ARF | RESEARCH INITIATIVES

RETAIL MEDIA NETWORKS: NAVIGATING METRICS, CHALLENGES AND OPPORTUNITIES

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EXECUTIVE SUMMARY

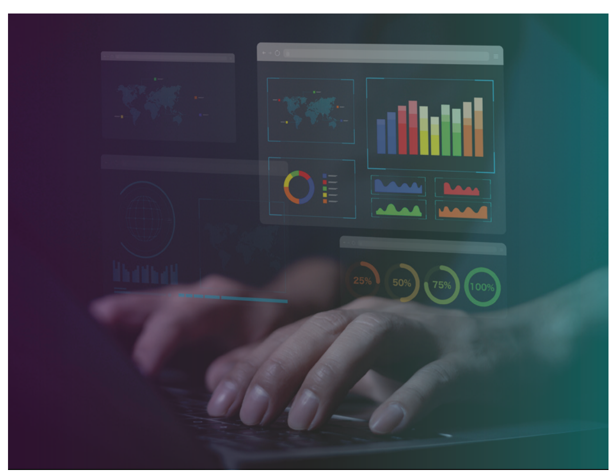
Retail Media Networks (RMNs) have emerged as one of the fastest-growing advertising channels in the U.S., transforming how brands reach and engage consumers. Leveraging first-party data, RMNs enable targeted, measurable campaigns across retailers' ecosystems, opening up a unique blend of performance-driven and brand-building opportunities.

This report draws on insights from agencies and brand-side advertisers to examine the critical trends shaping RMNs, including their rapid growth, metric utilization and the differing approaches advertisers and agencies have toward them.

Key insights include:

- **Adoption Trends:** Agencies report higher current usage of RMNs (57%) compared to advertisers (42%), attributed to their broader exposure and integration within multi-client strategies. However, advertisers show stronger intent to adopt RMNs in the future (33% vs. 26%), signaling their growing importance in the realm of performance marketing.
- **Metric Utilization:** Metrics such as CTR, sales and conversion rates dominate RMN evaluations, reflecting a bottom-funnel focus. Advertisers prioritize actionable metrics like ROAS and CTR, while agencies adopt more advanced techniques, such as synthetic control and incrementality, to provide holistic campaign evaluations.
- **Incrementality Challenges:** Despite industry recognition of its importance, advanced methods for measuring incrementality, such as synthetic control and matched market tests, remain underutilized, ranking among the bottom five metrics.
- **Challenges:** The lack of standardization across RMNs remains a significant barrier, cited by 55% of marketers. Additionally, the reliance on retailer influence and the complexity of implementing advanced measurement methods, such as matched market tests, limit broader adoption.
- **Future Potential:** RMNs are increasingly being utilized for mid-and upper-funnel objectives, such as brand consideration and awareness. Formats like CTV and in-store digital media are gaining traction, offering advertisers new avenues for engagement. Furthermore, the ARF DASH study shows high rates of online shopping adoption among U.S. households, highlighting the growing dominance of RMNs among consumers as well as the diversity of unique profiles among shoppers.

In conclusion, RMNs are solidifying their role as a critical advertising channel, bridging the gap between performance marketing and brand-building.



INTRODUCTION

Retail media networks (RMNs) are among the fastest-growing ad verticals in the U.S., providing personalized ads across retailer ecosystems and partner platforms. Offering diverse ad formats, including on-site, off-site and in-store, RMNs deliver targeted ads that boost conversion rates for brands while generating new revenue streams and enhancing shopping experiences for retailers (see e.g., Wood, 2024). Additionally, RMNs enable closed-loop measurement, linking ad performance directly to sales outcomes (ARF, 2024). RMNs are fueled by e-commerce expansion, first-party data availability and retailer investments in digital advertising platforms (ANA, 2024).

Retail media continues to expand rapidly, with U.S. ad spend growing 32% in 2023 to $48 billion. It reached $65 billion in 2024 and is projected to reach $82 billion in 2025. By then it will account for 23% of U.S. digital ad dollars spent (AP, 2024; see also ANA, 2024).

While not without challenges, primarily in measurement standardization and retailer influence (see e.g., Hercher, 2024; Kelman, 2024; Myers, 2024), RMNs are emerging as a powerful tool for advertisers through leveraging first-party data and driving measurable outcomes. Considering this staggering growth, a significant part of the ARF Metrics Survey focused on RMNs. The survey at large measured the array of metrics currently utilized by advertisers and advertising agencies across various platforms and industries. With the objective of providing a more complete understanding of what metrics are being used to select media, platforms and campaign strategies, we also dedicated one part to asking about attention metrics.

Alongside this effort, the ARF is also conducting a study with the IAB and the MRC to provide a better understanding of the landscape of RMNs. To this extent, we are collecting information on the assets of major retail media networks and, at a later stage, will also inquire into the methods that are used by these networks to provide measures of impact and effectiveness. This follows the recent guidelines for RMN measurement published by the IAB and the MRC (see IAB, 2024b).

In addition, in 2024, the ARF enhanced its syndicated DASH TV Universe Study by introducing a shopping battery as part of its broader focus on retail media networks. Conducted annually, DASH offers a detailed, nationally representative view of how U.S. households engage with TV across platforms and devices while also capturing shopping patterns at major retailers. The 2024 study tracked consumer behavior across 18 retailers, both online and in-store. In 2025, the survey expanded its scope to include 24 retailers and refined its measurement to analyze shopping activity over both a one-month and seven-day period.

