

Our Gift to You This Holiday Season

Unwrap and Reveal Buying
Strategies for Q4 2016

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INTRODUCTION

The holiday shopping season is the sum of billions of small, careful choices made annually by people all over the world. Outside a Black Friday sale in Chicago, a man waits in the cold for six straight hours to buy his spouse a television at a price he can afford. In a gleaming office tower in Berlin, a busy executive presses the buy button on an expensive necklace for her favorite niece. With each decision, consumers must weigh their wants and needs against the costs of acquiring the product and the limits of their personal resources. After hours of research and deliberation, they ultimately arrive at the gift basket that will give their loved ones the best possible holiday experience.

This holiday season, marketers will need to conduct the same degree of thoughtful analysis when choosing which media to buy for their clients. After all, the stakes are just as high. With countless brands hungry to reach consumers right before Christmas, ad prices often peak between late November and mid-December. If they're not cautious, marketers can very quickly drain their budgets on a small quantity of inventory that isn't guaranteed to drive results. In order to avoid this fate, media buyers must think carefully about whether their clients really need the year's priciest inventory to achieve their business goals. As any experienced holiday shopper will tell you, the most expensive option doesn't always offer the greatest value, and it might not even be a good fit for the person you're shopping for.

Our Q4 2016 Whitepaper aims to provide media buyers with the information they need to plot out the best course of action during this time of high risk and heavy competition. Powered by 2015 and Q1 2016 pricing and performance data from the AppNexus platform, this document offers deep insight into the peaks and troughs of the Q4 buying cycle as it plays out globally, as well as in the U.S., U.K., EMEA and APAC regions. Along the way, we'll be providing actionable recommendations you can use to maximize the effectiveness of your budgets -- based on the unique challenges facing your brands.

Indeed, while a travel marketer might sit out the holiday rush to preserve funds for when prices are lower, an ecommerce marketer might be willing to risk whatever it takes to influence her target customers in the week before Christmas. Our whitepaper addresses both types of buyers, telling the more flexible marketer which periods offer cheaper CPMs and advising the must-be-in-market advertiser on how she can optimize conversions with her holiday investment. By reading on, you'll learn which time of year offers the greatest value to brand advertisers, which day of the week delivers the highest holiday conversion rates, and why performance marketers might actually want to shy away from Cyber Monday this year.

There's a lot riding on the line in Q4, but we're confident that if you study the market and develop a customized buying strategy, you'll have plenty to celebrate in the New Year.



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EXECUTIVE SUMMARY

Buyers need to assess the market and their clients' needs in order to determine how much to spend during Q4's most competitive periods. If they *don't* have a pressing reason to participate in the market at these times, buyers should instead devote budgets to periods when prices are lower. If they do need to spend from late November through mid-December, buyers should focus on finding ways to limit their risk and maximize conversion rates.

Here are a few of the recommendations we made to help marketers choose the path that makes the most sense for them:

Brands that don't need holiday inventory should spend heavily early in November: Global CPMs start off low at the beginning of November and climb steadily until the week before Christmas.

Retailers and other holiday buyers should bid aggressively on high-performing inventory: If you're going to absorb high prices, it's best to limit your buy to inventory that has driven results for you in the past.

Early January is the cheapest buy of the year for brand advertisers: Around the world, CPMs take a huge drop from their holiday-season highs.

If possible, U.S. advertisers should limit unnecessary spending between December 22 and December 31st: Conversion rates drop dramatically during this period, despite high CPMs.

U.K. performance buyers should target the two weeks before Christmas: Conversion rates rise during this period, while U.K. CPMs recede from their late November peak.

EMEA marketers with budget to spare should use it during early October: This period offers EMEA's best prices, as well as some of its highest conversion rates.

Chinasphere advertisers should spend heavily in early November: The lead up to November 11's Singles' Day sees massive click-through rates and low CPMs.



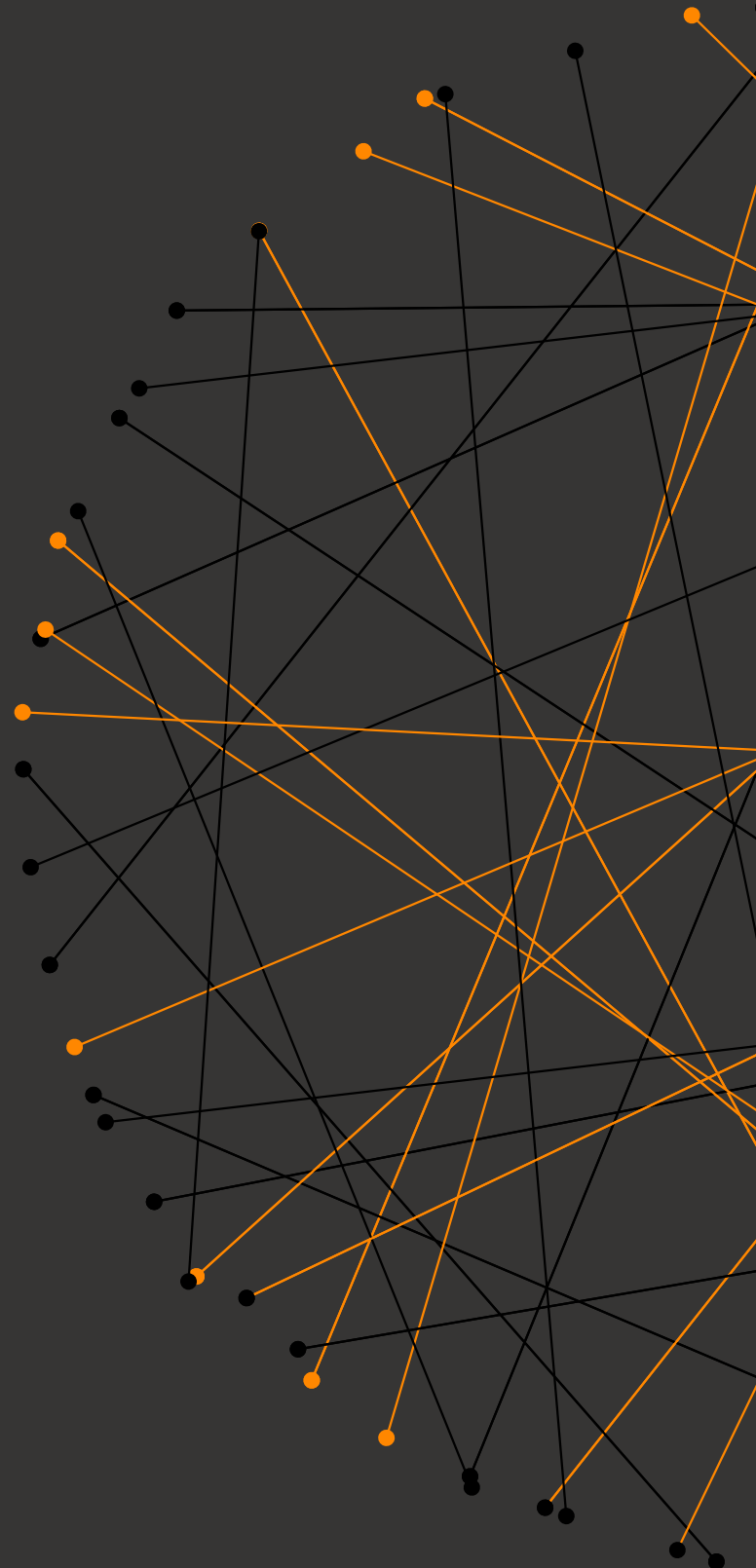
GLOBAL MEDIA BUYING OVERVIEW

Advertisers can unlock big savings by pacing spend early in November. Brands that need to be in the market closer to the holidays should stick with inventory that's performed for them in the past.

Global CPMs climbed steadily throughout November and December in 2015, spiking during the final weekend of November and peaking on December 17. Though each regional marketplace has its own peculiarities, late November and Christmas time were expensive periods all over the world, with the exception of the Chinasphere. In all of our markets, prices dropped significantly on Christmas and then tumbled dramatically at the start of the New Year.

For buyers, the key here is to **assess your risk profile in order to determine whether you really need to be in the market during the high-CPM holiday periods**. If you're a retailer that does need to reach consumers in late November and the final weeks leading up to Christmas, you should be prepared to bid aggressively to win quality inventory in an intensely competitive marketplace. You should also minimize your risk of wasted spend by sticking to placements and creative formats that have driven results for you in the past.

However, if you *don't* have a great need to advertise heavily during these periods, it's best to pace your spend early in November, when prices are much lower than they will be during the holiday rush.



INSIDE GLOBAL MEDIA BUYING

Insight: Prices are extremely low during the first week of January.

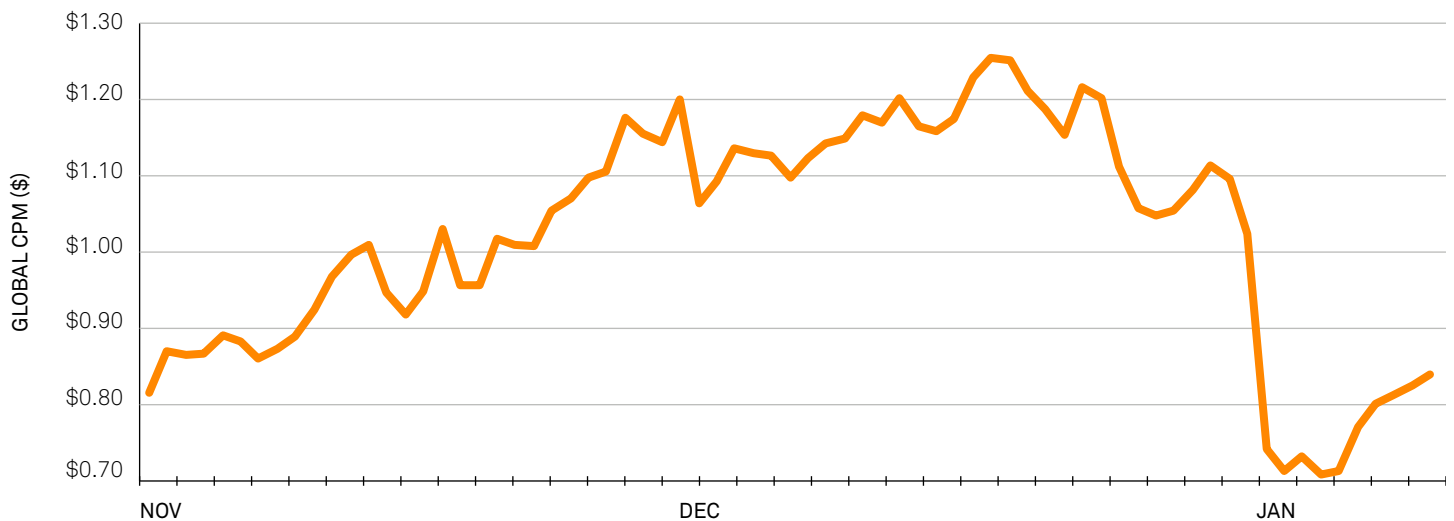
Recommendation: Brand advertisers should take advantage of this bargain.

As we discussed in our Q1 2016 Whitepaper, the beginning of January is the most undervalued time of the year for advertisers, particularly those hoping to achieve branding goals. In fact, we'd even go as far as saying that New Year's Day is the best day all year for brand advertisers to reach their target customers. January 1 offers some of the cheapest inventory all year, on a day when people are at home consuming media.

The early January period might be of special interest to brands looking to reach people who are evaluating life with the fresh perspective of a New Year, as well as health and fitness advertisers hoping to help consumers fulfill their resolutions. On the other hand, advertisers with purely direct-response goals should proceed with caution, as conversion rates decline dramatically in the wake of consumers exhausting their holiday spending budgets.

Figure 1

Global CPM Over Time (November 2015 – January 2016)



Insight: Consumers convert on Sundays in the lead-up to Christmas.

