unaddressable supply by conventional activation tactics.

Case Study: Amazon Ads and Clorox

Situation: Clorox aimed to drive significant campaign efficiencies in Amazon DSP.

Solution: Clorox shared their custom audiences with a leading streaming TV (STV) broadcaster on Amazon Publisher Cloud, enabling the publisher to curate a highly customized programmatic guaranteed deal

Benefits:

- 2.8x uplift on on-target reach compared to a control 'run-of-network' campaign.
- 264% increased on-target impressions vs. historical campaigns.
- 58% more efficient cost to reach a desired user vs. historical campaigns.

"Attribution quality depends directly on supply path transparency. By consolidating buys and reducing supply hops, you simultaneously drive cost efficiency and enhance measurement signal fidelity." – Jamie Fellows, Amazon Ads.

Case Study: Kargo and a Clothing/Accessories Retailer

Situation: A clothing/accessories retailer wanted to boost back-to-school sales and brand favorability among 18-24 year-olds.

Solution: Kargo implemented cross-channel contextual targeting, aligning ad sentiment with content emotion, and measured across CTV, web, and social.

Benefits: Compared to historical campaign benchmarks, Kargo delivered:

- 6x increase in ROAS.
- 8% lift in sales.
- 8-point lift in brand favorability.

"When you bring together dynamic creative and smart contextual targeting, that's when attribution starts to really make sense. You see performance jump across the consumer journey in ways static strategies can't deliver." – Danny Reuben, Kargo.

Case Study: LiveRamp and a CPG Brand

Situation: A major CPG brand needed to reduce waste and improve ROAS by targeting underexposed households.

Solution: LiveRamp's persistent identity solution connected first-party data from the CPG brand with CTV exposures across platforms.

Benefits: Compared to historical campaign benchmarks, LiveRamp delivered:

- 176% increase in unique household reach for OTT/CTV.
- 86% increase in ROAS.
- Significant reduction in wasted impressions.

Takeaways for Practitioners

Based on these success stories, a Growth Analytics leader recommends a practical approach: "Start with your primary attribution method, but always allocate 5-10% of your budget to testing complementary techniques. The fastest path to more accurate attribution is running controlled experiments alongside your primary methodology."

Smiti Paul from Canvas Worldwide adds: "Clean rooms are becoming essential infrastructure for sophisticated measurement. They allow you to bring together deterministic data sets from multiple parties while maintaining privacy compliance."

The most successful organizations are implementing a multi-method measurement approach that includes:

- Marketing Mix Modeling for comprehensive, cross-channel planning.
- Geo-based experiments to isolate incremental impact.
- Transaction-level matching to connect exposures to purchases.
- Response codes and QR tracking for direct attribution.
- Unified identity solutions for consistent cross-channel measurement.

Advertisers often approach CTV with one of three core objectives in mind: optimizing reach and frequency, delivering precise audience targeting, or driving measurable business outcomes. These aren't just theoretical goals — they reflect the real-world imperatives marketers bring to every campaign brief, RFP, and quarterly planning cycle.



Optimizing Reach and Frequency — delivering efficient reach across fragmented platforms while managing exposure at the user and household level.



Delivering Precise Audience Targeting — using advanced data sets to reach high-value segments, without blowing up budgets or sacrificing scale.



Driving Measurable Business Outcomes — connecting CTV impressions to meaningful results, from foot traffic to online sales, through thoughtful planning and measurement.

This section translates those objectives into actionable guidance in the form of three 'cheat sheets' — a series of one-pagers that offer a field-tested roadmap grounded in insights from leading buyers, platforms, and analysts. While each use case stands on its own, together they demonstrate how the eight best practices outlined earlier in this report work in concert across different goals, from data strategy to supply management to creative activation.

You can treat these use cases as modular: detach them, repurpose them, or drop them directly into your internal playbooks, agency briefs, or client education decks. Each one is built for practical utility — because knowing what to do is only helpful if you also understand how to do it well.

These cheat sheets are shown below, and can be downloaded here.

