

INDUSTRY TRENDS & INSIGHTS

Exploring New York City's Economic Sectors

ADVERTISING IN NEW YORK CITY | DECEMBER 2013



HIGHLIGHTS

- P.1** NYC has 20% of U.S. advertising employment
- P.1** Employment growth averaged 2.8% in NYC from 2002 to 2012
- P.2** Brooklyn is home to 7% of NYC's advertising establishments
- P.3** 14% of U.S. advertising revenues go to NYC
- P.5** Google claims 41% of U.S. digital ad revenues



NYCEDC Economic
Research & Analysis

Center for Economic Transformation

THE ADVERTISING INDUSTRY has played a major role in New York City's economy for close to a century. While local advertising dates from colonial days, the proliferation of advertising firms along Madison Avenue in the 1920s serving companies headquartered in the City and managing campaigns for emerging national brands gave birth to the modern industry. In recent years, the industry has both spread globally and consolidated, as multinational holding companies, some located abroad, have acquired once iconic agencies. The industry is also undergoing disruption as media has shifted online and more advertising space is auctioned electronically rather than sold face-to-face. Despite these technology- and globalization-related industry shifts, New York City remains an advertising hub.

Employment, Establishments, and Wages

EMPLOYMENT

According to data from the Bureau of Labor Statistics and New York State Department of Labor, the Advertising, Public Relations, and Related Services industry employed an average of 60,103 people in New York City in 2012, representing 1.9% of NYC's private employment.

Advertising agencies made up the largest employer group, accounting for 36,092 employees, while public relations agencies employed 11,110. Other related services, defined as media buying agencies, media representatives, outdoor advertising, direct mail advertising, advertising material distribution services, and other services related to advertising, together employed 12,902 people in 2012.¹ New York remains a major hub of advertising and public relations with around 20% of the nation's employment in each of those two categories (see Figure 1). New York City's location quotient, which measures the concentration of industry employment in an area vs. the country as a whole, is 4.79 for the industry, meaning that the industry is 4.79 times more concentrated in the City than in the country as a whole. For advertising agencies and public relations agencies, the location quotients are 6.95 and 7.27, respectively.²

The industry experienced compound annual growth of 2.8% from 2002 to 2012. Employment dropped from 2008 to 2009 due to the financial

crisis, but the industry recovered from 2009 to 2010, sooner than the industry's parent sector, Professional, Scientific, and Technical Services.

Figure 2 shows relative growth in subindustries. The larger sector, Professional, Scientific, and Technical Services, exclusive of Advertising, Public Relations, and Related Services, is included for reference.

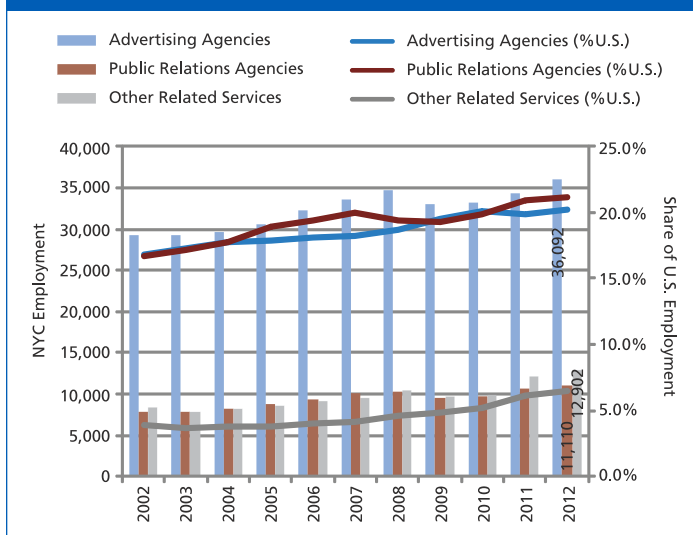
Overall, the industry experienced a net gain of 14,514 jobs from 2002 to 2012. The largest gains came from advertising agencies (6,880 net gain), media buying agencies (3,423), and public relations agencies (3,198) (see Figure 3). Media buying agencies grew by 181% but only accounted for 8.8% of industry employment as of 2012.