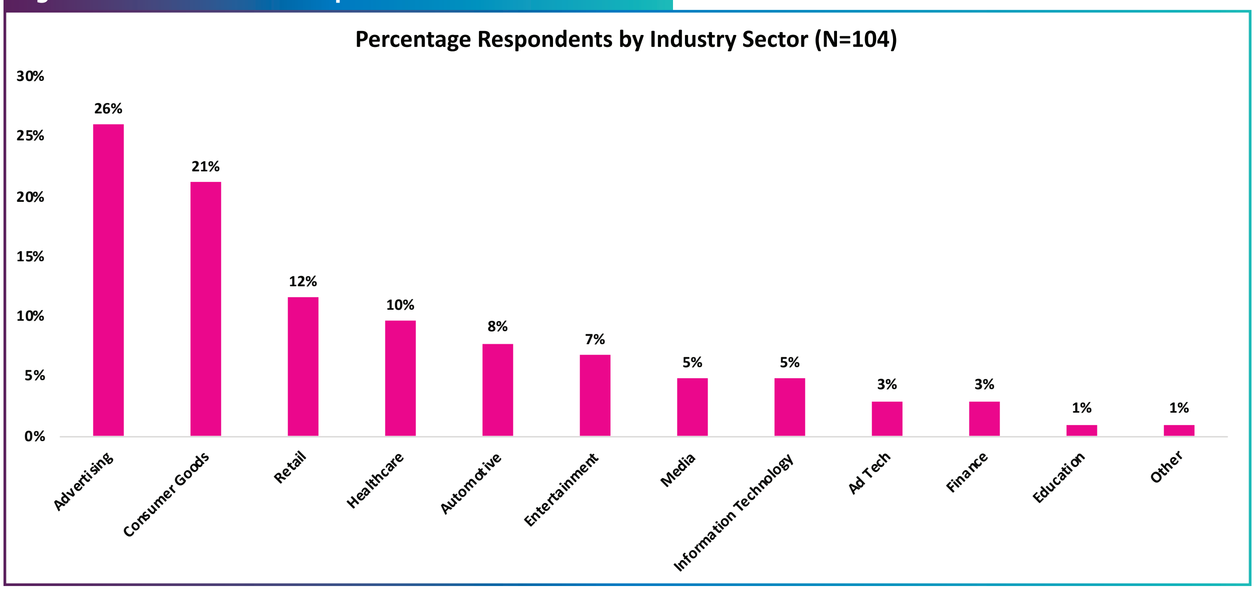
BACKGROUND

Conducted on Qualtrics in August 2024, the survey received a total of 105 respondents (54 from advertising agencies and 51 from brand-side advertisers). Respondents are distributed across industries, with advertising dominating at 26%,[1] followed by consumer goods at 21% (see Figure 1). Together, these two sectors represent nearly half of all respondents. Traditional sectors like healthcare and retail comprise 10% and 12% respectively, while technology-related sectors (information technology and ad tech) account for eight percent combined. Finance and education have minimal representation (three percent and one percent respectively), demonstrating a strong skew towards consumer-facing and marketing-related industries.

Interpreting survey results requires assessing sample variability to differentiate significant patterns from random fluctuations. In most cases, variations in the dataset follow expected trends and can be explained directionally. To gauge these differences, we analyzed the standard error (SE) of proportions across specific categories. Within this dataset, SE typically falls between 0.018 and 0.077. More substantial differences may indicate real variations, whereas smaller ones are likely attributable to random sampling noise. By comparing SE values with observed proportions, we can determine whether the differences reflect genuine trends or are merely statistical anomalies.

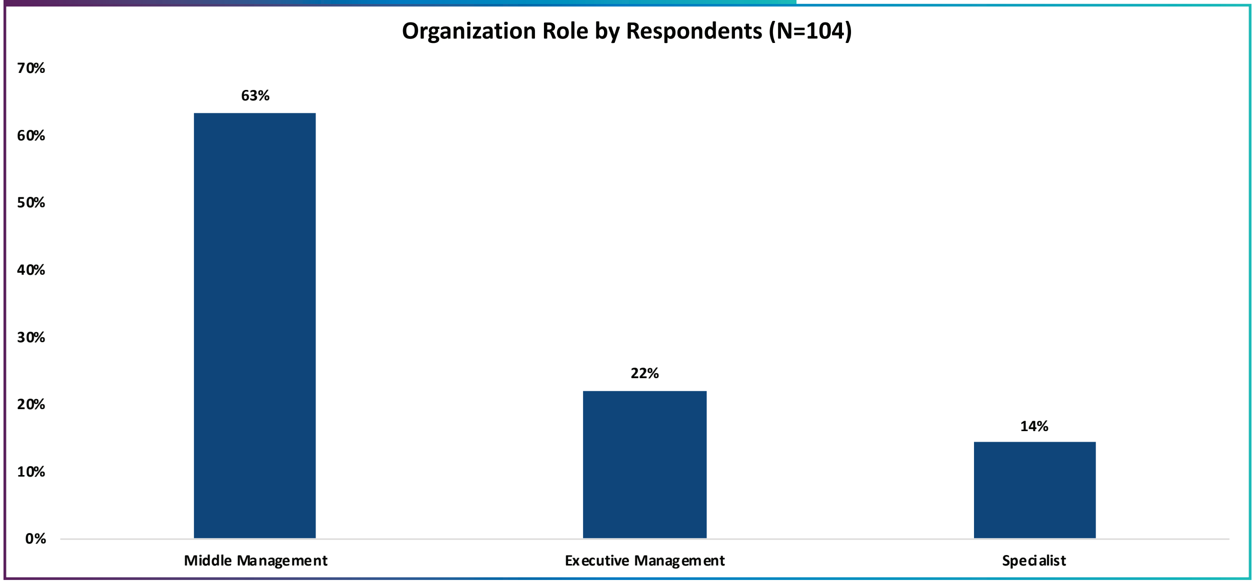
In terms of organizational roles, 63% of respondents are in middle management, 22% in executive roles and 14% are specialists (see Figure 2).

Figure 1: Distribution of respondents across industries.



[1] Of course, given that half the respondents work for advertising agencies, this figure is not surprising.

Figure 2: Distribution of respondents across organizational roles.



FINDINGS

AGENCIES REPORT HIGHER USE OF RMNS

We examined how agencies and advertisers use RMNs in advertising campaigns. The data shows that agencies report higher usage of RMNs compared to advertisers (agencies 57% vs. advertisers 42%) (see Figure 3). Since agencies often manage multiple clients and campaigns, they are more exposed to RMNs as part of broader media strategies. Additionally, RMNs may also be part of agencies' recommendations to clients as they diversify media strategies. On the advertisers side, the ANA's 2024 survey findings showing that almost two- thirds of brands view retail media networks as a "have to buy," versus a "want to buy" strategy (see also Adams, 2024).

While advertisers may be slower to adopt RMNs, they show a stronger intention to adopt them in the future compared to agencies (33% vs 26%). In this respect, it seems that advertisers are recognizing their growing importance in reaching shoppers closer to the point of purchase. At the same time, the data shows that a relatively high number of advertisers report no current use or plans to use RMNs (24%). This could indicate hesitation among advertisers to invest in RMNs due to lack of familiarity, perceived ROI concerns or differing campaign priorities. At the same time, this might also indicate that some categories are more amenable to retail media than others.

THE MOST FREQUENTLY UTILIZED METRICS FOR EVALUATING RMN CAMPAIGNS

Do agencies and advertisers utilize different methods and KPIs to evaluate campaigns using RMNs?

Figure 3: RMN in advertising campaigns by advertisers and agencies.

