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Start with Your Destination: The Shift Toward Outcome-Based Measurement and Optimization in Automotive Advertising

A data-backed look at the latest trends impacting automotive advertising for manufacturers, agencies, platforms and advertising technology service providers.



Start With Your Destination: The Shift Toward Outcome-Based Measurement and Optimization in Automotive Advertising

Automotive marketers have more tools at their disposal than ever to deliver meaningful customer experiences. At the same time, they are increasingly being asked to do more with less, as clients demand greater transparency, stronger performance and clearer ties to measurable outcomes. However, because most automotive sales take place offline, measuring and optimizing campaigns against this critical metric can be challenging.

Meanwhile, the consumer journey is evolving. Auto buyers have more control over how and when they engage, fueled in part by artificial intelligence (AI) and faster access to information. As a result, the path to purchase is becoming more fragmented, reducing the reliability of traditional web-based tracking methods. Buyers are cross-shopping dealerships and brands in greater volume, heightening the pressure on advertisers to connect with buyers in timely, resonant ways, even as the data available to do so becomes more fragmented and, in some cases, diminished. To succeed in this environment, advertisers must start with the end in mind: namely, by adopting outcome-based measurement and optimization.

Through case studies from leading automakers, platforms and agencies over the last year, this document explores key trends across the automotive advertising industry. Several clear themes emerged across the analyses:



[The Need for Outcome-Based Campaign Measurement](#)

Daily industry sales data is proving more and more valuable in measuring and optimizing automotive advertising performance. Urban Science's analysis of one major automaker's campaign found offline cost per acquisition (CPA) reduced the cost per sale by about two-thirds compared with traditional online key performance indicators (KPIs).



[The Role of Daily Industry Sales Data in AI Optimization](#)

As more AI-enabled tools enter the market, their ability to deliver value depends on the fidelity of the data they're trained on. A collaboration between Urban Science and The Trade Desk found AI-driven lookalike (LAL) audiences created using [SalesMatch™](#) data achieved a 20% higher purchase rate than other third-party audiences.



[A Fragmented Shopping Journey](#)

Shopping journeys are becoming more fragmented and, in some cases, shorter, while changes in how consumers engage online are making tracking more challenging. Urban Science's analysis of a campaign for one leading original equipment manufacturer (OEM) found buyers took an average of 29.5 days from their first media exposure in that campaign to a purchase. This campaign-specific example highlights the importance of continuing to market to, or even prioritizing, shoppers within the 30-day window.



[The Importance of Video in Influencing Sales](#)

