

What's Trending in Display for Publishers?

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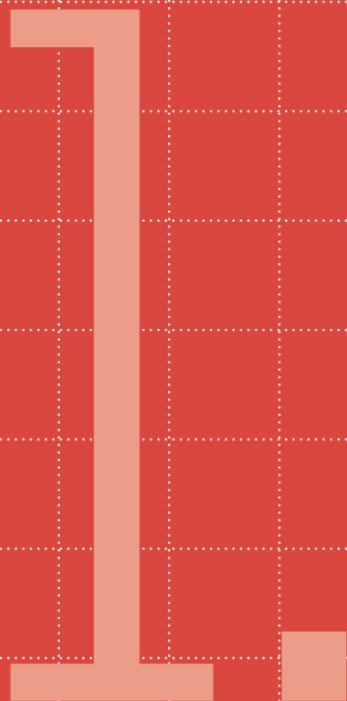
Publishers face the ever-changing complexities of selling display ads and reaching new audiences. As a business partner to publishers around the world, Google is no stranger to these challenges. We rely on **data-based insights** to guide our business decisions. During our routine deep-dives into the publisher display dynamics, we frequently notice trends that may be of interest to our clients as well, which is what prompted us to introduce this research publication.

This premiere issue focuses on **trends in the publisher display business**. It is not meant to be a comprehensive industry report or forecast; rather its purpose is to share trends that **publishers worldwide** may find useful in planning digital strategies, gleaning new insights, and supporting their hunches.

The metrics in this publication are derived from Google publisher products—DoubleClick for Publishers (DFP), the DoubleClick Ad Exchange, and Google AdSense network—to allow us to provide commentary on various display patterns, including geographic, vertical, and ad size trends over time. Based on rigorous methodology, the data sets contain **tens of billions of impressions** served by publishers globally, and are aggregated to preserve publisher confidentiality.

CHANNEL MIX

An ongoing challenge for publishers is to strike the right balance between **direct sales (reserved)** to advertisers and **indirect sales (unreserved)** through third-party channels such as networks and exchanges. How inventory is allocated between these two channels impacts overall ad revenue, since reserved inventory is generally sold at a higher price. In DFP, publishers assign different levels of inventory according to each channel. These levels are aggregated here to illustrate what we're calling the channel mix: the **ratio of impressions** between reserved and unreserved inventory.

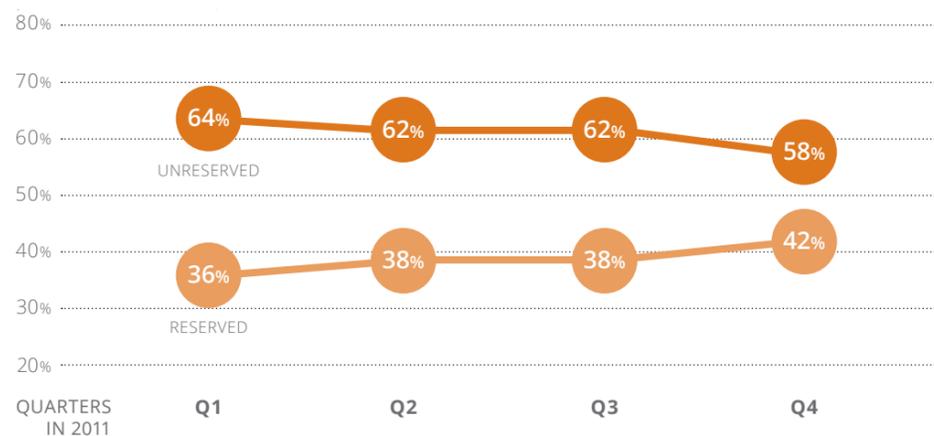


How do sell-through rates vary during the year?

Sell-through rates (the percentage of reserved ad inventory sold by the publisher's sales team) vary according to the time of year, with higher sell-through rates trending towards the end of the year. Although seasonal impact on sell-through rates is a generally observed phenomenon, we wanted to understand its magnitude and variation by region. Overall, publishers worldwide sold more unreserved than reserved impressions in 2011, and all regions exhibited similar compositions in channel mix. It's also worth noting that overall total impressions have grown between 2010 and 2011.

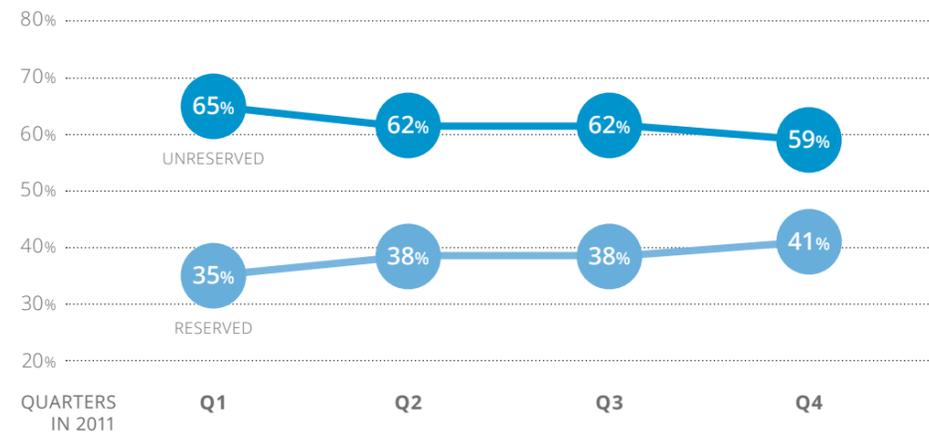
The rise in reserved impressions tends to be cyclical, with seasonal advertiser demand causing an increase in sell-through rate in the fourth quarter. Globally, the percentage of unreserved sales remained consistently higher than reserved throughout 2011, but the ratio between them steadily narrowed from a 28 percentage point spread in the first quarter to a 16 percentage point difference in the fourth. We observe that towards the end of the year, EMEA publishers experience a more pronounced shift in channel mix compared with APAC publishers displaying a slight divergence in channel mix in the fourth quarter.

FIGURE 1A
CHANNEL MIX IN DFP—ALL PUBLISHERS



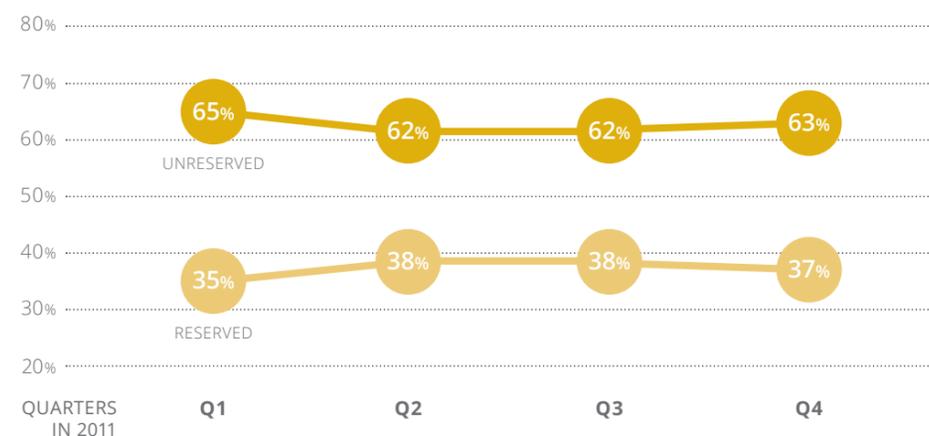
GLOBAL OBSERVATIONS
Although reserved and unreserved impressions rose incrementally each quarter, reserved impressions grew at a faster rate in the fourth quarter of the year.