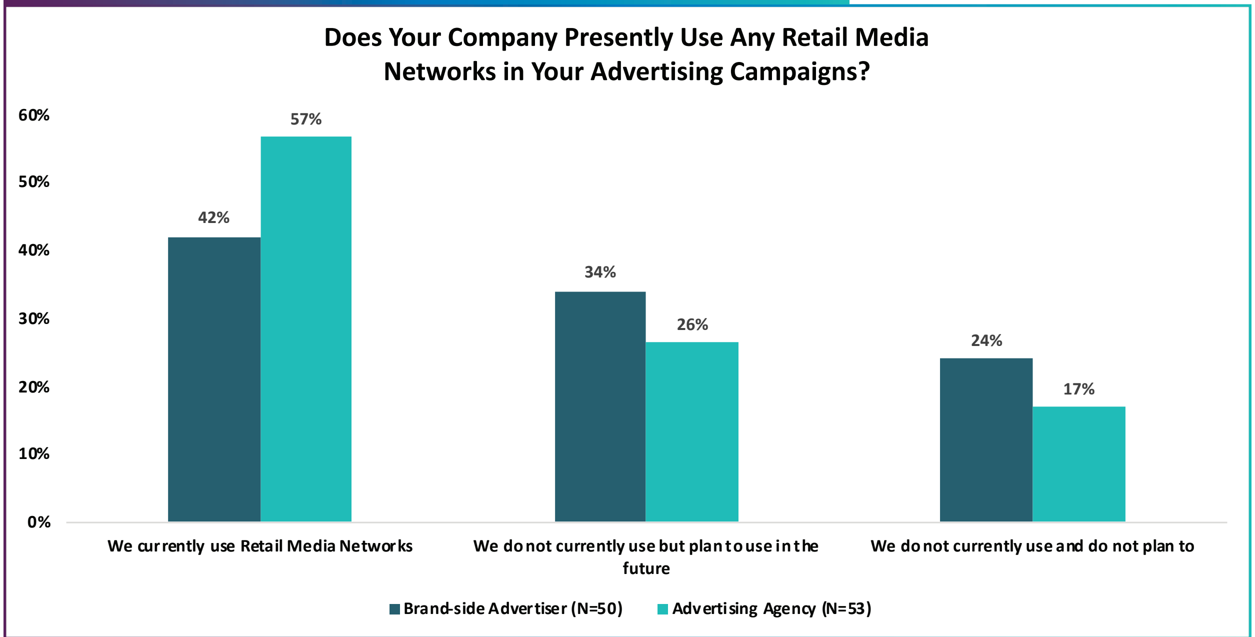
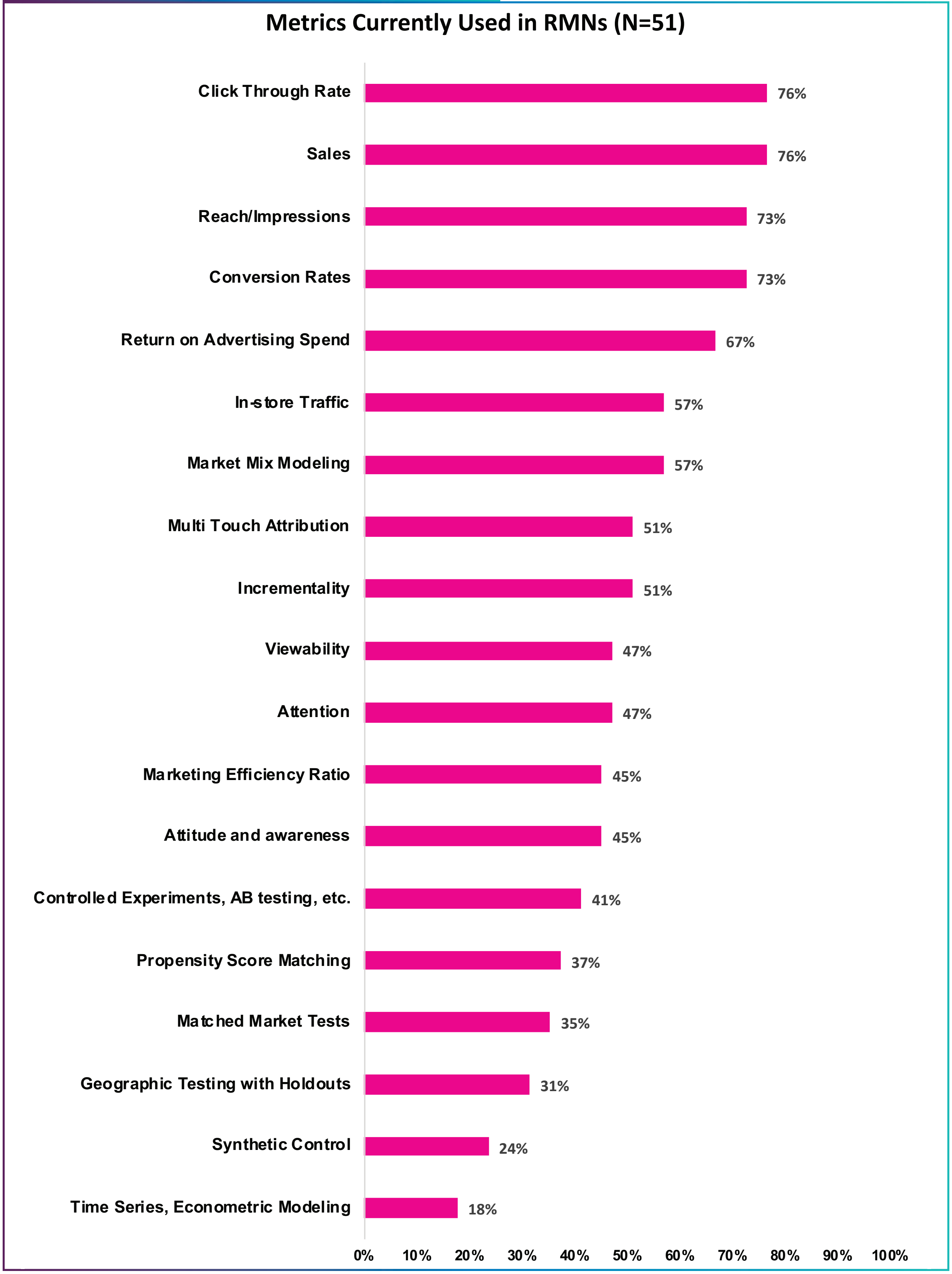


Figure 4: Metrics used in RMN advertising campaigns.



The findings show the most frequently utilized metrics are CTR and sales, each used by 76% of respondents, followed closely by conversion rates (72%). Reach/impressions, associated with top-funnel, also ranked highly at 72%, making them an outlier in a landscape otherwise dominated by mid- and bottom-funnel metrics. ROAS is ranked third at 67%, underscoring the focus on financial performance (see Figure 4) (see Rondon, 2023 on the importance of ROAS for RMNs).

