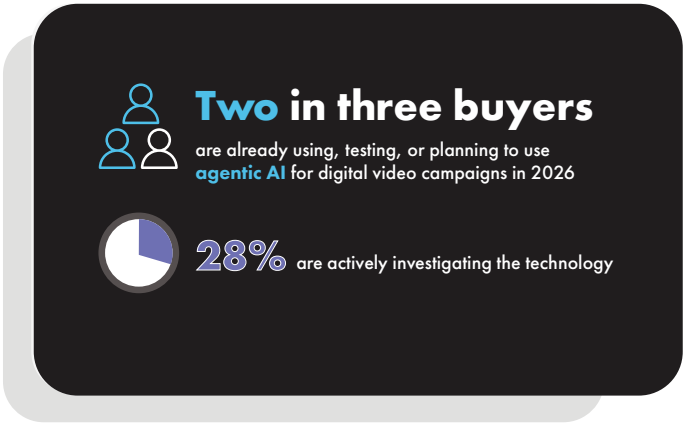
Artificial Intelligence is quickly moving into the infrastructure that powers the video advertising marketplace. Across planning, activation, optimization, forecasting, pricing, and measurement, AI is becoming embedded throughout the programmatic video supply chain.

The result is a marketplace that is becoming more automated, more predictive, and more efficient. According to IAB's 2026 Digital Video Ad Spend & Strategy Report, two in three buyers are already using, testing, or planning to use agentic AI for digital video campaigns in 2026, while another 28% are actively investigating the technology. As AI moves from experimentation to execution, its influence on how video inventory is evaluated, bought, optimized, and measured is expected to grow.



What makes this shift different from previous waves of automation is that AI is increasingly shaping transaction decisions rather than simply executing them. As digital video ad spend surpasses $80 billion in 2026, the volume of signals influencing video advertising decisions is growing exponentially. AI's ability to process and act on these signals across multiple video environments simultaneously is making it a core driver of how inventory is valued, curated, purchased, and optimized.

AI is increasingly being used to automate targeting, optimization, and media buying, making campaigns easier to execute and potentially more effective. However, those gains often come with reduced transparency into how decisions are made, even as advertisers continue shifting spend into AI-driven buying solutions. This creates a new challenge for the industry in understanding how value is allocated across the ecosystem as AI becomes more deeply embedded in programmatic workflows.

IAB's 2026 Digital Video Ad Spend report already found that trust in inventory transparency remains limited across streaming video buying. Even the buying methods viewed as most transparent, direct I/O, programmatic guaranteed, and self-serve platforms, are trusted by only 57% of buyers. Confidence falls below 50% for PMPs and to roughly one-third for open exchange buying. The findings suggest that complexity and intermediary involvement continue to undermine visibility into where ads run, pointing to a broader trust challenge across the streaming programmatic ecosystem. As AI increasingly influences inventory curation, bidding, pricing, and supply path decisions, transparency concerns may become even more pronounced unless platforms provide greater visibility into how outcomes are determined.

What This Means for Video Advertising: For advertisers, AI offers improved efficiency, automates planning and optimization, and identifies opportunities across large volumes of data in increasingly complex video environments. However, improved performance may not always provide insight into the tradeoffs being made behind the scenes.

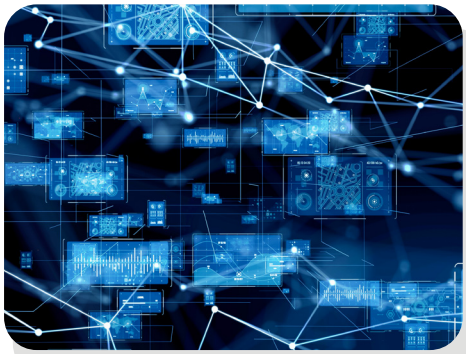
As AI assumes greater responsibility for media decisioning, advertisers will increasingly need confidence that recommendations align with business objectives and can be independently validated. Emerging efforts such as IAB's AI Transparency and Disclosure Framework aim to bring greater visibility into AI-driven decision-making, helping advertisers better understand the factors influencing campaign outcomes and increasing confidence in allocating media spend.

What This Means for Publishers and Media Companies: For publishers, AI creates opportunities to improve forecasting, inventory packaging, pricing, and monetization strategies.

But AI also changes how video inventory is evaluated. Historically, differentiation in the video marketplace relied heavily on relationships, audience scale, and content offerings. Using data signals isn't new either; however, as AI takes a larger role in planning, optimization, and bidding decisions, those signals carry greater weight in determining how inventory is discovered, valued, and prioritized within the marketplace.

As AI-driven buying systems place greater emphasis on predictive signals and outcomes, publishers should seek greater visibility into how inventory is evaluated and what factors influence demand allocation. The MRC Digital Advertising Auction Transparency Standards and IAB Tech Lab's Programmatic Auction Definitions represent important efforts to increase transparency around auction mechanics, helping publishers better understand how inventory is evaluated, priced, and prioritized within programmatic buying systems.

What This Means for Technology Providers: Technology companies sit at the center of this shift, and DSPs and SSPs may see the most disruption. Historically, these platforms differentiated through mechanics they owned: DSPs through bid optimization and targeting logic, and SSPs through inventory access and monetization. As AI increasingly optimizes key marketplace functions, from bid shading and pacing to floor setting and inventory curation, these systems become more dynamic and adaptive, making marketplace behavior harder for advertisers and publishers to interpret from the outside.



This means AI is making economically significant decisions inside systems that buyers and sellers cannot easily inspect. Models, weights, and objective functions may change continuously, reducing the ability of market participants to infer how outcomes are being determined or where value is being created.

This is especially relevant in video and CTV, where inventory is fragmented across publishers, devices, and placements, and where AI increasingly drives how impressions are priced, curated, and matched to audiences. As these processes become more automated, buyers lose the ability to reverse engineer why a given video impression was priced or won the way it was, making disclosure and explainability increasingly important.

As a result, competitive differentiation for DSPs and SSPs shifts toward:

- Decisioning and recommendation engines: proprietary models for scoring, ranking, and matching video and CTV inventory to audiences
- Predictive planning and forecasting: reliable reach and outcome projections across fragmented video and CTV supply
- Explainability of AI-driven outcomes: the ability to show buyers why a video ad won or lost placement
- Access to unique data and signals: proprietary contextual, content, or viewership signals that feed the model

The Future of Programmatic

As decisioning, forecasting, and pricing increasingly move inside AI systems, the industry faces a tradeoff: gains in speed and performance paired with increased losses in visibility. Left unaddressed, this could deepen an information gap where outcomes are visible, but the reasoning behind them is not.

Closing that gap will depend on the industry treating transparency as a priority. Efforts like the IAB Tech Lab's Programmatic Auction Definitions, IAB's AI Transparency and Disclosure Framework, and MRC Digital Advertising Auction Transparency Standards point toward a shared expectation: as AI takes on greater responsibility for decisions that move media dollars, it must also be able to explain those decisions.

The future of programmatic video will be less defined by whether AI is used and more by whether its influence can be understood, validated, and trusted. Advertisers, publishers, and technology providers who build for that standard now will be better positioned as AI's role in the video supply chain continues to grow.