



IAB internet advertising revenue report

2014 full year results April 2015

An industry survey conducted by PwC and sponsored by the Interactive Advertising Bureau (IAB)





Table of Contents

Background	
Executive summary	2
Detailed findings	(
Historical trends	
Ad formats	12
Social Media	1
Industries	16
Pricing models	18
Advertising market share	20
Appendix	2



Background

About the IAB internet advertising revenue report

Conducted by PricewaterhouseCoopers LLP ("PwC") on an ongoing basis, with results released quarterly, the "IAB Internet Advertising Revenue Report" was initiated by the Interactive Advertising Bureau (IAB) in 1996. This report utilizes data and information reported directly to PwC, publicly available online corporate data, and information provided by online ad selling companies.

The results reported are considered the most accurate measurement of internet/online/mobile advertising revenues because much of the data is compiled directly from information supplied by companies selling advertising online. All-inclusive, the report includes data reflecting online advertising revenues from websites, commercial online services, ad networks and exchanges, mobile devices, and email providers, as well as other companies selling online advertising.

The report is conducted independently by PwC on behalf of the IAB. PwC does not audit the information and provides no opinion or other form of assurance with respect to the information. Only aggregate results are published and individual company information is held in strict confidence with PwC. Further details regarding scope and methodology are provided in the appendix to this report.

David Silverman

S.hem

PwC

PwC Page 3 of 29



Executive summary

IAB internet advertising revenue report 2014 full year highlights

Internet advertising revenues ("revenues") in the United States totaled \$49.5 billion for the full year of 2014, with Q4 2014 accounting for approximately \$14.2 billion and Q3 2014 accounting for approximately \$12.2 billion. Revenues for the full year of 2014 increased 16% over 2013.

Key trends underlying 2014 results

Revenues increase 16% in FY 2014 — Internet advertising revenues in the United States totaled \$14.2 billion in the fourth quarter of 2014, an increase of 16% from the 2014 third-quarter total of \$12.2 billion and an increase of 17% from the 2013 fourth-quarter total of \$12.1 billion. 2014 full year internet advertising revenues totaled \$49.45 billion, up 16% from the \$42.78 billion reported in 2013.

"Marketers clearly recognize that consumers are leading mobile-first lives and are investing their ad dollars accordingly. The news of digital video's double-digit growth is also no surprise. Brands and agencies are clamoring to get into the upcoming Digital Content NewFronts, where they will experience the latest in storytelling in sight, sound and motion."

- Randall Rothenberg, President and CEO, IAB

Mobile advertising increases 76% in FY 2014 — Mobile advertising in the United States totaled \$12.5 billion during FY 2014, a 76% increase from the prior year total of \$7.1 billion.

"High double-digit growth in mobile advertising is a reflection of the continued shift in consumer behavior away from desktop and towards mobile devices. A prominent rise in Social, a significant mobile activity, is driving growth in advertising revenue as consumers spend more time connected."

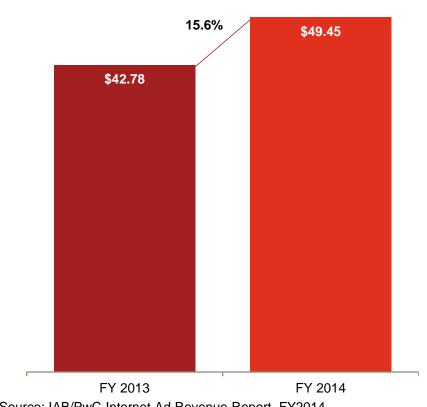
- David Silverman, Partner, PwC

PwC Page 4 of 29



Annual revenues show strong growth

2013 vs. 2014 (\$ billions)



Annual revenues for 2014 totaled **\$49.5** billion, **\$6.7** billion (or 15.6%) higher than in 2013.

Source: IAB/PwC Internet Ad Revenue Report, FY2014

PwC Page 5 of 29



Detailed findings

Revenues total \$14.2 billion in Q4 2014

Total 2014 fourth quarter revenues broke the prior quarter record of \$12.2 billion set in the third quarter of 2014 by \$1.9 billion. Fourth quarter 2014 revenues were \$2.0 billion (16.9%) higher than in the fourth quarter of 2013.

Q4 2013 vs. Q4 2014 (\$ billions)

Q3 2014 vs. Q4 2014 (\$ billions)



Source: IAB/PwC Internet Ad Revenue Report, FY 2014

PwC Page 6 of 29



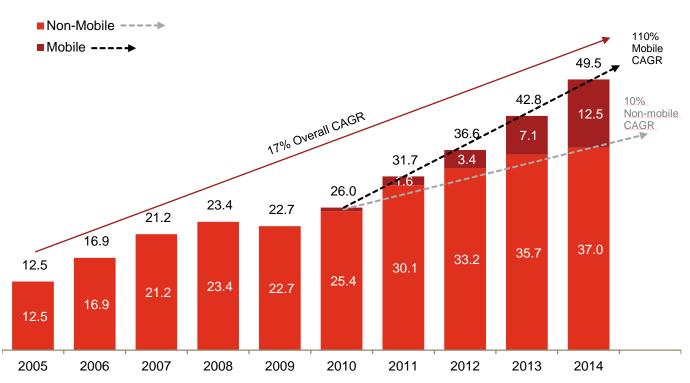
Historical annual revenue trends

Strong revenue growth continues in 2014

2014 annual revenues increased on a year-over-year percentage and dollar basis. The compound annual growth rate (CAGR) over the past ten years for internet advertising of 17% has outpaced U.S. current dollar GDP growth of 3%* over that period.

Since 2010, internet advertising growth was fueled by a 110% CAGR in Mobile (compared to 10 % growth in non-Mobile revenue over the same period).