Mid-range metrics such as incrementality (50%) and multi-touch attribution (MTA) (51%) highlight some effort to measure consumer behavior and brand impact beyond basic performance indicators. However, the findings reveal a notable gap in the use of true experimental designs in assessing incrementality, despite many in industry expressing concern over not getting real incremental reads (see e.g., ANA, 2024; Malmad, 2024). For example, while incrementality ranks at 50%, advanced experimental methods like synthetic control (23%), propensity scoring and time series econometric modeling (18%)—all considered experimental—fall into the bottom five metrics. Similarly, matched market tests score low, reflecting potential industry challenges in accessing the resources or expertise required for rigorous experimental designs. According to Ross Love, director of Orange Apron Media Measurement at Home Depot, matched market tests are not favored by marketers since they reduce the reach of their campaigns, even though the reduction is typically less than 10% (Love, 2024).

These findings suggest that while there is a strong focus on measurable, performance-driven outcomes, particularly bottom- and mid-funnel metrics like CTR and conversions, fewer advertisers and agencies prioritize top-of-funnel or advanced cross-funnel metrics, which require longer-term analysis and investment. This might indicate a preference for immediate results, over holistic, strategic insights.

> Despite industry concerns over achieving true incremental reads, advanced experimental designs for incrementality, such as synthetic control and matched market tests, remain underutilized, ranking among the bottom five metrics used by agencies and brand-side advertisers.

THE MOST FREQUENTLY UTILIZED METRICS FOR EVALUATING RMN CAMPAIGNS BY ADVERTISERS AND AGENCIES

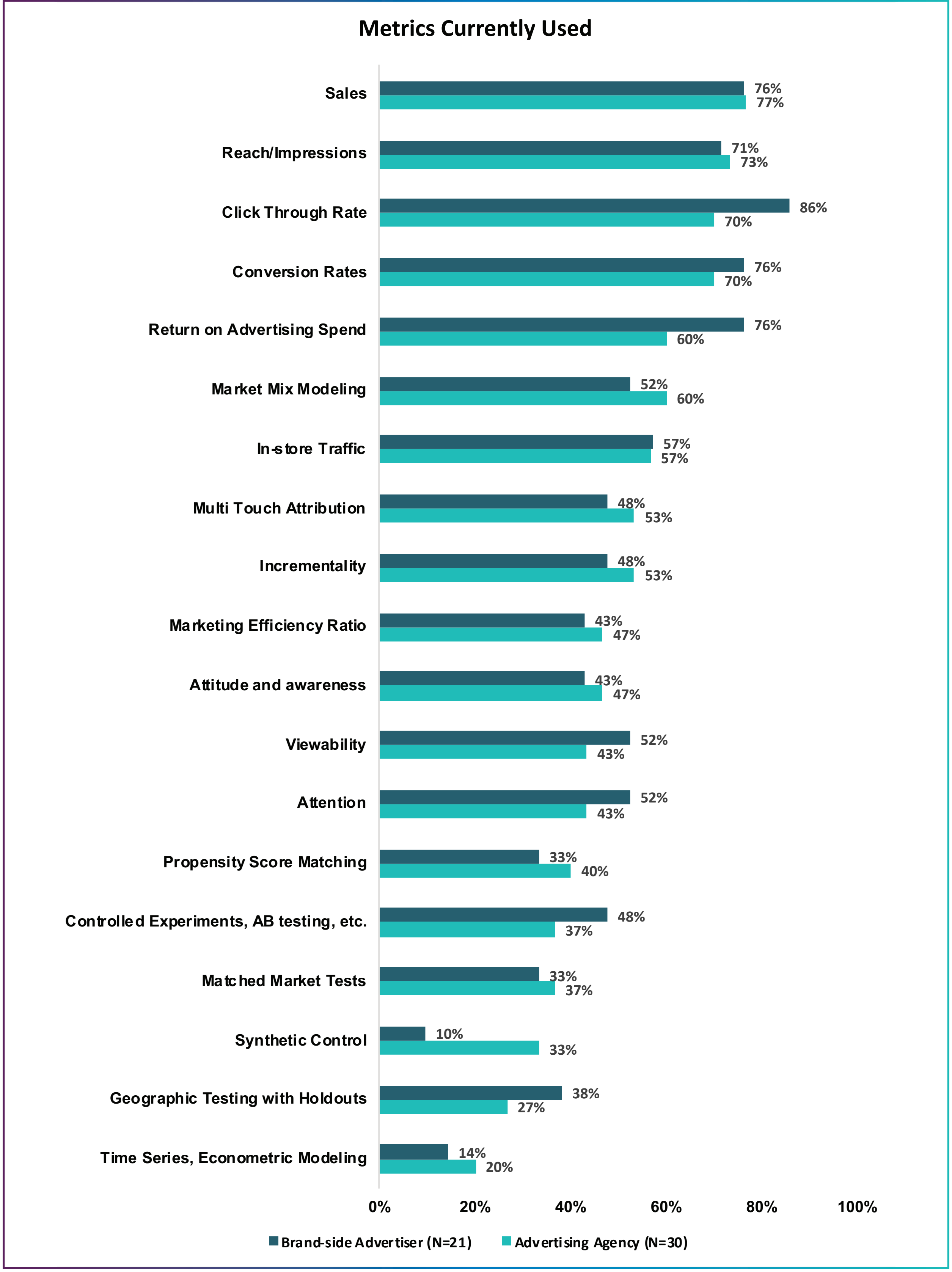
This study found that sales, conversion rates and reach/impressions are highly and almost equally emphasized by agencies and advertisers, reflecting a shared focus on bottom-line results (see Figure 5).

Key differences include:

- Advertisers prioritize CTR more than agencies (86% vs. 70%; this result is statistically significant at 0.10 level, 0.05 < p < 0.10).

Advertisers generally focus on evaluating the direct performance of digital campaigns.

Figure 5: Metrics used in RMN advertising campaigns by advertisers and agencies



Here, CTR is a key metric to measure consumer engagement and campaign effectiveness. To the extent that CTR is easy to track and interpret, it is an appealing metric for in-house teams that need actionable insights quickly. At the same time, agencies may focus on a broader range of metrics to evaluate campaigns holistically, especially mid- and upper-funnel metrics like reach/impressions or awareness, to demonstrate brand impact. Additionally, agencies might combine CTR with advanced techniques (e.g., incrementality or multi-touch attribution) to provide more comprehensive insights for their clients, rather than relying solely on CTR.

- ROAS: Usage is significantly higher for advertisers (76%) vs. agencies (60%). This result is statistically significant at 0.10 level, $0.05 < p < 0.10$.

ROAS directly ties campaign performance to financial outcomes, making it a critical metric for advertisers managing their budgets and justifying ROI to stakeholders. To add to this, advertisers are often under pressure to demonstrate bottom-line results to executives and investors and in-house teams typically focus more on short-term financial metrics to guide tactical decisions. ROAS in this respect is the go-to metric.