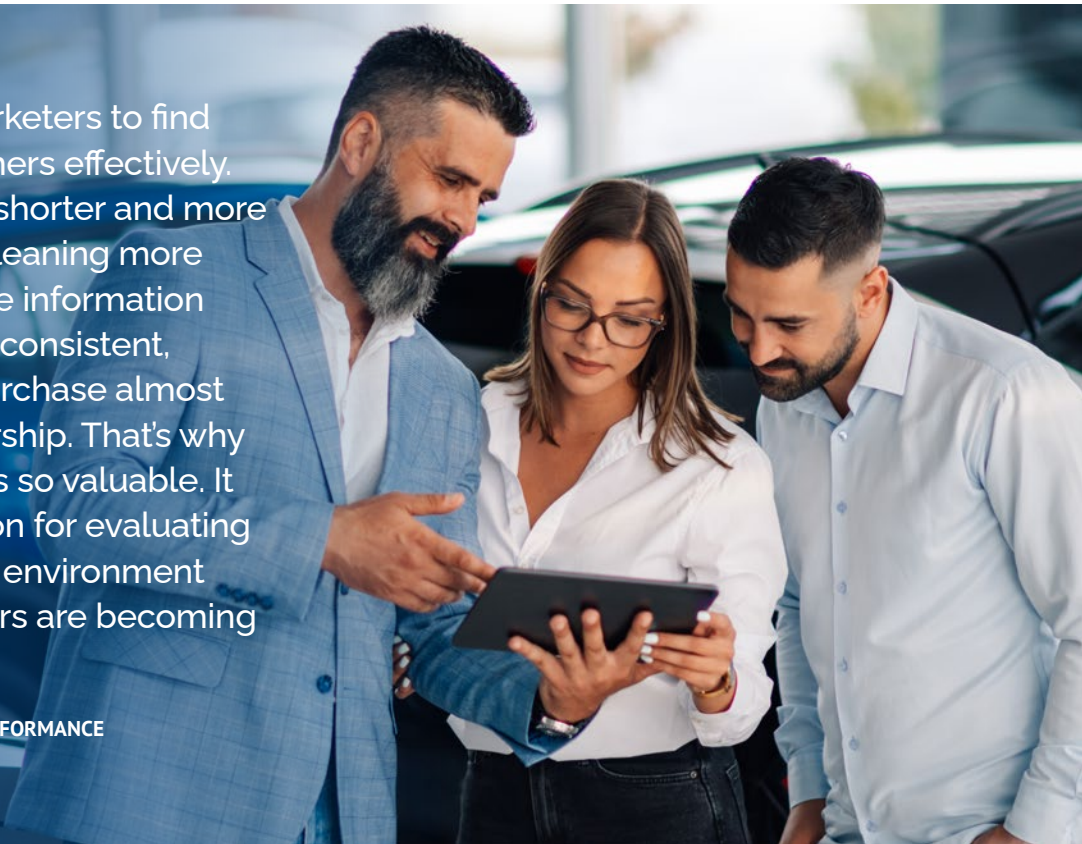
CTV and video play a central role in the automotive advertising ecosystem. In one leading OEM campaign analyzed by Urban Science, nearly half of tracked vehicle sales included exposure to video or CTV, showing how addressable channels like CTV can be used to reach in-market shoppers and measure deterministically against sales outcomes.

Together, the case studies included in this analysis demonstrate the growing importance of outcome-based measurement. Whether the goal is to reach new buyers or convert in-market shoppers, these campaign results highlight how daily industry sales data improves targeting, optimization and experimentation across the entire automotive media spectrum.



"It's getting harder for marketers to find and connect with consumers effectively. The consumer journey is shorter and more fragmented, with buyers leaning more heavily on AI to access the information they need. What remains consistent, however, is the path to purchase almost always ends at the dealership. That's why daily industry sales data is so valuable. It provides a solid foundation for evaluating media performance in an environment where traditional indicators are becoming less reliable."

– CARL MATTER, DIRECTOR OF ADTECH PERFORMANCE



The Power of Experimentation in Automotive Marketing

The complexity of today's marketing ecosystem is making it increasingly challenging for advertisers to judge which platforms are driving sales and where to invest their budgets. Agencies and brands have long looked to media mix modeling (MMM) as a top-down approach to measuring the overall impact of marketing activities in aggregate, but the approach has never fully delivered on its promise. Data signals vary in quality, and data transparency remains uneven across channels. Large platforms like Meta and Google operate as "walled gardens," restricting the flow of performance data to protect their competitive advantage. As such, MMM can indicate what's working at a high level, but it doesn't reveal how those individual activities influence the consumer journey to a sale. Using attributable sales to run experiments provides an alternative way to isolate the impact of specific exposures and strategies, helping brands better understand which tactics meaningfully influence sales.



"In my view, marketers get the most from measurement when experimentation is the foundation of their strategy. Every brand wants to know where to spend and what impact each investment delivers. Conducting incrementality tests and conversion lift studies with attributable sales data – including experiments run with native platform tools – will guide investment decisions toward truly incremental sales."

– SCOTT CLARK, GLOBAL DIRECTOR OF PRODUCT AND OPERATIONS



Activating AI-Driven Audiences with Offline Sales Data

A recent collaboration between Urban Science, The Trade Desk and a leading agency illustrates how experimentation can help marketers understand the impact of different media and targeting strategies. In 2025, Urban Science took the initiative to allow The Trade Desk to utilize SalesMatch data to power lookalike (LAL) audiences. The Trade Desk used SalesMatch data to identify buyers with similarities to those who had recently purchased a vehicle, powering the creation of AI-driven LAL audiences for the agency's automotive clients. The activation delivered clear, data-backed gains, with the advertising cost per vehicle sold improving by 50% and the purchase rate rising by 20% when compared with other third-party audiences.