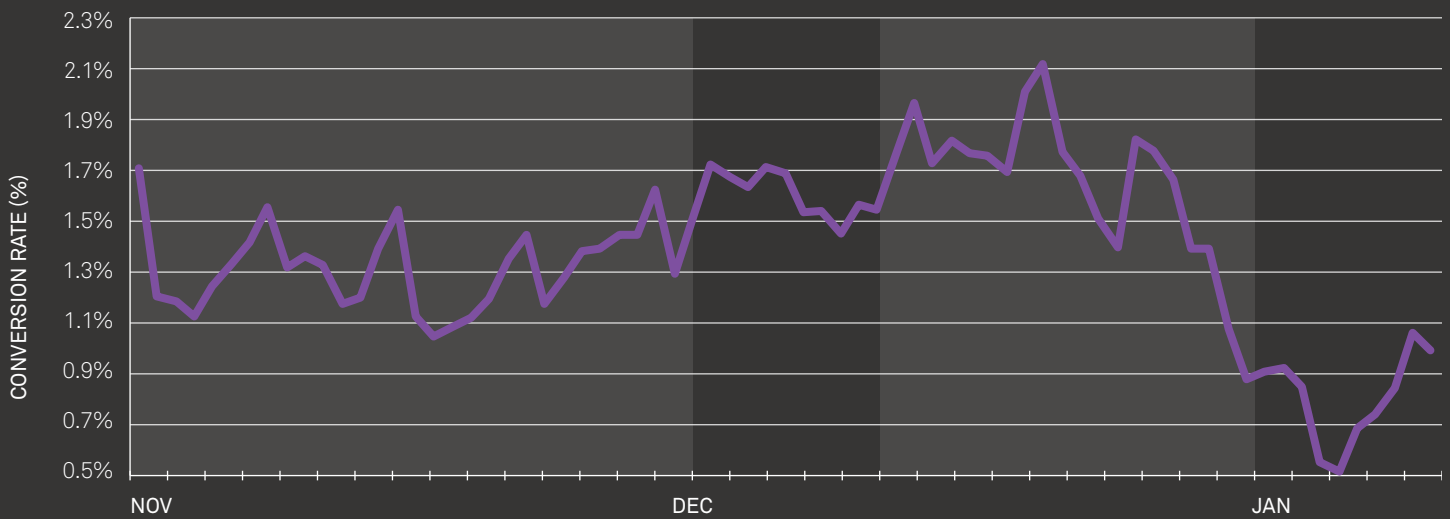
Recommendation: Direct-response buyers should try to close the loop on these days.

During November 2015, global conversion rates were highest on Sundays. Sunday conversion rates were also strong during December, with the Sunday before Christmas offering the highest conversion rate of the quarter.

Sophisticated buyers can implement a strategy of building awareness during the week and then retargeting their prospects with sales pitches on Sundays. Even though conversion rates drop off before Christmas in EMEA and the US, for the rest of the world there is still a (probably non-Christmas related) opportunity that doesn't disappear until closer to the New Year.

Figure 2

Global Conversion Rate Over Time (November 2015 – January 2016)



Insight: On average, video ads generated greater engagement than banners in Q4 2015.

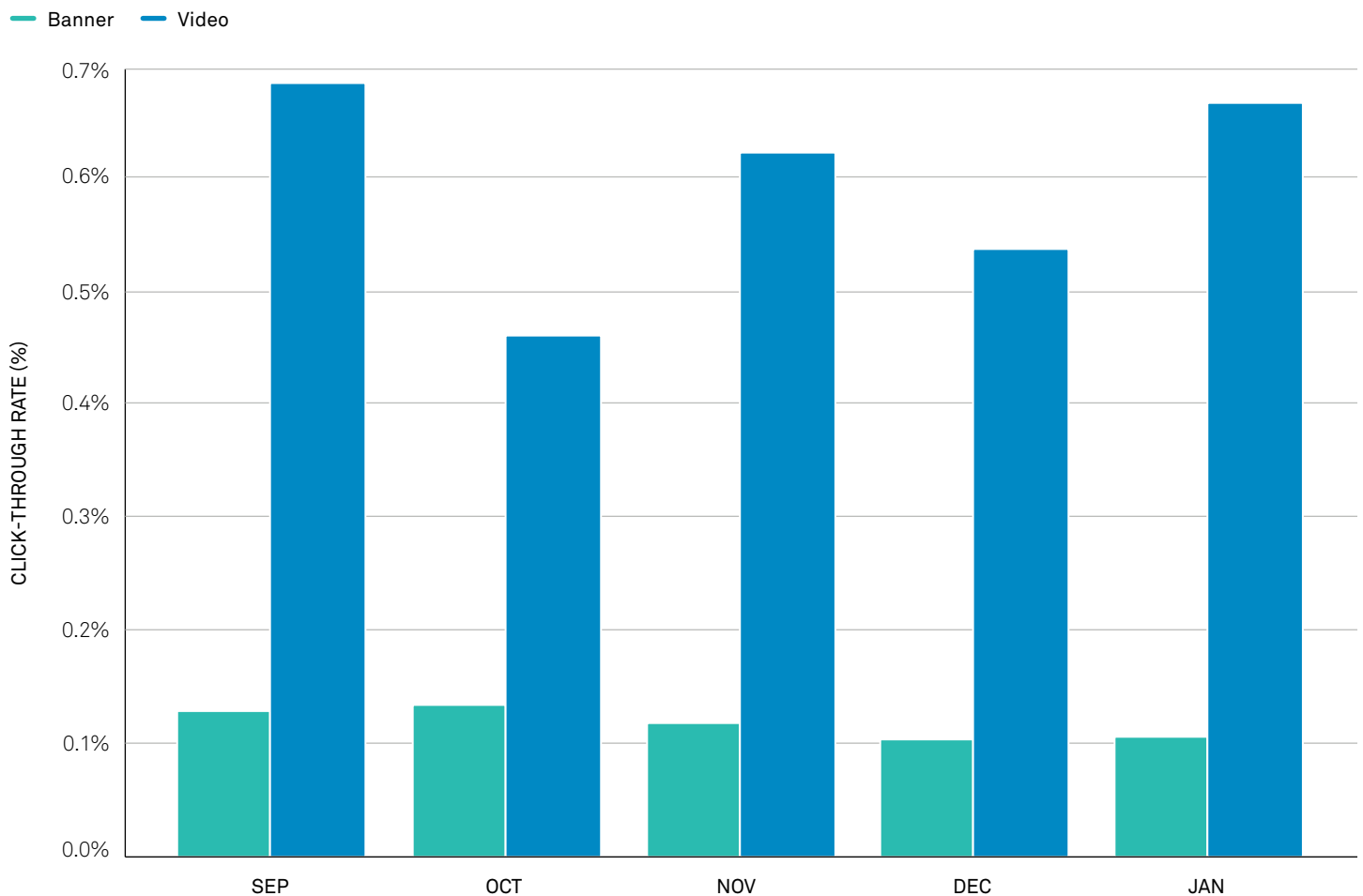
Recommendation: Performance advertisers should integrate video into their campaigns.

Though conventional wisdom states that video units are better for brand advertising than performance goals, our data shows that video click-through rates were actually significantly higher than banner CTRs during every month of Q4 2015.

Advertisers should consider using video for performance goals, making sure to hold video campaigns to the same performance metrics they use for other types of media. Though video cost-per-click was 33% higher on average than banner CPCs, a video-heavy strategy could be worth pursuing for buyers willing to pay a premium for higher user engagement.

Figure 11

Global Video and Banner Click-Through Rate (September 2015 – January 2016)

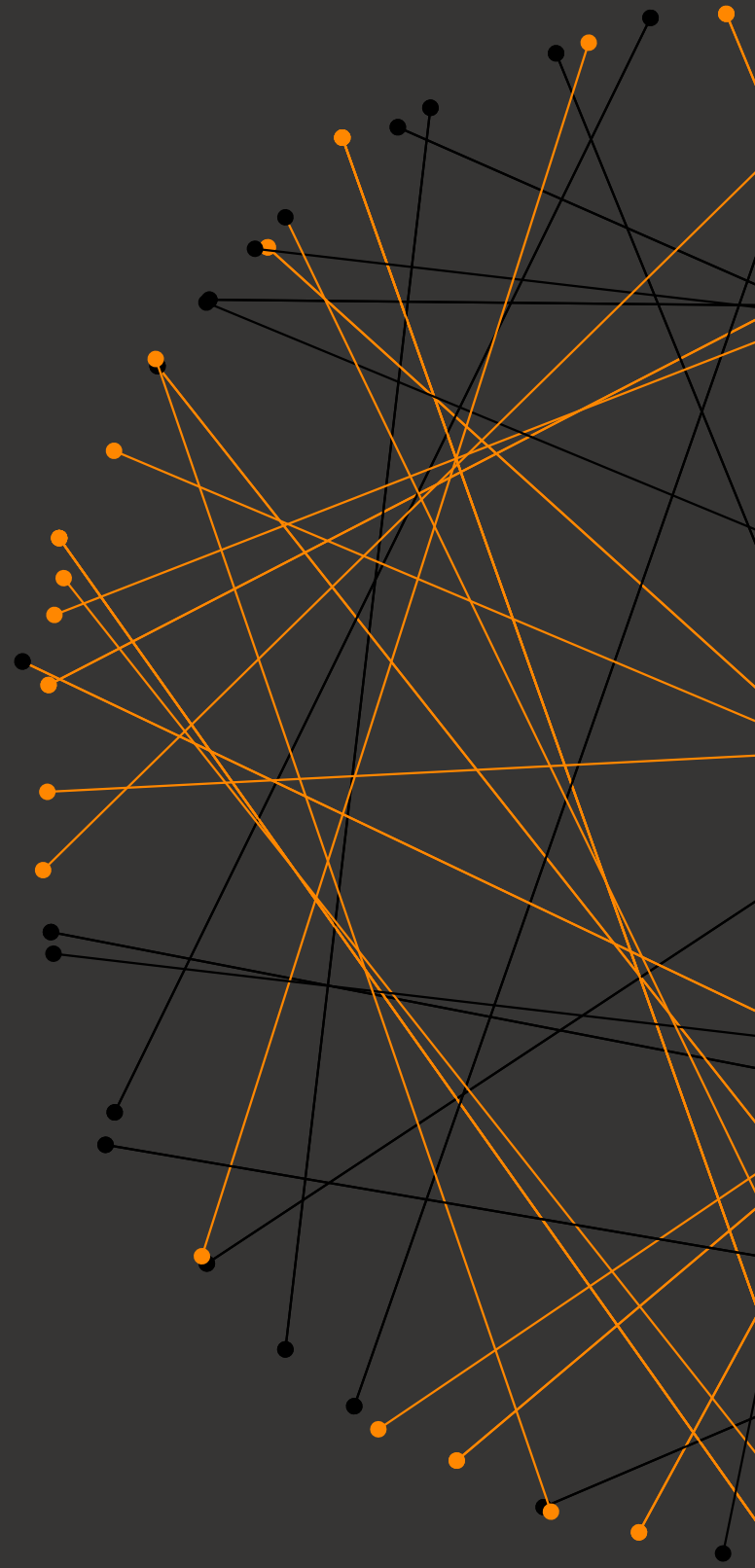


U.S. MEDIA BUYING OVERVIEW

Cheap inventory is available in November, but brands that need to drive holiday sales should buy a week before Christmas.

Given the United States' outsized influence in the programmatic advertising market, it's no surprise that general spending trends in America are largely similar to those found in our platform's global aggregate data. CPMs started off fairly low in November 2015 and rose throughout the quarter until they peaked the week leading up to Christmas. While global conversion rates were relatively steady across November and only really began climbing in December, U.S. conversion rates grew throughout November before taking a bit of a tumble around Thanksgiving weekend.

This suggests that while brand advertisers should spend their budgets early and often, direct-response advertisers should think carefully about their activity in early November. While inventory is very cheap during this time period, the low conversion rates might make it a better idea to wait until the week or two before Thanksgiving, depending on how important conversion rates are to the client's marketing goals. Brands looking to play in the Christmas market should pay a premium to advertise about a week before Christmas, when CPMs and conversion rates are both at their highest.



INSIDE U.S. MEDIA BUYING

Insight: U.S. conversion rates plummet between December 22nd and the 31st.

Recommendation: If possible, performance advertisers should avoid this period.