Annual Revenue 2005-2014 (\$ billions)



Source: IAB/PwC Internet Ad Revenue Report, FY 2014

PwC Page 7 of 29

^{*} Source for GDP growth: U.S. Bureau of Economic Analysis, "<u>Table 1.1.5</u>. <u>Gross Domestic Product</u>," (accessed March 31, 2015)



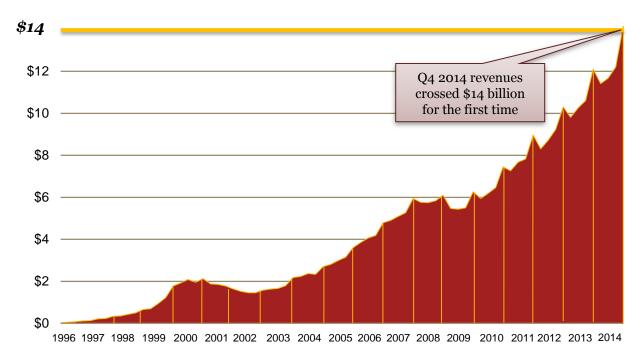
Historical quarterly revenue trends

Quarterly growth continues upward trend

Internet advertising continued to build on the momentum from 2013.

Over the past five years we have seen a clear seasonal trend of strong fourth quarter revenue followed by a first quarter dip. Despite the seasonal dip, first quarter revenues have outpaced the prior year's third quarter since 2010.

Quarterly revenue growth trends 1996-2014 (\$ billions)



Source: IAB/PwC Internet Ad Revenue Report, FY 2014

PwC Page 8 of 29

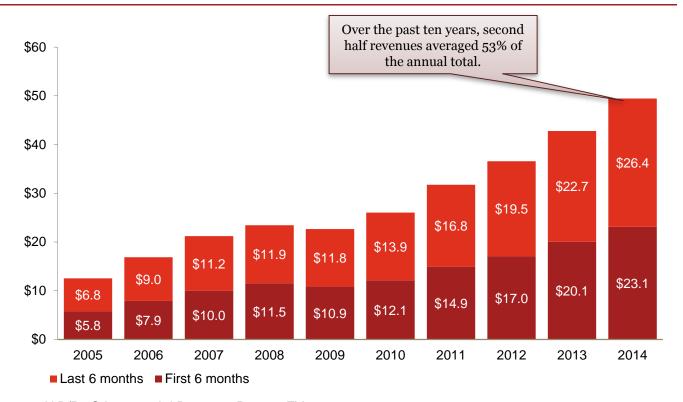


Historical revenue mix – first half vs. second half

Second-half revenues reach \$26.4 billion

Second-half revenues totaled \$26.4 billion in 2014, an increase of \$3.6 billion from second-half revenues of 2013, which totaled \$22.7 billion. Second-half revenues in 2014 represented 53% of total revenues in 2014, consistent with numbers reported in 2013 and consistent with the broader trend of higher revenues in the second-half of each year. The historically higher proportion of revenues in the second half of the year results from both the continued growth in the industry and from the seasonality of higher ad spend in the fourth quarter.

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



Source: IAB/PwC Internet Ad Revenue Report, FY 2014

PwC Page 9 of 29



Historical data findings

Annual and quarterly revenue growth

	Revenue (in mil)	Q/Q Growth	Y/Y Growth		Revenue (in mil)	Q/Q Growth	Y/Y Growth
Q1 2003	\$1,632	3%	7%	Q1 2009	\$5,468	-10%	-5%
Q2 2003	\$1,660	2%	14%	Q2 2009	\$5,432	-1%	-5%
Q3 2003	\$1,793	8%	24%	Q3 2009	\$5,500	1%	-6%
Q4 2003	\$2,182	22%	38%	Q4 2009	\$6,261	14%	3%
Total 2003	\$7,267		21%	Total 2009	\$22,661		-3%
Q1 2004	\$2,230	2%	37%	Q1 2010	\$5,942	-5%	9%
Q2 2004	\$2,369	6%	43%	Q2 2010	\$6,185	4%	14%
Q3 2004	\$2,333	-2%	30%	Q3 2010	\$6,465	5%	18%
Q4 2004	\$2,694	15%	24%	Q4 2010	\$7,449	15%	19%
Total 2004	\$9,626		33%	Total 2010	\$26,041		15%
Q1 2005	\$2,802	4%	25%	Q1 2011	\$7,264	-2%	22%
Q2 2005	\$2,985	7%	26%	Q2 2011	\$7,678	6%	24%
Q3 2005	\$3,147	5%	35%	Q3 2011	\$7,824	2%	21%
Q4 2005	\$3,608	15%	34%	Q4 2011	\$8,970	15%	20%
Total 2005	\$12,542		30%	Total 2011	\$31,735		22%
Q1 2006	\$3,848	7%	37%	Q1 2012	\$8,307	-7%	14%
Q2 2006	\$4,061	6%	36%	Q2 2012	\$8,722	5%	14%
Q3 2006	\$4,186	3%	33%	Q3 2012	\$9,236	6%	18%
Q4 2006	\$4,784	14%	33%	Q4 2012	\$10,307	12%	15%
Total 2006	\$16,879		35%	Total 2012	\$36,570		15%
Q1 2007	\$4,899	2%	27%	Q1 2013	\$9,806	-5%	18%
Q2 2007	\$5,094	4%	25%	Q2 2013	\$10,260	5%	18%
Q3 2007	\$5,267	3%	26%	Q3 2013	\$10,609	3%	15%
Q4 2007	\$5,946	13%	24%	Q4 2013	\$12,106	14%	17%
Total 2007	\$21,206		26%	Total 2013	\$42,781		17%
Q1 2008	\$5,765	-3%	18%	Q1 2014	\$11,414	-6%	16%
Q2 2008	\$5,745	0%	13%	Q2 2014	\$11,678	2%	14%
Q3 2008	\$5,838	2%	11%	Q3 2014	\$12,207	5%	15%
Q4 2008	\$6,100	4%	2%	Q4 2014	\$14,152	16%	17%
Total 2008	\$23,448		11%	Total 2014	\$49,451		16%