40%

more efficient

Advertising cost per vehicle sold for LAL audiences versus first-party behavioral and retargeting audiences.

50%

more efficient

Advertising cost per vehicle sold for LAL audiences versus other third-party audiences.

20%

higher purchase rate

For LAL audiences compared with other third-party audiences.

Optimizing Through Experimentation

Urban Science's case studies show experimentation is playing an increasingly important role in helping automotive advertisers improve performance, optimize AI and prove campaign outcomes. For instance, Urban Science's daily industry sales data provides the high-quality inputs needed for Meta's testing and optimization tools to work effectively, producing reliable signals advertisers can use to design and refine their experiments. Within Meta, several native levers illustrate the platform's growing focus on outcome-driven learning, including:

Conversion Lift Testing:

Measures the incremental impact of automotive ads on offline sales by comparing a test group (exposed to ads) with a control group (not exposed), using Urban Science data as the source of offline sales. This isolates causality and helps optimize media spend toward what truly drives incremental vehicle sales.

A/B Testing:

Compares different versions of an ad (creative, audience, placement, etc.) to determine which performs best. Audiences are randomized to ensure clean results, and the winning version is selected based on cost per sale, informed by Urban Science's fast, reliable and comprehensive daily sales data.

Omnichannel and Auto-Optimization:

By selecting offline vehicle sales as the campaign goal, Meta's algorithm can optimize delivery toward users most likely to convert offline based on Urban Science data. Over time, the algorithm learns and improves performance against attributed offline vehicle sales.



Urban Science's analysis of a recent campaign for a leading global automaker highlights the power of using offline outcomes to guide experimentation. Platforms vary in how they enable testing and optimization. However, leaning into each platform's native experimentation features and anchoring them to the same outcome-based data source helps to maintain consistency in both approach and results. Urban Science worked with a leading agency and The Trade Desk, using SalesMatch data to reorient campaign optimization toward vehicle sales rather than website activity. The Trade Desk's AI learned from these signals throughout the quarter, improving its ability to identify shoppers most likely to convert offline. The results were significant. The automaker saw a 66% jump in tier 1 attributable sales and an 83% increase in tier 2 attributable sales following an optimization adjustment toward vehicle sales. Cost per unit (CPU) sold dropped by 12–24%. While macroeconomic conditions may have influenced overall demand, the OEM's attributable sales outpaced competitors by 40–80%, indicating sales-based optimization drove the majority of the lift.

66%
Lift in tier 1 attributable sales.

83%
Increase in tier 2 attributable sales.

12–24%
Reduction in CPU sold.

Connecting Media Exposure to Offline Sales

Urban Science's analysis of a recent tier 3 agency campaign demonstrates how programmatic media becomes more effective when tied to outcome data rather than website-based key performance indicators (KPIs). The campaign, a display, video and CTV program for a tier 3 OEM, launched at the start of 2025. The agency used Urban Science's SalesMatch solution to connect media exposure directly to dealership sales. Between January and June 2025, the campaign delivered:

3,928

Verified sales, representing more than \$118 million in MSRP revenue.

95%

Dealers enrolled in the program by June 2025 based on its success.

6%

Lower cost per sale versus the NADA benchmark.

Urban Science's campaign learnings revealed notable trends in the exposure-to-sales timeline. On average, buyers took 29.5 days from their first media exposure to purchase a vehicle, and nearly half of all tracked sales included exposure to video or CTV. Each buyer was served an average of seven impressions before completing a purchase, illustrating the importance of consistent exposure throughout the decision window.

29.5

Average days from buyers' first media exposure to vehicle purchase.

7

Average number of impressions buyers were served before purchasing a vehicle.

~50%

Of all tracked sales included exposure to video or CTV.

INFLUENCED SALES (APRIL–JUNE 2025)

TACTIC	SALES	SALES %
CTV	377	17%
Display	1,246	58%
Video	536	25%
Total	2,159	100.00%



Validating CTV Effectiveness

While Urban Science's findings consistently demonstrate the important role of video in the path to purchase, CTV is inherently difficult to measure down to the sales level due to the online-to-offline gap in automotive sales. Urban Science recently partnered with VDX.tv, a global video advertising tech company, to [tie ad exposures to real-world vehicle sales](#) using Urban Science's daily industry sales data. VDX.tv used SalesMatch to achieve three distinct objectives, each of which called for tailored targeting and measurement strategies.

