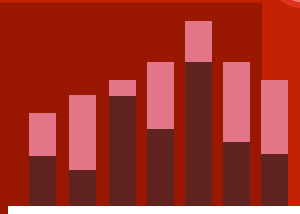


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IAB internet advertising revenue report

2018 full year results

iab.



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Agenda

Survey methodology

Full year results and quarterly trends

Mobile trends

Advertising formats

Social media

Audio

Pricing models

Advertising market share by media

About PwC

Survey Methodology

Survey Scope

The IAB Internet Advertising Revenue Report is part of an ongoing IAB mission to provide an accurate barometer of Internet advertising growth.

To achieve differentiation from existing estimates and accomplish industry-wide acceptance, key aspects of the survey include:

- Obtaining historical data directly from companies generating internet (desktop and mobile) advertising revenues;
- Making the survey as inclusive as possible, encompassing all forms of internet advertising, including websites, consumer online services, ad networks and exchanges, mobile devices; and
- Ensuring and maintaining a confidential process, only releasing aggregate data.

Methodology

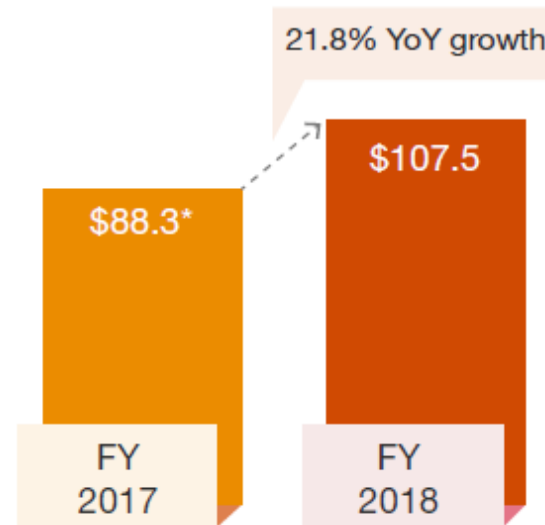
Throughout the reporting process, PwC:

- Compiles a database of industry participants selling internet advertising revenues.
- Conducts a quantitative mailing survey with leading industry players, including web publishers, ad networks, commercial online service providers, mobile providers, and other online media companies.
- Requests and compiles several specific data items, including monthly gross commissionable advertising revenue by industry category and transaction.
- Acquires supplemental data through the use of publicly disclosed information.
- Identifies non-participating companies and applies a conservative revenue estimate based on available public sources.
- Analyzes the findings, identifies and reports key trends.

Digital revenues totaled \$107.5 billion in FY 2018

Revenues for FY 2018 were approximately \$19.2 billion higher than in FY 2017

FY 2017 vs. FY 2018 revenue
(\$ billions)



* Restated due to inclusion of podcast revenue

(\$ millions)	Q1 2017	Q2 2017	Q3 2017	Q4 2017
As originally reported	\$19,352	\$20,786	\$21,764	\$26,106
As revised	\$19,404	\$20,847	\$21,832	\$26,183

Source: IAB/PwC Internet Ad Revenue Report, FY 2018

2018 fourth quarter revenues totaled \$31.4 billion

Q4 2017 vs. Q4 2018 revenue
(\$ billions)



Revenue in Q4 2018 was \$5.2 billion higher than in Q4 2017

Source: IAB/PwC Internet Ad Revenue Report, FY 2018

Strong growth between Q3 2017 and Q3 2018

Q3 2017 vs. Q3 2018 revenue
(\$ billions)