Note that these figures do not include companies that may be involved in advertising but classify themselves in a different industry. This may particularly apply to tech companies.¹

Comparison to other Metropolitan Areas

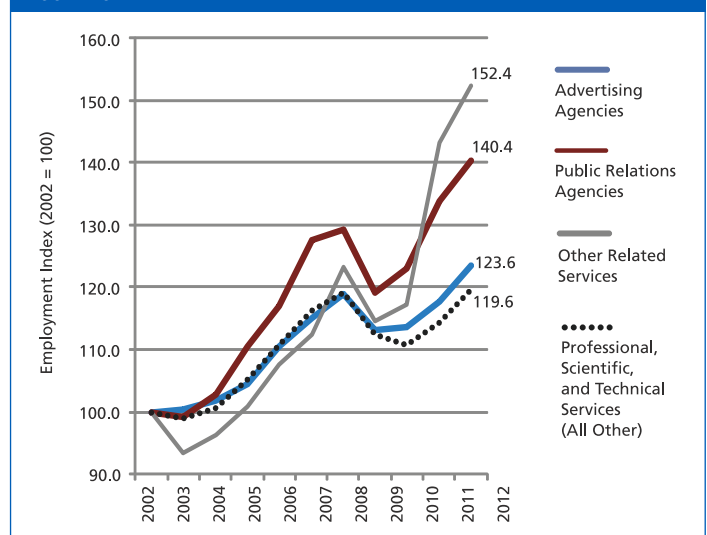
New York City is by far the nation's advertising agency employment leader. Los Angeles is second, employing 43% of the number in New York City, followed by Chicago with 34% of New York City's level. Atlanta leads in employment growth, with a compound annual growth rate of 4.1%,

Figure 1: Employment in New York City with National Share, 2002–2012



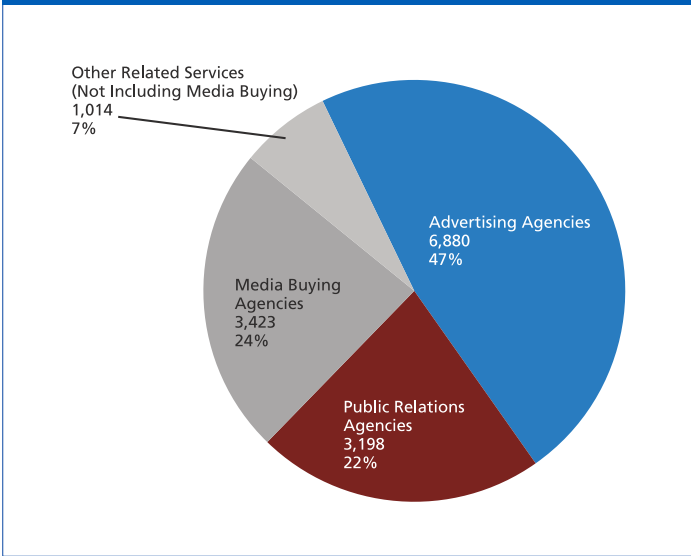
Source: Bureau of Labor Statistics (BLS) and New York State Department of Labor: Quarterly Census of Employment and Wages (QCEW)

Figure 2: Employment Growth in New York City, 2002–2012



Source: QCEW

Figure 3: Industry Growth by Category, New York City, 2002–2012



Source: QCEW

followed by San Francisco with 3.2% and New York with 2.1%.³ With respect to public relations, New York and Washington, D.C. lead other metropolitan statistical areas (MSAs) in employment. Washington, DC employs 76% of New York City's level, followed by Los Angeles at 27% of New York City's level. San Francisco was the fastest growing employer from 2002 to 2012, with a compound annual growth rate of 4.2%. New York was second with 3.5%, followed by Washington, D.C. with 2.7%.

ESTABLISHMENTS

There were 2,630 industry establishments in 2012, representing 1.1% of NYC's total private establishments. Advertising agencies accounted for 1,172 of these, public relations agencies accounted for 897, and other related services accounted for 560. About 6% of national advertising establishments and 9% of public relations establishments are in NYC (see Figure 4). New York has a higher average establishment size in this industry than the U.S. as a whole, which may be attributable to the number of headquarters in the City.

Comparison to other Metropolitan Areas

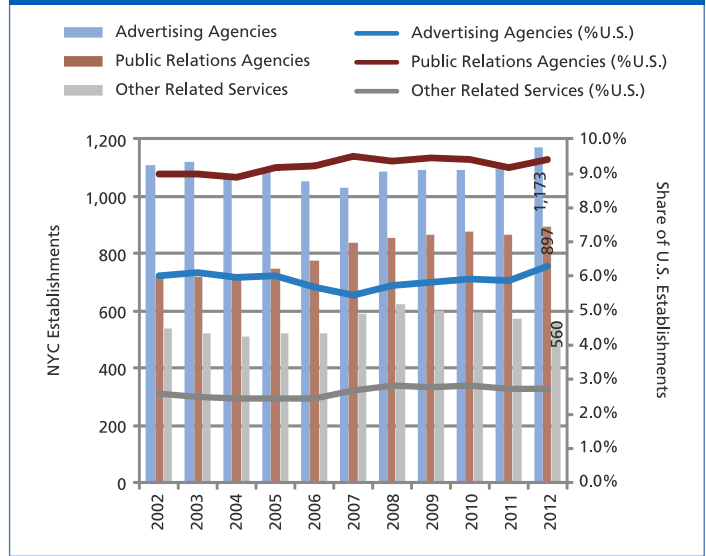
As with employment, New York City leads in the number of advertising agency establishments. Rounding out the top three metro areas are Los Angeles (82% of NYC) and Chicago (76% of NYC). In establishment growth, Washington, D.C. led with 1.3% compound annual growth, followed by Dallas with 1.1% and New York with 0.6%. Several of the MSAs studied had negative growth, which may be attributable to the financial crisis and industry consolidation.