PwC Page 10 of 29



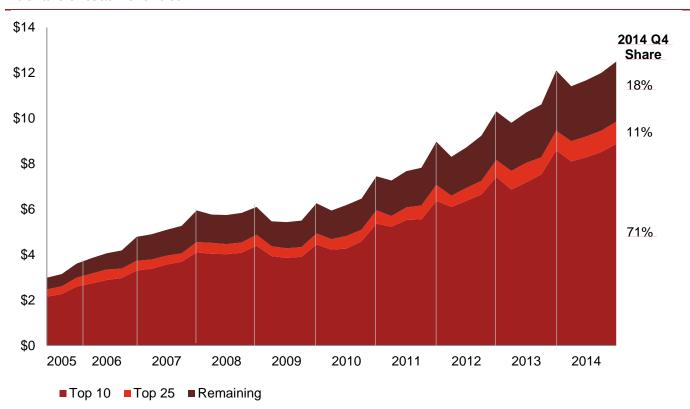
Revenue concentration

Top 10 companies command 71% of revenues in Q4 2014

Online advertising continues to remain concentrated with the 10 leading ad-selling companies, which accounted for 71% of total revenues in Q4 2014, consistent with 71% reported in Q4 2013. Companies ranked 11th to 25th accounted for 11% of revenues in Q4 2014, a slight increase from the 10% reported in Q4 2013.

Despite the emergence of a few heavyweights in internet advertising publishing, the concentration of top-10 revenue has remained relatively unchanged over the past ten years, fluctuating between 69% and 74%.

% share of total revenues



Source: IAB/PwC Internet Ad Revenue Report, FY 2014

PwC Page 11 of 29



Ad format – fourth quarter 2014 results

Search continues to lead ad formats, while Mobile continues its steady growth

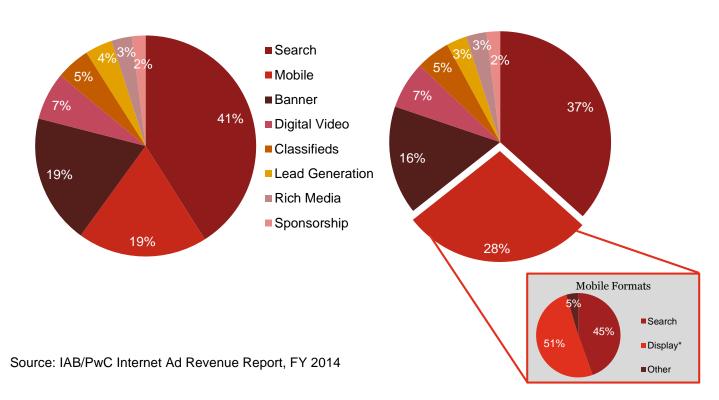
- Non mobile Search accounted for 37% of Q4 2014 revenues, down from 41% in Q4 2013 as mobile devices have shifted Search-related revenues away from the desktop computer. Search revenues totaled \$5.3 billion in Q4 2014, up 5% from Q4 2013, when Search totaled \$5.0 billion.
- Non mobile Display-related advertising accounted for \$3.8 billion or 27% of total revenues during Q4 2014, up 4% from the \$3.7 billion (30% of total) reported in Q4 2013. Q4 2014 Display-related advertising includes Banner Ads (16% of revenues, or \$2.2 billion), Digital Video (7% or \$952 million), Rich Media (3% or \$377 million), and Sponsorship (2% or \$225 million).
- Mobile revenues totaled 28% of Q4 2014 revenues, or \$3.9 billion, up 73% from the \$2.3 billion (19% of total) reported in Q4 2013.
- Non mobile Classifieds revenues totaled \$715 million or 5% of Q4 2014 revenues, up 8% from the \$664 million (5% of total) reported in Q4 2013.
- Non mobile Lead Generation revenues accounted for 3% of Q4 2014 revenues, or \$483 million, down from the \$484 million (4% of total) reported in Q4 2013.

Ad formats - Q4 2013

Total - \$12.1 billion**

Ad formats - Q4 2014

Total - \$14.1 billion**



^{*} Mobile Display includes: banner ads, digital video, digital audio, sponsorships, and rich media advertising served to mobile devices.

PwC Page 12 of 29

^{**} Amounts may not equal 100% due to rounding and omission of minor categories.