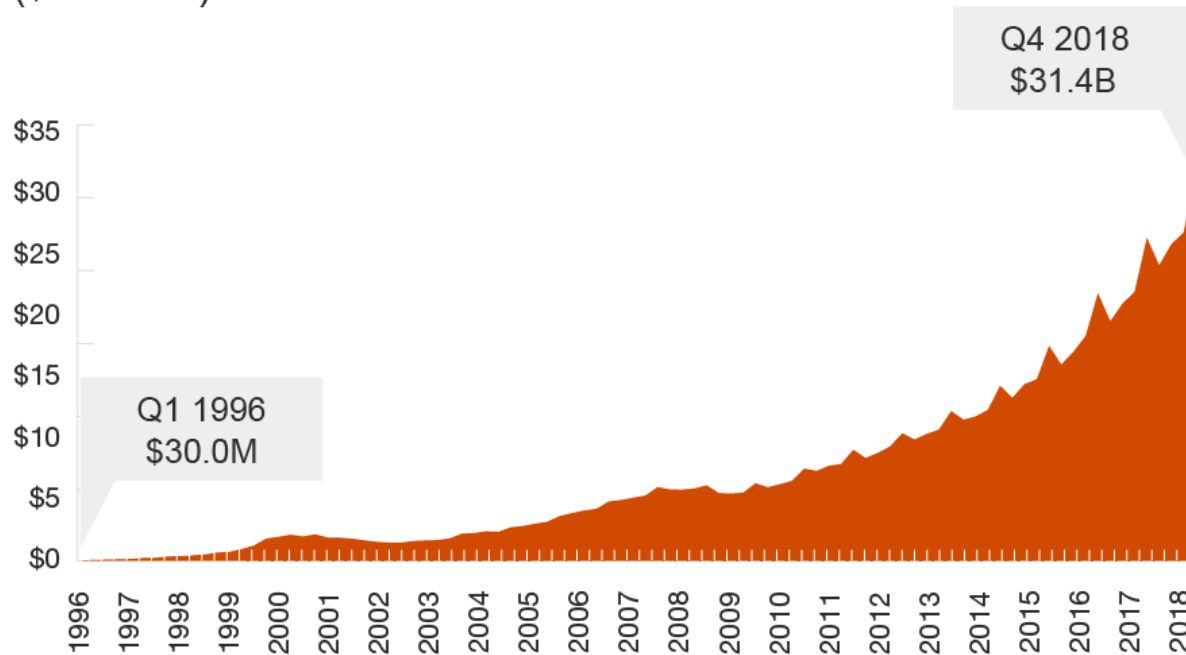


Revenue in Q3 2018 was \$4.8 billion higher than in Q3 2017

Source: IAB/PwC Internet Ad Revenue Report, FY 2018

Quarterly growth continued upward trend reaching \$31.4 billion in Q4 2018

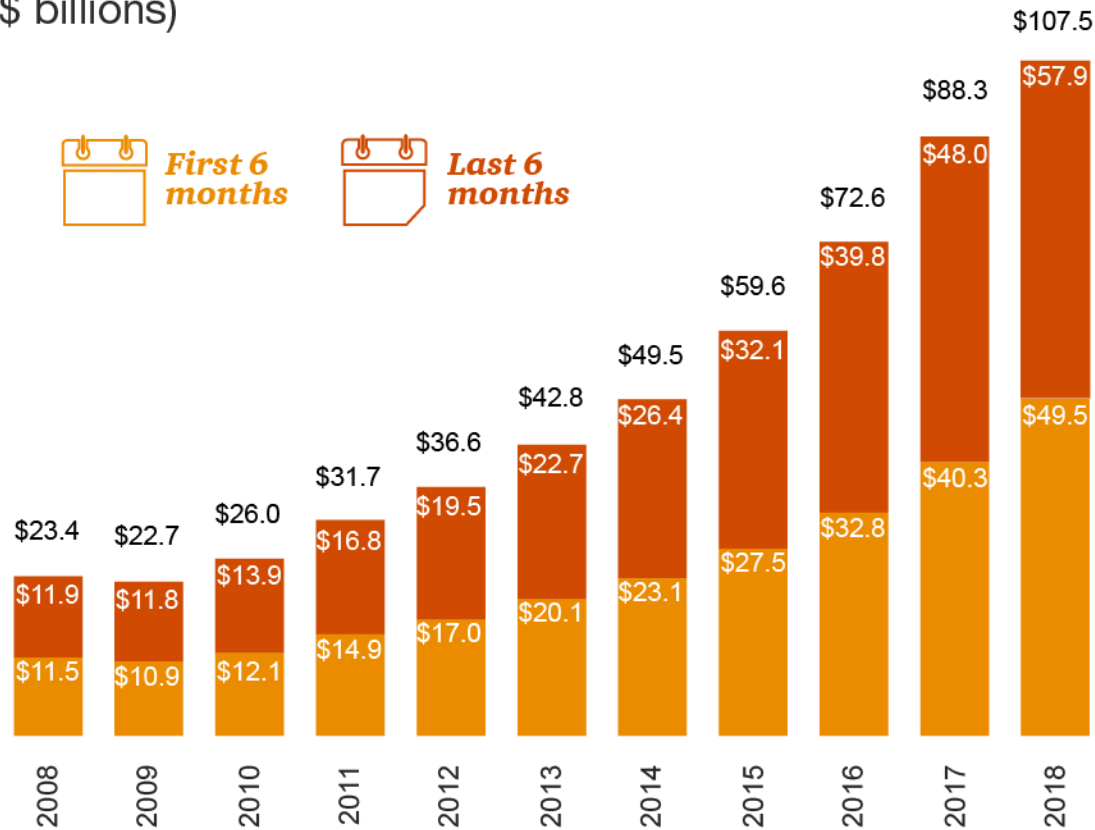
Quarterly revenue growth trends 1996–2018
(\$ billions)



Source: IAB/PwC Internet Ad Revenue Report, FY 2018

Second half revenues help FY 18 revenues exceed \$100 billion

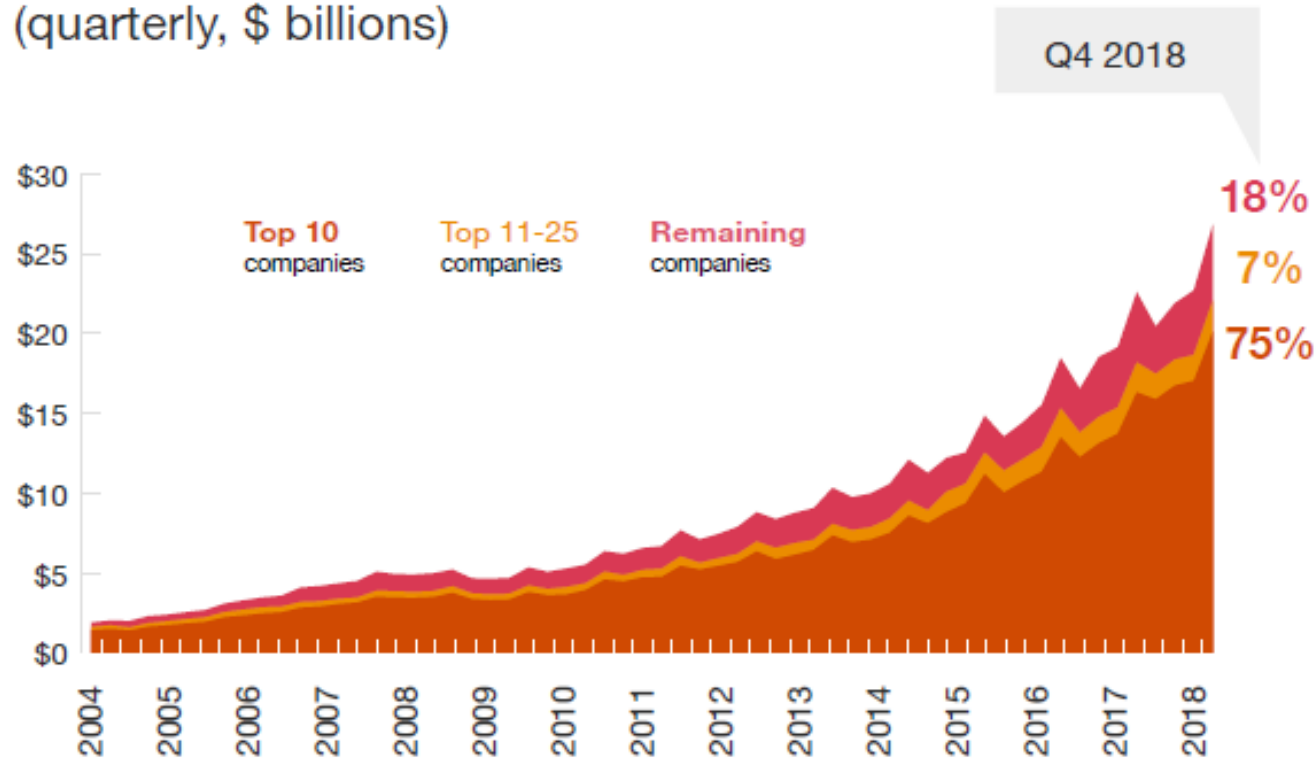
Historical revenue mix, first half vs. second half
(\$ billions)