Optimizing Reach and Frequency in CTV

Why This Matters

The transition from linear TV to CTV has fragmented audiences across platforms, making it challenging to achieve efficient reach and frequency. Without strategic approaches, advertisers risk oversaturating viewers or failing to reach them enough to drive impact.

Key Strategies

Understand Tool Limitations

Supplement planning tools with complementary data sets (linear TV exposure, platform-specific identity signals, behavioral data) to uncover true reach gaps and avoid overlap.

Anchor in Identity

Use a universal ID set compatible across CTV platforms. Coordinate with DSPs, SSPs, and publishers for accurate frequency tracking and audience deduplication.

Apply Exposure-Based Targeting

Leverage ad exposure data (ACR or set-top box signals) to target underserved households while suppressing overexposed ones.

Cap Frequency with Discipline

Set strict frequency caps at campaign, partner, and user levels. Regularly review delivery logs to ensure compliance.

Choose Supply Strategically

Match buying methods to objectives: direct deals for premium inventory, programmatic for flexibility, and PMP for cost-effective reach.

Balance Cost and Quality

Blend premium inventory with mid-tier sources to optimize CPMs.

Test multiple partners for the best mix.

Enable In-Flight Flexibility

Reserve 20–30% of your budget for mid-flight adjustments based on real-time data.

Summary

Efficient reach and frequency management in CTV requires a multi-tool approach anchored in strong identity resolution. By strategically selecting supply and maintaining flexibility in-flight, advertisers can maximize their investments while avoiding audience oversaturation.

Delivering Precise Audience Targeting

Why This Matters

CTV offers advanced targeting capabilities but comes with challenges like inconsistent audience matching, household vs. individual targeting limitations, and high costs for precision. Advertisers need strategies to balance precision with scale while avoiding inefficiencies.

Key Strategies

Collaborate Early to Define Audiences

Align planning, creative, and analytics teams to define clear audience personas and ensure consistency across platforms.

Start with Strong Identity and Match Rates

Choose scalable identity sets with high matchability across platforms. Work with partners to validate match rates and ID resolution logic.

Segment Thoughtfully

Avoid over-slicing audiences into tiny groups that increase CPMs. Focus on scalable segments tied directly to campaign goals.

Use Contextual Signals as a Supplement

Layer contextual targeting (genre, content type, geo) as a proxy for audience intent where ID match rates are weak.

Balance 1P, 3P, and Platform Data

Blend first-party data with reliable third-party sources and platform-native segments.

Test performance across data types.

Test and Learn Continuously

Run A/B tests or geo splits to identify responsive audiences. Treat targeting as dynamic input rather than fixed parameters.

Measure Audience Delivery

Track on-target delivery, segment saturation, and overlap to refine future strategies beyond just outcome-based KPIs.

Summary

Successful audience targeting in CTV balances precision with scale through thoughtful segmentation, strong identity resolution, and continuous testing. By measuring actual audience delivery, advertisers can optimize targeting strategies effectively.

Driving Business Outcomes in CTV

Why This Matters

CTV bridges traditional TV and digital channels but lacks immediate response mechanisms like search or social media. Advertisers need flexible planning approaches that connect ad exposure to measurable business outcomes through robust attribution frameworks.

Key Strategies

Build Budget Flexibility

Allocate upwards of 50% of the budget for real-time adaptation based on performance signals. Shift spend toward high-performing platforms or creatives as needed.

Cast a Wide Net First

Start broad across platforms, segments, publishers, and formats. Use early-stage data to identify drivers before narrowing focus.

Optimize for Outcomes Over Precision

Avoid hyper-targeted CPMs that may outpace value. Balance cost vs. response by testing environments and audiences for efficient performance.

Retarget Across Channels

Amplify broader marketing strategies by retargeting underserved audiences or sequencing messaging across channels.

Implement Multi-Layered Measurement

Use incrementality testing, geo experiments, MMMs, or deterministic measurement methods to validate incremental lift and channel value.

Test Creative Formats and Messages

Have multiple messages and deploy interactive formats like QR codes or shoppable ads that accelerate conversion while improving attribution clarity.