Ad format – full year 2014 results

Mobile increases share to become second largest format

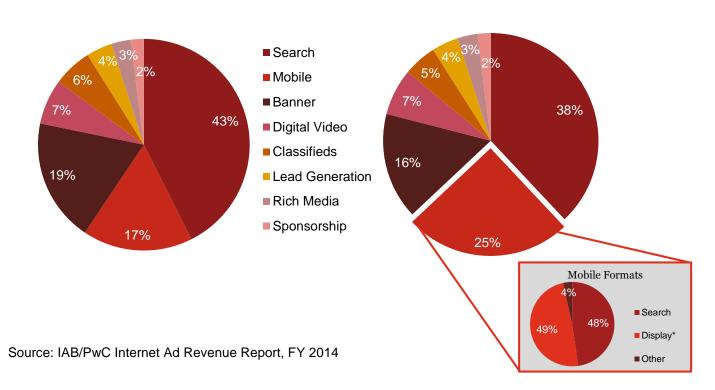
- Non mobile Search revenues accounted for 38% of FY 2014 revenues, down from 43% in FY 2013. Search revenues totaled \$19.0 billion in FY 2014, up 3% from FY 2013, when Search totaled \$18.4 billion.
- Non mobile Display-related advertising accounted for \$13.5 billion or 27% of total revenues during FY 2014, up 5% from the \$12.8 billion (30% of total) reported in FY 2013. FY 2014 Display-related advertising includes Banner Ads (16% of FY 2014 revenues, or \$8.0 billion), Digital Video (7% or \$3.3 billion), Rich Media (3% or \$1.4 billion), and Sponsorship (2% or \$774 million).
- Mobile revenues totaled 25% of FY 2014 revenues, or \$12.5 billion, up 76% from the \$7.1 billion (17% of total) reported in FY 2013.
- Non mobile Classifieds revenues totaled \$2.7 billion or 5% of FY 2014 revenues, up 4% from the \$2.6 billion (6% of total) reported in FY 2013.
- Non mobile Lead Generation revenues accounted for 4% of FY 2014 revenues, or \$1.9 billion, up 7% from the \$1.7 billion (4% of total) reported in FY 2013.

Ad formats - full year 2013

Ad formats – full year 2014

Total - \$42.8 billion**

Total - \$49.5 billion**



^{*} Mobile Display includes: banner ads, digital video, digital audio, sponsorships, and rich media advertising served to mobile devices.

PwC Page 13 of 29

^{**} Amounts may not equal 100% due to rounding and omission of minor categories.

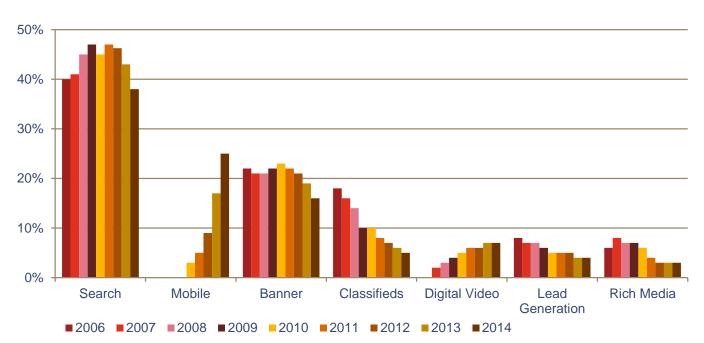


Historical format trends

Search retains largest share of revenue, while Mobile grows fastest overtaking Banner ads

- Non mobile Search remains the leading format at 38% of FY 2014 revenues. Decline in its overall share is attributed to growth in Mobile and Mobile Search, which is included in the Mobile category.
- Non mobile Search, Banner, and Classifieds are all down slightly as a percentage of total revenue due to the substantial growth of Mobile. Rich Media, Lead Generation, and Video remained consistent as a percentage of total revenue in comparison to FY 2013 results.
- Mobile revenues continued to quickly gain share, representing 25% of total revenues in FY 2014, as compared with 17% reported in FY 2013 and 9% in FY 2012. While Mobile has eroded share of other formats, the Mobile format itself is comprised of multiple formats.

Advertising format share, 2006 - 2014* (% of total revenue)



Source: IAB/PwC Internet Ad Revenue Report, FY 2014

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

PwC Page 14 of 29



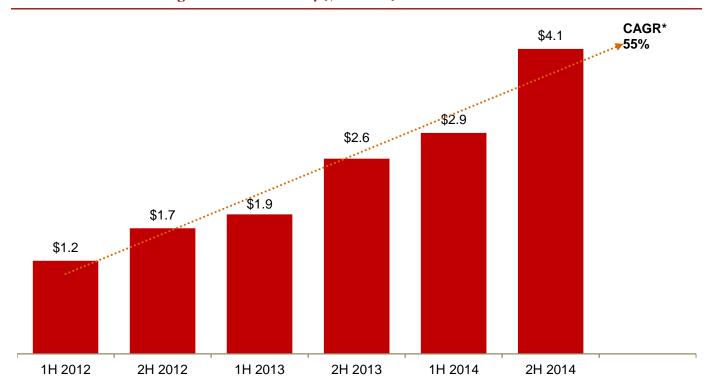
Social media advertising revenue

Strong growth each half-year in social

For the second half of 2014, social media revenue was \$4.1 billion. Social has experienced growth each half-year since we first measured it in 2012. These steady increases are reflected in the 55.0% compound annual growth rate of social from 2012 to 2014.

Note: We define social media as advertising delivered on social platforms, including social networking and social gaming websites and apps, across all device types, including desktop, laptop, smartphone and tablet.

Social media advertising revenue 2012-2014 (\$ billions)