FIGURE 1B
CHANNEL MIX IN DFP—AMERICAS PUBLISHERS



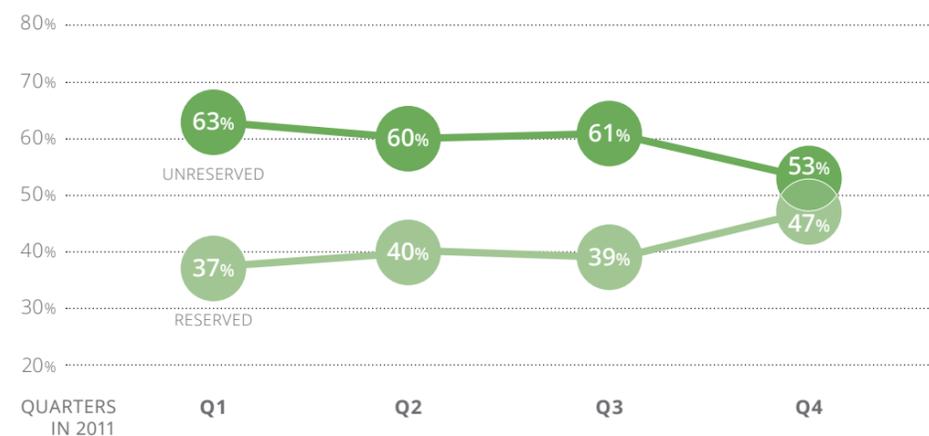
AMERICAS OBSERVATIONS
The Americas most closely resembled the overall global inventory mix, varying only by a single percentage point in the first and fourth quarters.

FIGURE 1C
CHANNEL MIX IN DFP—APAC PUBLISHERS



APAC OBSERVATIONS
The ratio between unreserved and reserved inventory held relatively steady throughout 2011, especially compared to other global regions.

FIGURE 1D
CHANNEL MIX IN DFP—EMEA PUBLISHERS



EMEA OBSERVATIONS
The sell-through rate for reserved impressions rose significantly in the fourth quarter, closing the year with reserved and unreserved sold impressions closer to a 1:1 ratio.

PUBLISHER VERTICAL AND GEOGRAPHIC COMPARISONS



Using the **aggregated impressions** running through DoubleClick Ad Exchange and Google AdSense, this section compares how unreserved publisher inventory is spread across **vertical** subject content and **geographic** areas worldwide.

Which verticals show growth in ad impressions?

In 2011, 15 out of the 25 publisher verticals experienced **double-digit growth** in monetized impressions across AdSense and the Ad Exchange. **Arts & Entertainment ranked No.1** in impressions, while posting a healthy 11% year-on-year increase. We also observed that both Shopping and Sports sites showed very strong growth, at 37% and 25% respectively. Online Communities and Business & Industrial sites experienced shifts in inventory mix, and contracted during the year.

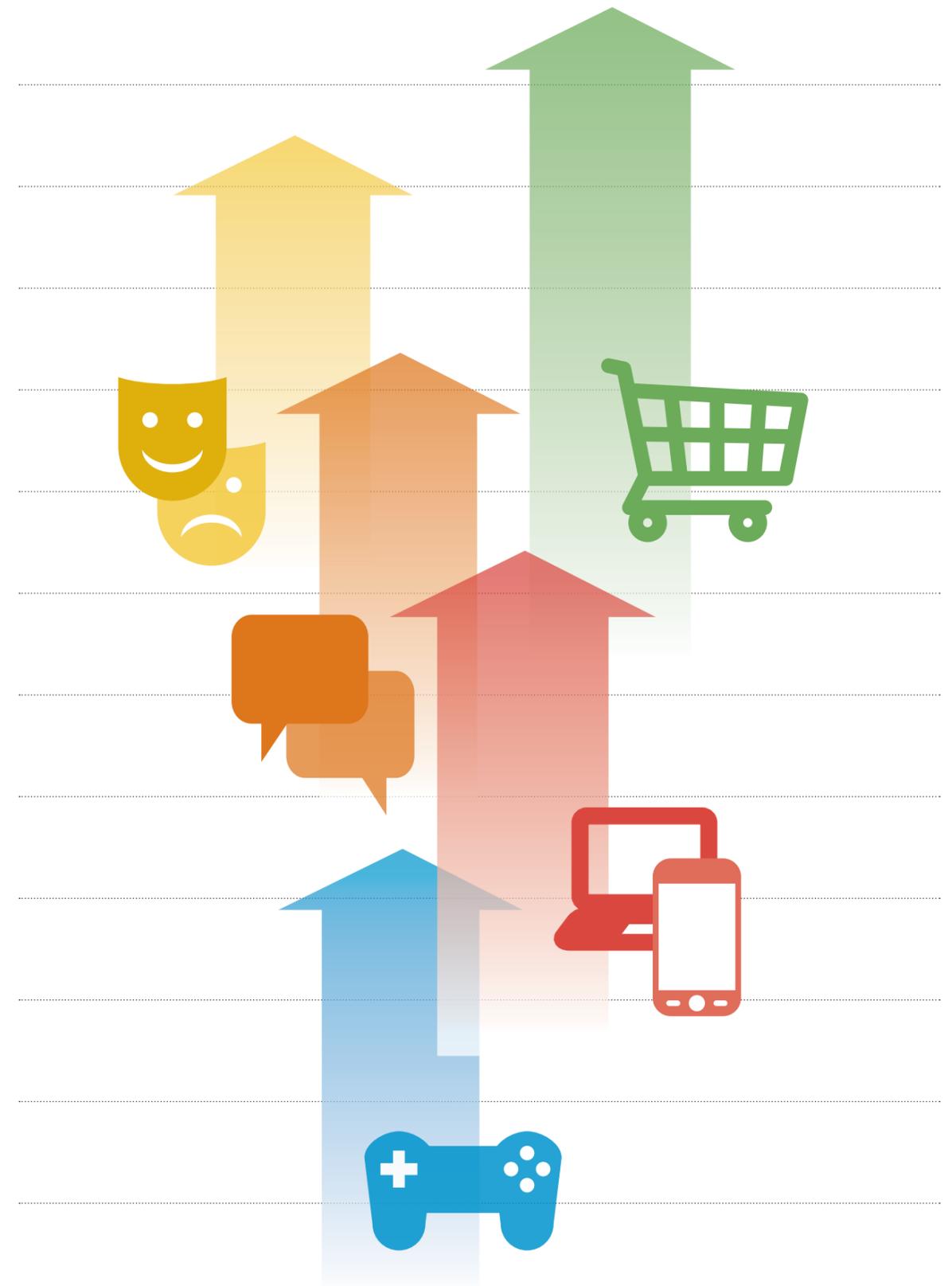
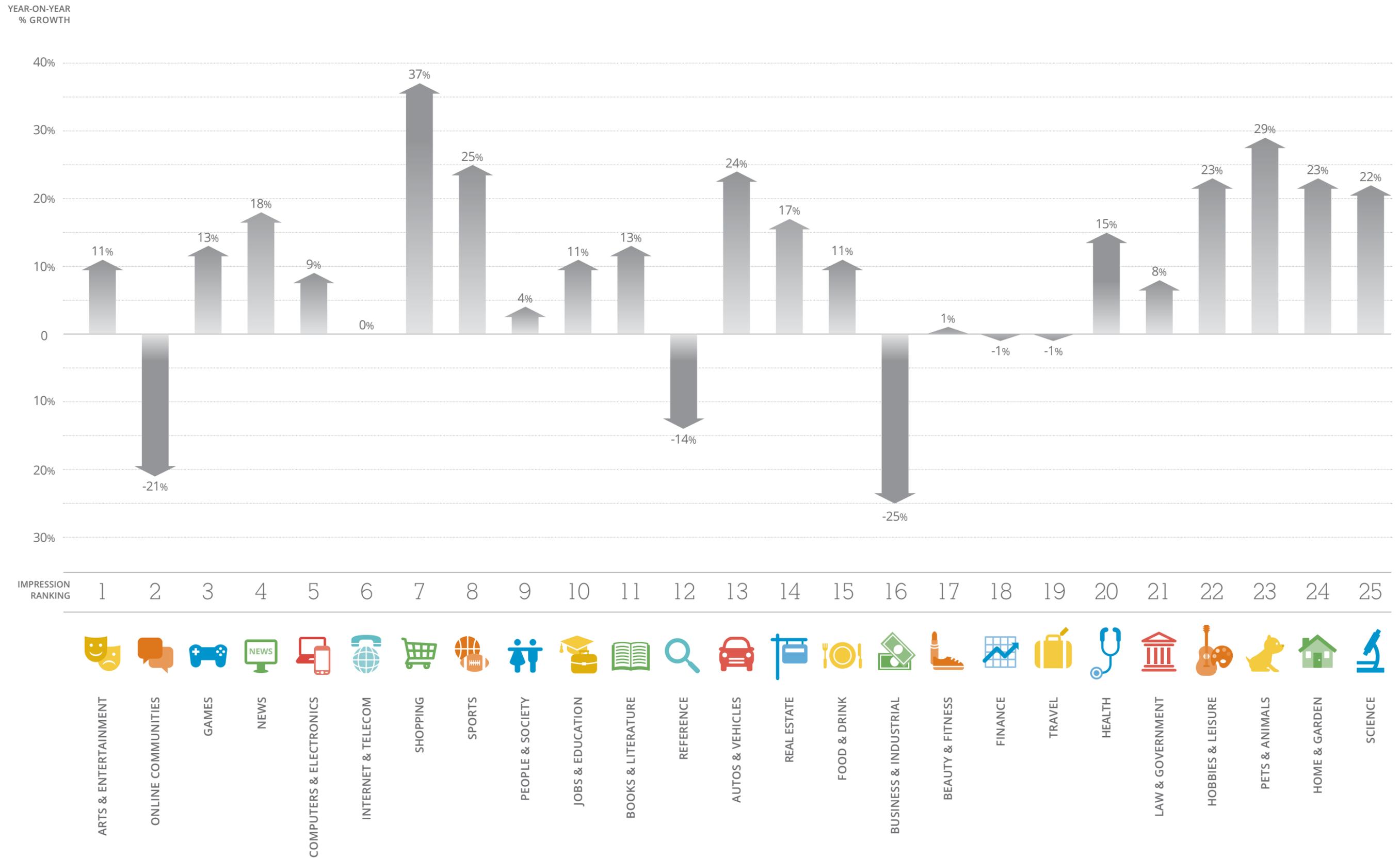