Source: IAB/PwC Internet Ad Revenue Report, FY 2018

Top 10 companies commanded 75% of revenues in Q4 2018

% share of total revenues
(quarterly, \$ billions)

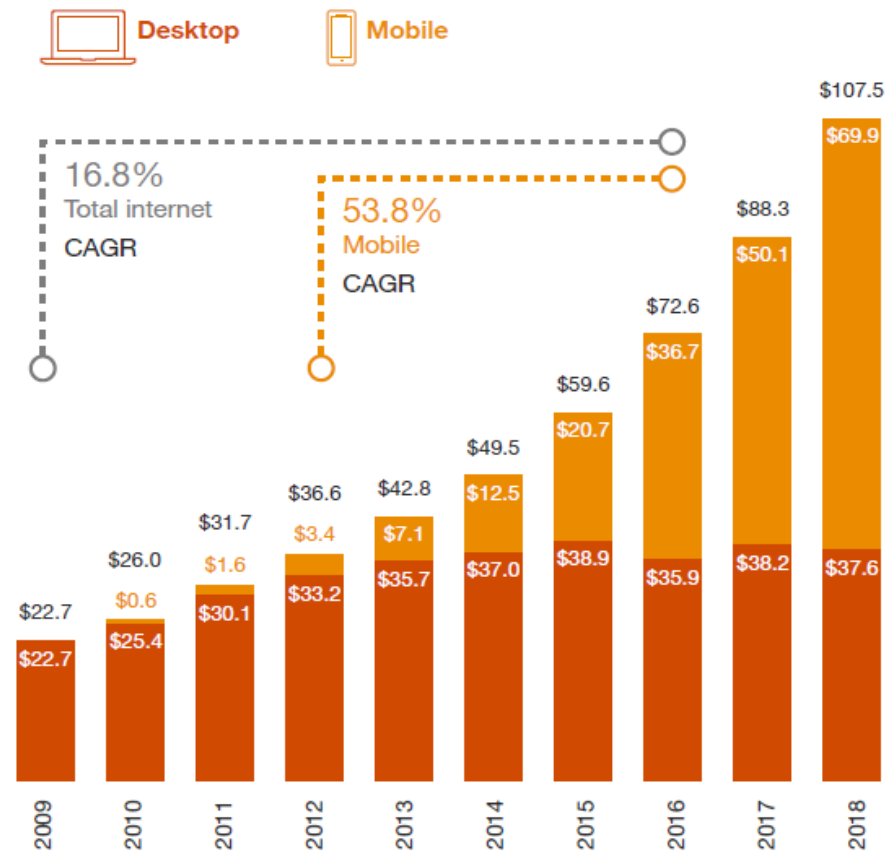


Note: Totals may not equal 100% due to rounding.

Source: IAB/PwC Internet Ad Revenue Report, FY 2018

Mobile growth is driving the overall industry compound annual growth rate

Desktop vs. mobile internet advertising revenue
(Full year results, \$ billions)

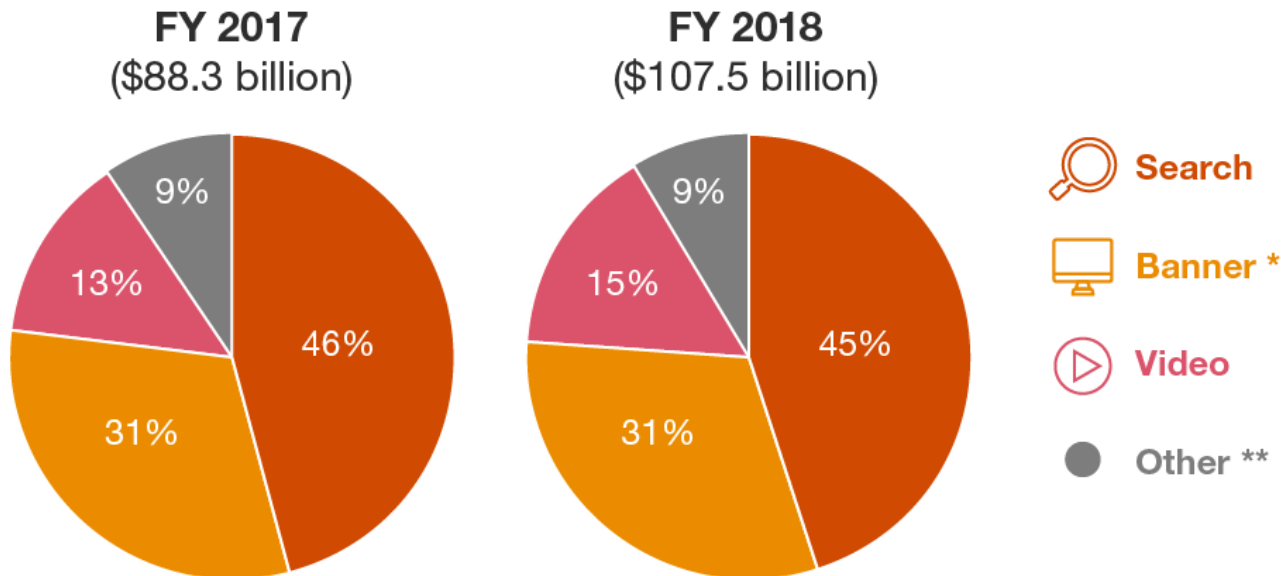


Source: IAB/PwC Internet Ad Revenue Report, FY 2018

CAGR: Compound Annual Growth Rate

Digital video advertising revenue had the largest growth among formats in the full year 2018 report

Advertising format revenue, full year results



* Banner includes: Ad Banners/Display, Rich Media, and Sponsorship.