Source: IAB/PwC Internet Ad Revenue Report, FY 2014

* CAGR: Compound Annual Growth Rate

PwC Page 15 of 29



Ad revenues by industry category

Retail drives advertising, as dollars shift to digital

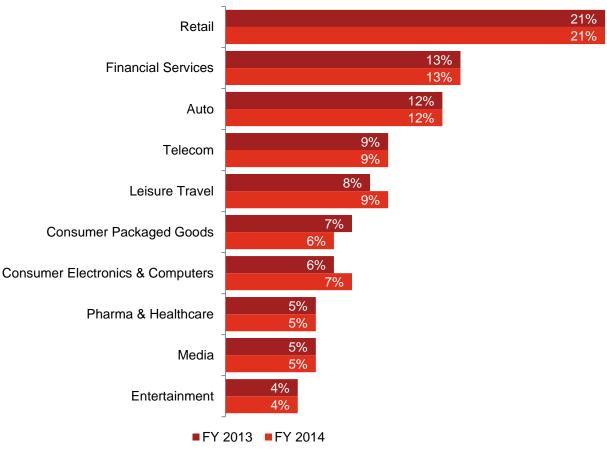
- Retail advertisers continue to represent the largest category of internet ad spending, accounting for 21% of total revenues in FY 2014, consistent with the 21% reported in FY 2013.
- Financial Services advertisers accounted for 13% of revenues in FY 2014, consistent with the 13% reported in FY 2013.
- Automotive advertisers accounted for 12% of revenues in FY 2014, consistent with the 12% of total reported in FY.
- Telecom companies accounted for 9% of revenues in FY 2014, consistent with the 9% reported in FY 2013.
- Leisure Travel (airfare, hotels, and resorts) accounted for 9% of revenues in FY 2014, up from the 8% of revenues reported in FY 2013.
- Consumer Packaged Goods represented 6% in FY 2014, down from the 7% reported in FY 2013.
- Consumer Electronics and Computers advertisers represented 7% of revenues in FY 2014, up from the 6% reported in FY 2013.
- Pharmaceutical/Healthcare accounted for 5% in FY 2014, consistent with the 5% of revenues reported in FY 2013.
- Media accounted for 5% in FY 2014, consistent with the 5% reported in FY 2013.
- Entertainment accounted for 4% of FY 2014 revenues, consistent with the 4% reported in FY 2013.

PwC Page 16 of 29



Industry advertising – year-over-year comparison

Internet ad revenues by major industry category*, year to date: 2013 vs. 2014



Source: IAB/PwC Internet Ad Revenue Report, FY 2014

* Industry category definitions may have changed over the time period depicted, both within the survey process and as interpreted by survey respondents. Amounts do not total to 100% as minor categories are not displayed.

PwC Page 17 of 29



Revenues by pricing model

Performance-based pricing shows slight uptick

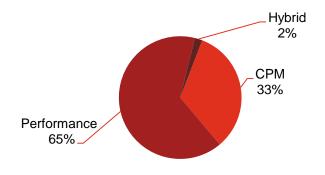
- Approximately 66% of 2014 revenues were priced on a performance basis, up from the 65% reported in 2013.
- Approximately 33% of 2014 revenues were priced on a cost per medium/thousand (CPM) or impression basis, consistent with the 33% reported in 2013.
- Approximately 1% of 2014 revenues were priced on a hybrid basis, down from the 2% reported in 2013.

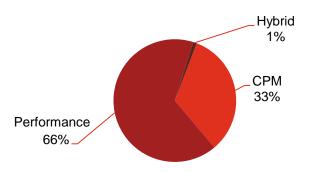
Pricing models - FY 2013

Pricing models – FY 2014

Total - \$42.8 billion

Total - \$49.5 billion



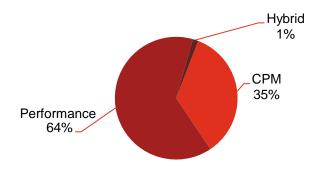


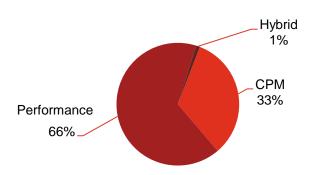
Pricing models - Q4 2013

Pricing models – Q4 2014

Total - \$12.1 billion

Total - \$14.2 billion





Source: IAB/PwC Internet Ad Revenue Report, FY 2014

PwC Page 18 of 29

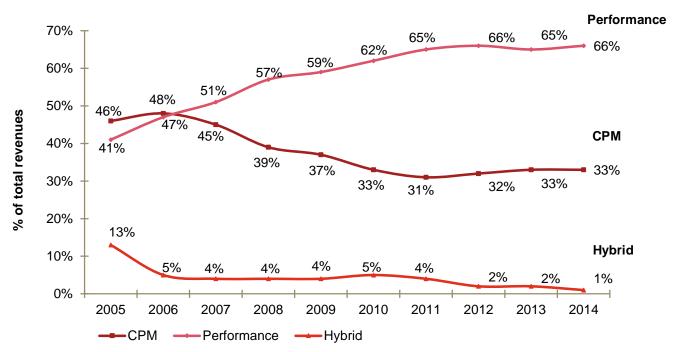


Historical pricing model trends

Performance-based pricing remains the preferred model

- Performance-based pricing, the leading pricing model since 2006, increased slightly to 66% of total revenue in 2014 from 65% in 2013.
- CPM/impression-based pricing remained at 33% of revenues, consistent with 33% in 2013.
- Hybrid pricing decreased slightly to 1% of total revenues in 2014, down from the 2% reported in 2013.

Internet ad revenues by pricing model*



Source: IAB/PwC Internet Ad Revenue Report, FY 2014

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

PwC Page 19 of 29



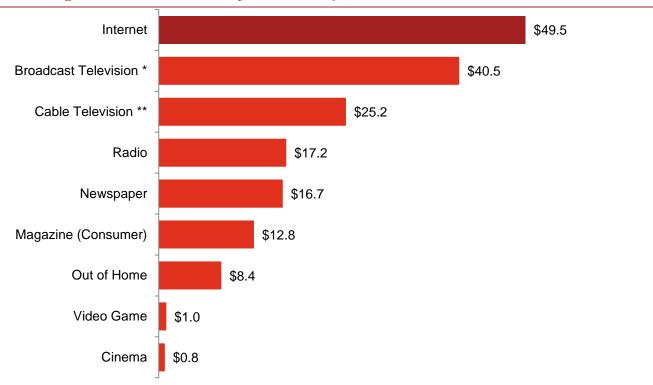
Advertising market share by media

Internet advertising continues to be the leading source of advertising revenue in 2014

Internet has continued to grow in share and significance when compared to other U.S. ad-supported media.† Internet advertising revenue now represents 75% of all Television (Broadcast and Cable) advertising.