For public relations agencies, the top three MSAs in terms of number of establishments are Washington, D.C. with 1,249 establishments, New York City with 897, and Los Angeles with 498. The fastest-growing cities were Atlanta with 3.4% compound annual growth, Philadelphia with 2.8%, and Washington, D.C. with 2.5%.

BOROUGH COMPARISON

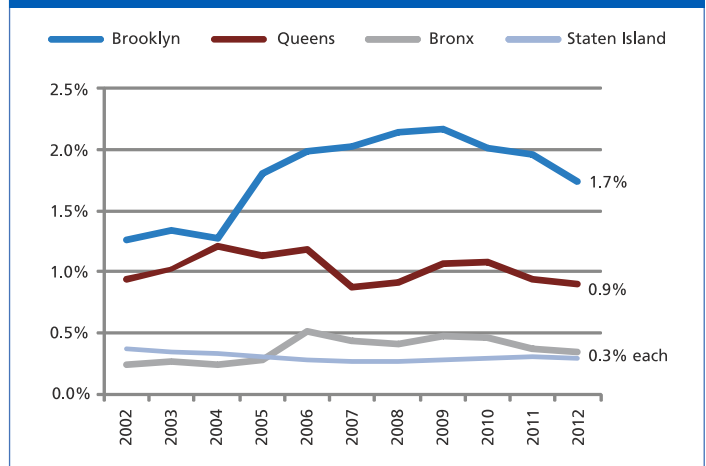
Employment in the industry as a whole grew in all five boroughs from 2002 to 2012, and the number of establishments increased in all boroughs except Staten Island. Manhattan has long been and remains

Figure 4: Establishments in New York City with national share, 2002–2012



Source: QCEW

Figure 5: Employment in Advertising, PR, and Related Services, City Share by Borough, 2002–2012



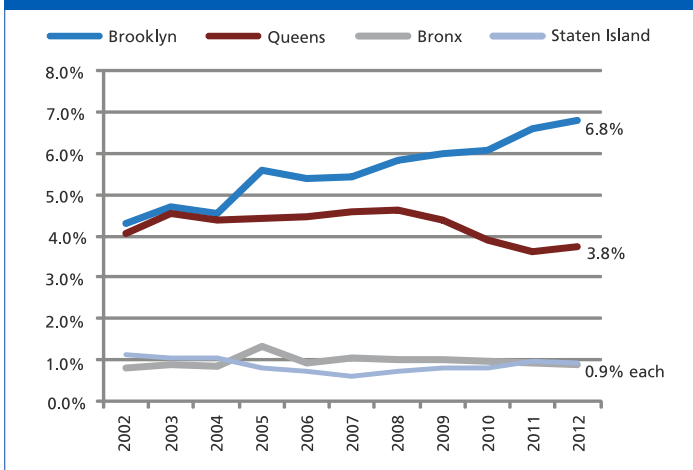
Source: QCEW

the country's advertising center and accounts for 96.7% of City employment and 87.6% of the City's establishments in the industry. Brooklyn saw faster growth than Manhattan in the last decade, increasing its share of overall City employment in the sector to 1.7% and share of establishments to 6.8%. Over the period, Manhattan's share of employment and establishments decreased from 97.2% to 96.7% and from 89.7% to 87.6%, respectively (see Figures 5 and 6).

AVERAGE WAGE

The average real wage (adjusted for inflation) of the industry was 60.5% higher in New York than in the U.S. as a whole in 2012, though the gap has been closing. The industry's real average wage in the City declined from \$122.7 K in 2002 (adjusted to 2012\$) to \$118.8 K in 2012. Total payroll was \$7.14 billion in 2012. Average advertising agency wages declined from \$129.6 K to \$123.6 K, and public relations wages declined from \$118.0 K to \$107.4 K. Wages in other related services, led by salary increases in media buying and media representatives, increased from \$103.0 K to \$115.3 K (see Figure 7).