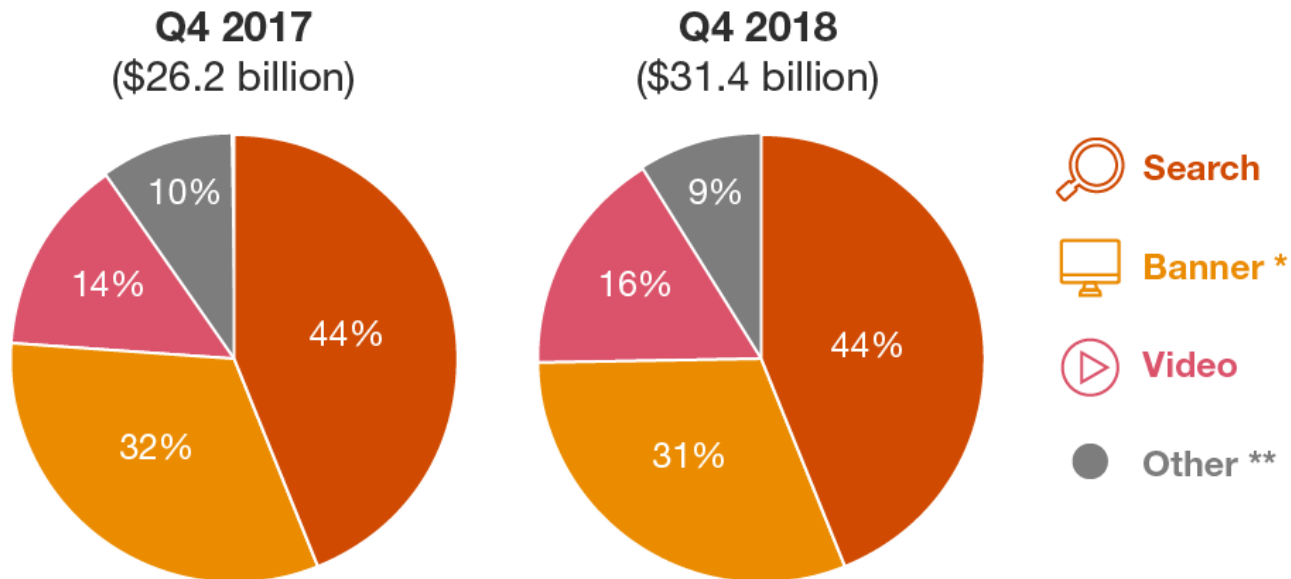
** Other includes: Classifieds, Lead Generation, Audio, and Unspecified.

Note: Totals may not equal 100% due to rounding.

Source: IAB/PwC Internet Ad Revenue Report, FY 2018

Digital video across desktop and mobile devices increased \$1.4 billion from Q4 2017

Advertising format revenue, fourth quarter results



* Banner includes: Ad Banners/Display, Rich Media, and Sponsorship.

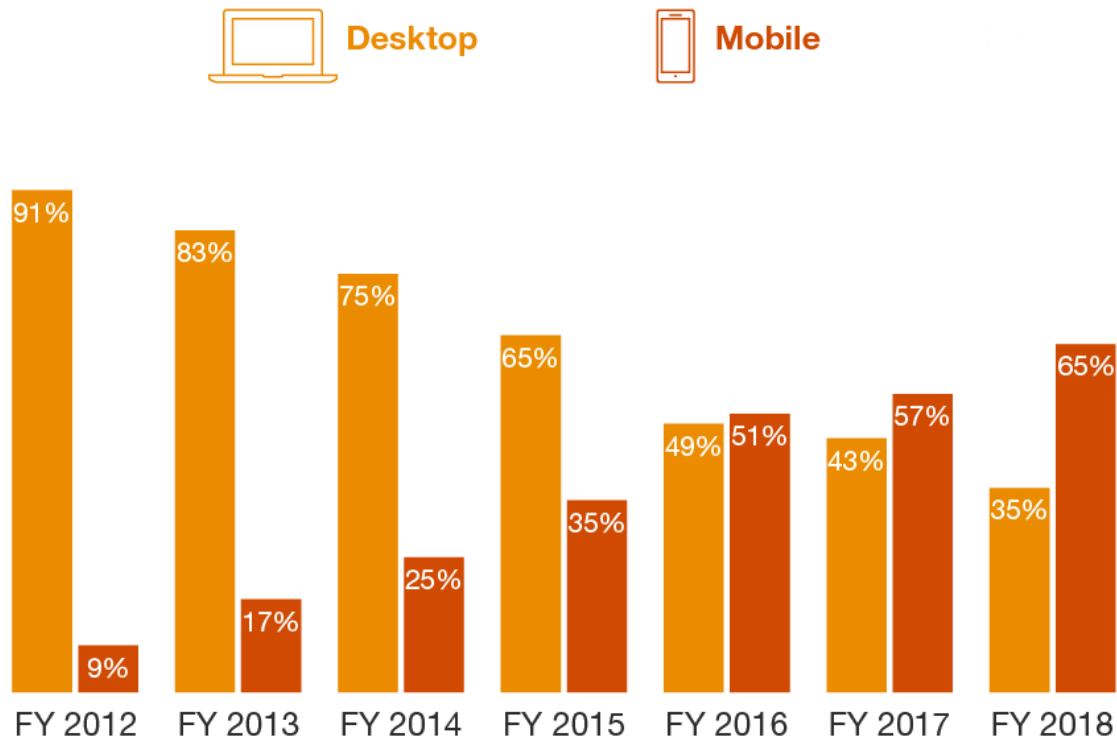
** Other includes: Classifieds, Lead Generation, Audio, and Unspecified.

Note: Totals may not equal 100% due to rounding.