Since ROAS may not always capture the broader value of campaigns, such as brand awareness or customer retention, it becomes a less useful metric for agencies. As a result, agencies often balance ROAS with brand-building metrics that reflect long-term impact analysis, such as market mix modeling or marketing efficiency ratio. These provide a more strategic view of campaign effectiveness over time.

Typically RMNs offer closed-loop measurement, ignoring other media which only allows for optimization at the individual retail level. This leads to disconnected ROAS. One solution, is to use a deep learning process that can identify additive and synergistic effects (e.g., Data POEM's "AI Cockpit" in O'Sullivan, 2024). Another solution, presented by Vijoy Gopalakrishnan and Mike Ellgass from Circana (2023 ARF Attribution & Analytics Accelerator Event) is to link ad exposure to online and offline sales at the household level. This helps mitigate bias in the measurement of effects.

- We find statistically significant differences ($p<0.05$) between agencies and advertisers in their use of synthetic control (33% vs. 10%).

Synthetic control is an advanced method used for causal inference, such as evaluating the impact of specific interventions (e.g., a new campaign) while controlling for confounding factors. Agencies usually have access to specialized teams with the technical expertise to implement such complex analyses. Therefore, they may adopt this method to provide more data-driven justifications for campaign success, particularly when presenting information to clients. Conversely, advertisers can lack the internal technical resources or expertise to implement complex methods like synthetic control. Beyond that, since synthetic control often requires longer timelines for analysis, it might not match the immediate reporting needs of advertisers and may not align with their primary focus on easily interpretable and actionable metrics, like CTR and ROAS.

MOST FREQUENTLY UTILIZED METRICS FOR COMPANIES INTENDING TO USE RMNS

We inquired with companies that do not currently utilize retail media networks but intend to do so in the future, regarding which KPIs or methods they would employ to evaluate these campaigns. The same five metrics were identified as before, although with slightly lower percentages and varied

Metrics for Evaluating RMN Campaigns:

Advertisers emphasize short-term, actionable metrics like CTR and ROAS, while agencies adopt a more holistic approach, incorporating advanced techniques to evaluate campaigns over the long-term.

- Sales, conversion rates, and reach/impressions are the most frequently used metrics by both groups, reflecting a shared focus on bottom-line results.

Key differences between advertisers and agencies include:

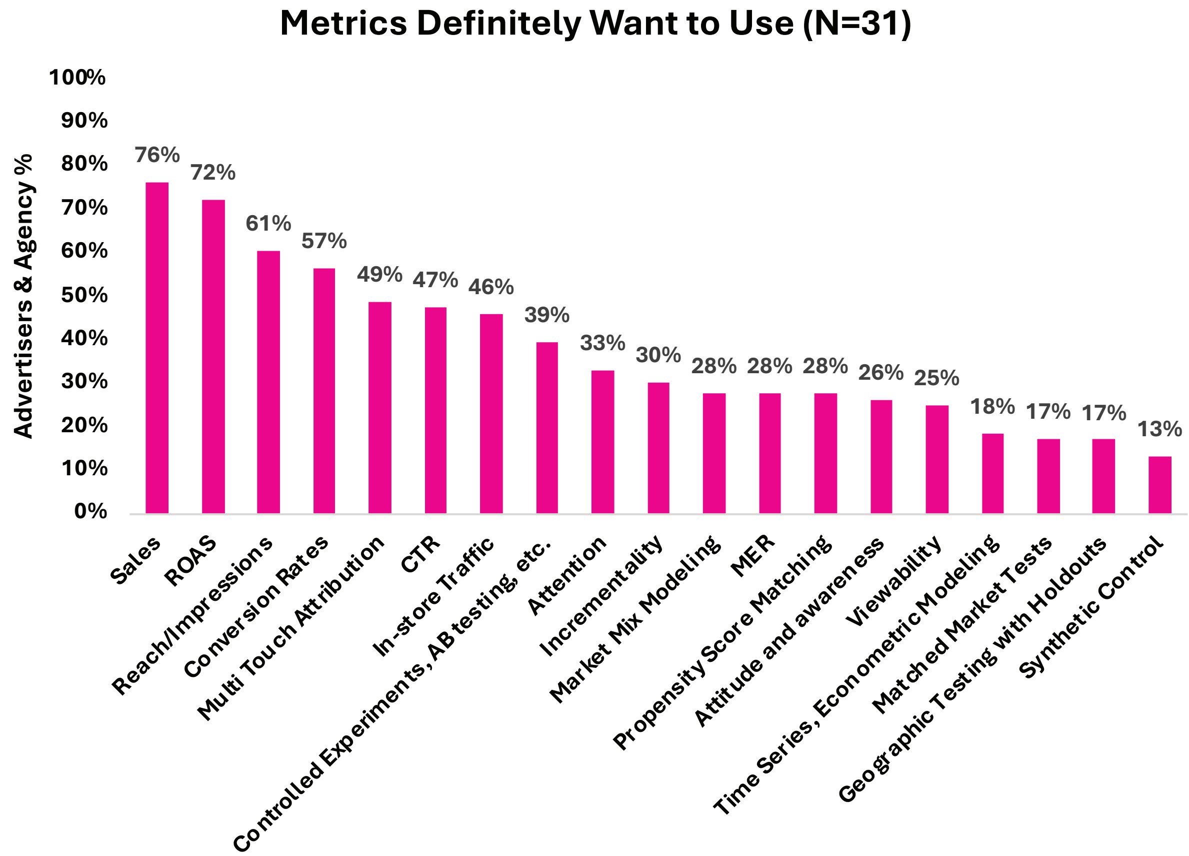
- CTR: Advertisers prioritize CTR significantly more than agencies, favoring its simplicity and actionable insights for digital campaign performance.
- ROAS: Advertisers rely on ROAS more heavily, possibly due to its direct connection to financial outcomes and budget justification, while agencies balance it with broader, strategic metrics.
- Synthetic control: Agencies use this advanced method more frequently, possibly due to greater access to technical expertise and the metric's alignment with their focus on providing comprehensive, data-driven insights.

prioritization: Sales remained the top priority (76%), closely followed by ROAS (72%). Reach/impressions moved to third place (61%), and conversion rates follow at 57% (this is statistically significant at p=0.06 in comparison to companies who use RMNs) (see Figure 6). MTA and CTR followed with 49% and 47% respectively, proceeded by in-store traffic with 46%.

We find significant differences in the prioritization of advanced strategic metrics between companies that currently utilize RMNs and those that plan to use them in the future. For instance, market mix modeling (MMM) and marketing efficiency ratio (MER) are ranked at 28%. For both this is a significant decrease in comparison to companies that do utilize RMN. Viewability is also significantly ranked lower in comparison to companies that utilize RMN (p=0.03), as is matched market tests (p=0.06), incrementality (p=0.02), attitude and awareness (p=0.04) and geographic testing with holdouts (p=0.07).