Figure 6: Establishments in Advertising, PR, and Related Services, City Share by Borough, 2002–2012



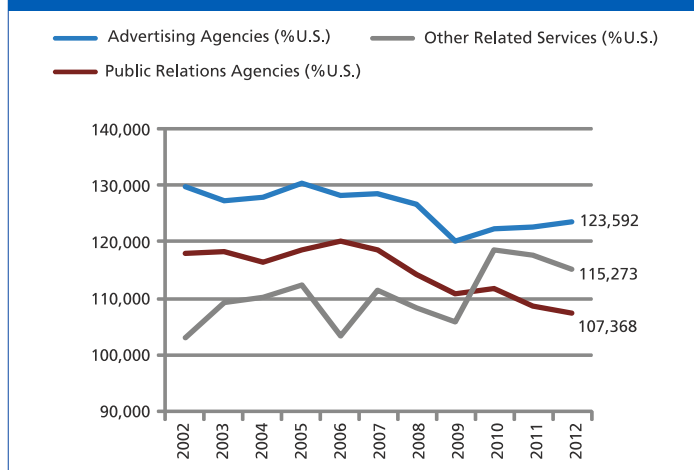
Source: QCEW

Table 1 shows average annual wages in the New York Metropolitan Statistical Area in select occupations related to the advertising and public relations industry. The New York MSA employs more employees in each of these occupations than any other MSA.

Compared to other MSAs, New York has the highest annual average wage for advertising agencies, \$123.6 K. San Francisco is a close second with \$112.6 K, then Los Angeles with \$116.6 K. Atlanta has led wage growth with average annual growth of 4.5%, followed by Los Angeles with 1.5%, and Boston/Washington, D.C. with 1.4% each.

For public relations, New York is second only to Washington, D.C., which has an average annual wage of \$158.1 K. New York City's is \$107.4 K, and San Francisco is third with \$94.9 K. Washington, D.C. led wage growth with 1.9%, followed by Houston with 1.7% and Atlanta with 0.8%.

Figure 7: New York City Real Average Wage, 2002–2012 (2012 dollars)



Source: QCEW, Consumer Price Index

Table 1: Mean Annual Wage by Occupation, New York Metropolitan Statistical Area

Occupation	NY MSA Mean Annual Wage
Advertising & Promotions Managers	\$147,250
Advertising Sales Agents	\$80,690
Public Relations & Fundraising Managers	\$150,410
Public Relations Specialists	\$71,290
Art Directors	\$130,690
Graphic Designers	\$63,160
Marketing Managers	\$170,900
Market Research Analysts & Marketing Specialists	\$74,670

Source: BLS: Occupational Employment Statistics

New York and U.S. Markets

MARKET SIZE AND PRODUCTIVITY

The size of the U.S. advertising market was \$165.0 billion in 2012, according to eMarketer, up from \$158.3 billion in 2011, (an increase of 4.2%), and will rise to \$171.0 billion this year. The leading market segments in 2012 were TV with \$64.5 billion, digital with \$36.8 billion, and print with \$32.9 billion.⁴

According to the 2007 Economic Census, the most recent available, New York City firms took in \$13.3 billion in revenue in advertising, public relations, and related services. This accounted for 14.1% of total U.S. revenues in the sector of \$94.4 billion.⁵ Over the period 2002 to 2011, the latest year available, gross output (a measure of revenue) in advertising, public relations, and related services grew from \$82.0 billion to \$126.4 billion. Output dropped in 2009 but surpassed previous levels in 2011.⁶ Adjusted for price increases, gross output grew 30.2% over the period, a compound annual growth rate of 3.0% (see "Real Gross Output" in Figure 8).

Productivity in the industry, as measured by real output per employee, has been increasing faster than for the U.S. nonfarm business sector as a whole, climbing 35.1% from 2002 to 2011, a compound annual rate of 3.4%. The following chart shows that relationship and decomposes the productivity figure into real gross output and employment. While U.S. employment in the industry has yet to return to pre-recession levels, the industry's output has risen significantly (see Figure 8).

A CONCENTRATED INDUSTRY

The global advertising industry is heavily concentrated among a handful of global conglomerates, commonly known as advertising holding companies. These holding companies own portfolios of companies that handle an array of services such as advertising, marketing, public relations, and media planning and buying. The so-called "Big Four" of WPP (UK), Omnicom (New York), Publicis (France), and Interpublic (New York) had

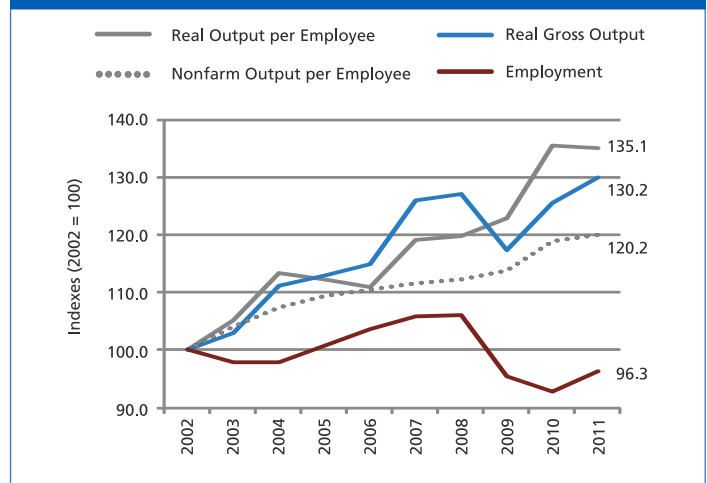
more than twice the revenue of the next 46 companies combined in 2010.⁷ The Big Four had total revenues of \$45.2 billion in 2012 (see Table 2). For comparison, the fifth largest, Dentsu (Japan), had revenues of \$3.68 billion.