Leverage Partnerships for Attribution

Use privacy-safe environments like clean rooms to connect ad exposure to outcomes (e.g., site visits or app installs) without compromising user data.

Summary

Driving business outcomes via CTV requires flexibility in planning, cross-channel synergy, robust measurement frameworks, and creative experimentation. By focusing on performance signals rather than rigid targeting metrics, advertisers can transform CTV into a powerful performance channel.

5. Conclusions

CTV represents an enormous opportunity to combine the storytelling power and scale of linear TV with the precision, accountability, and flexibility of digital. The industry has already seen remarkable adoption and many successful campaigns that prove CTV can deliver efficient reach, targeted engagement, and real business outcomes.

Yet despite these early results, execution remains difficult. Planning, investment, and measurement are still fragmented. Lack of good frequency controls and confusing user experiences continue to frustrate. Delivering precision at scale is hard, and while great campaigns can unlock growth, clear performance signals are still elusive.

We can — and must — do better.

As this guide makes clear, the advertisers and agencies getting the most from CTV are applying a consistent set of best practices across the campaign lifecycle. They collaborate early. They define realistic goals and measure against them. They treat creative as a strategic lever, not as an afterthought. They choose supply paths based on desired KPIs. They protect their investments with strong verification approaches. They ground identity and targeting in a consistent audience spine. And they embrace multiple methods to understand attribution and outcomes.

These are the patterns behind the results. They're not theoretical — they're working today. What holds CTV back is not capability, but inconsistency.

CTV's ability to deliver meaningful business results is real. But realizing that potential will require doing things differently — more intentionally, more collaboratively, and with greater operational rigor. We hope this guide will provide a roadmap for stakeholders eager to evolve their practices in order to gain more value out of CTV advertising planning, buying and measurement.

This guide benefited from the insight and support of six leading industry stakeholders driving innovation in the CTV space - Amazon Ads, FOX, Innovid, Kargo, LiveRamp, and Spectrum Reach. More detail about each of these players' efforts in CTV are described in this chapter.

Amazon Ads

About

Amazon Ads offers full-funnel advertising solutions to help businesses of all sizes achieve their marketing goals at scale. Amazon Ads connects advertisers to highly relevant audiences through first-party insights; extensive reach across premium content like Prime Video, Twitch, and third-party publishers; the ability to connect and directly measure campaign tactics across awareness, consideration, and conversion; and generative AI to deliver appropriate creative at each step. Amazon Ads reaches a monthly ad-supported audience of over 275 million customers across owned and operated properties in the U.S. For more information, please visit ads.amazon.com.

Current Offerings

Amazon DSP is a key technology solution available from Amazon Ads and provides choice and flexibility to drive meaningful moments between brands and consumers. Amazon DSP leverages unique first-party data and AI to deliver impactful ads even without traditional identifiers, ensuring campaigns remain effective in a changing landscape. Additionally, its AI-powered automation streamlines campaign management and empowers advertisers with transparent reporting for data-driven decision-making. By combining privacy-centric clean rooms with streamlined workflows, Amazon DSP offers a comprehensive solution that unlocks deeper audience insights and optimizes campaign performance. Key features include programmatic guaranteed buying, frequency management tools, and real-time measurement capabilities.

For example, a leading CPG brand achieved a 264% uplift in on-target impressions and a 58% cost efficiency improvement by leveraging Amazon Publisher Cloud (APC) to activate custom audience segments in collaboration with a leading broadcaster. Similarly, an automotive brand reduced effective CPMs by 20% through Amazon DSP's programmatic guaranteed deals, reinvesting savings into incremental impressions.

Lauren Bernard, Product Manager for Amazon Ads, highlighted Amazon DSP's focus on "delivering holistic measurement insights and optimizing campaigns for both reach and outcomes," underscoring its commitment to innovation.

Looking Ahead

Amazon DSP's future priorities center on enhancing its end-to-end capabilities for managing video investments. Amazon DSP is introducing tools like commitment management to help advertisers optimize upfront commitments while achieving desired outcomes such as incremental reach.