We identify several possible explanations. First, companies already utilizing RMNs are more likely experienced in integrating RMNs into their broader marketing strategy and

Figure 6: Most frequently used metrics for companies intending to use RMNs in the future.



leveraging advanced analytics such as MMM, MER, matched market tests, incrementality and geographic testing with holdouts to measure campaign performance across multiple dimensions. These methods are complex and resource-intensive, often requiring significant historical data, sophisticated tools and expertise to implement them effectively. Specifically, testing-based metrics such as matched market tests, incrementality and geographic testing with holdouts involve experimental or quasi-experimental designs, which require robust datasets, technical expertise and time to implement.

A second possible explanation is companies not yet using RMNs may not be as familiar with digital advertising-specific metrics like viewability, which measures whether an ad was seen by users. Rather, they may focus on basic engagement (e.g., CTR) or sales outcomes, without yet recognizing the importance of ensuring ad visibility as a precursor to effectiveness. A third possibility, companies planning to use RMNs might primarily view them as performance-driven tools aimed at generating immediate sales or conversions, rather than influencing top-of-funnel metrics like brand attitude and awareness. In contrast, it may well be that companies already using RMNs recognize their potential for holistic brand impact, particularly as RMNs expand their ad offerings to include display and video formats, which are more likely to influence awareness.

DASH SURVEY HIGHLIGHTS AMERICAN SHOPPING HABITS

As part of its comprehensive initiative on retail media networks, a shopping battery was added to the syndicated ARF DASH TV Universe Study in 2024. Conducted annually, this nationally projectable study of over 10,000 households records, in granular detail, how American households connect to and consume TV across platforms and devices. It also looks at how those households shop among 18 major retailers, both online and in-store. Shopping questions were further expanded in the 2025 iteration, and now cover 24 retailers within the timeframes of both one month and seven days.

The study highlights the popularity of online shopping amongst American consumers, with 68% of households shopping at at least one online retailer in the past seven days. Of these consumers, 23% also shopped at physical retail locations as well.

Figure 7. Online shopping is more popular among those aged 25-34.

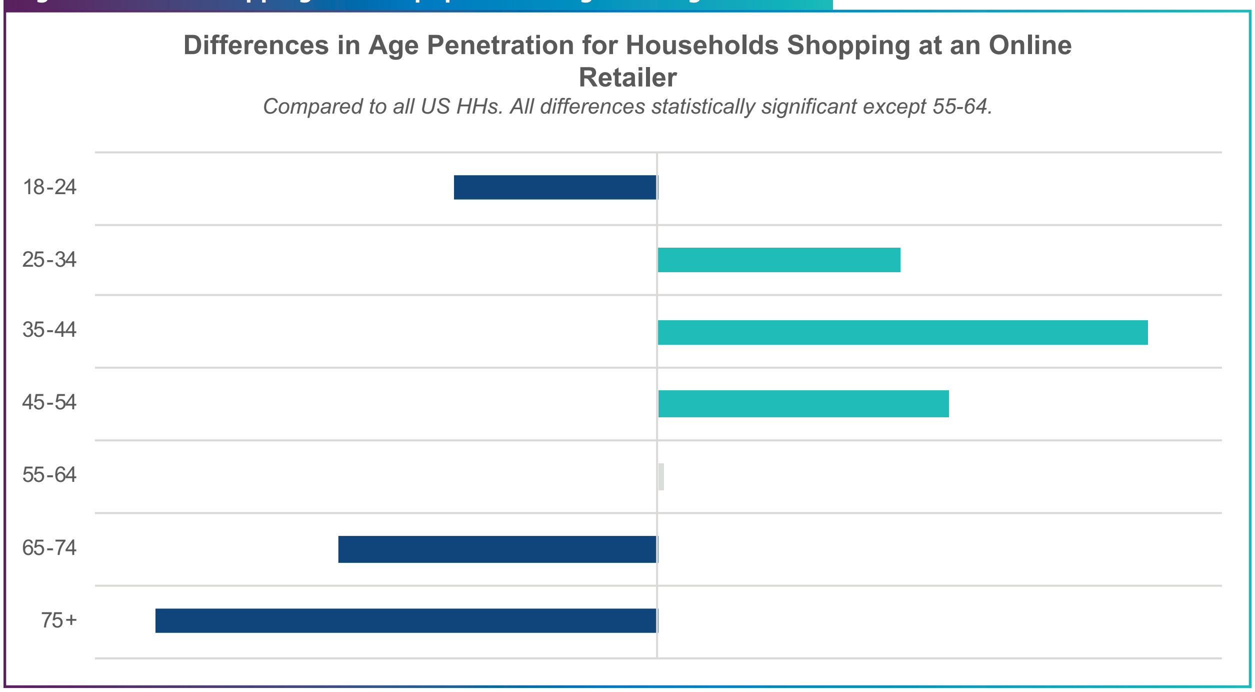
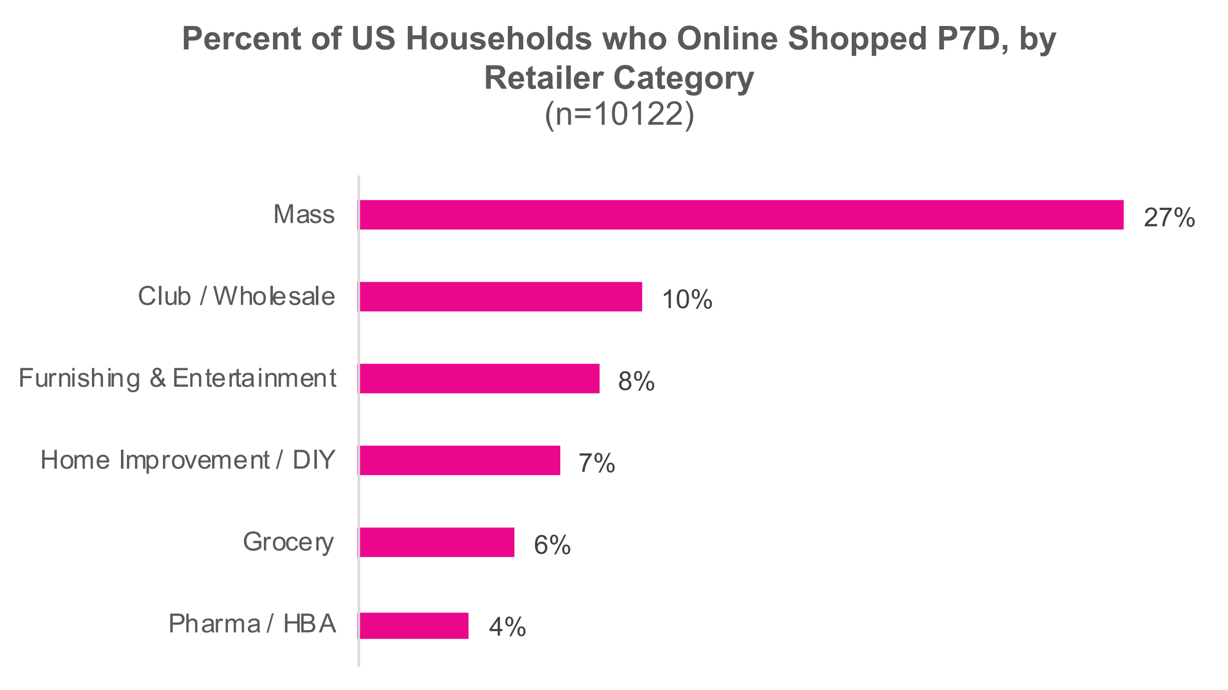


Figure 8. Mass merchandisers still receive the lion's share of the online shopping pie, with other retail categories gaining merely a sliver.