Table 2: Top Four Global Advertising Companies by Revenue

Company	2012 Revenues (\$bn)
WPP	15.81
Omnicom	14.22
Publicis	8.17
Interpublic	6.96

Source: Corporate Annual Reports. When necessary, revenue amounts were converted to USD using average annual exchange rates from the IRS.

Figure 8: Productivity, Output and Employment Growth, U.S., 2002–2011



Source: Bureau of Economic Analysis (BEA): Gross Output by Industry; BLS: QCEW and Labor Productivity and Costs

Industry Trends

As with many industries, the key drivers of change in the advertising industry in recent years have been globalization and technology. The proliferation of smartphones and tablets has created a new advertising channel. Globalization has seen New York City agencies expand across the globe while the large conglomerates have continued to grow in size. Advertising is also following eyes from print and television to the internet and mobile devices, and technology is changing the way advertising and media are measured and purchased.

THE INDUSTRY CONTINUES TO GLOBALIZE AND CONSOLIDATE

Geographically, New York City Advertising agencies remain global leaders. Iconic agencies such as McCann Erickson, Young & Rubicam, JWT and BBDO, now part of global conglomerates, operate around the world but are headquartered in New York City. McCann Erickson is now part of Interpublic, Young & Rubicam and JWT are part of WPP, and BBDO is part of Omnicom.⁸

The advertising holding companies have further consolidated by merging with each other. Two major deals have occurred in the last two years. In 2012, Dentsu (Japan) acquired Aegis (UK), a \$4.9 billion deal between the fifth and sixth largest global companies, which seemed to move the advertising world from a Big Four of large companies to a Big Five.⁹ With the July 2013 announcement of the merger between Publicis (France) and Omnicom (New York), a merger valued at \$35.1 billion,¹⁰ the advertising world may be returning to a Big Four with the new Publicis Omnicom Group, WPP, Interpublic, and Dentsu.¹¹

Even with continued consolidation, New York City remains at the center of the industry. Publicis Omnicom Group will have operational headquarters in both France and New York City. (Omnicom's headquarters and Publicis' U.S. headquarters are both currently in the City.) Interpublic is headquartered in New York, and WPP and Dentsu both have their U.S. headquarters here. In addition, many of the companies among the conglomerates' holdings are headquartered here.

In recent years the holding companies' portfolios have grown to include interactive / digital agencies with internet-based services such as digital content creation, web branding and presence, and analytics. Recent major acquisitions of New York City agencies include 360i (Dentsu, 2010), Razorfish (Publicis, 2009), and Huge (Interpublic, 2008). More and more, digital is becoming fully integrated with traditional advertising, erasing the lines between the two.

ADVERTISING GOES DIGITAL AND HIGH TECH

Like many other sectors, the advertising industry has experienced disruption from technology that affects how advertising space is bought and sold, the relative roles of different service providers, and even the need for an ad agency at all. Companies like Google, Facebook, Adobe, and IBM are playing increasingly large roles in advertising.¹² Meanwhile, ad tech startups abound in Silicon Valley and New York City. Though NYC has faced competition from Silicon Valley, NYC's position as a center of creative culture and media, together with its growing tech strength, have helped keep the City the center of the industry. (For an example, see the box later in this report on the Dumbo neighborhood of Brooklyn.)

Advertising technology, or ad tech, is a broad, evolving term that captures the use of computer technology to help make the advertising process more efficient at all steps of the value chain. Ad tech helps with the planning of marketing strategy, search engine optimization, the buying and selling of advertising space (digital and traditional), digital content creation and distribution, improved audience targeting, customer relationship management, and advertising impact analysis.¹⁴

Perhaps the most successful story of ad tech in New York City is that of DoubleClick. Founded in 1996 and acquired by Google in 2008 for \$3.1 billion, DoubleClick pioneered dynamic ad targeting, which made it possible to show different ads to different users and has become a key feature of internet advertising.¹³ Other New York ad tech startups include AppNexus, Magnetic, MediaMath, and Mojiva, among others.