Additionally, Amazon DSP plans to integrate linear TV data with streaming insights for comprehensive planning and measurement solutions. By leveraging advanced Al-driven optimization and publisher collaborations through clean rooms, Amazon DSP aims to redefine how advertisers manage cross-channel budgets effectively. As Lauren Bernard, Product Manager for Amazon Ads, noted, "We're empowering advertisers with actionable insights while ensuring privacy-safe signal collaboration between buy-side and sell-side partners."

Fox

About



At OneFOX, Connected TV (CTV) is not just another screen. It is a dynamic platform that allows brands to connect with audiences at an unparalleled scale, while delivering personalized and engaging experiences. Their CTV strategy goes beyond reach; it is about enhancing those meaningful, immersive moments that audiences experience across our diverse portfolio.

Rooted in cultural resonance, brand safety, and performance, OneFOX's CTV footprint is designed to meet the evolving needs of both advertisers and viewers. With the full power of FOX's iconic brands, including Tubi, FOX Sports, FOX News, and FOX Entertainment, OneFOX provides a unified offering that blends broad reach with data-driven precision and measurable results.

Powered by AdRise, OneFOX continues to lead the CTV space as a pioneer in breaking down traditional media silos. By merging the mass reach of linear television with the targeting capabilities of streaming, OneFOX has created a centralized, future-forward system. Advertisers can now activate, optimize, and measure their campaigns, all in one place, with the confidence that their message is being delivered in a trusted, high-quality environment.

Current Offerings

FOX has always been creators - playmakers of unmissable moments, iconic stories, and cultural milestones. Today, they're turning that same creative energy toward the future, spotlighting innovation and building next-generation solutions that elevate the FOX experience. The goal is to connect brands with fans in more meaningful, purposeful ways, meeting audiences wherever and however they choose to engage.

OneFOX is the bold vision for that future, a centralized platform that delivers cutting-edge tools, experiences, and products across the entire FOX portfolio. It acts as a data-driven center of excellence, sitting at the intersection of premium content, audience behavior, analytics, and advertising intelligence.

Within this ecosystem, they offer a suite of advanced, tech-enabled tools designed for smarter targeting and optimization. These include contextual ad placements, audience targeting powered by first- and third-party data, and device-level insights. Starting with a data-driven linear solution, they help advertisers reach audiences with a higher propensity to convert. From there, they expand into the CTV space, enhancing targeting through cross-device signals and audience behaviors. Looking ahead, they're advancing toward even more precise solutions, guaranteeing delivery at the household level with addressable inventory and integrating robust cross-platform capabilities to maximize reach and impact.

And there is no other audience like FOX's. They are turned up and tuned in and building meaningful moments that cultivate connection. FOX is the #1 publisher in co-viewing, with two out of five viewers watching with another person in the room, a 111 index vs. the publisher norm.

In today's attention-driven marketplace, the priority is clear: focus on the people who are engaged and ensure that every campaign delivers measurable performance. Achieving this starts with the significant scale of their video footprint -18 billion impressions optimized across their expansive video landscape to drive results.

OneFOX enhances this scale with the ability to target audiences through a combination of behavioral, contextual, and demographic signals, allowing them to serve customers with precision across the entire ecosystem.

To support performance at every stage of the customer journey, they've also invested in a robust network of measurement partners, enabling full-funnel attribution aligned to any client KPI.

Looking Ahead

OneFOX just launched a new converged media platform, powered by AdRise built on a foundation of Al-driven technology and tools that support unified planning, activation and measurement across FOX Entertainment, FOX Sports, FOX News Media and Tubi. This intelligence platform will harness audiences & contextual signals along with behavioral, creative and campaign analytics to create more personalized ad experiences for consumers and increase ad efficacy for advertisers. Its key capabilities include:

- 1. Al Powered Planning predictive models that surface optimal campaign strategies across genres and platforms from NFL Sundays to breaking news to Tubi originals
- 2. Unified Activation converged audience insights enabling holistic planning to be activated across linear, addressable and digital media
- 3. Outcome-Based Measurement real-time insights that tie media strategies to business outcomes and client objectives, including sales lift, engagement, and brand resonance

This proprietary intelligence platform will dynamically align brand goals with the right audience, consumer touchpoint and programming to make every moment count for advertisers and audiences.