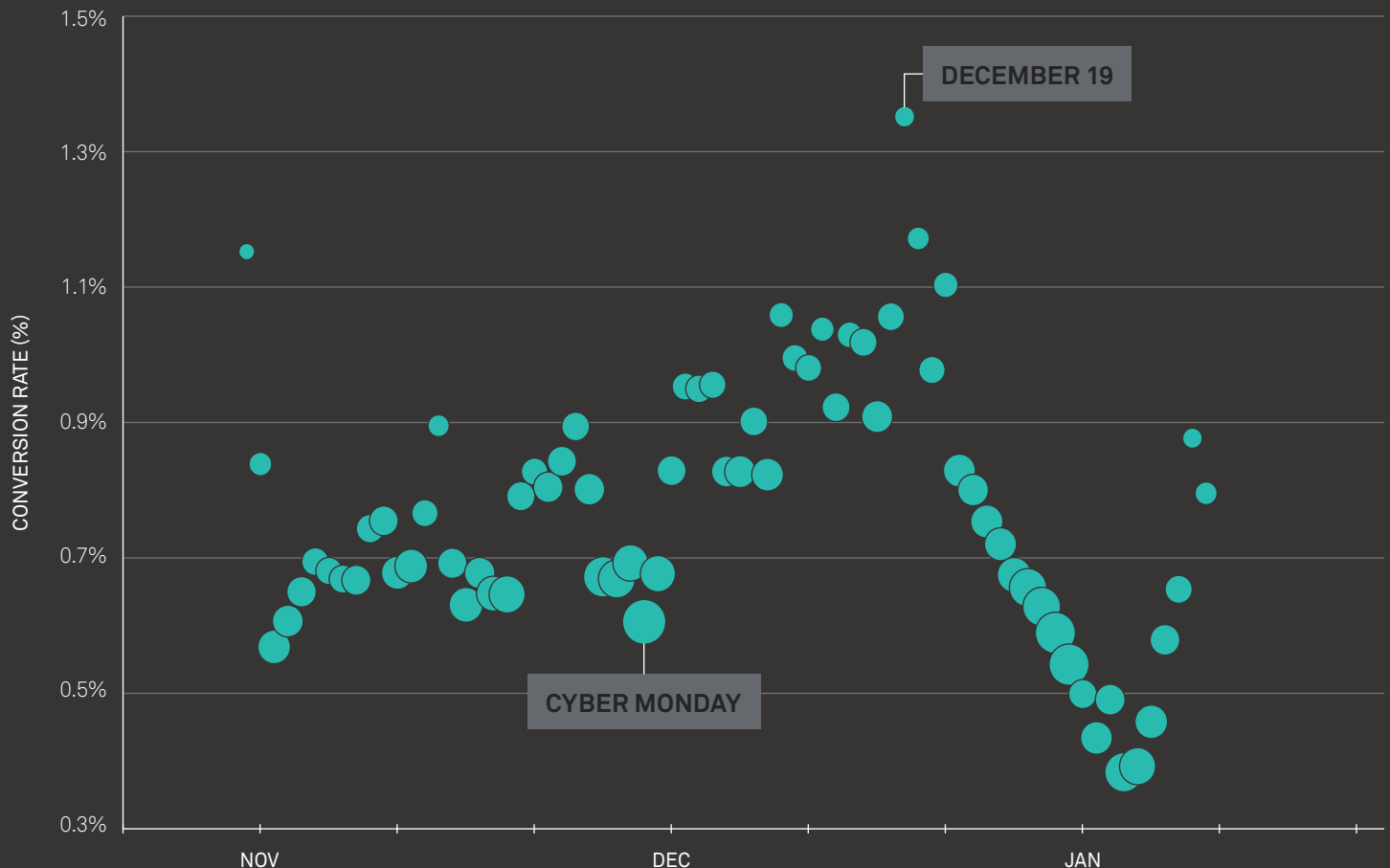
In contrast to our global data, where conversion rates peaked on Christmas Day, U.S. conversion rates reached their highest point on December 19th and then fell considerably between December 22 and the end of the year.

Though the temptation is to spend heavily right through the 25th, advertisers looking for strong performance should avoid Christmas and the three days before it unless they absolutely need to be in the market during those days. Instead, performance brands should devote more of their budgets toward targeting Christmas shoppers on the days between December 12 and December 21, when people have a higher propensity to buy products and click on ads.

Figure 3

US Conversion Rate Over Time (November 2015 – January 2016)

*Size of bubble indicates CPA



Insight: Black Friday and Cyber Monday have some of the lowest conversion rates of the quarter.

Recommendation: Advertisers buying on these days must be aggressive and vigilant.

Though Black Friday and Cyber Monday are widely considered two of the United States' biggest shopping events, our 2015 data found that U.S. conversion rates (featured in Figure 3 on the preceding page) dropped off sharply in the days right after Thanksgiving. In fact, these two days had some of the highest cost-per-acquisitions of the quarter.

As a result, retailers run the risk of wasting big money on ads that don't drive people to their Black Friday and Cyber Monday sales. Ultimately, it's up to the individual media buyer to decide how badly they need to be in-market on these days. If you're comfortable shifting spend earlier in the month when prices are lower and conversion rates are higher, do that. If you're running online sales that you simply must promote, you should be vigilant in targeting only high-performance inventory and aggressive in bidding enough money to secure those impressions.

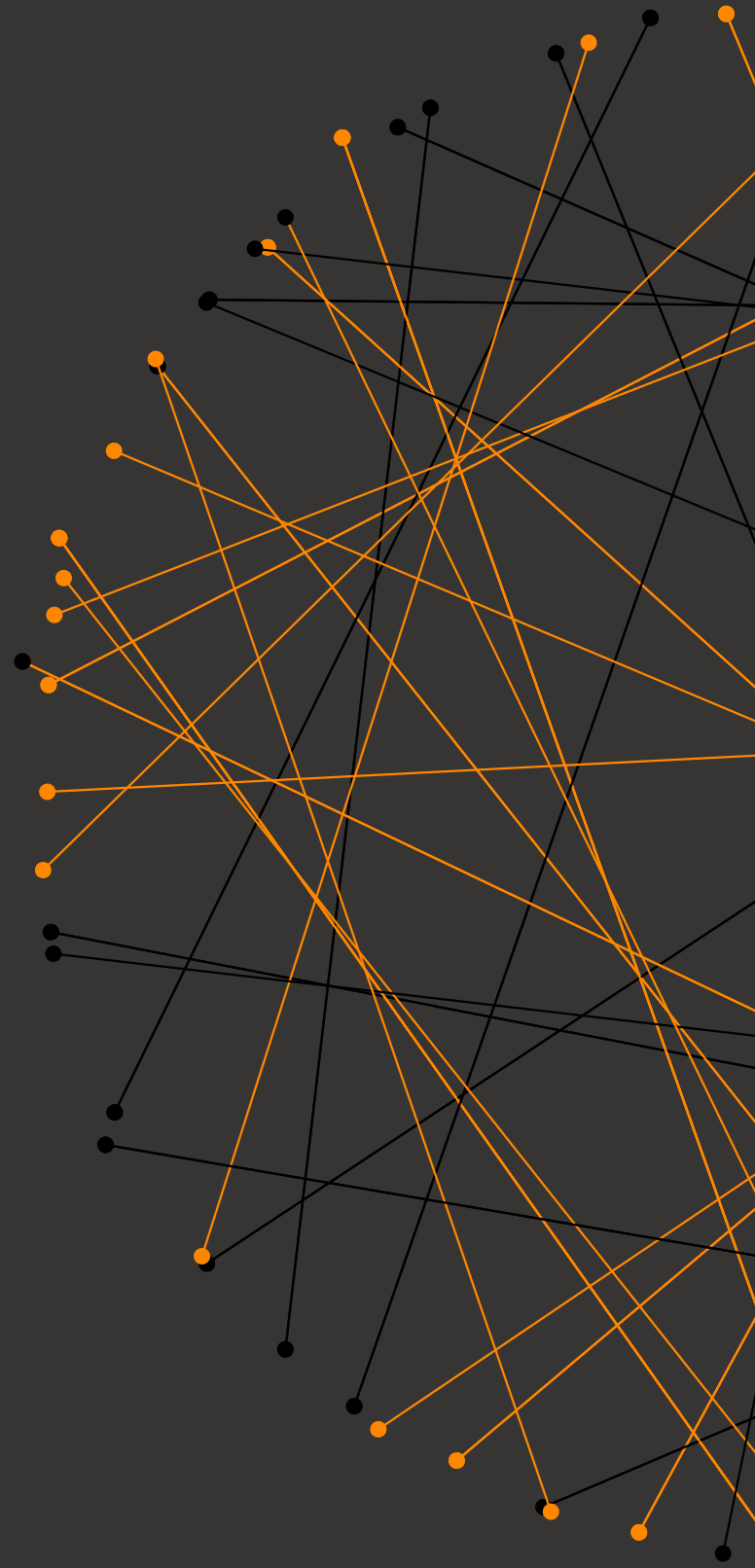


U.K. MEDIA BUYING OVERVIEW

Marketers should avoid late November if possible, and holiday buyers should target the two weeks before Christmas.

Unlike in the United States and the rest of Europe, CPMs in the United Kingdom do not increase throughout November and December. Instead, 2015 U.K. CPMs peaked in late November, at a time when conversion rates were fairly low. Prices then took a dive in early December, before rising in the lead-up to Christmas.

If possible, buyers should avoid investing heavily in the expensive late November period. Instead, advertisers looking to solely to drive branding metrics can find the cheap inventory they need in late October and early November. Meanwhile, brands looking to drive holiday sales should consider targeting the two weeks leading up to Christmas, when conversion rates skyrocket even as CPMs fall from their late-November peak. In the event that your business does require you to be in the market in late November and early December, you'll want to bid high to win your desired inventory and to lock in deals to manage price fluctuation.



INSIDE U.K. MEDIA BUYING

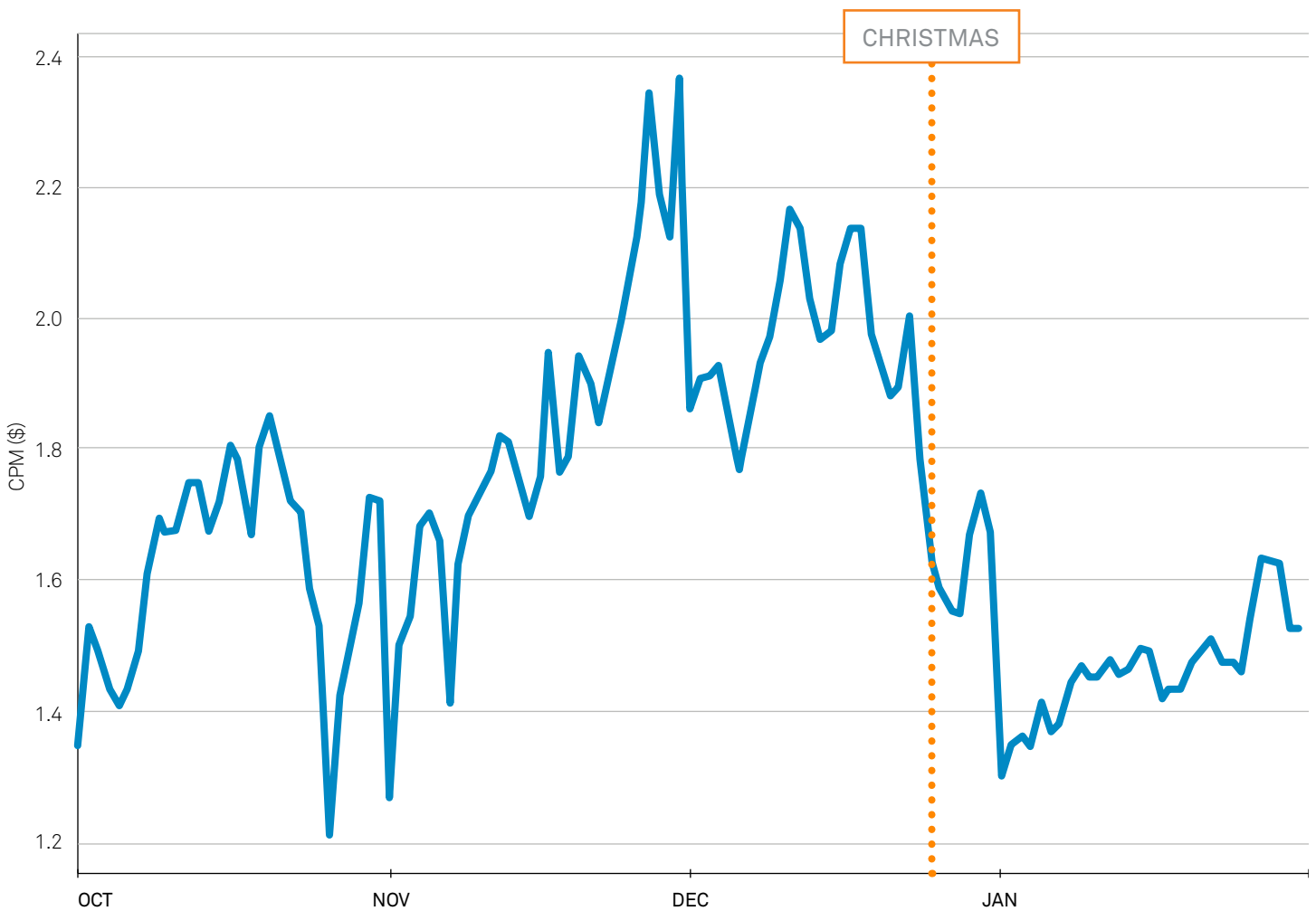
Insight: The week between Christmas and New Year's offers low CPMs and strong conversion rates.