INTERNET ADVERTISING REVENUE CONTINUES TO GROW

Internet advertising revenue, including mobile, totaled \$20.1 billion in the U.S. in the first half of 2013, up from \$36.6 billion in all of 2012 and \$31.7 billion in 2011, according to the Internet Advertising Bureau (IAB) and PricewaterhouseCoopers (PwC). Since 2003, the compound annual growth rate has been 19.7%.¹⁵ According to industry analyst Mary Meeker, in 2010, internet advertising surpassed newspaper advertising for the first time.¹⁶ Internet advertising, with 25% of the nation's advertising spending in 2012, appears to have overtaken advertising spending in total print, including newspapers and magazines, which accounted for 23%. Print and Internet are the 2nd and 3rd categories in advertising spending behind TV, which gets 43% of total advertising spending.¹⁷

	U.S. (%)	Worldwide (%)
Google	40.9	31.5
Yahoo!	8.6	3.4
Facebook	5.9	4.1
Microsoft	5.1	1.6
IAC	2.5	1.4
AOL	2.5	1.0
Amazon	1.2	0.6
Twitter	0.7	0.3
Market Size (billions)	\$36.8	\$104.0

Source: eMarketer. Bold represents NYC-based companies

Google is by far the leader in digital advertising revenues, claiming 40.9% of the U.S. digital advertising market in 2012, according to eMarketer. Facebook and Yahoo are a distant 2nd and 3rd with 8.6% and 5.9%, respectively. While most of the top companies are located elsewhere, especially in California, two New York City companies made the list; IAC and AOL, at 5th and 6th, each captured 2.5% of the U.S. market.¹⁸ The two companies' shares of worldwide revenue were 1.4% and 1.0%, respectively (see Table 3).¹⁹ IAC, or InterActiveCorp, owns a number of internet brands such as Match.com, About.com, and Vimeo. AOL owns such brands as Huffington Post, TechCrunch, and Moviefone. The other companies on the list also all have offices in New York.

MOBILE MEDIA PRESENTS A CHALLENGE AND AN OPPORTUNITY

Mobile advertising is another disruptive force as smart phones and tablets gain wider usage. Global mobile traffic as a percent of global total internet traffic was 15% in May 2013, according to internet analyst Mary Meeker, and is on an exponential growth trajectory.²⁰ The share of digital advertising going to mobile is also growing rapidly, rising to 15% in the first half of 2013 from 7% in the first half of 2012, according to the IAB and PwC. Spending on mobile advertising was \$3.0 billion dollars in the first half of 2013, compared to \$3.4 billion in all of 2012, \$1.6 billion in

2011, and \$641 million in 2010.²¹ Another estimate by eMarketer puts the 2012 mobile advertising total even higher, at \$4.4 billion.²²

Meeker estimates that there is a \$20 billion opportunity for advertising growth in internet and mobile in the U.S. due to gaps between time spent and ad spending on each medium. This is especially true for mobile (including smartphones and tablets), on which users spend 12% of their time but which receives only 3% of the nation's ad spending.²³

New York City is home to a number of people and companies at the forefront of mobile advertising. The City is home to 4 of Business Insider's Top 29 Most Important People in Mobile Advertising and 9 of the Business Insider's Top 28 Most Powerful Women in Mobile Advertising. California, especially Silicon Valley / San Francisco, claims most of the list. The highest ranked ad professionals from New York are sales executives of media or internet companies headquartered on the West Coast: Facebook, Amazon, and Pandora. The others are officials from ad tech companies such as NYC-based AppNexus, Mojiva, and Tapad.²⁴

KNOWING WHICH HALF IS WASTED: A NEW ERA OF METRICS

Now that advertising has moved online, the advertising dictum (sometimes attributed to John Wanamaker) that half of all advertising spending is wasted, but it is impossible to know which half, is in need of an update.²⁵

A major innovation in the development of new metrics for the internet was the cost-per-click (CPC) model of pricing, whereby advertisers are charged when the user clicks on an ad. CPC appeared in the late 1990s. Google incorporated it in the AdWords advertising platform in 2002. The traditional standard of cost per thousand impressions (CPM) still exists, but performance-based pricing using CPC or cost-per-action (CPA), such as a website registration or a social media "Like", now predominates. A new model is cost-per-engagement (CPE), in which advertisers are charged when a user engages with an ad. This may be defined in different ways but includes clicking on an ad to enlarge it or start a video within the ad frame.