- In 2013, Internet advertising exceeded Broadcast Television.*
- In 2011, Internet advertising surpassed Cable Television.**

Advertising revenue market share by media - 2014 (\$ billions)



Sources: IAB/PwC Internet Ad Revenue Report, FY 2014; PwC

- † The total U.S. advertising market includes other segments not charted here.
- * Broadcast Television includes Network and Syndicated and Spot television advertising revenue.
- ** Cable Television includes National Cable Networks and Local Cable television advertising revenue.

 Methodology for Cable TV estimate changed in 2014, impacting results shown in the table above from prior years' Reports.

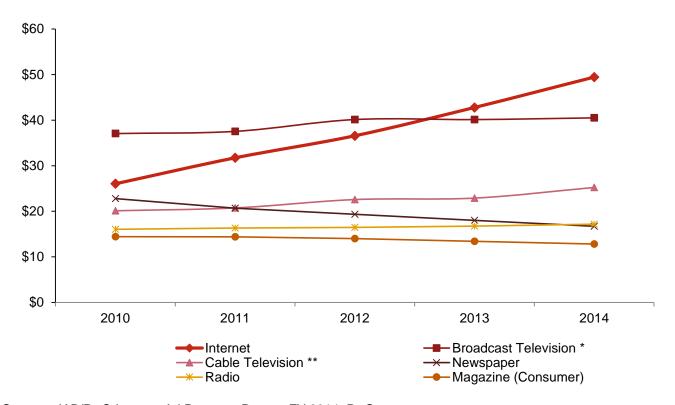
PwC Page 20 of 29



Historical advertising market share

Internet advertising revenue growth outpaces other media outlets over the past five years

In every year since 2010, the annual growth rates of Internet advertising have exceeded those of other advertising media. Internet advertising has experienced double-digit annual growth in every year except 2009; no other media has experienced double-digit growth in any year.



Sources: IAB/PwC Internet Ad Revenue Report, FY 2014; PwC

PwC Page 21 of 29

^{*} Broadcast Television includes Network, Syndicated and Spot television advertising revenue.

^{**} Cable Television includes National Cable Networks and Local Cable television advertising revenue. Methodology for Cable TV estimate changed in 2014, impacting results shown in the table above from prior years' Reports.



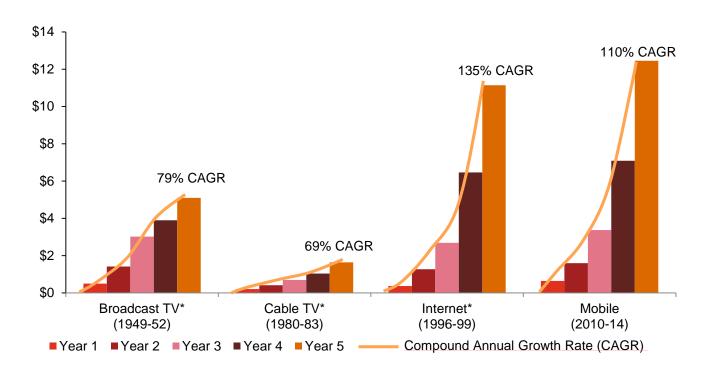
Historical advertising growth of media

While Mobile's growth over the past five years is impressive, the Internet fared even better in its early years

During the first five years of Broadcast TV, Cable TV, Internet, and Mobile, all media experienced tremendous advertising revenue growth.

While over time Cable TV has emerged as a major advertising medium, due to the capital intensive nature of the rollout and reliance on subscription fees, advertising revenue growth rates, while impressive, were not on par with the other media.

Comparative U.S. advertising media annual ad revenue growth for first 5 years (\$ billions)



Sources: IAB/PwC Internet Ad Revenue Report, FY 2014; McCann-Erickson

* Adjusted for Inflation

PwC Page 22 of 29



Appendix

Definitions of leading industry categories

The industry categories used in the "IAB Internet Advertising Revenue Report" were sourced from the North American Standard Industrial Classification (SIC) Manual.†

Retail	Includes mail order/catalog, apparel, restaurants/fast food, home furnishings/textiles, toys, pet food/supplies, appliances, jewelry, drugstores, retail stores, and cosmetics stores.
Automotive	Includes all automotive-related categories including sale/purchase of vehicles and parts and maintenance.
Entertainment	Includes film, music, TV, box office, video games, and amusement & recreation.
Consumer packaged goods	Includes packaged goods, food products, household products, and tobacco.
Leisure travel	Includes travel, hotel, airlines, and resorts.
Consumer Electronics and Computers	Includes hardware (computers, computer storage devices, and computer peripheral equipment), consumer electronics, prepackaged software (operating, utility, and applications programs), local area network systems and network systems integration, computer processing, and data preparation and data processing services.
Financial Services	Includes commercial banks, credit agencies, personal credit institutions, consumer finance companies, loan companies, business credit institutions, and credit card agencies. Also includes companies engaged in the underwriting, purchase, sale, or brokerage of securities and other financial contracts.
Telecommunications	Includes point-to-point communications services, including cellular phone services, paging services, wireless internet access, and wireless video services. Includes multichannel video providers on a subscription fee basis (e.g., cable television, wireless cable television, and direct broadcast satellite services).
Pharmaceutical & Healthcare	Includes pharmaceutical products, facilities, services, researchers, and biological products. Also comprises establishments providing healthcare and social assistance for individuals as well as personal care, toiletries, and cosmetic products.
Media	Includes establishments primarily engaged in radio and television broadcasting (network and station) including commercial, religious, educational, and other radio or television stations. Also includes establishments primarily engaged in publishing newspapers, periodicals, and books.