Recommendation: U.K. buyers have a strong incentive to remain in the market.

Whereas global CPMs tend to retain their Christmastime highs through the end of the year, prices in the U.K. began sliding in the week before Christmas in 2015. At the same time, conversion rates remained strong all the way through the middle of the following January.

Figure 4

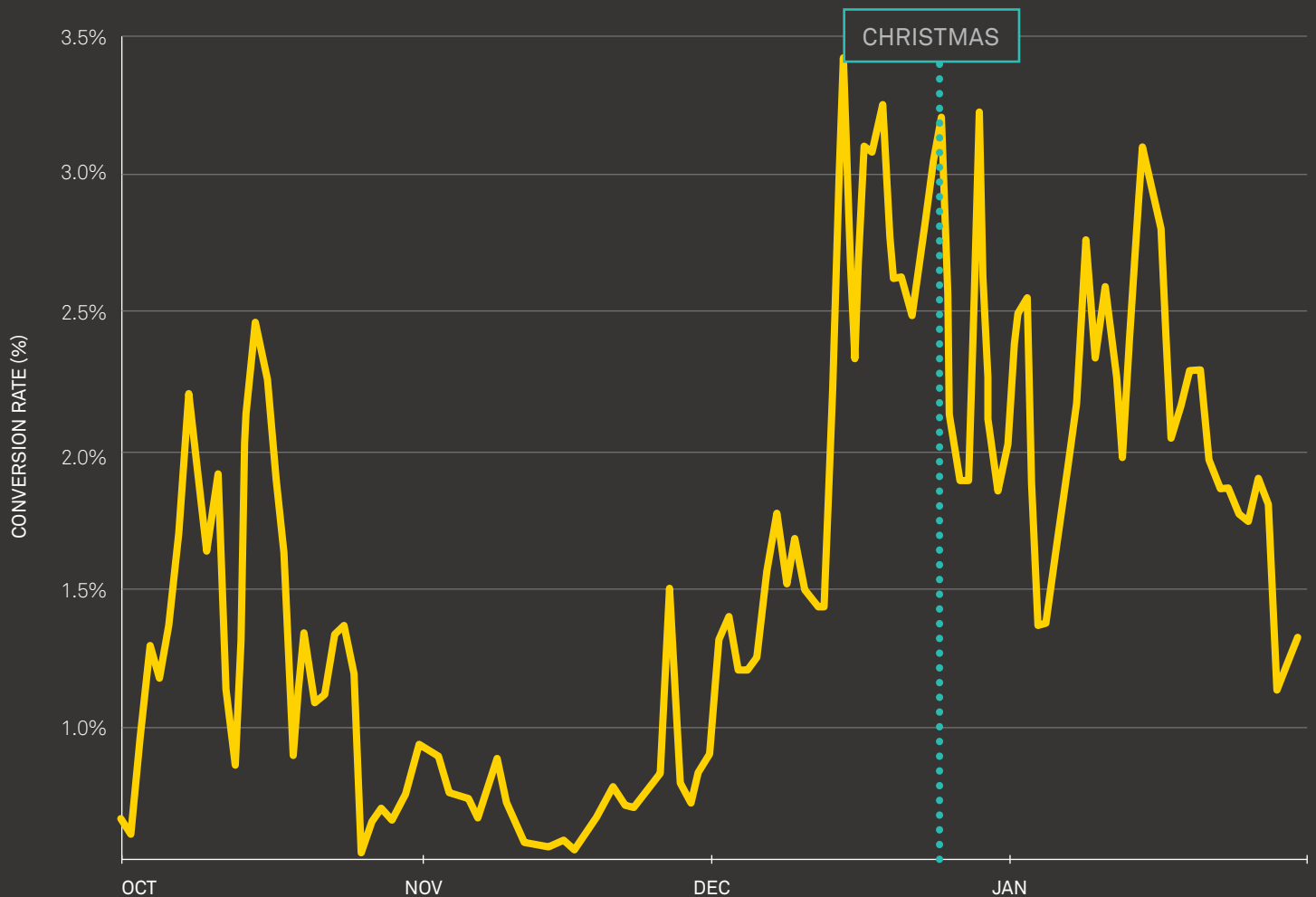
UK CPMs Over Time (October 2015 – January 2016)



As such, U.K. buyers of all stripes can seize a great deal by setting aside Q4 budget to spend between Christmas and New Year's. In particular, the British celebration of Boxing Day on December 26 presents a great opportunity to reach people when they're at home. Meanwhile, the early January period we've recommended for global advertisers is even more alluring in the U.K., since performance buyers can take advantage of great conversion rates.

Figure 5

UK Conversion Rates Over Time (October 2015 – January 2016)

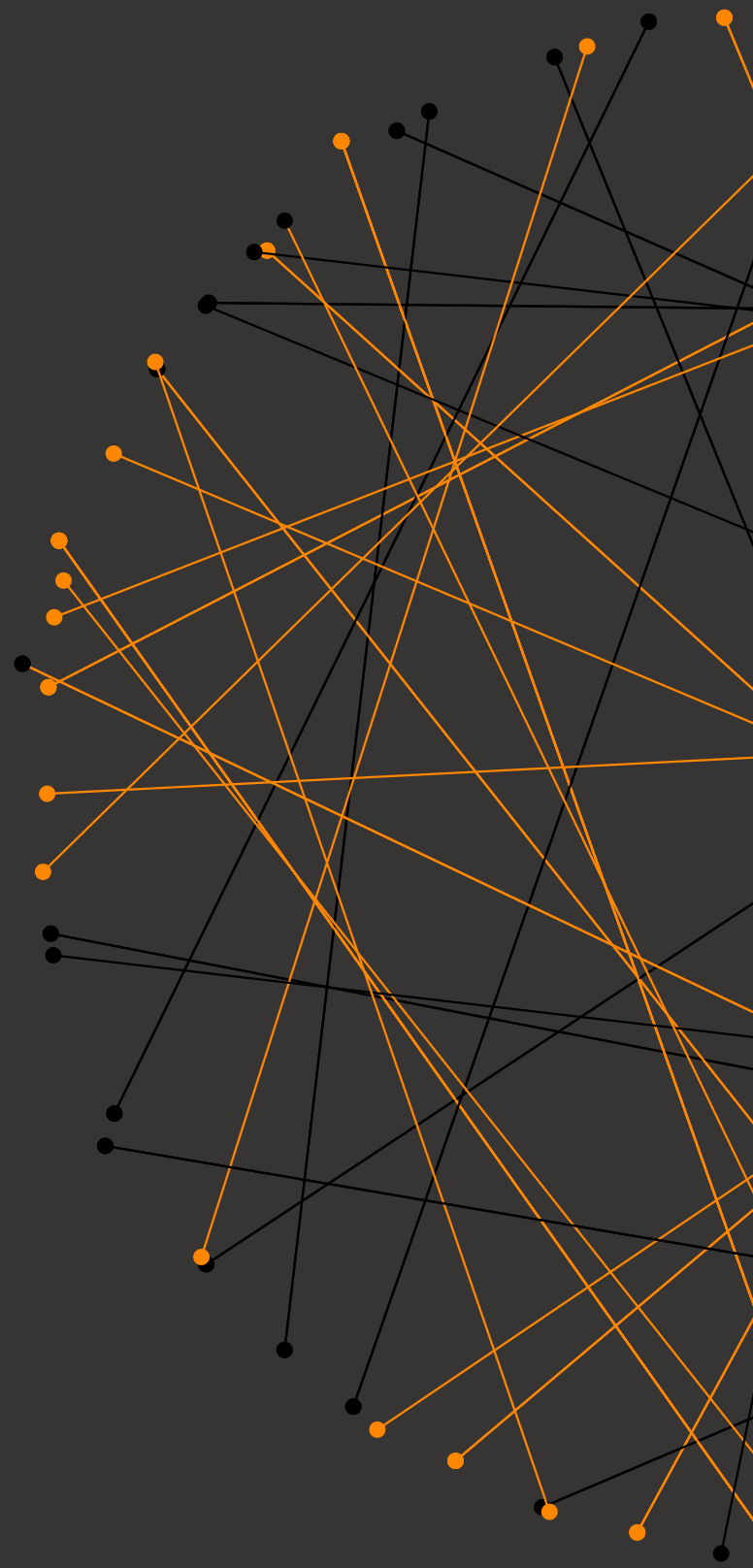


EMEA MEDIA BUYING OVERVIEW

EMEA buyers can win big on weekends and in early October.

Similar to the global and U.S. markets, prices in the rest of EMEA (excluding the U.K.) climbed steadily throughout November and December, peaking in the middle of the month.

EMEA buyers who are able to carve out money to spend at the beginning of October will be rewarded not only with the quarter's best prices, but also with some of its highest conversion rates. Notably, we found that dips in average daily CPMs tended to fall on weekends, which may provide an opportunity for advertisers to generate added value by weighting their spend toward Saturdays and Sundays.



INSIDE EMEA MEDIA BUYING

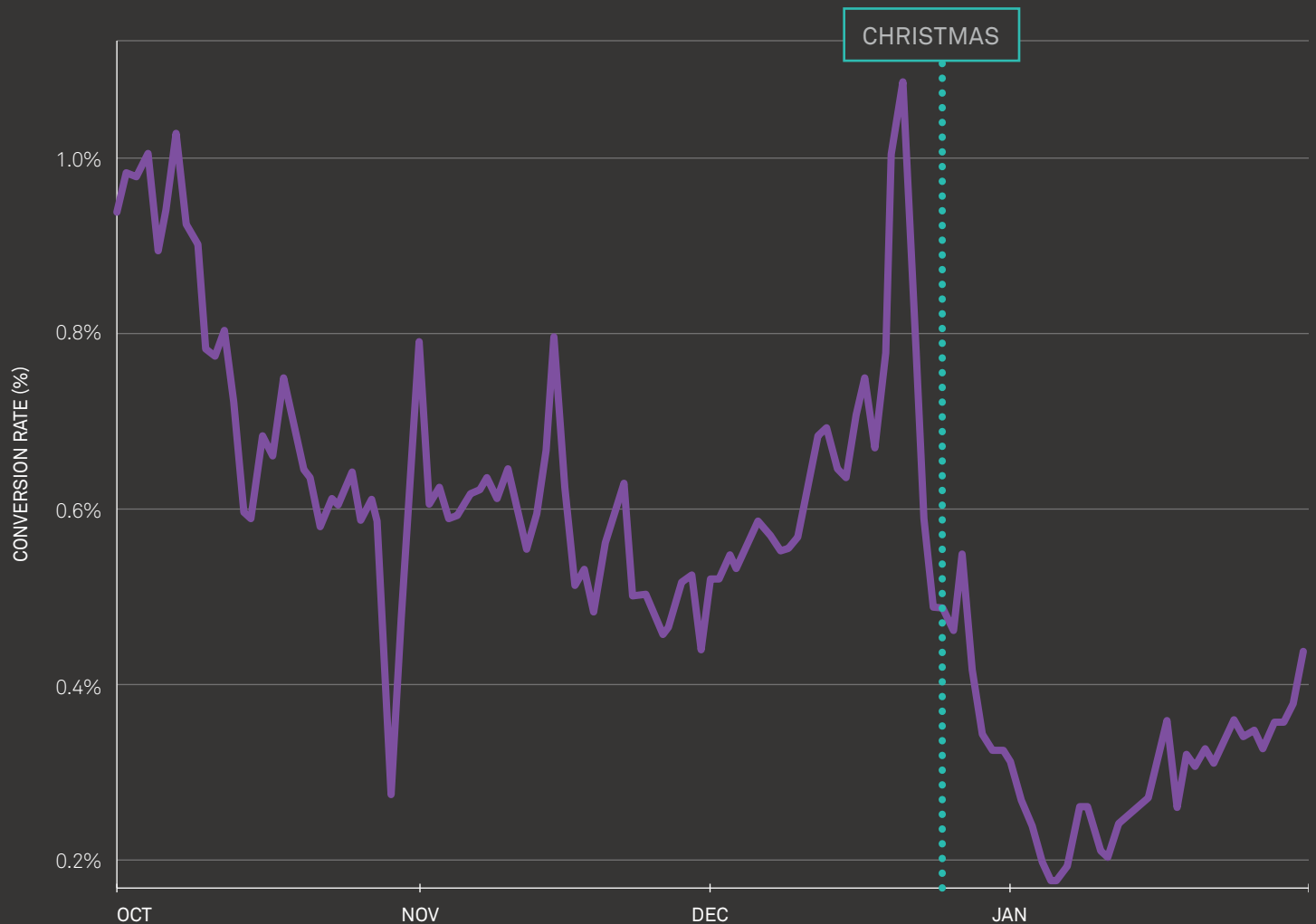
Insight: Conversion rates spiked right before Christmas.