Sustaining Vehicle Sales

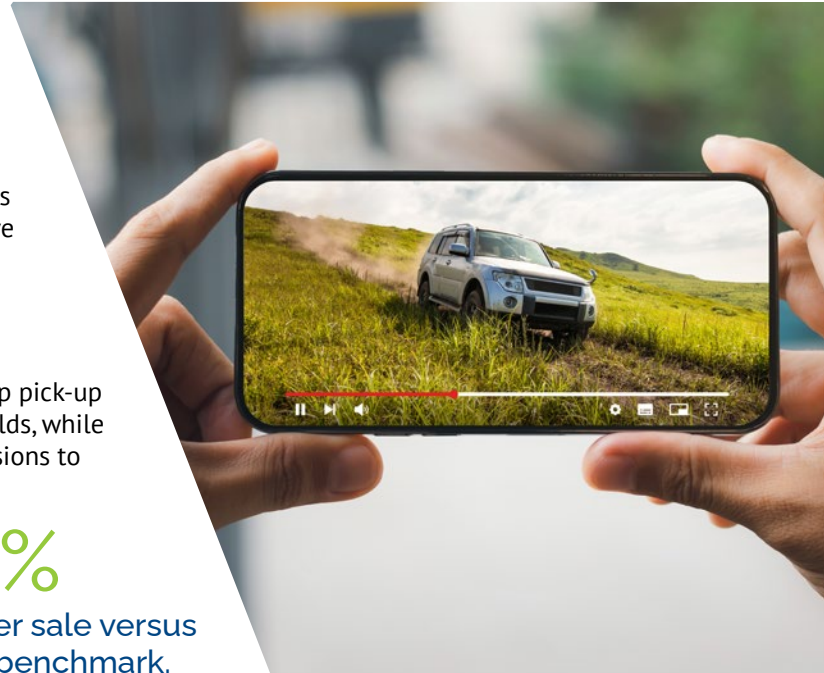
A top U.S. auto brand sought to sustain sales for its flagship pick-up truck. VDX.tv used [TV Magnify](#) to target in-market households, while Urban Science's SalesMatch solution connected ad impressions to daily dealership sales.

\$166M+

Revenue attributed to CTV-driven sales over 60 days.

95%

Lower cost per sale versus the NADA benchmark.



Boosting EV Sales

A leading OEM set out to increase sales of an electric SUV model in California by raising consumer awareness of charging options. VDX.tv used TV Magnify to target in-market households with ads featuring a PlugShare map of local public charging stations. Urban Science's SalesMatch solution identified which ad exposures contributed to vehicle purchases.

86%

Total campaign sales influenced by CTV.

2,500

EV sales influenced, generating more than \$119M in revenue.

99%

Video completion rate (VCR), beating industry benchmarks by 3%.

Converting Active Shoppers

A major domestic automotive brand wanted to reach and convert in-market shoppers for a redesigned compact SUV. VDX.tv used TV Magnify to deliver precision-targeted video to households demonstrating active shopper intent. Meanwhile, SalesMatch tied ad exposures to real-world vehicle sales.

8.13%

Sales lift and market share over 60 days.

87%

Lower cost per sale versus the NADA benchmark.

~\$400:1

ROAS, driving \$40M in revenue.

The three VDX.tv use cases illustrate the value of combining in-platform targeting capabilities with verified outcome data. When advertisers pair video and CTV delivery with daily industry sales data, they gain clearer insight into how media exposures contribute to measurable performance outcomes, allowing them to optimize their investments with greater precision.

Enabling Agility in a Compressed Sales Cycle

A recent [collaboration](#) between Urban Science, Toyota, H/L agency and Nexxen* illustrates how linking media exposure to vehicle sales can help brands remain agile during shorter automotive shopping windows. Toyota sought to address a long-standing challenge in automotive marketing: traditional KPIs such as impressions, clicks and form fills fail to demonstrate how media spend translates to vehicle sales. Compounding this issue, Toyota typically received sales attribution on a quarterly basis, limiting the brand's ability to adapt its advertising tactics during the period when most consumers complete their shopping journey.