FIGURE 2A
AD IMPRESSION YEAR-ON-YEAR GROWTH RATES BY VERTICAL ON THE AD EXCHANGE AND GOOGLE ADSENSE

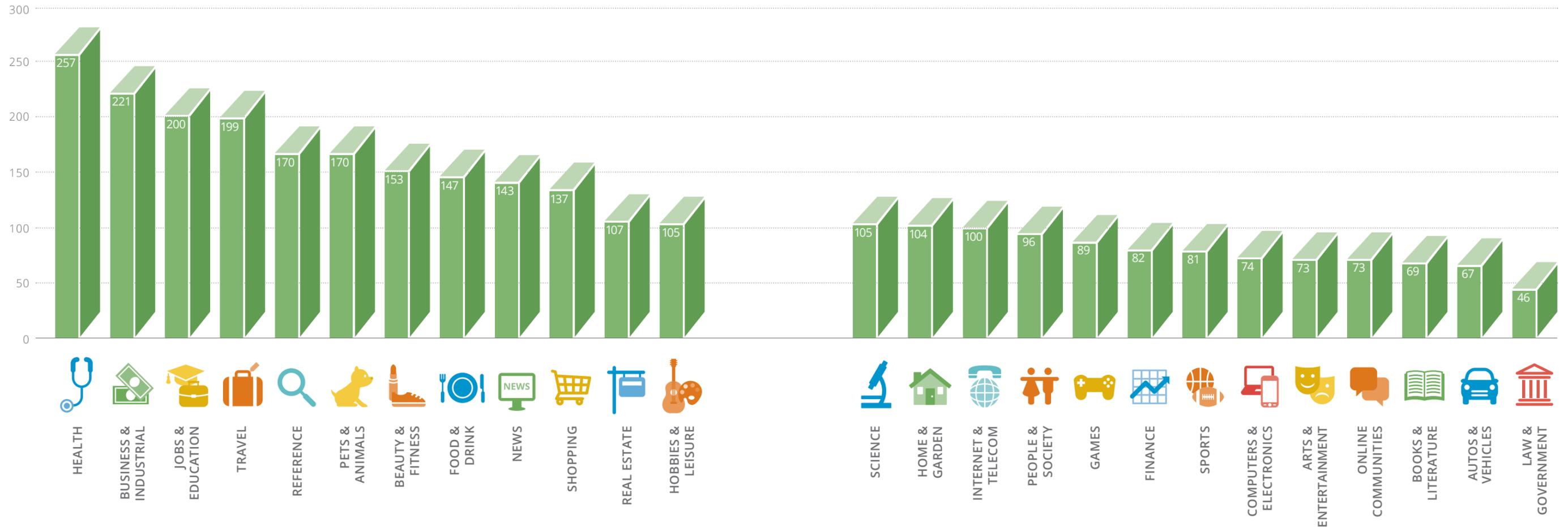


How do verticals rank by CPM?

For this report, CPM is defined as the amount a publisher earns for delivering a thousand impressions through a single ad unit. This is different from the page-level or site-level CPM. For various reasons, including advertiser

demand, some verticals command higher CPMs than others. Here, verticals are indexed from highest to lowest CPM. Indexes are compiled from the DoubleClick Ad Exchange because its composition of ad formats more accurately reflects the mix generally bought by advertisers.

FIGURE 2B
INDEXED CPM COMPARISONS BY VERTICAL FOR THE AD EXCHANGE



REAL-TIME BIDDING IMPACT

For years, publishers have monetized their unreserved impressions via third-party ad networks. Increasingly, they are using ad exchanges and other yield management tools to maximize their revenue from these partners in ways that complement their direct sales strategies. In 2011 publisher earnings continued to grow via these channels, and we observed the highest growth occurring in exchange-based platforms.

Spend on the Ad Exchange via real-time bidding (RTB) grew from **58%** at the end of 2010 to **72%** by the end of 2011. In 2012, we anticipate this growth to continue as buyers increase their spends

through this programmatic channel. Although much has been debated about whether aggregated spending on ad exchanges with RTB might cause a race to the bottom in publisher revenue, we've observed this not to be the case. In previous studies, we've seen U.S. publishers gain an average of **188% lift in revenue** when the Ad Exchange wins the auction compared with fixed upfront sales of non-guaranteed display advertising. In a separate study, we've observed EMEA publishers gain **73% in revenue** where the Ad Exchange won against a complete channel mix of direct sales teams and other networks.

Which countries generate the most impressions?

One of the most fascinating aspects of online advertising is seeing content originate from all over the world. North America and Western Europe have traditionally produced the largest online publishing businesses, and remain the powerhouses of online content. In 2011, Asia-Pacific publishers, especially from East Asia, are delivering an even larger share of global impressions. With rising internet accessibility and usage growing worldwide, some of the fastest growth rates are being experienced by publishers outside these traditional hot-spots of digital advertising, presenting **attractive regional diversification opportunities** for publishers.

This global map calls out the 2011 impression contributions of the top 25 publisher countries on DoubleClick Ad Exchange and Google AdSense. We've been incredibly impressed by the size and growth from publishers based in **China and Japan, who comprise 11% and 6%** of total impressions, respectively. We also observe that publishers located in EMEA are experiencing significant impression growth.

Publishers included in this report come from 235 countries and territories—from established, highly populated nations like Japan right through to the island country of Palau, one of the world's newest sovereign states. Below, we've highlighted some emerging markets that are posting extraordinary ad impression growth in 2011, and are ones to watch.