Source: IAB/PwC Internet Ad Revenue Report, FY 2018

Mobile internet advertising continues to grow faster than the overall market

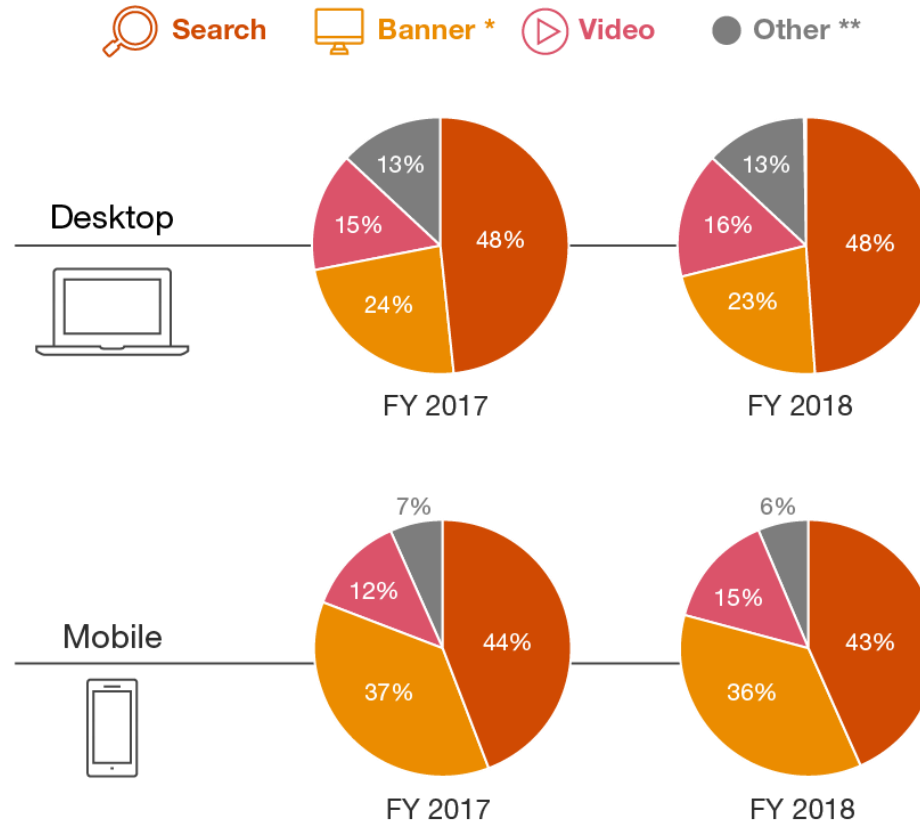
Historical desktop vs. mobile trends, full year results
(\$ billions)



Source: IAB/PwC Internet Ad Revenue Report, FY 2018

Video is becoming a preferred method

Advertising format revenue, desktop vs. mobile



* Banner includes: Ad Banners/Display, Rich Media, and Sponsorship.

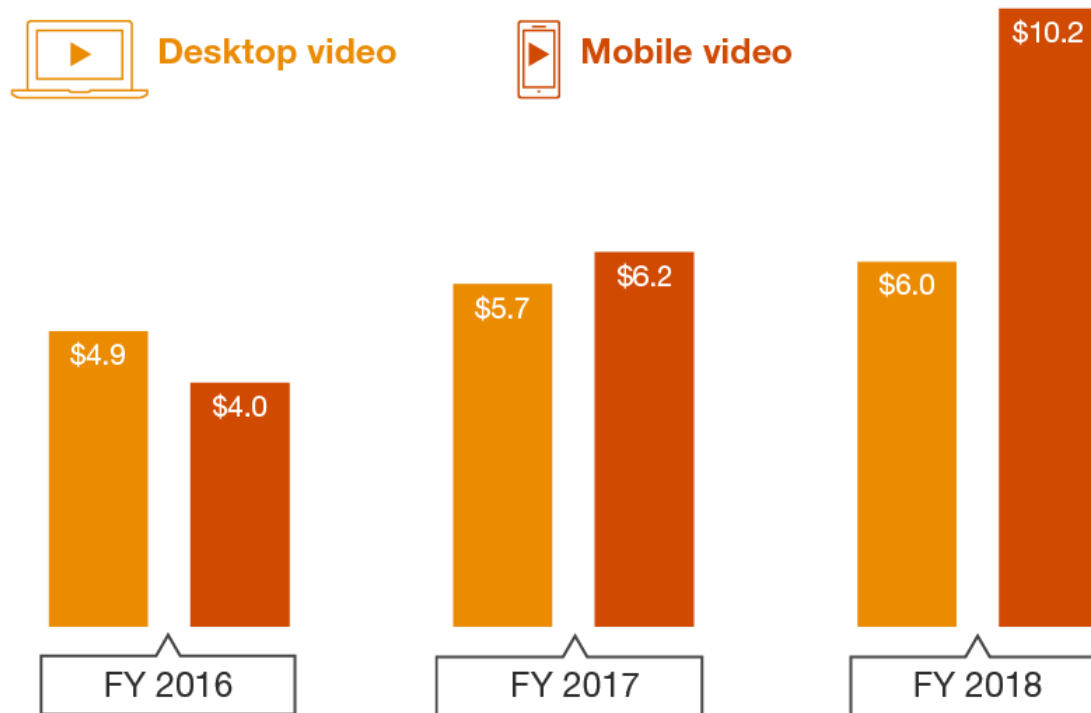
** Other includes: Classifieds, Lead Generation, Audio, and Unspecified.

Note: Totals may not equal 100% due to rounding.

Source: IAB/PwC Internet Ad Revenue Report, FY 2018

Digital video dominance strengthens share of mobile and desktop growth in FY 2018

Historical digital video revenues, full year results
(\$ billions)