About two-thirds of online ads were performance-based (CPC, CPA, CPE) in the first half of 2013 according to the Interactive Advertising Bureau. About one-third were impression-based (CPM and CPI, or cost per impression). Since 2005, performance-based pricing has been on the rise, surpassing impression-based pricing in 2007, though the trend has leveled off in the last three years.²⁶ In the case of mobile, however, Velti reports that CPM campaigns dominate, with CPM/CPI accounting for 90% of mobile ads in May 2013, compared with 50% in May 2012. Velti attributes this to the growing presence of established brands on mobile, which rely on CPM campaigns for brand awareness.²⁷

"Half the money I spend on advertising is wasted; the trouble is I don't know which half." John Wanamaker (attributed)

Programmatic buying & selling, or Programmatic, is the use of computerized platforms to buy and sell advertising space, bringing together buyers (marketers, ad agencies, ad networks) and sellers (publishers, web portals). Programmatic is often likened to financial exchanges. Real-Time Bidding is often a central part, but there are other types of interactions as well.

Real-Time Bidding, or RTB, is an automated process that allows for buyers of advertising space (marketers, ad agencies, and media buying agencies) to bid on available space for a single impression (display) of an ad in the fraction of a second that it takes for a web page or other digital space to load. It is one of the major ways in which programmatic buying & selling is conducted.³⁰

In an industry dominated by metrics, new ways to measure engagement are crucial, and several New York City companies have emerged to meet this need. Companies such as ZenithOptimedia, part of Publicis, and MediaMath help clients track the success of campaigns. EMarketer is an oft-cited major player in digital advertising data. EMarketer has been following the online advertising industry since 1996 and in 1999 released, in conjunction with Ad Age, one of the first comprehensive studies of the online advertising industry.²⁸ AdExchanger, founded in 2008, is another online trade publication that follows digital advertising with a particular focus on advertising technology.²⁹

BUYING AND SELLING IS ALSO GOING DIGITAL

Programmatic buying is altering the relationships in the advertising ecosystem. More and more advertising space is now bought and sold through the use of computer platforms, many of which use auctions. As one way to deal with the shift, the large advertising holding companies have created their own trading desks to handle programmatic buying and some smaller agencies have followed suit.³¹ Further shaking up the programmatic space, in September, NYC-based AOL became the first media company to hold an exclusively programmatic-focused upfront, a standard pre-season media preview for the advertising industry, allowing industry players to programmatically reserve premium advertising space on AOL-owned digital media. Industry reaction seems to suggest the industry isn't set to move in this direction, however.³²

Real-time bidding presents a fundamental change to the advertising industry. RTB analyst Karsten Weide of International Data Corporation states that RTB is the "fastest growing segment of the digital advertising industry bar none, including hot growth segments such as mobile, video and social." In fact, he has called RTB "the fastest-growing area of media in history."³³ In 2012, RTB spending on display ads (as opposed to search ads) was \$2 billion and accounted for 15% of total combined online and mobile display ad spending. Weide expects RTB to grow at a compound annual growth rate of 49% through 2017, bringing RTB spending in the U.S. to \$14.4 billion, or 41% of display ad spending. RTB's growth comes from the fact that RTB provides better return on investment (ROI) for ad agencies and publishers, according to Weide.³⁴

Several New York City ad tech firms are active in real-time bidding. The most prominent example is AppNexus. Founded in 2007, the company is an industry leader in RTB platforms. The company employs about 500 people and handles 16 billion ad buys per day, accounting for \$700 million in ad spending last year, according to Forbes.³⁵ In September, AppNexus and Baltimore-based mobile ad company Millennial Media announced a joint venture that will help AppNexus add a large mobile presence to its existing traditional web presence.³⁶ AppNexus had a \$75 million Series D venture capital round in January, bringing total VC funding to \$141 million.³⁷ Another New York-based RTB company is AdTheorent. Founded in 2011, AdTheorent brings RTB to mobile devices. The company uses real-time predictive modeling to serve the right ad to any given user. In September, the company raised \$4 million in Series A venture capital funding from Verizon Ventures, among others.³⁸



Dumbo, Brooklyn: Interactive and Creative Digital Content

The Dumbo neighborhood of Brooklyn is home to a thriving community of creative, digitally savvy agencies and professionals. The neighborhood's cozy 10-block area is home to numerous firms working in digital media and technology and was recently identified as the NYC neighborhood with the highest concentration of creative and technology companies.³⁹ Named "New York's Digital District" by industry insiders in 2010, the neighborhood has established itself as one of New York's creative and technical centers.⁴⁰

Firms working in the space between advertising and digital media are often referred to as interactive or digital agencies. Services provided by these agencies include digital and mobile strategy, content creation, product development, and user-centered responsive design, along with more traditional web design and development. These digital agencies are called upon by other agencies or global brands themselves to turn traditional TV and print advertising campaigns into interactive digital products and to coordinate the campaigns across multiple digital platforms.