Egypt 45% growth

Indonesia 85% growth

Venezuela 79% growth

Kenya 157% growth

More and more ad networks—of which Google AdSense is one—allow anyone with an internet connection and original content to earn revenue as an online publisher, facilitating creation of local content and new business models. Some are very small countries in terms of population, but post ad impression growth rates that are (almost!) out of this world.

Laos 382%

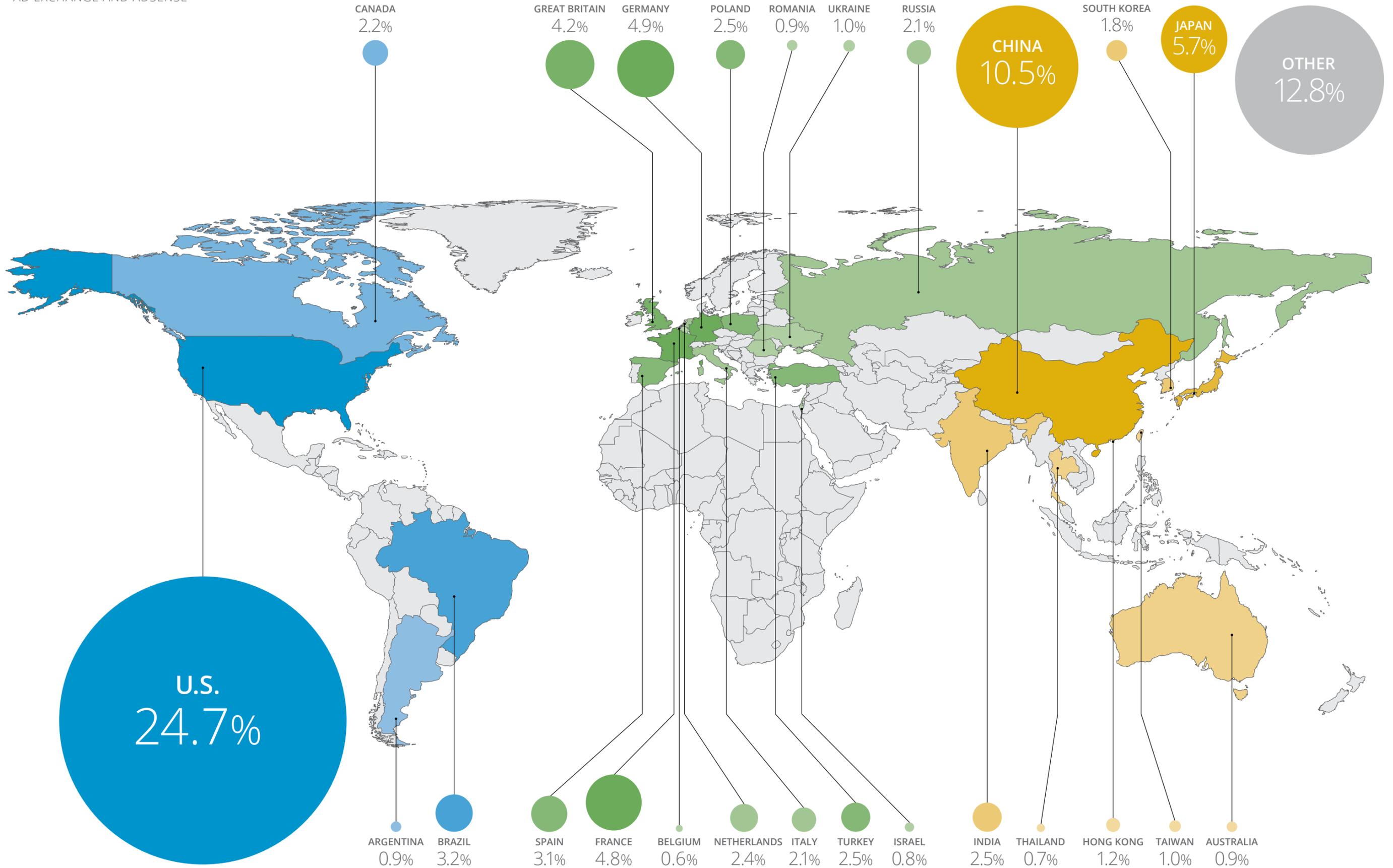
Equatorial Guinea 4635% growth

Montserrat 990% growth

Palau 1106% growth



FIGURE 2C
 IMPRESSIONS BY COUNTRY ON THE
 AD EXCHANGE AND ADSENSE

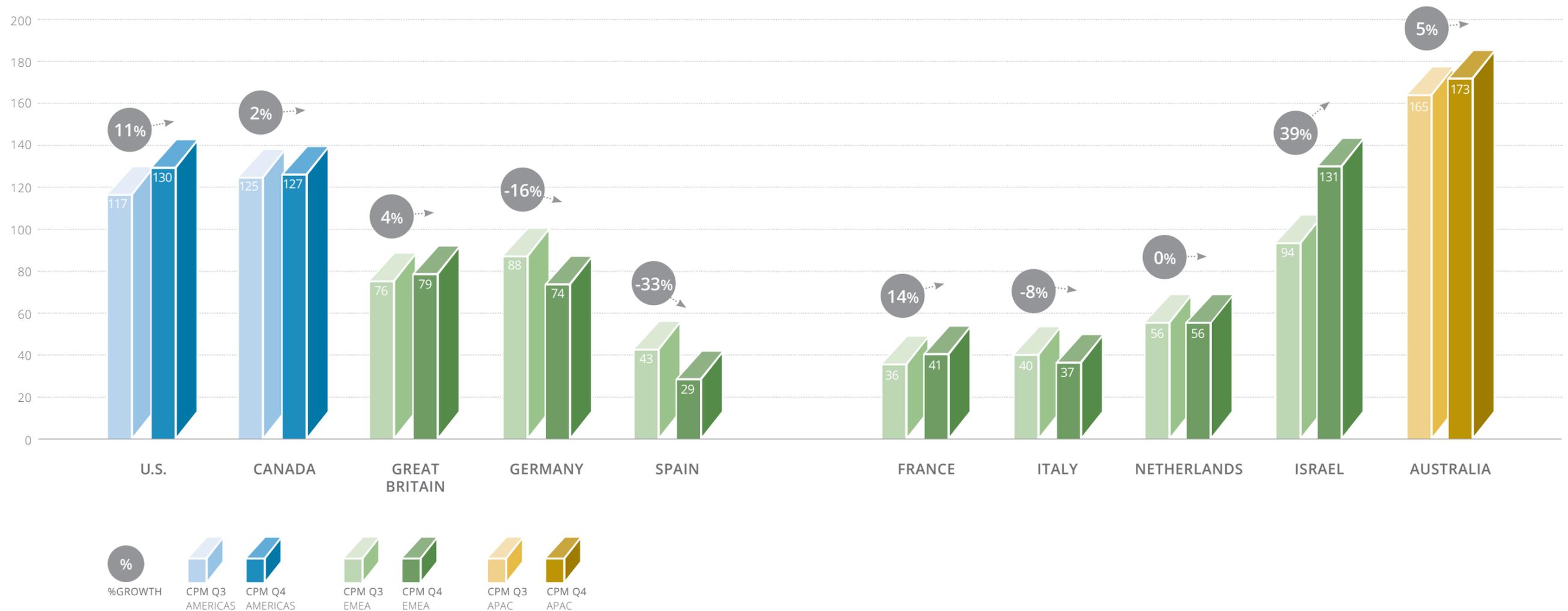


Has CPM changed in top publisher countries?

A snapshot of CPM changes during Q3 and Q4 of 2011 for the top 10 largest countries by impressions on the Ad Exchange shows that CPMs varied widely. We observe that in many countries—including the U.S., Great Britain, and France—CPM grew over Q3-Q4. In some EMEA markets, notably Spain and Italy, CPMs fell significantly in the fourth quarter, but this seems to correspond with

the overall slowdown in advertising spend in late 2011. Germany also experienced a change in inventory that produced an atypical decline that was restricted to this quarter. In conjunction, we observed that reserved inventory sales nearly matched unreserved sales in EMEA over Q3 and Q4 (see Section 1), indicating a higher sell-through rate of premium-priced inventory.