Recommendation: Performance brands should spend heavily to reach last-minute gift buyers.

Though EMEA conversion rates remained relatively stable throughout November and the first half of December last year, conversion rates rose sharply during the second half of the month.

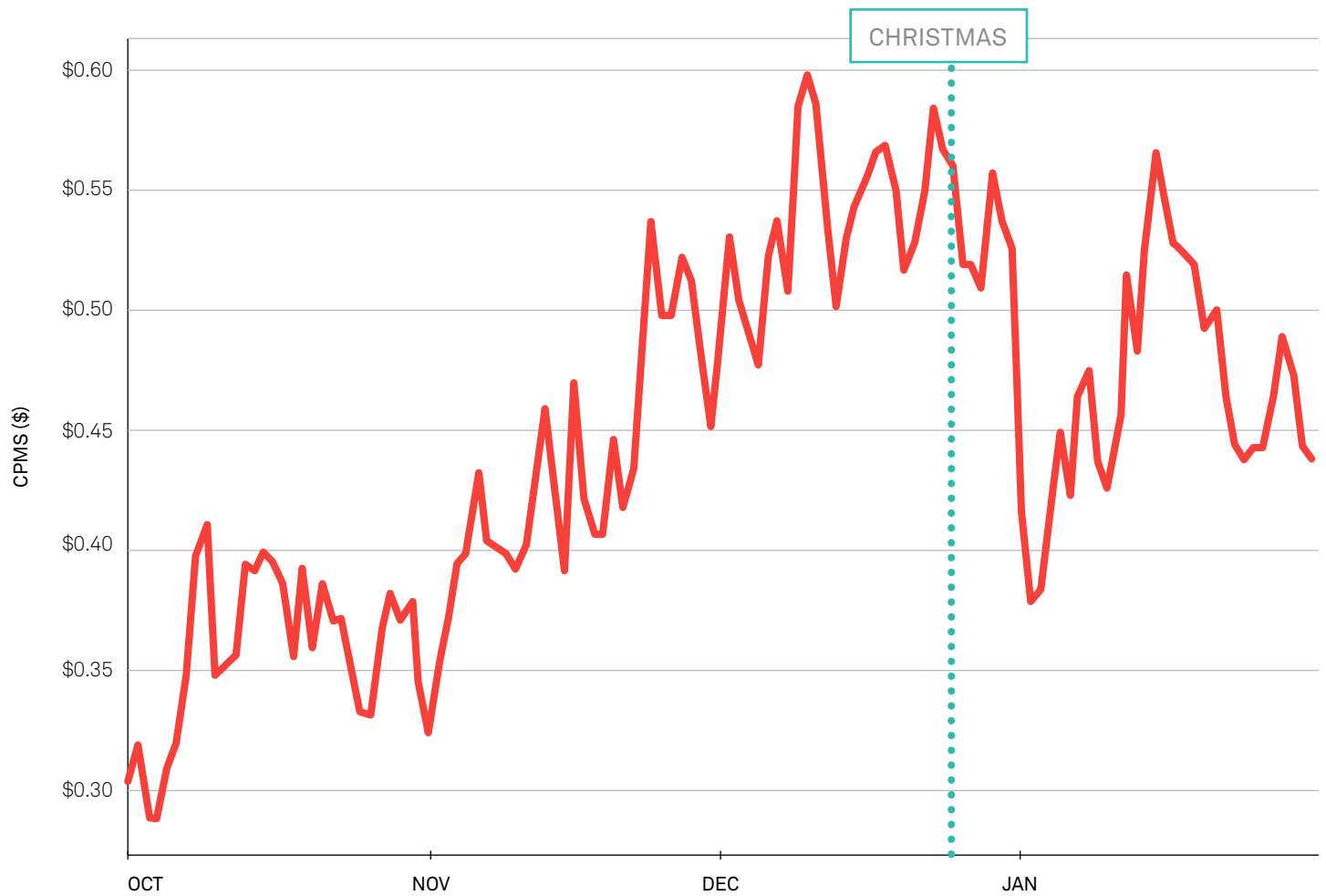
Figure 7

EMEA Conversion Rates Over Time (October 2015 – January 2016)



Retailers can drive sales among last-minute gift buyers by spending aggressively between December 20 and December 23. Though CPMs are fairly steep, prices are not that much higher than they are during the rest of the month. For performance advertisers who need to be in the market during this time of year anyway, these circumstances create a major opportunity to maximize effectiveness, particularly for those who finalize deals early in the season.

Figure 6
EMEA CPMs Over Time (October 2015 – January 2016)

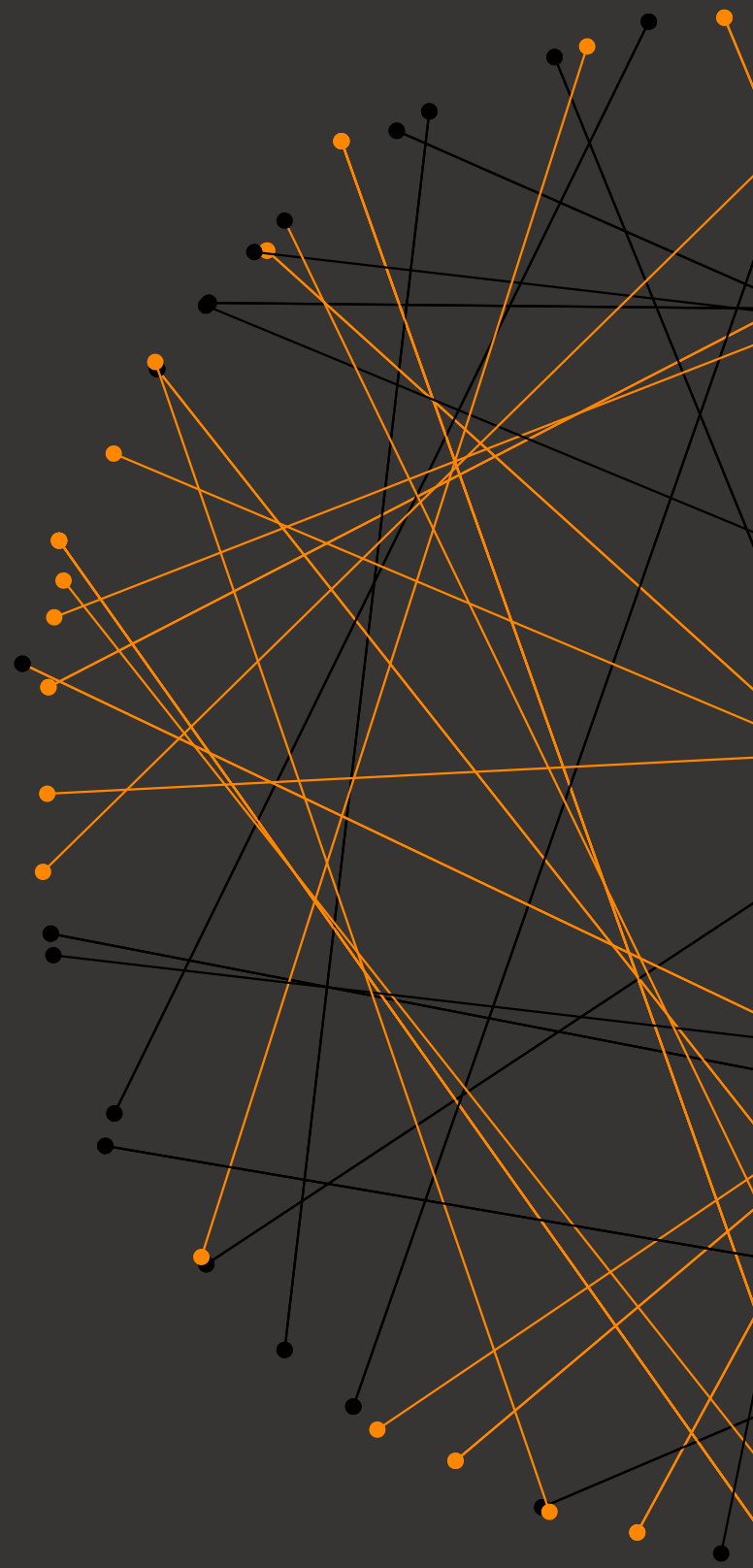


CHINASPHERE MEDIA BUYING OVERVIEW

October and early January offer advertisers the most bang for their buck.

Ad markets in Chinasphere countries behaved similarly to what we think of as a “western” Q4. Prices climbed throughout November and peaked in December, albeit much earlier in the month than they did in other regions.

Prices were lowest throughout October and in early January. As such, advertisers driving awareness and other branding goals could be best served buying during these periods.