[†]Survey participants reported results based on the 20 industry categories listed on page 25, which were used specifically for the "IAB Internet Advertising Revenue Report." This is consistent with other relevant industry categorization sources that measure advertising spending by industry. For purposes of this report, PwC classified a number of individual categories under "Retail."

PwC Page 23 of 29



Definitions of advertising formats and pricing models Advertiser pays an online company for space on one or more of the online company's pages to display a Banner static or linked banner or logo. Advertising Advertiser pays for custom content and/or experiences, which may or may not include ad elements such as **Sponsorship** display advertising, brand logos, advertorial, or pre-roll video. Sponsorships fall into several categories: Spotlights are custom-built pages incorporating an advertiser's brand and housing a collection of content usually around a theme Advergaming can range from an advertiser buying all the ad units around a game or a "sponsored by" link to creating a custom branded game experience Content & Section Sponsorship is when an advertiser exclusively sponsors a particular section of the site or email (usually existing content) re-skinned with the advertiser's branding Sweepstakes & Contests can range from branded sweepstakes on the site to a full-fledged branded contest with submissions and judging **Email** Banner ads, links or advertiser sponsorships that appear in email newsletters, email marketing campaigns and other commercial email communications. This includes both ads within an email or the entire email. Fees advertisers pay online companies to list and/or link their company site domain name to a specific Search search word or phrase (includes paid search revenues). Search categories include: Paid listings - payments made for clicks on text links that appear at the top or side of search results for specific keywords. The more a marketer pays, the higher the position it gets. Marketers only pay when a user clicks on the text link. Contextual search – payments made for clicks on text links that appear in an article based on the context of the content, instead of a user-submitted keyword. Payment only occurs when the link is Paid inclusion – payments made to guarantee that a marketer's URL is indexed by a search engine (i.e. advertiser isn't paid only for clicks, as in paid listings). Site optimization – payments made to optimize a site in order to improve the site's ranking in search engine results pages (SERPs). (For example, site owner pays a company to tweak the site architecture and code, so that search engine algorithms will better index each page of the site). Lead Fees paid by advertisers to online companies that refer qualified potential customers (e.g., auto dealers which pay a fee in exchange for receiving a qualified purchase inquiry online) or provide consumer Generation information (demographic, contact, behavioral) where the consumer opts in to being contacted by a marketer (email, postal, telephone, fax). These processes are priced on a performance basis (e.g., cost-peraction, -lead or -inquiry), and can include user applications (e.g., for a credit card), surveys, contests (e.g., sweepstakes) or registrations. Classifieds Fees paid to advertisers by online companies to list specific products or services (e.g., online job boards and employment listings, real estate listings, automotive listings, auction-based listings, yellow pages). and Auctions **Rich Media** Display-related ads that integrate some component of streaming interactivity. Rich media ads often include flash or java script, but not content, and can allow users to view and interact with products or services (e.g., scrolling or clicking within the ad opens a multimedia product description, expansion, animation, video or a "virtual test-drive" within the ad). All IAB Rising Stars ad formats are considered Rich Media. Video commercials that appear in video players are considered Digital Video Ads, not Rich Media. "Interstitials" have been consolidated within the rich media category and represent full- or partial-page text and image server-push advertisements which appear in the transition between two pages of content. Forms of interstitials can include a variation of the following terms: Splash screens – a preliminary page that precedes the regular home page of a website that usually promotes a particular site feature or provides advertising. A splash page is timed to move onto the home page after a short period of time. Pop-up ads and pop-under ads – an advertisement that appear in a separate window which automatically loads over an existing content window, without an associated banner. Daughter windows - an advertisement that runs in a separate window associated with a concurrently displayed banner. The content and banner are typically displayed first, followed by the

PwC Page 24 of 29

that they play instantly (ads are fully downloaded before they are displayed).

Superstitials – ads that are distinct from interstitials because of the much higher ad quality, and

daughter window.



Definitions of advertising formats and pricing models (cont.)

Digital Video Advertising	Advertising that appears before, during or after digital video content in a video player (i.e. pre-roll, mid-roll, post-roll video ads). Digital Video Ads include TV commercials online and can appear in streaming content or in downloadable video. Display-related ads on a page (that are not in a player) that contain video are categorized as rich media ads.
	Video Overlays are also categorized as Digital Video Advertising. Video overlays include small ads that appear on top of digital video content. They can appear to be display, video, rich media, text or another ad format but are contained within the video player.
Mobile Advertising	Advertising tailored to and delivered through wireless mobile devices such as smartphones (e.g. Blackberry, iPhone, Android, etc.), feature phones (e.g. lower-end mobile phones capable of accessing mobile content), and media tablets (e.g. iPad, Samsung Galaxy Tablet, etc.). Typically taking the form of static or rich media display ads, text messaging ads, search ads, or audio/video spots, such advertising generally appears within mobile websites (e.g. websites optimized for viewing on mobile devices), mobile apps (e.g. applications for Smartphones running iOS, Android, Windows Mobile or other operating systems), text messaging services (i.e. SMS, MMS) or within mobile search results (i.e., 411 listings, directories, mobile-optimized search engines). Mobile advertising formats include: Search, Display (banner ads, digital video, digital audio, sponsorships,
	and rich media), and Other advertising served to mobile devices.
Social Media Advertising	Advertising delivered on social platforms, including social networking and social gaming websites and apps, across all device types, including desktop, laptop, smartphone and tablet.
Impression- based	Cost-per-thousand (CPM) pricing model
Performance- Based	Cost-per-click, sale, lead, acquisition, or application (e.g., credit card application) or straight revenue share (e.g., % commission paid upon sale)
Hybrid	Any mix of impression-based pricing plus performance-based compensation within one ad campaign

PwC Page 25 of 29



Survey scope and methodology

Survey scope

The Interactive Advertising Bureau (IAB) retained PwC to establish a comprehensive standard for measuring the growth of internet/online/mobile advertising revenues. 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/online/mobile advertising revenues;
- Making the survey as inclusive as possible, encompassing all forms of internet/online/mobile advertising, including websites, consumer online services, ad networks, mobile devices, and email providers; and
- Ensuring and maintaining a confidential process, releasing only aggregate data.