FIGURE 2D
CHANGES IN CPM BY PUBLISHER COUNTRY ON THE AD EXCHANGE



AD SIZES



Publishers can maximize their revenue by choosing to offer ad sizes that are in higher demand by advertisers. They aim to strike a balance between **customized ad packages** with exclusive sizes that can be tailored to the needs of an individual advertiser, and **standardized sizes** that will accommodate creatives from the majority of advertisers and networks.

Which ad sizes are growing in popularity?

Publishers make decisions on ad sizes based on the audience they wish to target, the content environment, and the ad size that advertisers prefer to use to reach that audience. To determine the most popular ad sizes and identify any growth trends, we took a look at ad sizes trafficked through the DFP ad serving platform. **The top three ad formats**—the medium rectangle, leaderboard and skyscraper—**comprise nearly 80% of all served ad impressions**. However, the remainder of impressions span a wide variety of uncommon sizes. There were over one thousand different ad sizes trafficked—yet only 300 unique sizes posted more than 1 million impressions during 2011.

The growth in non-standard ad sizes is notable, and it has mostly been at the expense of traditional ad sizes like the 468 x 60 banner and 120 x 60 skyscraper. Of interest is the growth of **larger “premium” formats**, which offer advertisers a **richer visual canvas** for their creatives.

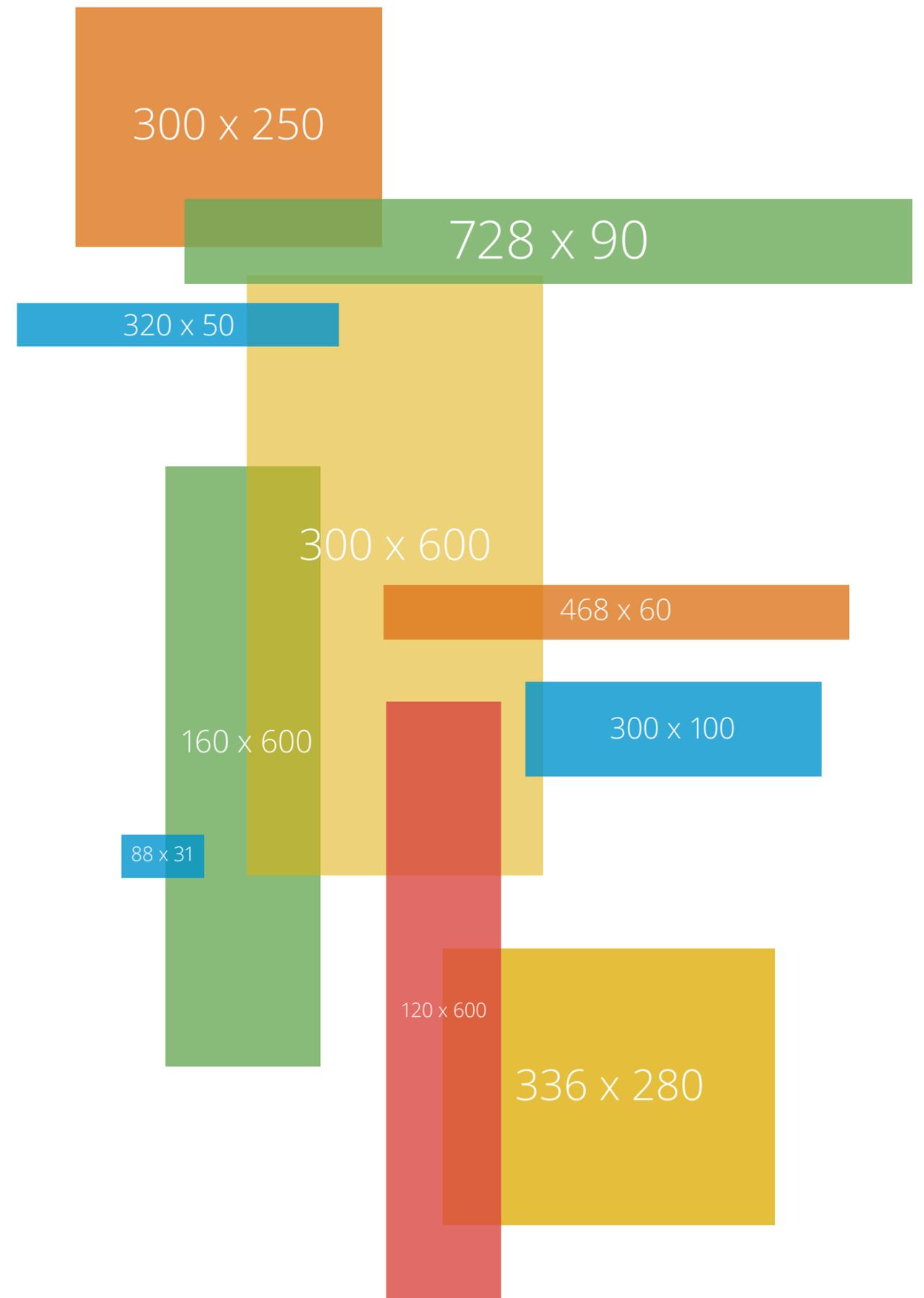
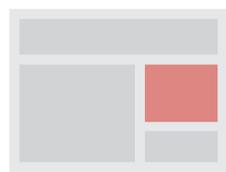
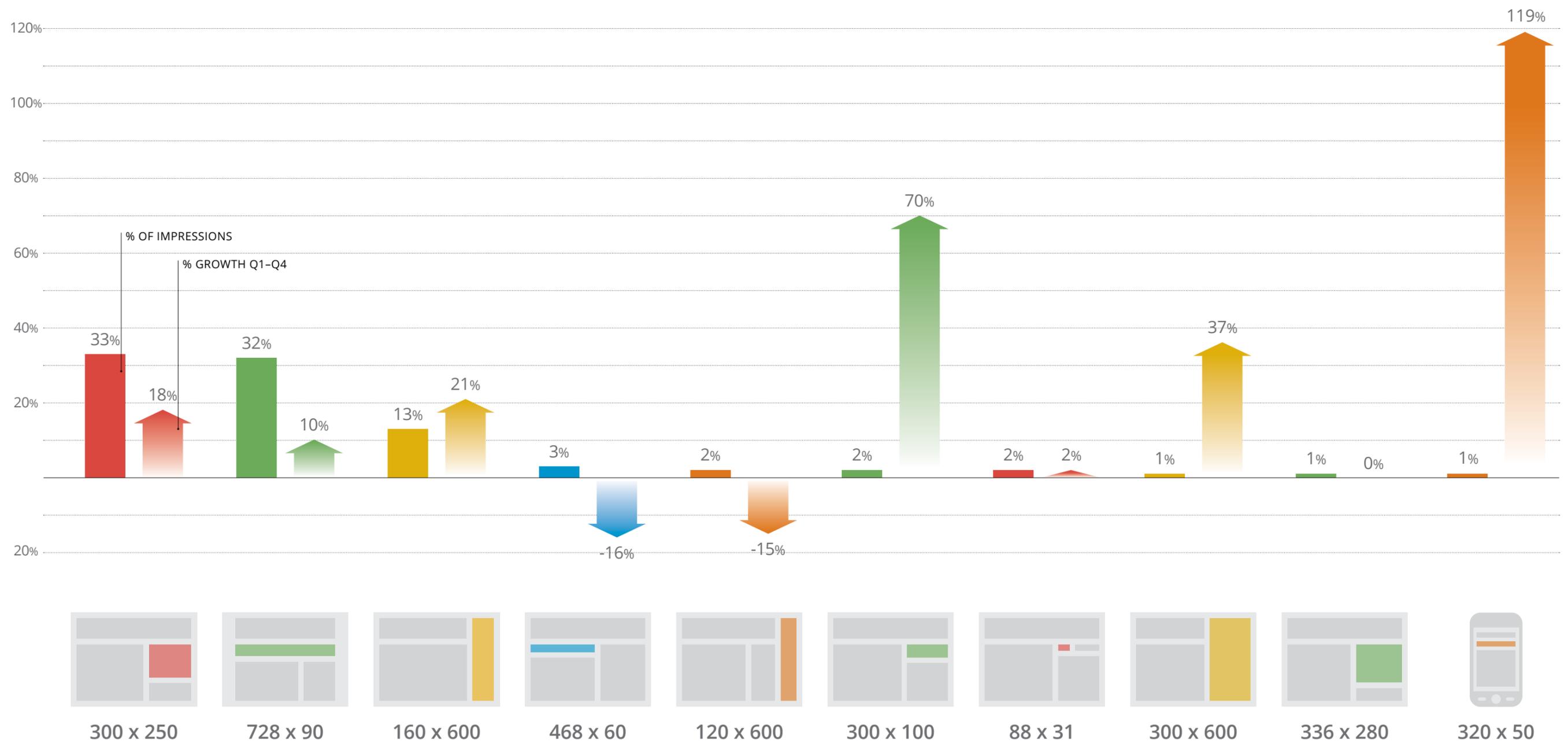
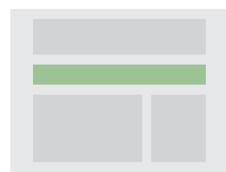