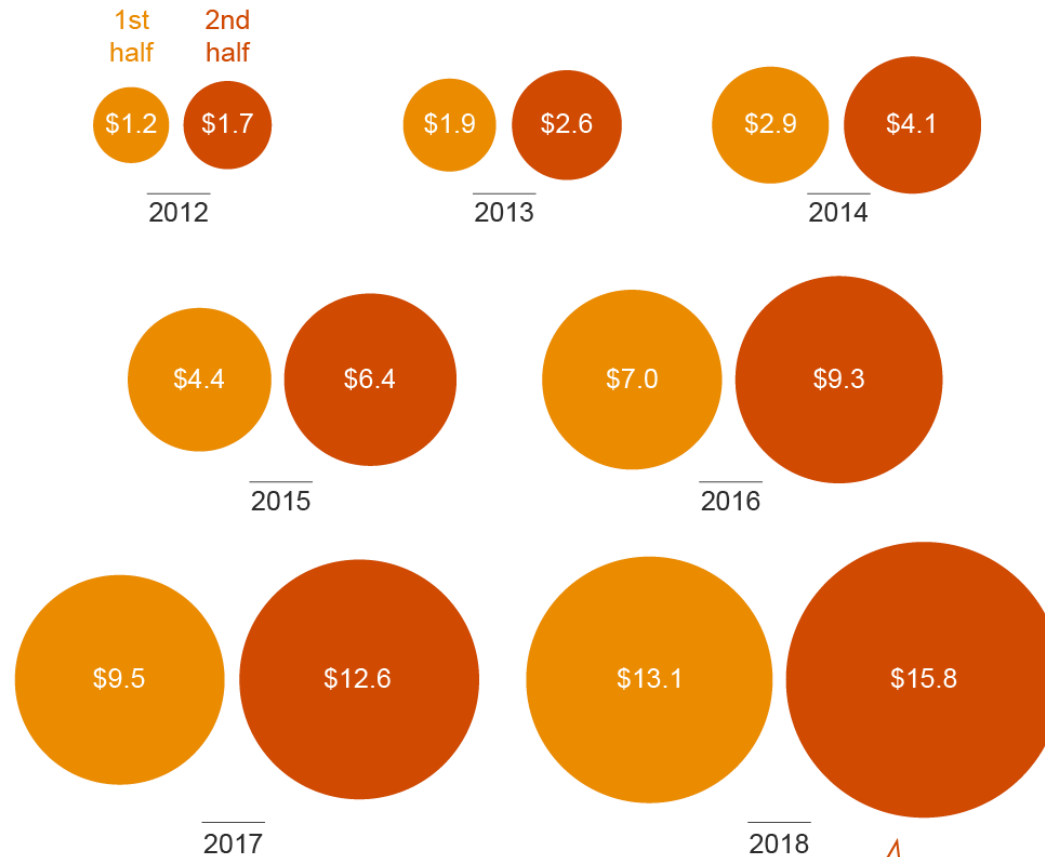


Source: IAB/PwC Internet Ad Revenue Report, FY 2018

Social media advertising revenue grows 30.6% in 2018 to \$28.9 billion

Social media advertising revenue, full year results

(\$ billions)

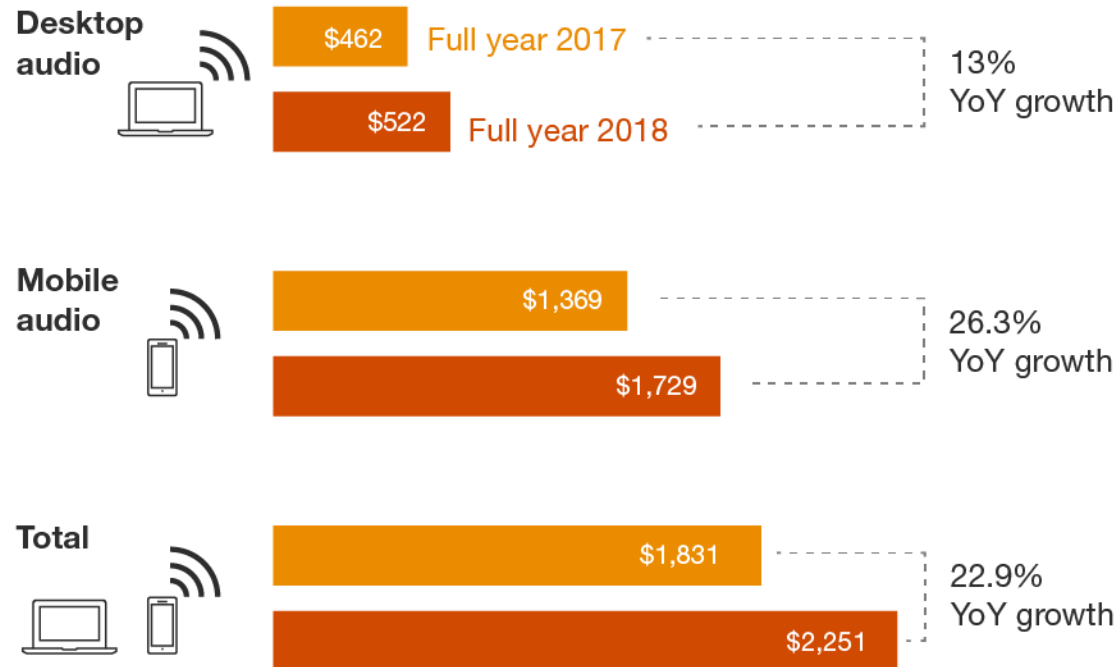


Source: IAB/PwC Internet Ad Revenue Report, FY 2018

In 2018, digital audio advertising revenue reached \$2.3 billion

Digital audio advertising revenue, full year results

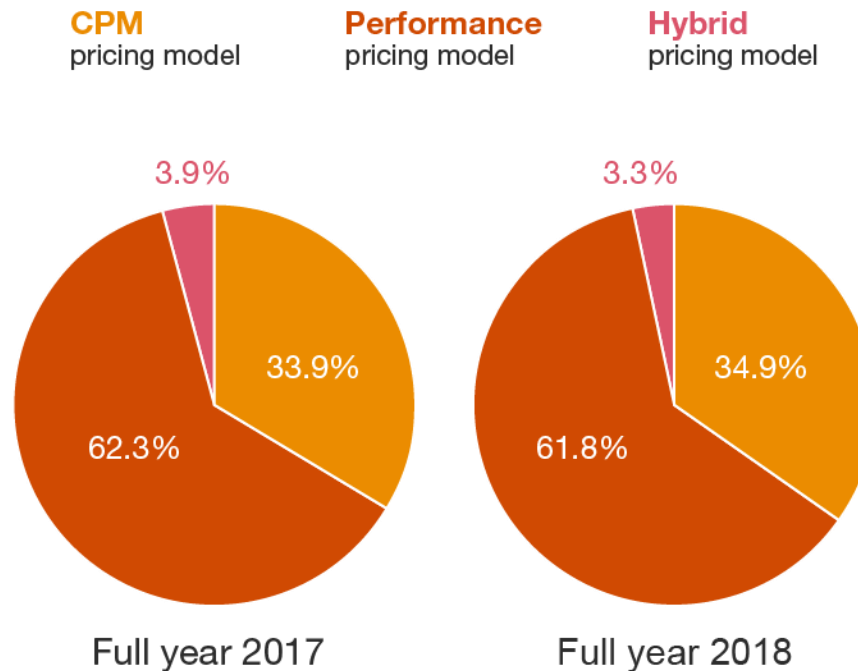
(\$ millions)