Urban Science integrated its sales-based measurement into Toyota's campaign architecture, enabling the team to attribute performance to real vehicle sales

and benefit from faster reporting. This change provided Toyota with a timelier view of which media exposures contributed to conversions, supporting faster optimization.

Between February and May 2025, Toyota and H/L activated campaigns through Nexxen's end-to-end platform. Nexxen's identifier-free contextual targeting aligned media delivery with in-market consumer intent, while Urban Science linked those exposures to verified offline sales. Using offline vehicle sales as the optimization signal reduced the cost per sale by about two-thirds compared with traditional online KPIs. In addition, offline return on ad spend (ROAS) exceeded \$600, demonstrating the efficiency gained by tying optimization to conversions rather than engagement.

~66%

Reduction in cost per sale when optimized toward sales versus online proxy metrics.

>\$600

Offline ROAS.



*This case study originally appeared on [Nexxen's website](#).



"The shift to faster sales attribution gave Toyota a clearer picture of performance at the pace auto buyers are actually moving. That allowed the team to experiment, validate what worked and redirect investment quickly. As sales cycles continue to compress, this kind of agility will be essential for every automaker."

— CARL MATTER, DIRECTOR OF ADTECH PERFORMANCE

Leveraging Daily Industry Sales Data for 2026 Media Planning

Shorter consumer journeys and growing platform fragmentation demand a more outcome-driven approach to media. Urban Science's case studies show that when brands connect media exposure directly to dealership sales, they gain a more precise, efficient way to target buyers and measure results, driving real sales lift. Meanwhile, experimentation and optimization based on daily industry sales data allow for a cycle of continuous improvement, strengthening performance over time.

As marketing agencies accelerate their adoption of AI for targeting, optimization and experimentation, the need for high-fidelity data is becoming even more pronounced. AI is only as powerful as the data that fuels it. Features such as auto-optimization require timely, relevant, high-quality data to function effectively. Urban Science's daily industry sales data provides the foundation that AI-enabled tools and models need to deliver stronger performance outcomes.

Looking ahead in 2026, automakers will face tighter shopping windows and rising competition for in-market consumers as affordability pressures continue to inform buyer behavior. These dynamics make outcome-based attribution and experimentation essential for effective media planning.

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“A well-structured learning agenda requires some degree of stability. Marketers can experiment across platforms, iterate creative and test different optimization strategies, but to get results, one aspect of the experiment has to remain constant. Urban Science's daily industry sales data provides that anchor. It gives brands a fixed point of truth to measure against, helping them focus their resources on the channels and strategies that move performance in the right direction.”

— SCOTT CLARK, GLOBAL DIRECTOR OF PRODUCT AND OPERATIONS

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Solution Spotlight

Urban Science's [Media Performance](#) solution suite powers scientific innovation throughout the media ecosystem. Our daily industry sales data helps manufacturers, agencies, platforms and advertising technology service providers target real buyers **up to 25 times more likely to purchase in the next 90 days**, suppress out-of-market buyers and measure performance with precision.



URBAN SCIENCE®

Unlock Your Breakthrough Potential With Urban Science

Urban Science works with leading brands, agencies, publishers and platforms to power our solutions across tiers and channels with industry-wide intelligence and data you can implement at speed and at scale.

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About Urban Science

Urban Science® is a leading automotive consultancy and technology firm that serves automotive original equipment manufacturers (OEMs) and dealers, and AdTech companies that support them, around the world. Headquartered in Detroit and operating in 20 office locations globally, Urban Science taps the power of its science – and its unrivaled data, solution offerings and industry expertise – to create clarity and business certainty for clients in even the most chaotic market conditions. Visit UrbanScience.com for more information about how Urban Science helps the automotive industry gain a competitive edge by taking the guesswork out of critical business decisions. This, in turn, drives improved efficiency and profitability industrywide. For more information, visit UrbanScience.com.



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