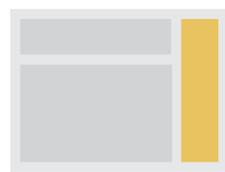
FIGURE 3A
GROWTH OF TOP 10 AD SIZES BY IMPRESSIONS SERVED THROUGH DFP AND PLATFORMS



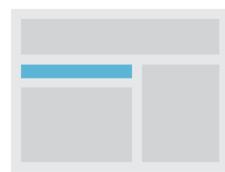
300 x 250



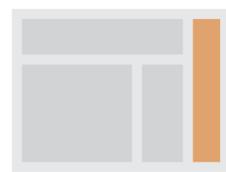
728 x 90



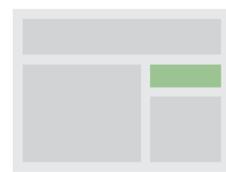
160 x 600



468 x 60



120 x 600



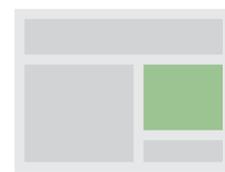
300 x 100



88 x 31



300 x 600



336 x 280



320 x 50

TOP THREE AD UNITS

The medium rectangle, leaderboard, and skyscraper comprise the vast majority of ads served. All three posted robust growth rates.

SMALLER-SIZED AD UNITS

In general, impressions shrank in this category. The 468 x 60 banner and 264 x 60 half banner, as well as buttons 125 x 125 and 120 x 120, have become less popular. The only small unit that is holding its ground is the 88 x 31 micro bar, which is mostly used to advertise financial products.

PREMIUM AD SIZES

In 2011, 300 x 600 and its companion sizes 300 x 50 and 300 x 100 grew by double digits, and were particularly favored by News, Sports, and Entertainment publishers. The increase in the 300 x 600 unit is indicative of a trend where publishers are offering more visually impactful ad sizes that are favored by brand advertisers, over the functionality to direct response advertisers.

MOBILE AD SIZES

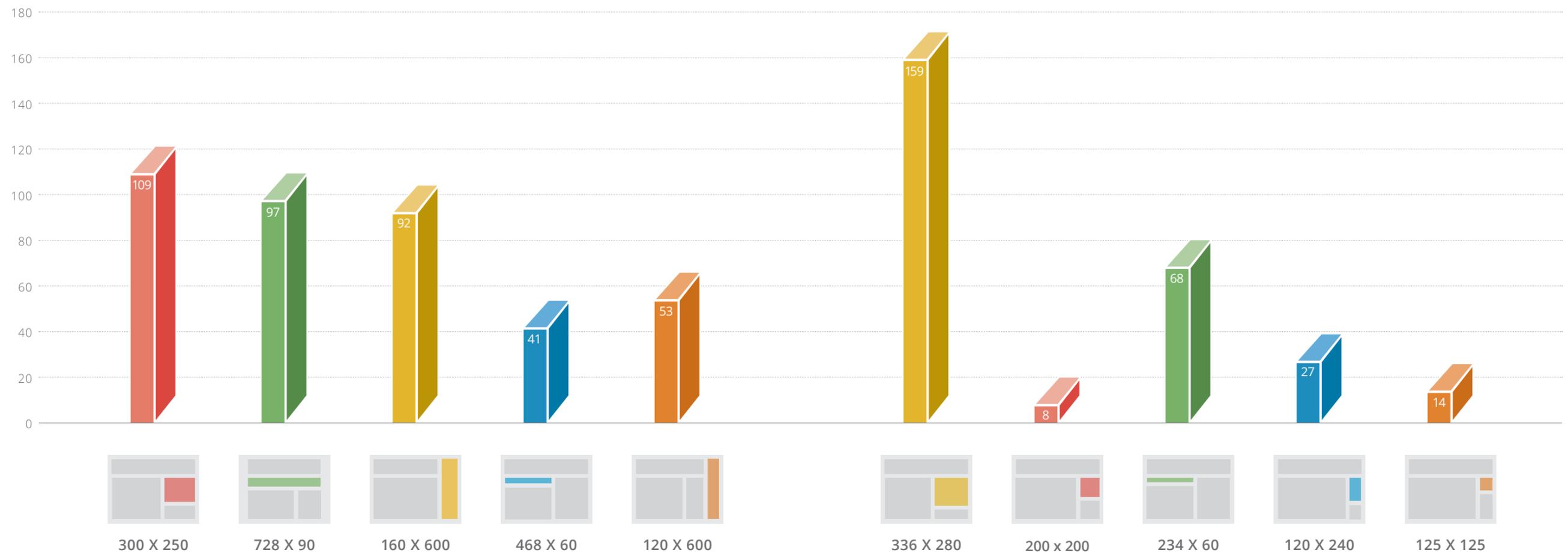
In 2011, mobile optimized sizes, including 320 x 50 and 300 x 50, experienced record growth among publishers. The 300 x 50 is the 21st most popular ad size, but grew 186% in 2011.

How do ad sizes compare by CPM?

The CPM index of the 10 most popular ad sizes on the Ad Exchange shows that the 300 x 250 medium rectangle posted a 12% increase over the leaderboard and an 18% increase over the skyscraper formats in 2011. The top three ad sizes in the Ad Exchange comprise approximately 95% of all impressions served, and they are identical to the top three ad sizes seen on DFP.

Ad networks show fewer ad size variations since most sellers and buyers have standardized their offered inventory to reflect the most popular ad sizes. One explanation for the relatively high CPM of the 336 x 280 large rectangle may be the result of lower publisher supply for this format. However, advertiser demand is also correspondingly lower.

FIGURE 3B
AD SIZE CPM COMPARISONS ON THE AD EXCHANGE



MOBILE WEB AD IMPRESSIONS

4.

With consumer mobile usage growing rapidly, publishers are rethinking their content monetization strategy. Advertisers look to **reach audiences across screens and formats**, and publishers are responding to this demand with ever-more sophisticated channels for **monetizing mobile content**. Mobile has become essential to the overall ad inventory mix, but some publisher verticals on the mobile web are growing faster than others.

Is mobile growing across the board?