Online shopping habits also differ by age and retailer category. Online shopping is most prevalent in the 25-54 age groups, with both younger and older consumers less likely to haves shopped online in the past seven days (Figure 8).

Additionally, we see that online shopping from mass merchandisers and big-box stores is most prevalent, while online shopping in other categories remains less common (Figure 9).

From the DASH study, the shopping habits of American consumers can be examined in tandem with household media consumption, resulting in a detailed profile of advertising exposure. Utilizing the ARF's new TV connection framework (Figure 10), the data shows that those who shopped online from a

Figure 9: The new reception framework introduced by the ARF in 2024.

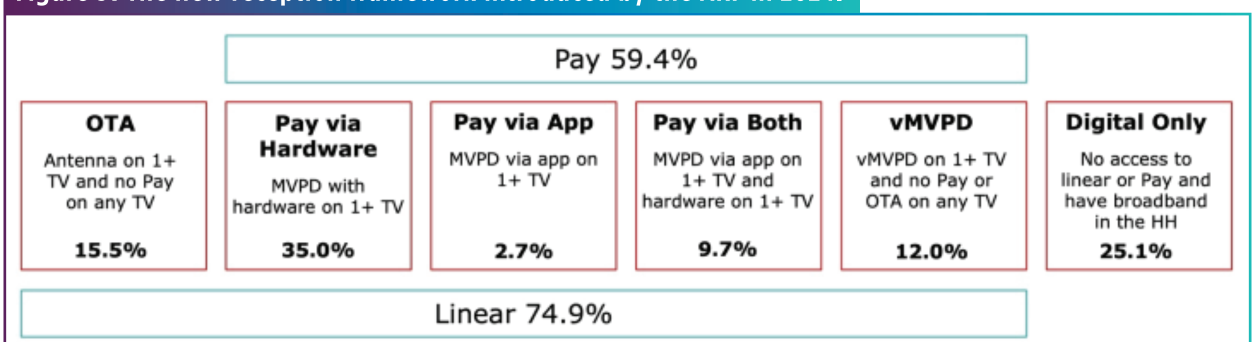
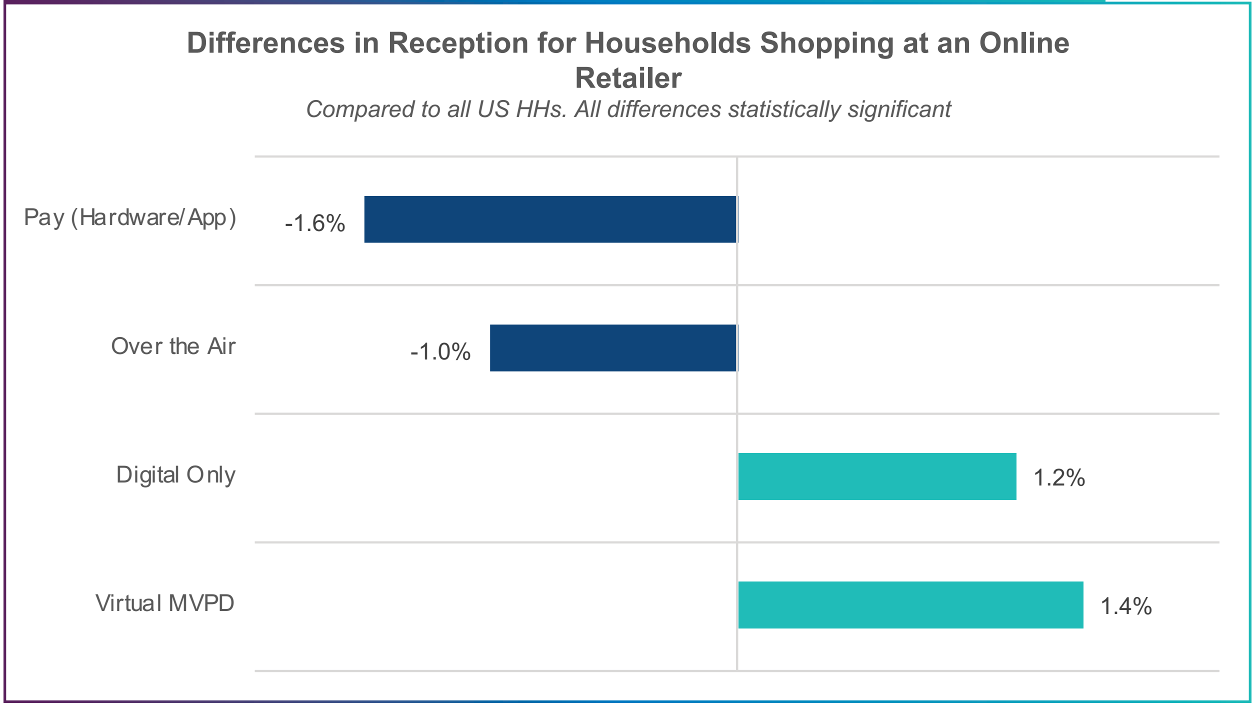


Figure 10: Digital only and vMVPD as a means of reception are overrepresented in households that online shop, while pay and over-the-air households are underrepresented.