Innovid

About



Innovid is the leading independent ad tech platform empowering marketers to create, deliver, measure, and optimize ad-supported experiences that people love. In 2025, Innovid and Flashtalking merged to create a transparent, scalable alternative to big-tech, walled-garden, and point solutions across CTV, digital, linear, and social channels. Innovid's commitment to innovation, especially in the CTV space, has positioned it as a trusted partner for brands, agencies, and publishers looking to navigate the complexities of modern advertising.

Current Offerings

Today, Innovid is at the forefront of omnichannel innovation offering solutions to brands, agencies, and publishers to create, deliver, measure, and optimize across CTV, linear, digital video, social, display, native, audio, and Digital OOH.

Create

Doug Paladino, Programmatic Director at PMG, praised the platform's dynamic creative optimization for its role in driving engagement and incremental sales: "Its success in driving engagement, site visits, and sales has solidified its place in our marketing mix."

Measure

Innovid's collaboration with PMG for a Quick Service Restaurant (QSR) campaign demonstrated its ability to measure ad-driven sales and optimize mid-flight campaigns using Affinity Solutions' transaction data. This resulted in a 25x increase in attributed revenue and a 55x boost in attributed transactions compared to online-only approaches.

Optimize

Its Harmony suite enables advertisers to optimize supply paths, reduce inefficiencies, and unlock incremental impressions. For example, CMI Media Group utilized Innovid's Harmony Direct solution to streamline workflows, cut ad tech fees by 80%, and reinvest savings into 5.3% more impressions while reducing carbon emissions by 40%.

Looking Ahead

Looking ahead, Innovid's innovation agenda is focused on delivering a unified ad tech platform that offers advertisers enhanced control and performance throughout the entire advertising journey. This includes a strong emphasis on Al-driven creative production to enable dynamic creative optimization across all formats and channels, as well as expanding the use of shoppable formats like interactive CTV creative. To address media fragmentation, Innovid is prioritizing Al-based automation for the faster deployment of video, audio, and display ads across walled gardens, streaming services, and the open web. Additionally, the company is making significant investments in privacy-compliant solutions, including cookieless identity management and centralized audience analytics. Innovid is also enhancing its real-time measurement tools, seamlessly connecting ad exposure data to measurable business outcomes. Lastly, Innovid is expanding its Harmony optimization suite to drive better campaign performance across multiple buying platforms and channels. With an unwavering commitment to independence, intelligence, and innovation, Innovid is shaping the future of advertising.

Kargo

About



As the only media marketplace with 100% premium supply, Kargo creates memorable advertising experiences that go beyond the first impression to captivate consumer attention. With a suite of exclusive, full-funnel advertising solutions, Kargo empowers leading brands to make meaningful customer connections across mobile, connected television, video and social. Focused on delivering results, Kargo helps the world's largest advertisers achieve incremental brand lift and higher returns on ad spend. For publishers, Kargo's proprietary platform maximizes revenue per impression through unique creative and targeting solutions. Founded in 2003, Kargo is a global company headquartered in New York with offices around the world.

Current Offerings

Kargo is adapting media investment strategies for its advertisers across three key pillars of innovation: context, commerce, and creative.

For context Kargo uses scene-level targeting by analyzing streaming video content to serve ads based on specific scenes, emotions, dialogue, or on-screen elements. Kargo is also incorporating AI to evaluate content on a much deeper level. Rather than relying only on a show description, AI allows our technology to understand many different aspects of the content including dialogue, what's present in the scene, and even sentiment and emotion.

For commerce, Dynamic Product Ads (DPAs) allow advertisers to customize big-screen ads using SKU-level data, geo-targeting, and behavioral insights, producing highly personalized creative variations.