There has never been a better time for publishers to engage mobile users, whether through a mobile-optimized site or a full-featured app. **Growth in mobile usage** has exploded with impressions on the Ad Exchange and AdSense platforms **increasing by 250%** over Q3 and Q4 2011. This growth is not just happening in highly mobilized cities like Seoul and San Francisco, but also in emerging markets where users are first interacting with the internet not on a desktop but on a mobile phone. Both mobile and desktop ad impressions exhibit strong growth, but due to increased mobile web usage, **mobile ads are growing at a faster rate** and have increased as a proportion of overall ad impressions.

We took a look at mobile web impressions over the last quarter of 2011 to get a sense of average vertical impression growth. Globally, all publisher verticals, with the exception of Travel, experienced double-digit growth in mobile web ad impressions in the fourth quarter of 2011. As might be expected from seasonal consumer mobile usage, the strongest vertical market in mobile usage was Shopping, with 69% growth, followed by Food & Drink at 61%.

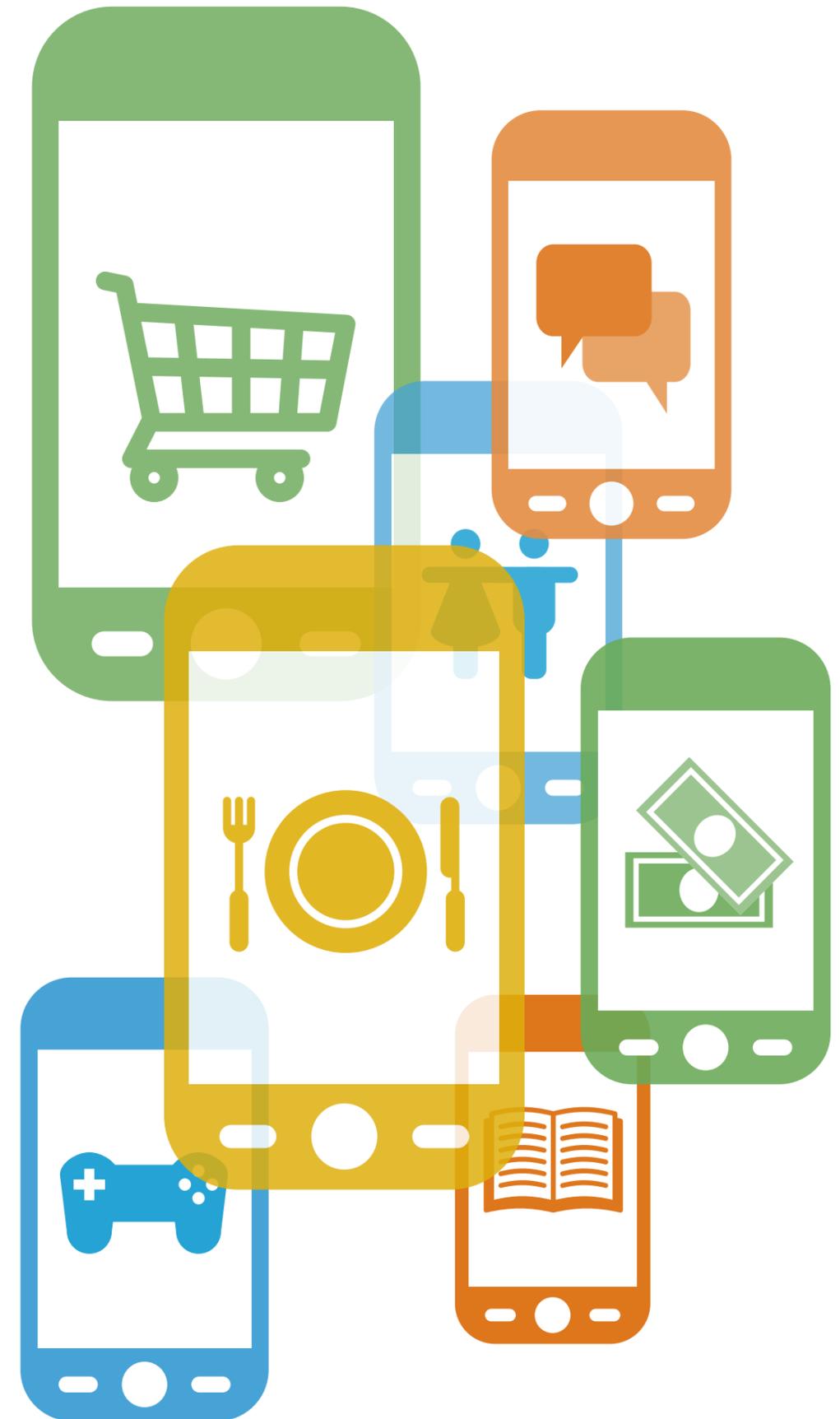
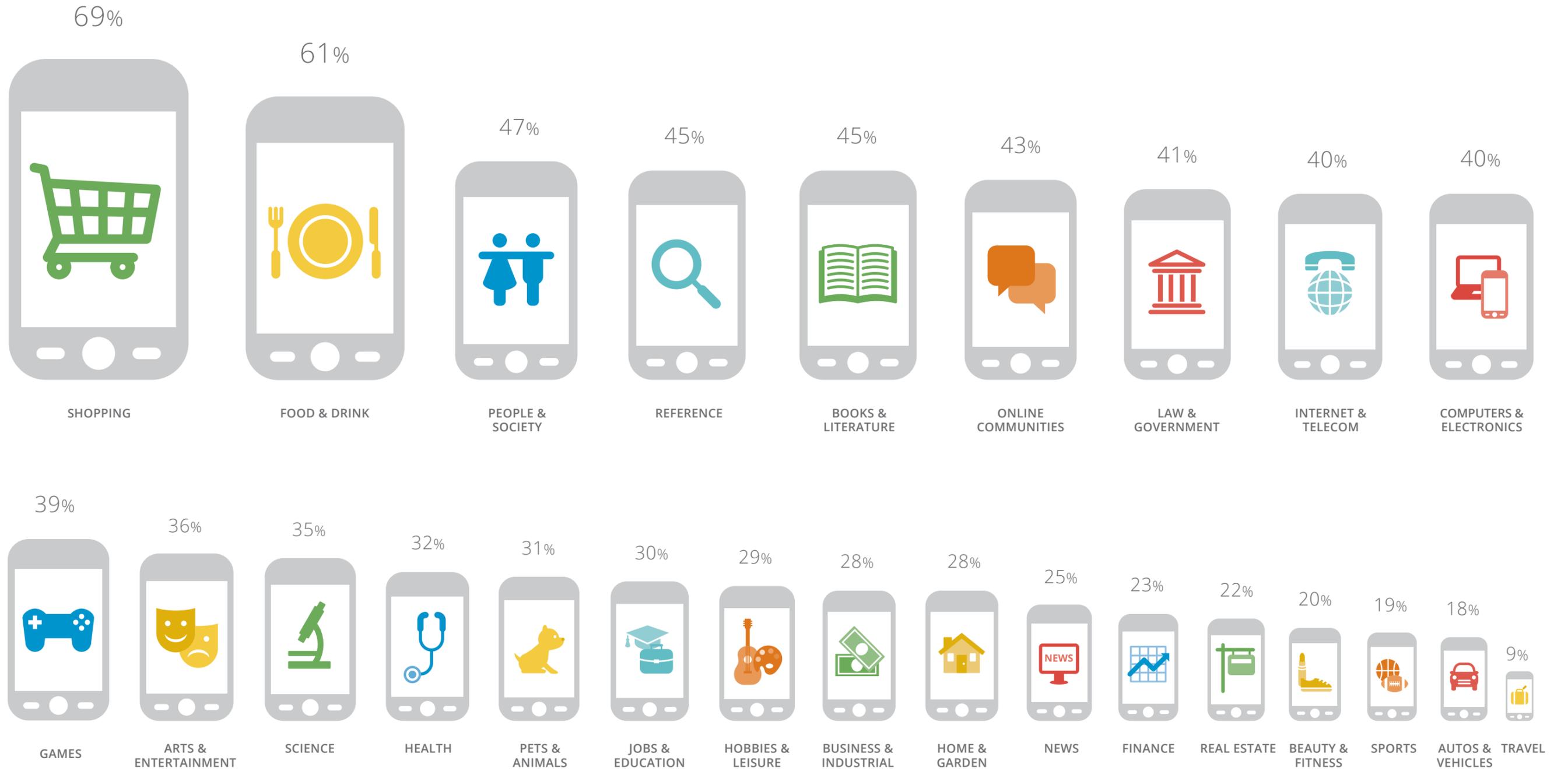


FIGURE 4A
 GLOBAL MOBILE WEB AD IMPRESSION GROWTH BY VERTICAL ON THE AD EXCHANGE AND ADSENSE



VIDEO ADS



Videos tell stories—from publishers as well as advertisers. Video is becoming a lucrative part of a publisher’s ad inventory, partly because it offers **creative opportunities** that attract brand advertisers, and partly due to tremendous viewer demand. We’re excited about the growth in video advertising, and we have more comprehensive metrics in store—so stay tuned for more to come.