Source: IAB/PwC Internet Ad Revenue Report, FY 2018

Slight shift in pricing models to CPM

Revenue by pricing model, full year basis
(\$ billions)

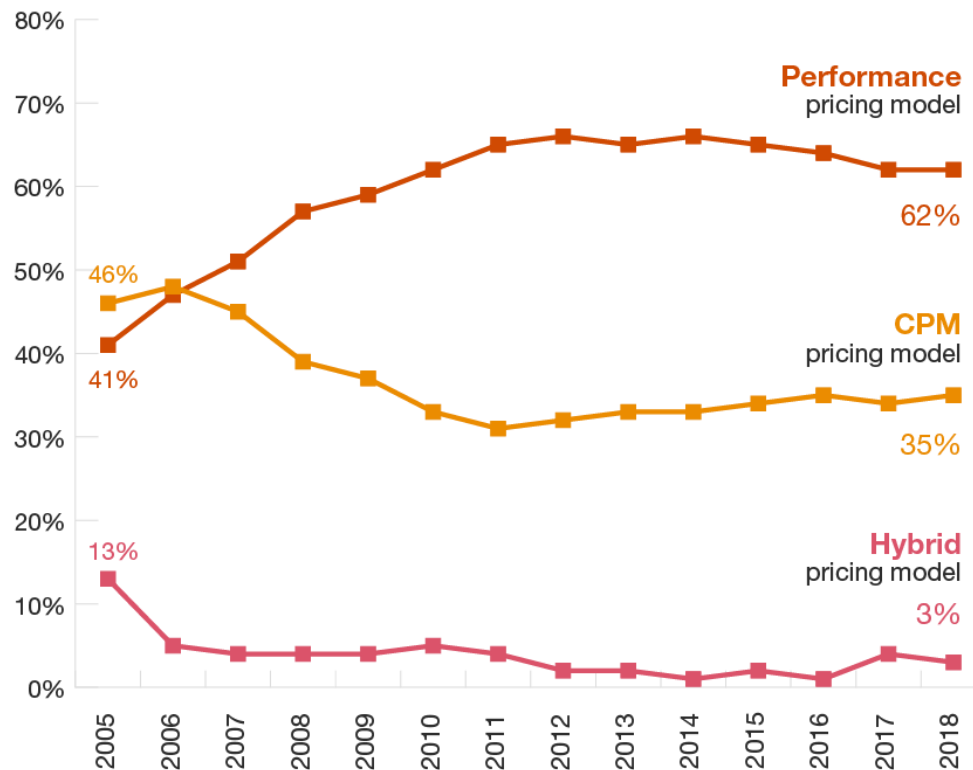


Note: Totals may not equal 100% due to rounding.

Source: IAB/PwC Internet Ad Revenue Report, FY 2018

Performance-based pricing is still the preferred model for advertisers

Internet advertising revenue by pricing model,*
2005-2018 (% of total revenue)



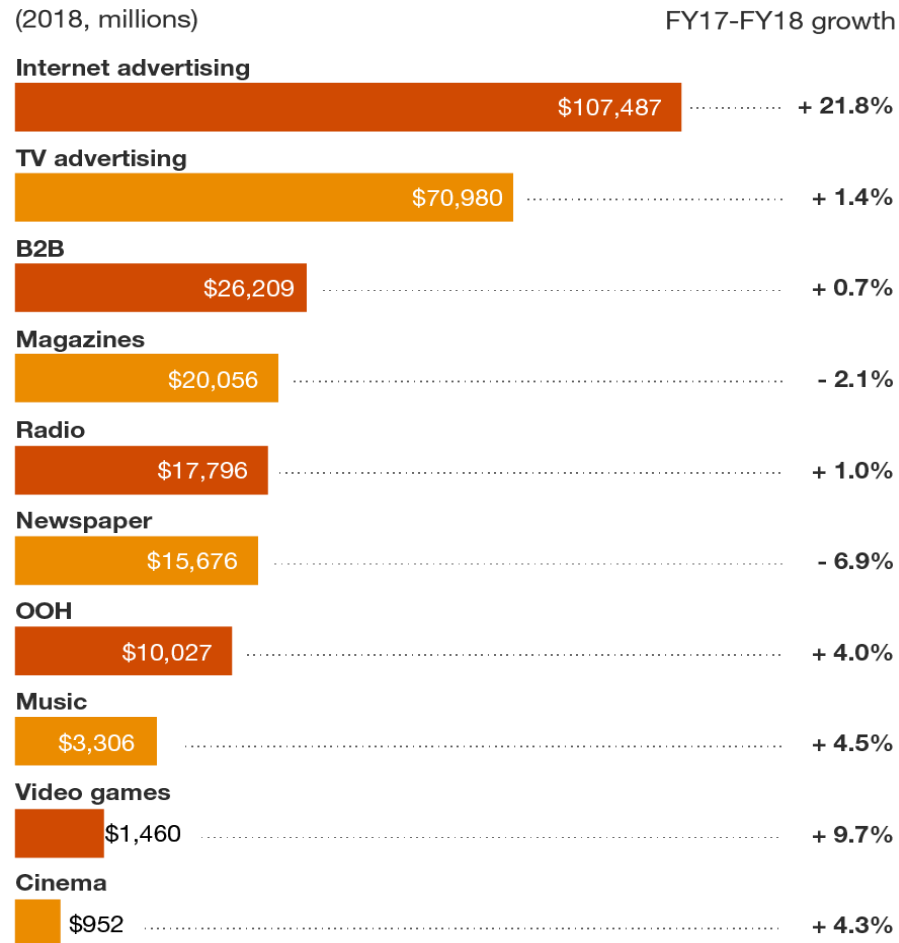
* Pricing model definitions may have changed over the time period depicted both within the survey process and as interpreted by survey respondents.