INSIDE CHINASPHERE MEDIA BUYING

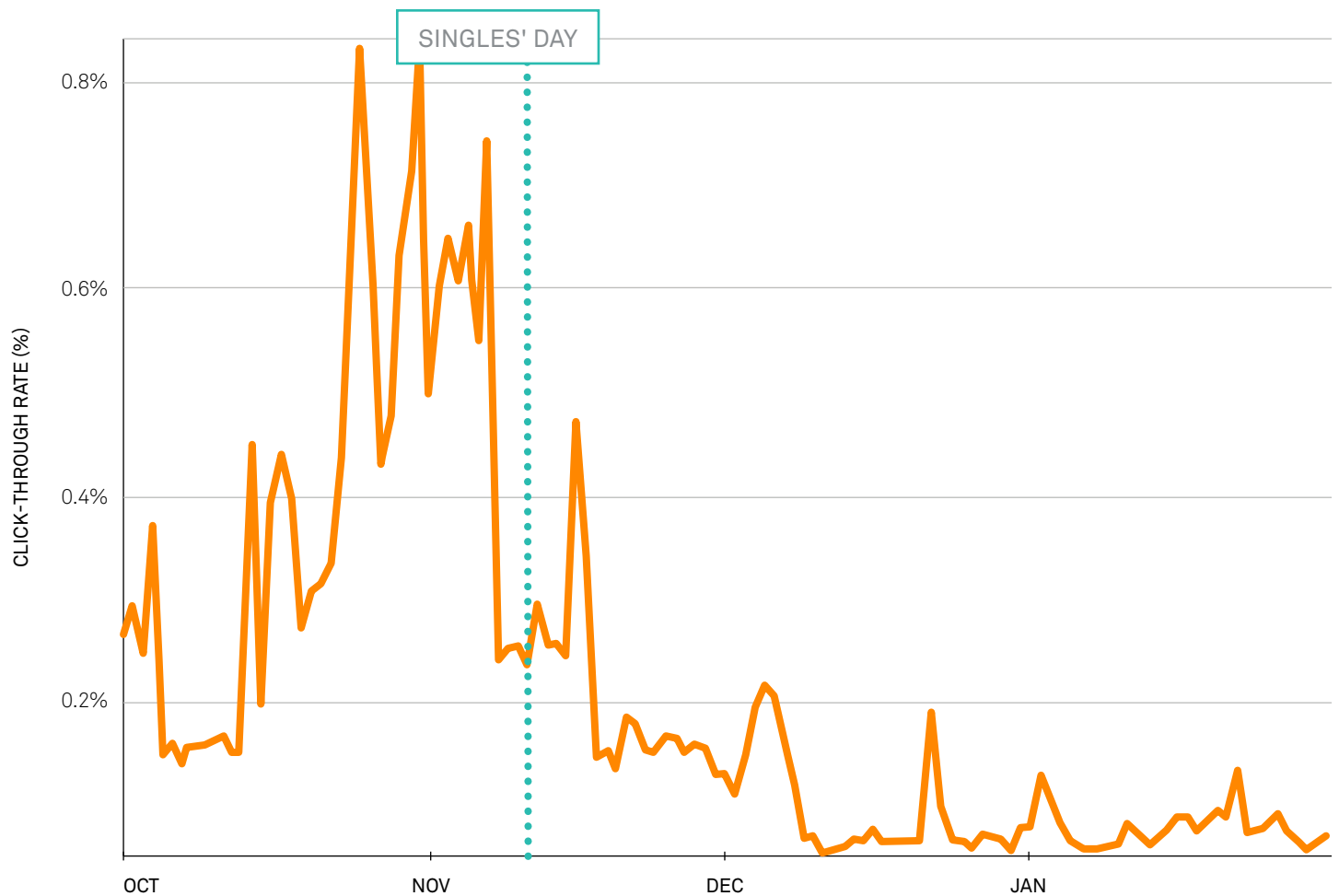
Insight: Click-through rates skyrocketed in the lead up to Singles' Day on November 11.

Recommendation: Brands have a huge opportunity to drive sales and engagement by advertising during this period.

The Chinese holiday of Singles' Day, held annually on November 11, is one of the biggest online shopping days of the year. Last year, click-through rates in Southeast Asia leapt between October 16 and November 7.

Figure 10

Chinasphere Click-Through Rates Over Time (October 2015 – January 2016)

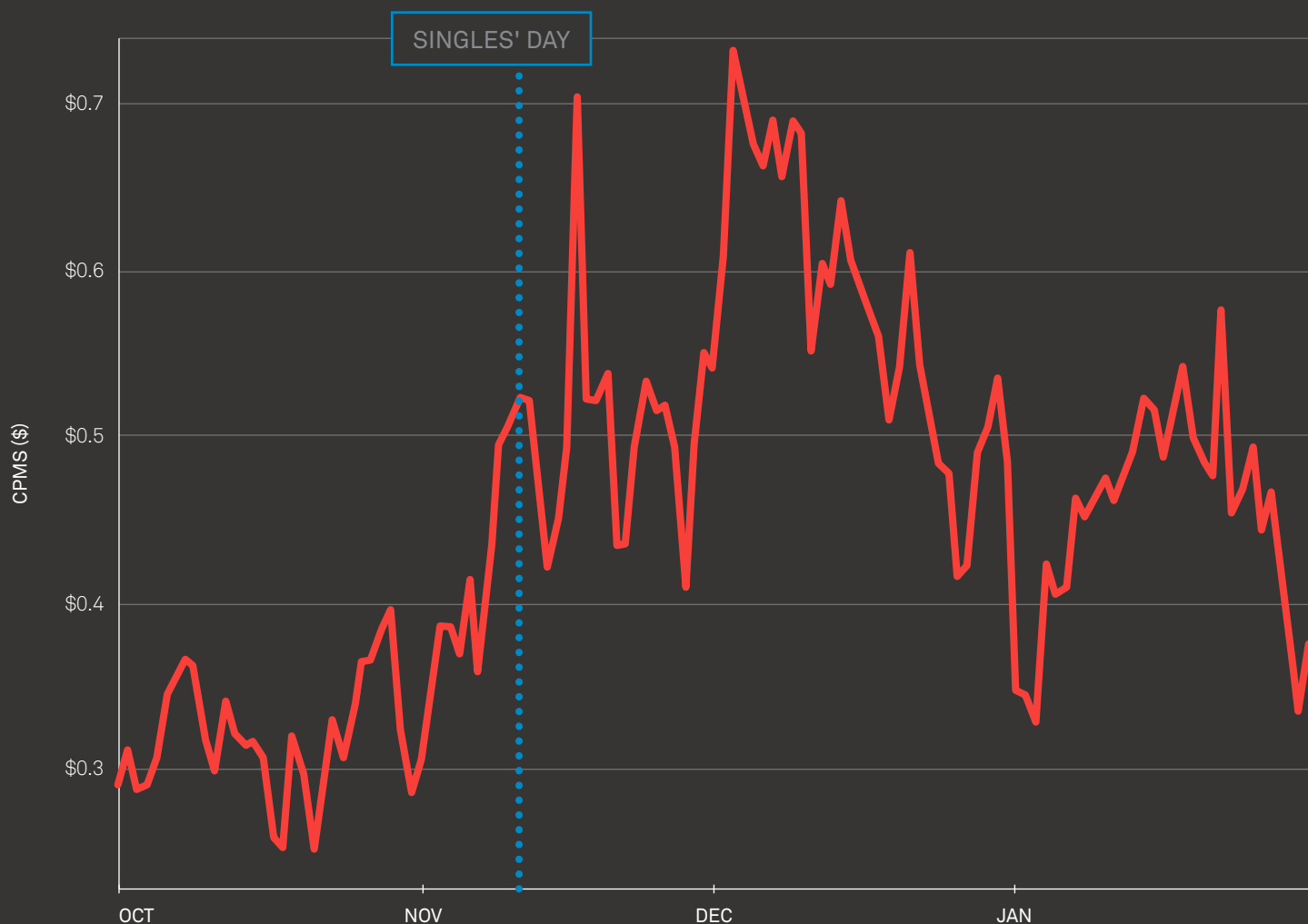


Though we called out this opportunity in our 2015 Q4 Whitepaper, Chinasphere CPMs barely budged until right before the holiday, suggesting that platform advertisers still aren't spending much during this time.

If you're a performance advertiser in the Chinasphere, you'd be crazy not to ramp up your spending in mid October and early November, when prices are low and consumers are prepping for a shopping spree. In fact, even brand advertisers ought to consider making a play here. After all, what kind of advertiser wouldn't benefit from buying the quarter's highest engagement rates at some of its lowest CPMs?

Figure 9

Chinasphere CPMs Over Time (October 2015 – January 2016)



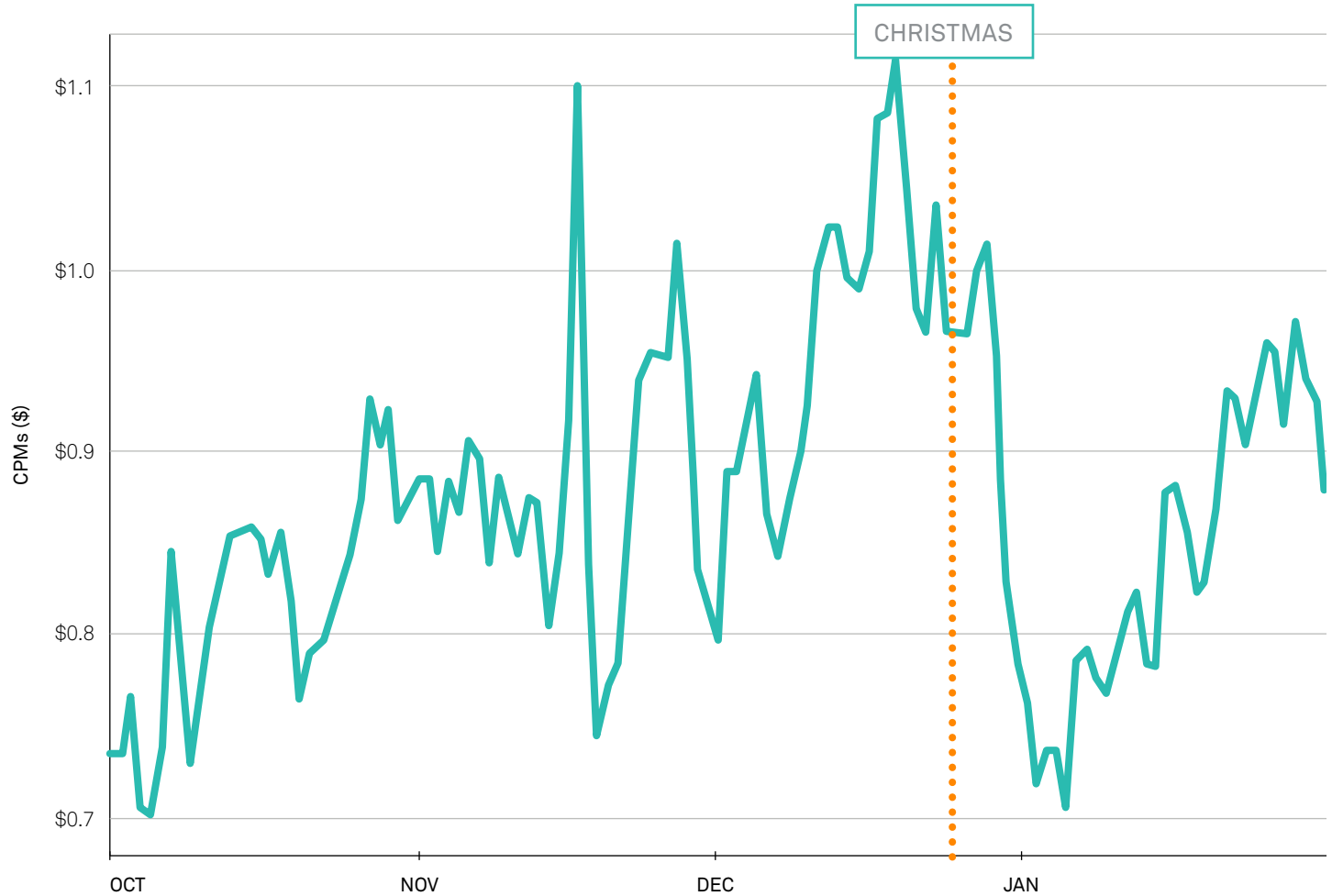
AUSTRALIA AND NEW ZEALAND MEDIA BUYING OVERVIEW

December buyers should lock in deals.

Prices in Australia and New Zealand were fairly volatile in November 2015, but, as elsewhere, December CPMs increased dramatically heading into Christmas. Marketers planning to buy in December should arrange deals in advance.