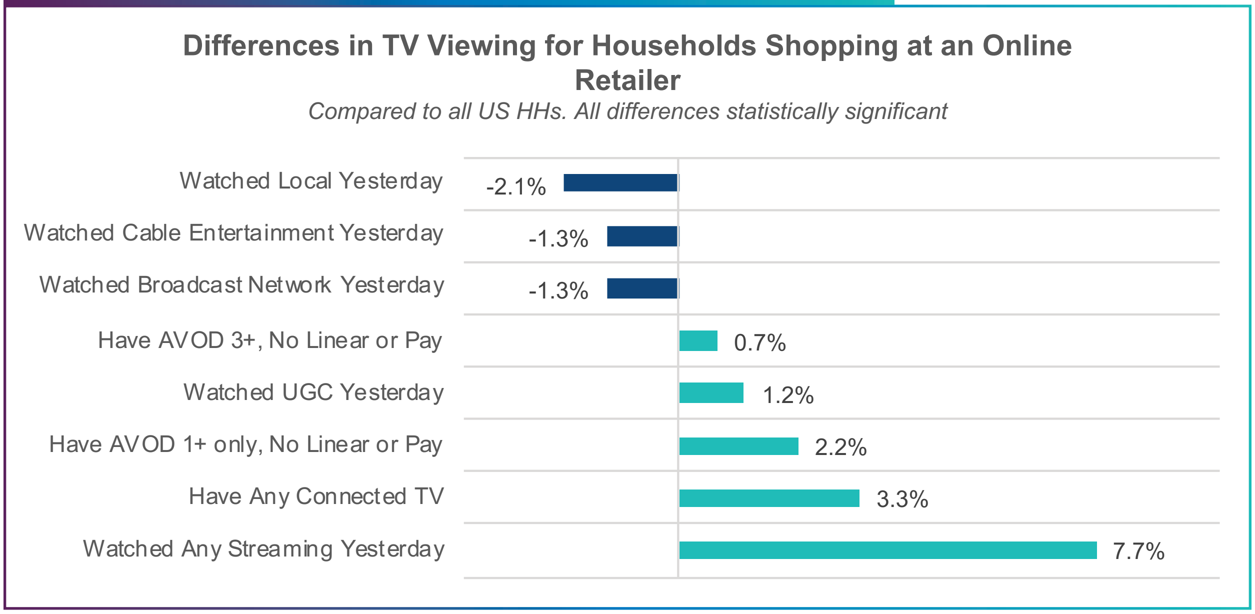


retail media network in the past seven days are more likely to get reception through a virtual MVPD or belong to a digital only household, which do not have access to linear or pay. On the other hand, households who shop online are less likely to get reception through an over-the-air antenna or cable hardware (Figure 11).

Similarly, DASH data shows that those who shopped on an online retail website in the past seven days are more likely to have multiple subscriptions to paid, ad-based streaming accounts (AVODs) or have access to connected television (CTV). These households are more likely to have watched streaming television or user-generated content (UGC) yesterday, and less likely to have watched local, broadcast or cable television (Figure 12).

Examined in further detail, the data shows that these trends vary depending on the category of the online retailer. For example, shoppers at retailers in the pharmacy and home improvement categories display lower levels of digital only penetration, compared to all U.S. households. This is distinct from the higher penetration levels of online shoppers in general. DASH data allows for comparison both within and between these categories, showing the key differences in demographics for shoppers as well as the overlap between retailers within the same categories.

Figure 11: Households who shop online are more likely to watch television via streaming, connected TV or UGC compared to all households.



CONCLUSION: RMNS – A GROWING FORCE IN ADVERTISING

RMNs have emerged as a key growth area in advertising. This trend is driven by their ability to deliver personalized, high-impact ads and closed-loop measurement, linking ad performance directly to sales. Our analysis highlights both the common ground and divergent paths of advertisers and agencies in RMN adoption and metric preferences.

Similarities are notable across core KPIs. Both groups rely on sales, conversion rates and reach/impressions to measure campaign success. These metrics reflect a shared emphasis on performance outcomes and indicate widespread confidence in bottom- and mid-funnel metrics to demonstrate ROI. Both advertisers and agencies also show growing interest in using RMNs beyond performance alone—expanding toward formats such as CTV and in-store digital to support mid- and upper-funnel goals like awareness and consideration.

There are also pronounced differences between the two groups. Agencies report a higher current use of RMNs, for instance, and are more likely to employ advanced analytical tools, such as synthetic control and controlled experiments, to evaluate campaigns across dimensions. Advertisers, on the other hand, exhibit a stronger preference for CTR and ROAS, emphasizing more immediate, actionable insights to drive performance. This reflects advertisers' focus on financial accountability and rapid optimization, whereas agencies lean toward broader strategic evaluation frameworks.

For companies planning to adopt RMNs, the findings reveal a preference for fundamental performance metrics like sales and ROAS, while advanced methods such as market mix modeling and incrementality remain less common. This suggests a learning curve for newcomers, with seasoned RMN users leveraging more complex tools to evaluate holistic campaign impact.

The ARF DASH TV Universe Study shows high adoption rates of online retail usage amongst American consumers, with 68% of respondents having shopped online in the past seven days. DASH data provides a granular look at the shopping habits of U.S. households in conjunction with their media and device usage, highlighting the key differences among those who shop online compared to the general population. That study found online shoppers have a higher propensity to watch television via streaming or virtual MVPD compared to traditional cable or over-the-air reception.

In conclusion, RMNs are solidifying their position as a critical advertising channel, offering significant opportunities for both performance-driven and brand-building strategies. Agencies and advertisers alike must balance short-term results with the potential for broader, long-term brand impact as RMN capabilities expand to include diverse formats and advanced targeting solutions.

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APPENDIX

Closed-Loop Measurement: A feature of RMNs that enables advertisers to link ad performance directly to sales outcomes. While this system provides robust in-platform insights, it often excludes external media influences, potentially limiting holistic optimization.

Incrementality: A metric used to measure the additional impact of a campaign beyond what would have occurred without it. It is often calculated using controlled experiments or synthetic control methods.

In-Store Retail Media: These are advertising formats utilized within physical retail spaces. They include digital signage: Video displays promoting products or brands, interactive kiosks: screens enabling shoppers to explore deals or new products, and audio ads: Overhead announcements for in-store promotions.

Off-Site Advertising: Ads served on third-party platforms using retailer first-party data, including: display ads: Banner ads on external websites, CTV: Connected TV ads targeting audiences who consume streaming content and in-game ads: Digital ads within mobile or console games.

On-Site Advertising: Ads displayed directly on a retailer’s platform, including sponsored products: ads for specific items, typically appearing in search results or product pages, display ads: Banner or video ads promoting brands or products, often used mid-funnel, and sponsored brands: Ads showcasing a brand logo and products, designed to drive broader awareness.

Marketing Efficiency Ratio (MER): A broader measure of marketing performance that compares total revenue generated to total marketing spend. This metric is often used to complement channel-specific metrics like ROAS.

Matched Market Tests: A quasi-experimental method where similar markets are compared, with one exposed to the campaign and the other serving as a control. This helps isolate the campaign’s impact.

Retail Media Network: An advertising platform established by retailers on their websites, apps or other digital properties within their ecosystem. It enables the retailer and other brands to advertise directly to customers through platforms, offering a digital extension of traditional in-store advertising.

Synthetic Control Methods: A statistical approach used to evaluate the causal impact of interventions (e.g., advertising campaigns). This method constructs a synthetic comparison group to isolate the effect of the campaign.