Methodology

PwC performs the following:

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

Survey industry categories

Automotive
Beer/Wine/Liquor
Business Products/Services
Computers (Hardware/Software)
and Consumer Electronics
Consumer Packaged Goods, Food,
Non-Alcoholic Beverages and Candy
Educational Services
Entertainment (Film, Music, TV, Box
Office, Video Games,
Amusement/Recreational)

Financial Services (Banks,
Insurance, Securities, Mortgages)
Personal Care, Toiletries, and
Cosmetics
Drugs and Remedies
Manufacturing
Media
Professional Sports and Sporting &
Athletic Goods
Real Estate

Restaurants/Fast Food Retail, Mail Order, Catalogs and Apparel Telecommunications: Telephony, Cable/Satellite TV Services, ISPs Toys/Games Leisure Travel (Airfare, Hotels, Resorts) Business Travel (Airfare, Hotels, Resorts)

PwC Page 26 of 29



About the Interactive Advertising Bureau

The Interactive Advertising Bureau (IAB) empowers the media and marketing industries to thrive in the digital economy. It is comprised of more than 650 leading media and technology companies that are responsible for selling, distributing and optimizing digital advertising and marketing. Together, they account for 86 percent of online advertising in the United States. Working with its member companies, the IAB evaluates and recommends standards and practices and fields critical research on interactive advertising. The organization is committed to professional development, elevating the knowledge, skills, and expertise of individuals across the digital marketing industry. The IAB also educates marketers, agencies, media companies and the wider business community about the value of interactive advertising. Founded in 1996, the IAB is headquartered in New York City.

Overall report guidance provided by IAB leadership

Executive Committee

President and CEO

Randall Rothenberg

IAB

Joe Apprendi Collective

Joan Gillman Time warner Cable Media Chairman

David Morris CBS Interactive

Curt Hecht

The Weather Channel

Neal Mohan

John Toohey

Google

Vice Chair

Lauren Wiener Tremor Video

Jim Norton

AOL

Vivek Shah Ziff Davis, LCC Rik van der Kooi Microsoft Advertising

Ex-Officio

Founding Chairman

Rich LeFurgy

Archer Advisors

David Moore

Xaxis

Treasurer

Time Warner Cable Media

Secretary

Joe Rosenbaum Reed Smith LLP

Board of Directors

Michael Barrett

Millennial Media

David Brinker

News Corporation

Ned Brody

Yahoo!

Paul Caine

Bloomberg Businessweek

Kevin Conrov

Univision

Jory Des Jardins

SheKnows

Mark Ford

Time Inc.

Eric Franchi Undertone

IDG Communications

Michael Friedenberg

Eric Harris

BuzzFeed

Mark Howard

Forbes Media

Scott Howe

Acxiom

Eric Johnson

ESPN.com

Neil O. Johnston

CMG Digital

Seth Ladetsky

Turner Broadcasting System

David Lawenda

Facebook

Meredith Kopit Levien

The New York Times Company

Jean-Philippe Maheu

Twitter

Harold Morgenstern

Discovery Communications

Penry Price

LinkedIn

Scott Schiller

NBC Universal

Drew Schutte

Condé Nast

Tad Smith

The Madison Square Garden

Company

John Trimble

Pandora

Jacob Weisberg

Slate

Mike Welch

AT&T AdWorks

Troy Young

Hearst Magazines Digital Media

Page 27 of 29 **PwC**



PwC New Media Group with the Entertainment, Media, and Communications practice

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 expertise 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.

PwC's New Media Group was the first practice of its kind at a Big Four firm. Currently located in New York, Los Angeles, Boston, Seattle, and the Bay Area, our New Media Group includes accounting, tax, and consulting professionals who have broad and deep experience in the three areas that converge to form new media: advanced telecommunications, enabling software, and content development/distribution.

Our services include:

- Business assurance services
- Web audience measurement and advertising delivery auditing and advisory
- IAB Measurement Certification Compliance auditing
- Privacy policy structuring, attestation, and compliance advisory
- Mergers & acquisitions assistance
- Tax planning and compliance
- Capital sourcing and IPO assistance

For more information about our New Media Group, contact one of the following PwC professionals:

New YorkNew YorkHallandale BeachDavid SilvermanRuss SapienzaStephanie FaskowPartner, Assurance ServicesPartner, Advisory ServicesManager, Advisory Services646.471.5421646.471.1517954.604.1968david.silverman@us.pwc.comrussell.j.sapienza@us.pwc.comstephanie.faskow@us.pwc.com

Boston San Jose Seattle

Vic Petri Mike Pearl Suzanne Faulkner

Partner, Assurance Services Partner, Assurance Services
617.478.1698 408.817.3801 206.398.3550

victor.petri@us.pwc.com michael.pearl@us.pwc.com suzanne.faulkner@us.pwc.com

PwC Page 28 of 29



www.pwc.com/e&m

This publication has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, PricewaterhouseCoopers LLP, its members, employees and agents do not accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it.

© 2015 PricewaterhouseCoopers LLP. All rights reserved. PwC refers to the United States member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.