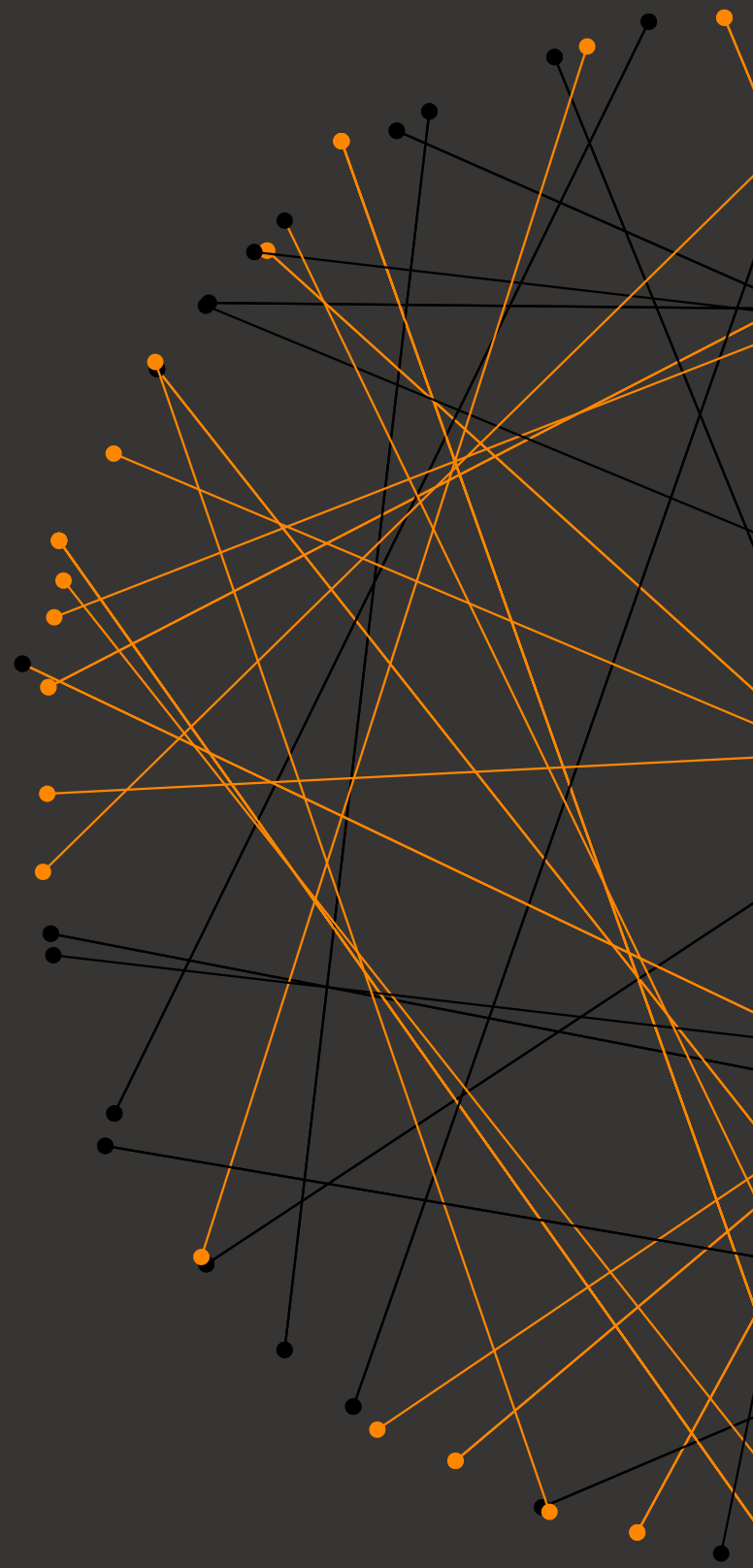
Figure 8

Australia and New Zealand CPMs Over Time (October 2015 – January 2016)



MEDIA BUYING BY VERTICAL

To conclude our Q4 2016 whitepaper, we'll leave you with a few industry-specific opportunities buyers can take advantage of in the upcoming quarter.



PRICE GUIDE BY VERTICAL

These graphics can be used as a visual “cheat sheet”, as they summarize the buying insights provided on pages 24-26

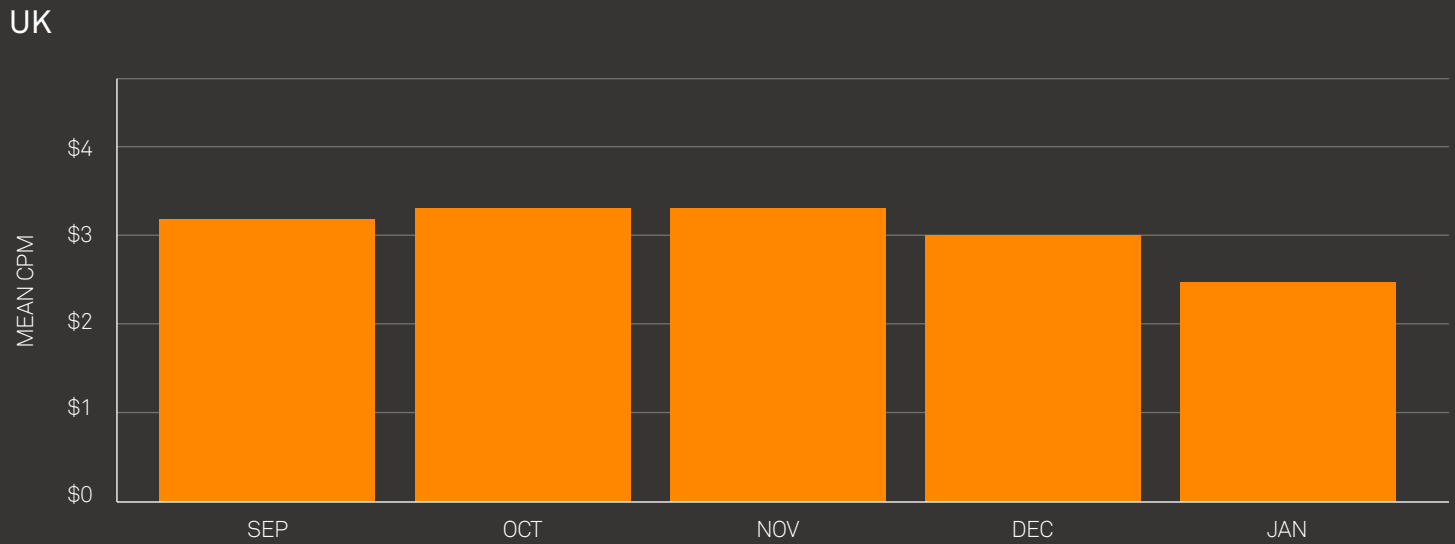


APPAREL

Insight: Average U.K. CPMs in the Apparel vertical dropped 10% between November and December.

Recommendation: U.K. clothing brands can find high-value inventory leading into Christmas.

Figure 12

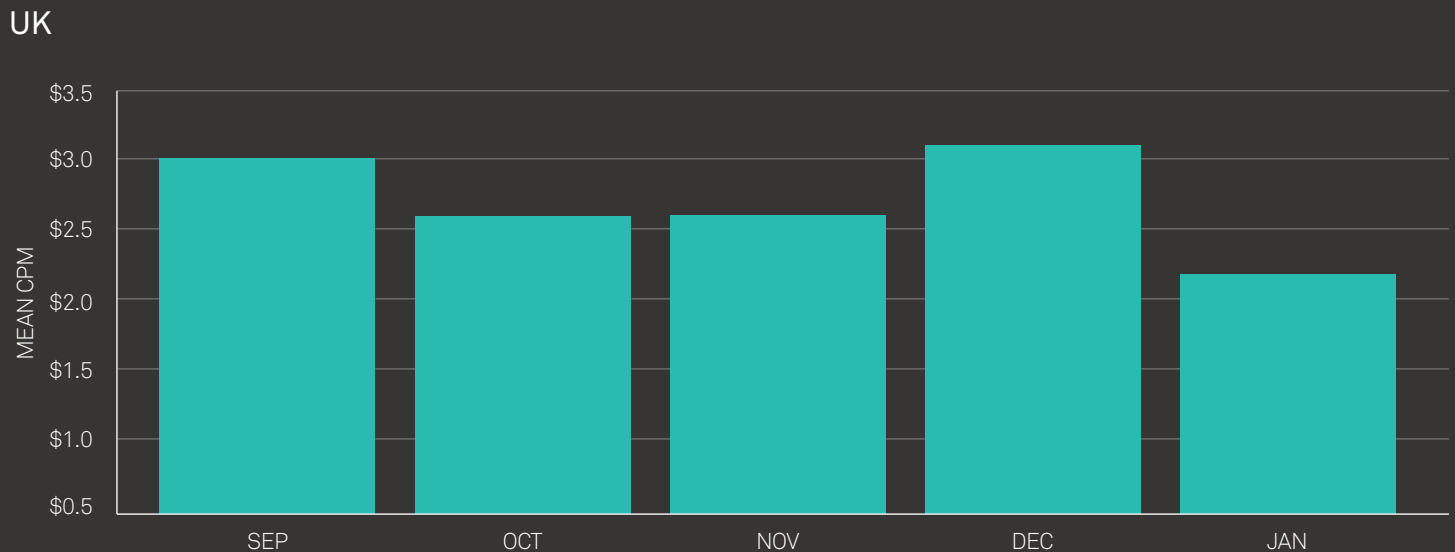


COSMETICS

Insight: U.K. impressions in the Cosmetics category were cheaper in October and November than they were in September and December.

Recommendation: U.K. cosmetics brands should take special care to pace spend early in the quarter.

Figure 13



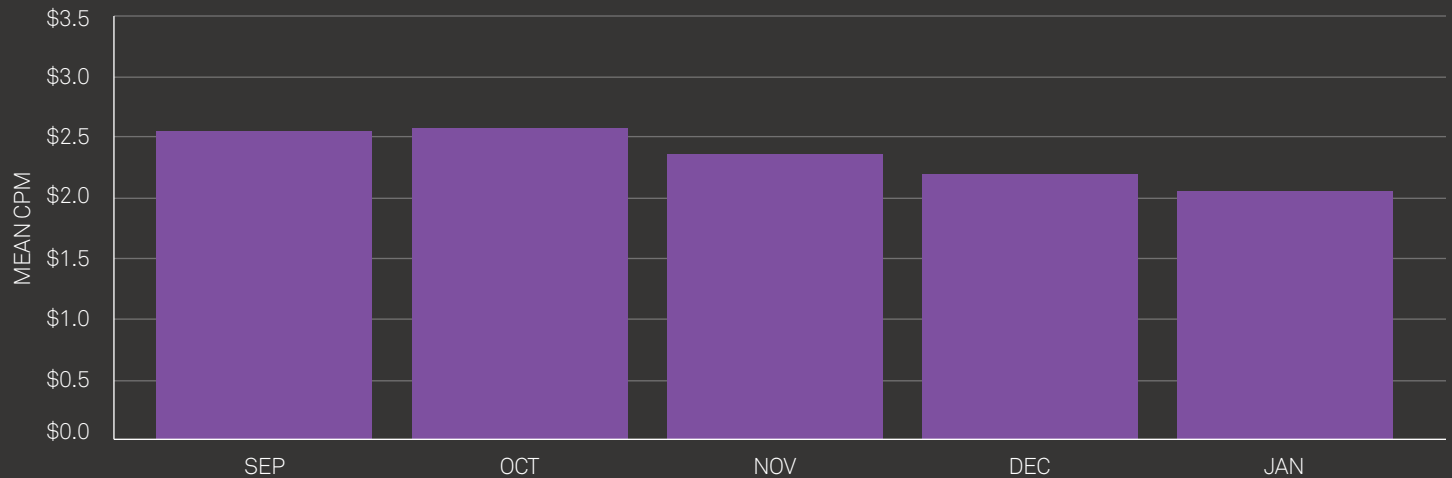
FOOD AND DRINK

Insight: Food and Drink advertising costs dropped throughout the quarter in EMEA.

Recommendation: EMEA food brands can maximize their effectiveness by being patient early and ratcheting up spend later in the holiday season.

Figure 14

EMEA



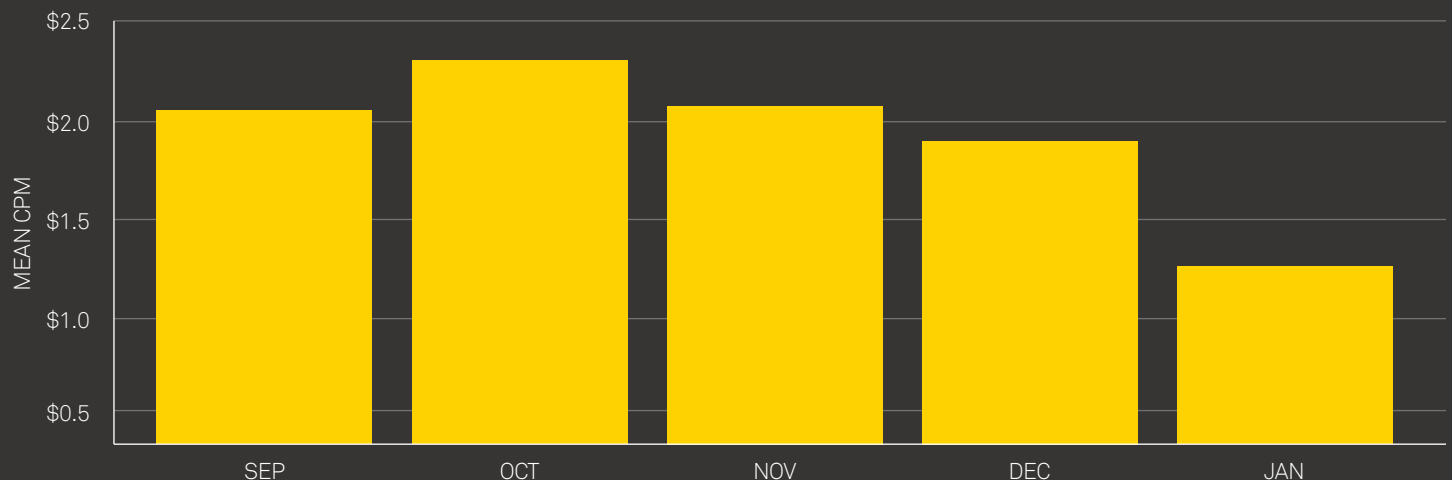
TOYS AND GAMES

Insight: EMEA Toys and Games publishers were significantly cheaper in November and December than October.