On the creative front, high-impact ad formats — including Glass and new offerings such as Mirage, Flipbook, and Tiles — maximize viewer engagement by integrating unique ad experiences seamlessly into streaming content, Smart TV interfaces, and standard ad pods.

Looking Ahead

Looking ahead, Kargo is focused on further enhancing its creative capabilities while expanding its contextual targeting solutions. Central to this strategy is the development of curated contextual packages that align premium content environments with relevant messaging. By leveraging advanced data signals and content insights, Kargo delivers targeted placements that resonate with audiences based on the content they are consuming in real time.

Additionally, Kargo is investing in dynamic and personalized creative experiences that adapt to users' contexts and behaviors. These efforts aim to push beyond conventional formats, offering more engaging and responsive ad experiences tailored to individual user journeys.

Kargo is also advancing its Al-powered creative solutions, including "Narrative," which uses artificial intelligence to help advertisers customize creative without expensive, high-quality video assets. Kargo's Al-based technology uses existing visuals, including display ads and website content, to build CTV-ready, cost-effective campaigns that help more advertisers tap into this channel.

LiveRamp /LiveRamp

About

LiveRamp empowers marketers and media owners to deliver and measure marketing performance everywhere it matters with the world's most powerful data collaboration network. Built on a foundation of strict neutrality, unmatched interoperability, and global scale, LiveRamp enables organizations to unlock new value by optimizing CTV investments – combining data sources to gain insights across all signals, identifiers, and platforms. Brands can activate their first-party data (such as CRM data, purchase history, and website behavior) across CTV platforms to expand their audience reach and deliver deeply personalized experiences.

Current Offerings

LiveRamp capabilities for CTV include:

- 1. RampID the industry's most interoperable and durable identifier can connect customer data across CTV and other digital touchpoints, with strong data governance and controls for the responsible use of data, while delivering and maintaining deeply personalized experiences.
- A premier global ecosystem of data partners and publishers that provide instant access to high-quality thirdparty data. Advertisers can collect and analyze viewer data across various CTV platforms, integrating first-party customer data with external insights to create a comprehensive audience profile.
- 3. The largest data marketplace, offering third-party audience targeting across key categories such as demographic, behavioral, interest, purchase intent, and more for greater relevance and effectiveness. With LiveRamp's Authenticated Traffic Solution (ATS), marketers can reach these authenticated audiences by seamlessly distributing data to advertising platforms across an interoperable ecosystem to reach customers at scale.
- 4. Enhanced measurement and analytics solutions, including viewer engagement, conversion tracking, and return on ad spend (ROAS) calculations, for precise assessment of ad effectiveness to help advertisers optimize their campaigns. Cross-Media Intelligence supports campaigns that span multiple devices, ensuring coherent messaging and targeted opportunities across both digital and traditional platforms, and a seamless advertising experience for viewers.

Looking Ahead

LiveRamp is building the world's most powerful data collaboration network to seamlessly unite data across advertisers, platforms, publishers, data providers, and commerce media networks – unlocking deep insights, delivering transformational consumer experiences, and driving measurable growth. Trusted by the world's leading brands, publishers, retailers, financial services providers, and healthcare innovators, LiveRamp is shaping the future of responsible data collaboration in an AI-driven, outcomes-focused world.

Spectrum Reach

Spectrum REACH®

About

Spectrum Reach®, the advertising sales business of Charter Communications, Inc. (NASDAQ:CHTR), provides custom advertising solutions for local, regional and national clients. Operating in 36 states and 91 markets, Spectrum Reach creates scalable advertising and marketing services driven by aggregated and de-identified data insights and award-winning creative services and supported by a 100% U.S.-based workforce. Spectrum Reach helps businesses of all sizes reach anyone, anywhere, on any screen. Additional information about Spectrum Reach can be found at spectrumreach.com.

Current Offerings

Spectrum Reach delivers scalable, data-driven advertising solutions that connect brands and agencies to the right consumers across all screens and devices. As the largest local aggregator of premium video inventory in the US, ⁶ Spectrum Reach provides access to 60+ traditional TV networks including Spectrum News and regional sports networks, and 450+ streaming networks and publishers, reaching up to 98% of consumers in the US. ⁷ This expansive reach includes consumers in Spectrum's footprint and beyond.