Digital agencies located in Dumbo include, but are not limited to:

- Huge
- Carrot Creative
- Big Spaceship
- The Jar Group
- Brooklyn Digital Foundry
- Apex Exposure
- Brooklyn United
- Mammoth Advertising
- Space 150
- Spike DDB
- The Joey Company
- Damashek Consulting

Related Industry: Marketing

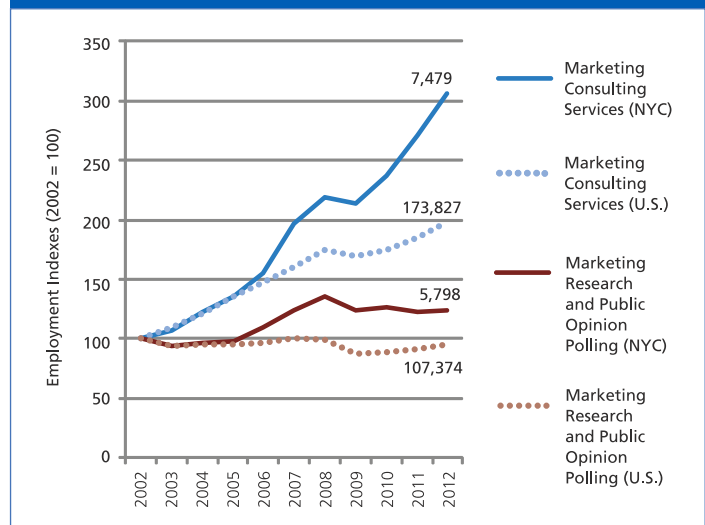
New York City saw growth in two marketing-related industries: Marketing Consulting services and Market Research & Public Opinion Polling. Table 4 shows a comparison between 2002 and 2012 for employment, establishments, and average annual wage. Growth is given as a compound annual growth rate. Figure 9 shows how NYC employment growth in these industries compared to the U.S.

Table 4: Growth in New York City Marketing-Related Companies, 2002–2012

	2002	2012	CAGR
Employment			
Marketing Consulting Services	2,445	7,479	11.8%
Marketing Research and Public Opinion Polling	4,704	5,798	2.1%
Establishments			
Marketing Consulting Services	566	1,076	6.6%
Marketing Research and Public Opinion Polling	251	285	1.3%
Average Real Annual Wage			
Marketing Consulting Services	\$105,991	\$112,326	0.6%
Marketing Research and Public Opinion Polling	\$87,658	\$97,989	1.1%

Source: QCEW

Figure 9: Marketing Employment Growth, New York City and U.S., 2002–2012



Source: QCEW

Notes & Sources

- ¹ These categories are all part of North American Industry Classification System (NAICS) code 5418: Advertising, Public Relations, and Related Services. The numbers may not always sum correctly due to data suppression to protect company confidentiality. Also, some companies involved in advertising work are likely to report NAICS codes outside of the 5418 grouping, for example computer services companies that work in advertising technology or web design firms who manage clients' online campaigns. These firms fall outside the employment, establishment, and wage data covered in this report.
- ² For more on location quotients, see: New York State Department of Labor, Industry Clusters in New York's Economy: A Statewide and Regional Analysis, December 2011, www.labor.state.ny.us/stats/PDFs/Industry-Clusters-report-2011.pdf
- ³ Comparisons are among New York City proper and metropolitan statistical areas (MSAs) around the country. The MSAs chosen for comparison are the top nine MSAs in the country by population after New York: Los Angeles, Chicago, Dallas, Houston, Philadelphia, Washington, D.C., Miami, Atlanta, and Boston. In addition, San Francisco and Detroit were included due to their recognized presence in the advertising industry. MSAs such as Boulder, Portland, Seattle, and Austin have experienced significant growth in this industry but remain comparatively small and are not included. For simplicity, only the largest city of each MSA is named in this discussion.
- ⁴ EMarketer, "US Total Media Ad Spend Inches Up, Pushed by Digital," August 22, 2013, www.emarketer.com/Article/US-Total-Media-Ad-Spend-Inches-Up-Pushed-by-Digital/1010154
- ⁵ U.S. Census Bureau, 2007 Economic Census, www.census.gov/econ/census07/www/get_data.html
- ⁶ U.S. Bureau of Economic Analysis, GDP-by-Industry Data, www.bea.gov/Industry/gdpbyind_data.htm
- ⁷ Matt Carmichael, "Stat of the Day: How Big Is Big in the Ad Agency World?" Ad Age, April 26, 2011, <http://adage.com/article/adagestat/stat-day-50-biggest-ad-agencies-stack/227214/>
- ⁸ For an interesting look at the history and consolidation of ad agencies, see Vitamin T, "The Ad Agency Bloodline" (Infographic), May 17, 2011, <http://vitamintalent.com/vitabites/the-ad-agency-bloodline>
- ⁹ Rupal Parekh and Kunur Patel, "Not the 'Big Four' Holding Firms in Adland Anymore — Now It's the Big Five," Ad Age, July 12, 2012, <http://adage.com/article/agency-news/big-holding-firms-adland-anymore-big/236001/>
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