Recommendation: November is probably the best bet for EMEA toy companies, as the December CPMs could be distorted by a post-Christmas price drop.

Figure 15

EMEA



FITNESS AND HEALTH

Insight: Fitness and Health CPMs were lower in January than November and December in both EMEA and the U.S.

Recommendation: January presents a great opportunity to reach people while they are beginning their New Year's Resolutions.

Figure 16

EMEA

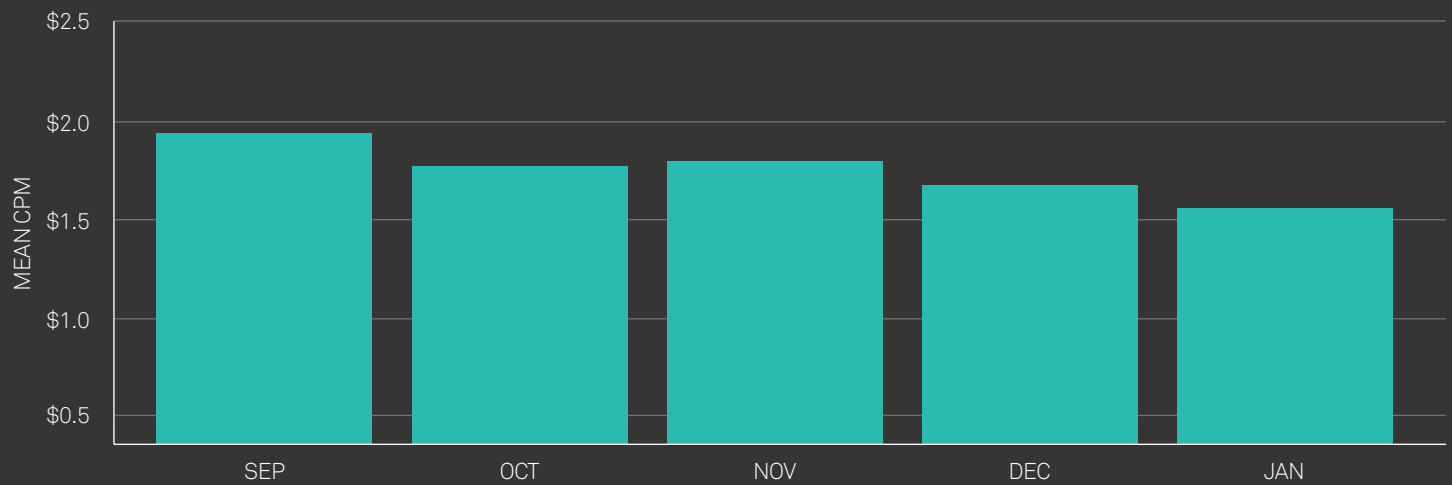
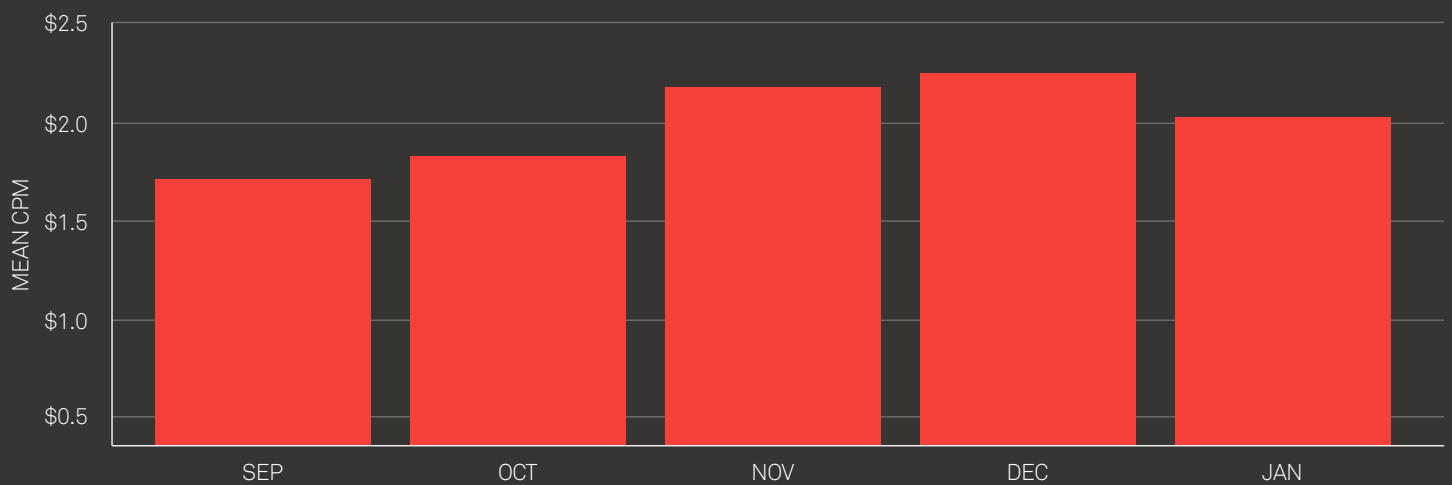


Figure 17

US



The AppNexpert Series

An Interview with **Alex Cone**

It's happening, finally: The movement away from Flash—and from Flash-based creatives—is accelerating across the entire ecosystem to such a degree that buyers need to remain alert to fast-moving changes. We spoke with Alex Cone, Product Manager and Creative Capability leader at AppNexus, to hear about some of the ways that Flash is no longer an acceptable ad technology, and learn practical steps that buyers can take to adapt equivalent technologies that will ensure the quality of their creatives remains unaffected.



THE APPNEXPERT SERIES **An Interview With Alex Cone**

AppNexus: *What's causing the growing, industry-wide movement away from Flash?*

Alex: It really all started – as a lot of these things got started – with a certain fellow by the name of Steve Jobs. Back in 2010, Jobs wrote a now-famous letter, where he defended Apple's decision not to allow Flash to work on its iPhones, iPads and iPods.

At the time, a lot of people thought Apple's decision not to allow Flash was motivated purely out of corporate rivalry. In his letter, Steve laid that idea to rest, once and for all. He listed a long series of Flash-related problems that were purely about function. For instance, he spoke of Flash's inability to run on a multi-touch interface, and how Flash videos ate up the battery lives of mobile devices. In hindsight, the majority of Jobs' critiques about Flash seem quite prescient, in fact.

AppNexus: *Do you think the growth of the mobile advertising has played a role in minimizing the role and impact of Flash?*

Alex: I would argue that mobile advertising hasn't played much of a role in of itself, though others might disagree. The main thing about Flash is that study after study shows how it renders slowly on mobile devices and how it eats up battery life. All these things add up to creating a negative user experience.

AppNexus: *Clearly Flash has its disadvantages as a technology, and we should talk about that more in a moment. But even so, one still has to account for its original popularity as a technology. Why have so many people stayed with Flash?*

Alex: In all honesty, there are quite a few. The toolset is really quite powerful. If you're trying to design anything that incorporates animation of any kind, Flash is very robust and reliable, given the right conditions.

Another plus is viewability. To its great credit, Flash was the first technology that allowed buyers to measure a video ad's viewability on a screen, and whether or not an actual person had ever seen it. Viewability's rightfully become a big topic in ad tech of late, and nowadays there are other technologies that support ad viewability for video, but you've got to give credit where credit's due.

Other factors are at play, too. You also have to take into

account the fact that designers, in general, are deeply familiar with Adobe's entire suite of products, which very much includes Flash. And there are a lot of incredibly talented designers out there who first cut their teeth in the industry by using Flash. It's tough saying goodbye to a system that's proven so successful, at least until quite recently.

Of course, there's already a new generation of developers beginning to emerge. They're schooled in standards like HTML5 in the same way that their "ancestors" are schooled in Flash. It's becoming clearer and clearer, as more and more companies announce that in a year or so they'll no longer be running Flash, that standards like HTML5 are the driving engines of today's creatives. And that trend is only going to grow.

AppNexus: *We've already covered a few of them. But what are some other minuses against Flash?*

Alex: One of the other, major strikes against Flash is that it's pretty easy to hack. While there's no question that Flash is a robust system, and that part of the reason it remains popular is directly due to that fact, all the same: It's a closed, proprietary system that's owned by Adobe. In other words, if someone is able to hack into a computer via Flash, it takes a team of Adobe software engineers to provide a patch or fix for it.

Also, Flash is something that's been around for a long time. As anyone knows that has worked on a long evolving piece of software, as code bases and logic grow bigger and more complex, it becomes easier for developers to overlook potential holes. Because of that – and also because of the sheer reach of Flash across browsers – it's a prime target for hackers.

And the security risks are real. There have been numerous instances where hackers have essentially taken control of people's computers via their Flash players.

Then, in contrast, you have something like HTML5, which is an open standard all modern browsers have adopted. Chromium and Webkit, popular rendering engines for HTML5, are each designed transparently for the world to see. So whenever a new security issue emerges to jeopardize HTML5 browsers, it



has more eyeballs on it to identify solutions. This also means oversights are less likely to crop up in the first place.

AppNexus: *It feels like a dangerous world for a Flash creative to live in, these days!*

Alex: That's definitely one way to put it!

AppNexus: *Given all we know about Flash, and how its "extinction" seems to be both likely and soon, what are specific actions advertisers can take to ensure their creatives will be able to serve on the internet? What are ways they can get around the end of Flash?*

Alex: That's an important question – and there are several answers to it. For all buyers who employ Flash, there are three things you should start doing right now to make sure you're ready to transition into a non-Flash world. Those steps include:

1. Be sure to consult with your ad-tech partner to understand how many of your existing creatives are Flash-based. Armed with that intel, you can build an action plan that takes into consideration upcoming policy changes from major browsers and publishers that might have a negative impact as far as where and how your target audiences browse the internet.
2. I'd also recommend that you partner with your creative agency (or agencies) to ensure they develop their future creatives using non Flash-based alternatives like HTML5. That way, you're set when it comes to long-term playability and measurement. And for existing creatives, I'd ask your agencies to explore third-party tools that can convert Flash creatives to HTML5.
3. You'll also want to check in and make sure that any third-party viewability and measurement solutions continue to work uninterrupted without Flash elements. It's true that a lot of tech vendors still use Flash for its ability to track and report ads that could actually be seen by an actual pair of eyes. That isn't an issue with AppNexus' clients, since our viewability solution automatically provides both Shockwave (Flash) and JavaScript tracking for display creatives (and is getting rolled out for video creatives in Q4). But for those working with outside viewability vendors, I'd make sure to consult them and double-check that they're able to provide those two formats instantly.

Now, if you're a video buyer, there are a few, extra steps you'll also want to take. The most important step would be to ensure your technology provider includes MP4 or WebM formats in whatever ad gets delivered onto a page. That's typically going to be VAST.

If a buyer uses VPAID, they should make sure they use VPAID 2.0 with a JavaScript option, which is compatible with HTML5 players and will render across major browsers.

Finally, I'd also note that most video ad mediation managers, even today, still run on Flash. To ensure compatibility with HTML5 and major browsers, advertisers should run through their ad managers and ask if they can provide them with HTML5 solutions.

All in all, like I said before, it can be a tough thing to have to transition out of one longstanding technology in favor of another. But in the end, it's really just worth it. You can quote me as saying that Steve Jobs said so.



DISCLAIMER

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