With the largest addressable video footprint in the country,⁸ Spectrum Reach enables advertisers to reach hyper-local, local, or national audiences with precision. As the #1 multiscreen video provider in their markets,⁹ Spectrum Reach delivers ads based on when and how people consume content.

Spectrum Reach is the first advertising partner to bring brands deterministic multiscreen attribution at scale, matching aggregated and de-identified first-party data collected from set-top-boxes and streaming devices with third-party website visitation through partnerships with Innovid and Blockgraph.

From premium live TV programming to high-engagement streaming content, now including Amazon Ads and the Spectrum TV App (the #1 streaming service in the US on an hours-per-household basis, according to Comscore), Spectrum Reach offers clients unparalleled access to premium inventory, precise targeting capabilities, and consistent, measurable results across all screens.

Looking Ahead

Spectrum Reach is simplifying the fragmented media landscape through data, innovative tools, and precise targeting, providing advertisers and agencies a holistic view of their campaign.

Spectrum Reach's Audience Reach Optimizer (ARO) leverages Spectrum Reach's unique data insights in a privacy-focused way to simplify the process for advertisers to target audiences more efficiently at the household level. The innovative planning tool identifies new opportunities for multiscreen engagement across traditional TV and streaming platforms, maximizing campaign impact and audience engagement.

Spectrum Reach Architect, Spectrum Reach's exclusive Al planning tool, uses Spectrum Reach's proprietary data in combination with machine learning to create even more efficient and effective advertising campaigns. ARO and Architect empower advertisers to shift to more efficient, audience-first strategies, with early adopters already seeing measurable improvements in outcomes.

⁶ Definition: watched any Streaming past 30 days or watched ad-supported cable channels past 7 days. Spectrum Reach slice includes: Amazon Prime Video, DIRECTV Stream, ESPN+, fuboTV, Philo, Pluto TV, The Roku Channel, Sling TV, Spectrum TV, Tubi or any non-premium cable (list is reflective of services Scarborough measures and is not comprehensive of our coverage). #1 local aggregator based on reach in markets with Spectrum Traditional TV/Linear footprint. Nielsen Scarborough, USA+ 2024 Release 1 (Revised 9/04/24). Household Total. (January 2023 - April 2024)

⁷ Base: Spectrum Reach Markets, Target Households, access internet OR owns smartphone OR subscribes to cable, telco or satellite service. Up to 99% in the Spectrum Reach footprint and 98% in the total US. Nielsen Scarborough, USA+ 2024 Release 1 (January 2023 - April 2024)

^{8 #1} claim based on total Domestic Video Subs (Charter vs. Comcast) reported as of Q1 2024. Charter & Comcast, Earning Reports (Q1 2024)

⁹ Based on Spectrum Reach share of premium ad-supported streaming TV against competitors in Spectrum Reach markets, and traditional TV share against broadcast competitors in Spectrum Reach markets - Nielsen (Q1 2025)

Spectrum Reach also offers Customer Data Match, enabling brands to activate their own customer data, in a privacy focused way, to reach existing, new and similar customers, and extend messaging with a 90% match rate. Moreover, as the advertising sales business for one of the nation's largest MVPDs, Spectrum Reach's first-party data also offers a 95% addressable match rate to audiences, way above the industry benchmark of 60%. Along with multiscreen attribution reporting, Spectrum Reach will provide advertisers with the ability to analyze the impact of Spectrum Reach campaigns on their sales data. This capability allows companies to align ad-exposed prospects with outcomes by uploading their sales or other HH purchase metrics.

Paired with superior measurement capabilities and ongoing advancements in AI and machine-learning tools, Spectrum Reach continues to build for what's next and advance how advertisers connect with audiences in today's complex media environment.

¹⁰ CIMM, Guidelines for Planning & Buying Addressable TV Advertising (February 2024)