How do video ads impact viewers?

Video content monetization is now one of the fastest-growing segments in advertising. Publisher video impressions grew nearly 70% in the second half of 2011 across the DFP Video platform. As measured across in-stream video impressions in DFP, the average midpoint and completion rates of a video ad come in at 79% and 72%, respectively. About 51% of video ads run between 15 and 30 seconds in length, with 36% running more than 30 seconds, and only 13% running less than 15 seconds. We're also seeing a 175% increase in impressions on the 640 x 360 ad unit that fits wide-screen players. Conversely, we've observed a decrease in standard aspect-ratio video player impressions, indicating that they're phasing out.

FIGURE 5A
VIDEO AD LENGTH

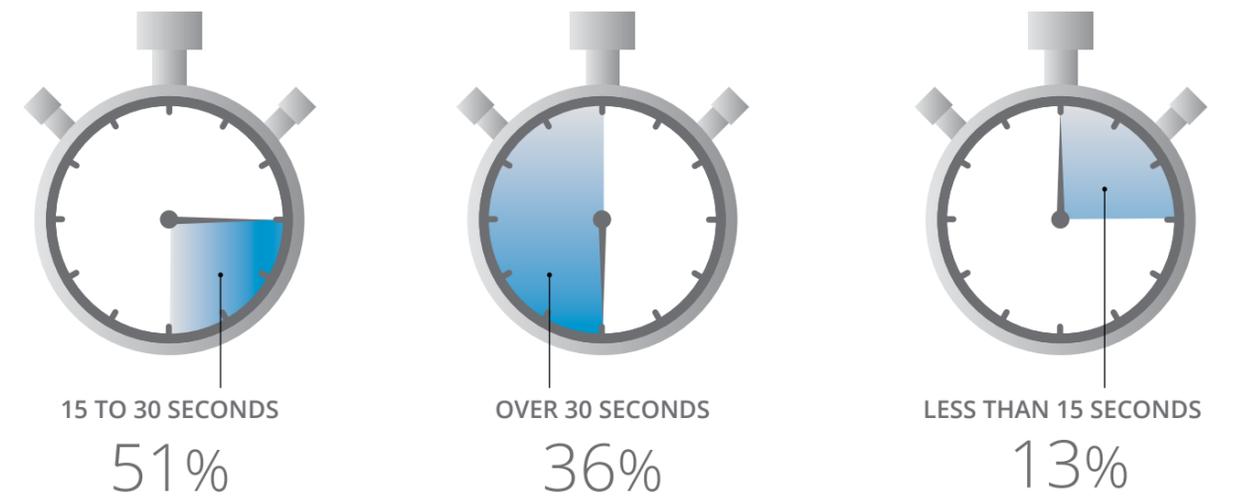
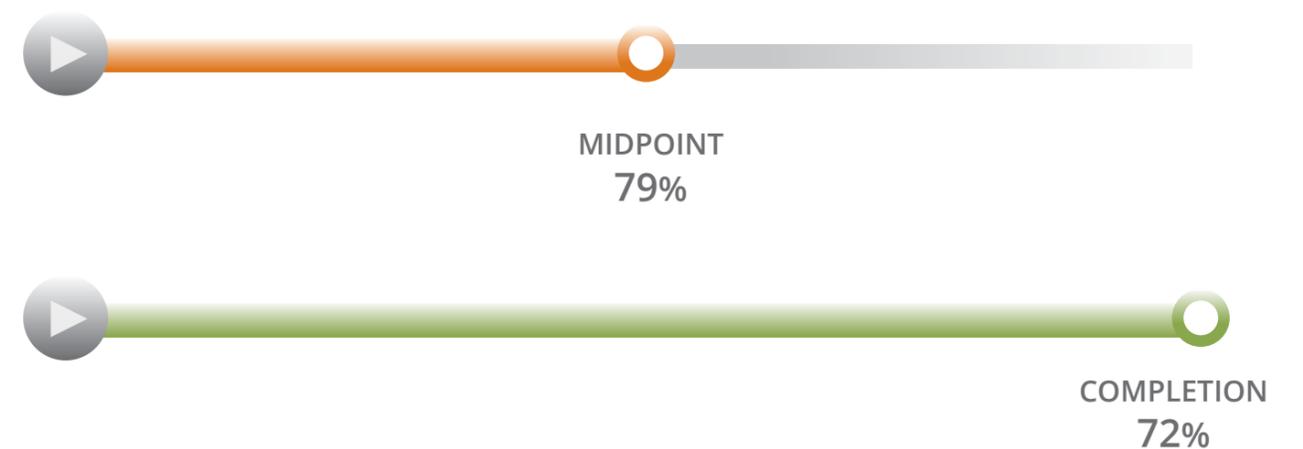


FIGURE 5B
IN-STREAM VIDEO AD COMPLETION RATES



APPENDIX

IMPORTANT NOTES ABOUT THE DATA IN THIS REPORT

- The data sets used to obtain the metrics presented in this report are sourced from DoubleClick for Publishers (DFP) ad serving platform, the DoubleClick Ad Exchange, and Google AdSense.
- The data sets contain tens of billions of impressions served by publishers globally for the year 2011.
- Although revenue and absolute CPM benchmarks would be useful to publishers, to preserve client confidentiality, that information is unavailable.
- A publisher's vertical is determined by the site's primary content subject.
- A publisher's geography is determined by their billing country.



GOOGLE'S PUBLISHER DISPLAY PRODUCTS



DoubleClick for Publishers (DFP) is a comprehensive ad serving solution that helps publishers streamline their ad management to increase efficiency and minimize costs. Featuring efficient trafficking workflows, robust inventory management and forecasting, revenue optimization, and granular reporting, DFP equips publishers with a complete tool kit for ad delivery and revenue optimization across all digital ad inventory. DFP can be seamlessly customized with platform modules to meet a publisher's current and future advertising needs. For more information, visit google.com/dfp

Google AdSense

Google AdSense is a free program that helps online publishers earn revenue by displaying relevant text and display ads on a wide variety of online content, including websites, site search results, mobile sites, video content and games. The Google AdSense program includes more than 2 million publishers globally and supports 33 different languages. For more information, visit google.com/adsense



DoubleClick Ad Exchange enables publishers to make the most of every display impression, across every channel. It is the only ad exchange that offers real-time access to every major demand source, including the Google Display Network. In addition, the Ad Exchange connects seamlessly with the DFP ad serving platform, making it easy for publishers to achieve the maximum value from every impression. For more information, visit google.com/doubleclick

Admeld

Admeld, acquired by Google in December 2011, is the most recent addition to DoubleClick's publisher offerings. Admeld helps the world's top online publishers sell their ad inventory smarter, capture new revenue streams, and simplify their operations. Admeld's unique approach is marked by high-touch services and its track record of innovation in Private Exchanges, Traditional Yield Management, and Mobile Yield Management. For more information, visit admeld.com