Note: Totals may not equal 100% due to rounding.

Source: IAB/PwC Internet Ad Revenue Report, FY 2018

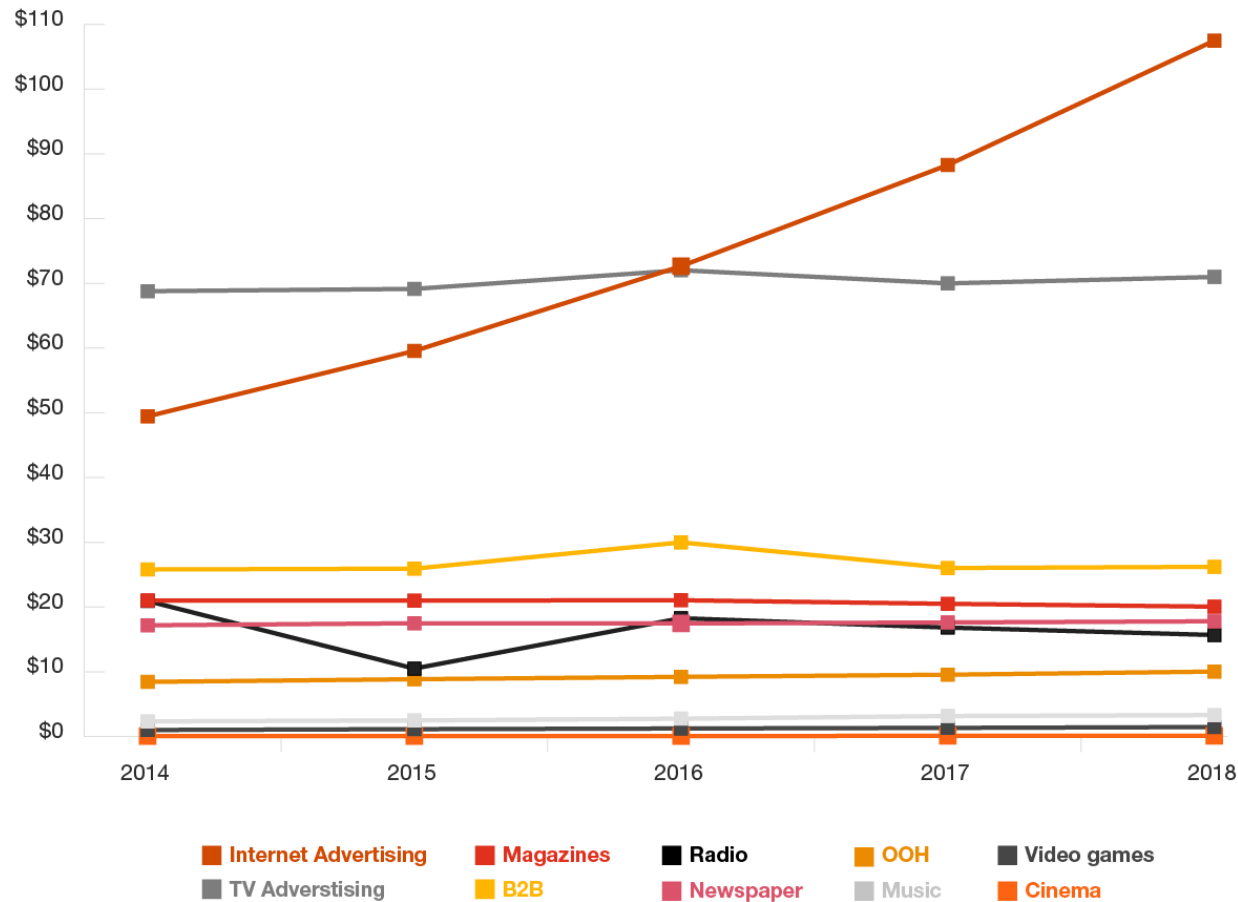
Internet advertising passed the \$100 billion mark for the first time in history

Advertising market share by media



Internet advertising is the only media type that has experienced double digit growth year-over-year

Historical advertising market share



PwC's Technology and Entertainment, Media, and Communications practices

As business, accounting, and tax advisors to many of the world's leading Entertainment, Media, and Communications (EMC) and Technology (Tech) companies, PwC (www.pwc.com) has an insider's view of trends and developments driving the industry. With approximately 1,200 practitioners serving EMC and Tech clients in the United States, PwC is deeply committed to providing clients with industry experience and resources. In recent years, our pioneering work in EMC and Tech has included developing strategies to leverage digital technology, identifying new sources of financing, and marketplace positioning in industries characterized by consolidation and transformation. Our experience reaches across all geographies and segments of the EMC and Tech sectors, including broadband, wireless, the internet, music, film, television, publishing, advertising, gaming, theme parks, computers and networking, and software. With thousands of practitioners around the world, we're always close at hand to provide deep industry knowledge and resources.

Our services include:

- Business assurance services
- Web audience measurement and advertising delivery auditing and advisory
- Privacy policy structuring, attestation, and compliance advisory
- Mergers & acquisitions assistance
- Tax planning and compliance
- Capital sourcing and IPO assistance
- Marketing & Media operations enablement

Technology and Entertainment, Media, and Communications practices

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About the IAB

The Interactive Advertising Bureau (IAB) empowers the media and marketing industries to thrive in the digital economy. Its membership is comprised of more than 650 leading media and technology companies that are responsible for selling, delivering, and optimizing digital advertising or marketing campaigns. The trade group fields critical research on interactive advertising, while also educating brands, agencies, and the wider business community on the importance of digital marketing.

In affiliation with the IAB Tech Lab, it develops technical standards and best practices. IAB and the IAB Education Foundation are committed to professional development and elevating the knowledge, skills, expertise, and diversity of the workforce across the industry.

Through the work of its public policy office in Washington, D.C., IAB advocates for its members and promotes the value of the interactive advertising industry to legislators and policymakers. Founded in 1996, the IAB is headquartered in New York City and has a San Francisco office.

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