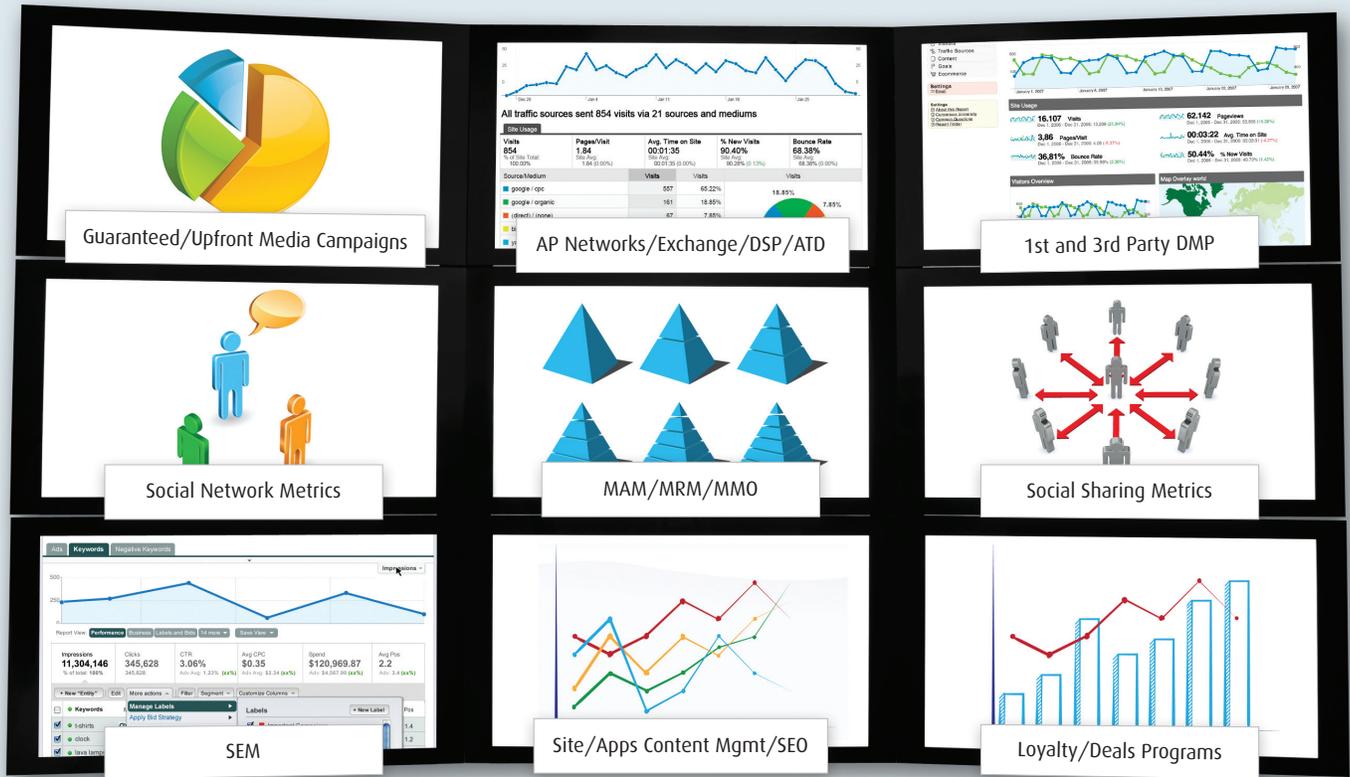


# DIGITAL MARKETING HUB v2.0



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Please refer to pages 118-119 for Disclosures Statements, including Analyst's Certification. For important disclosures on the stocks discussed in this report, please go to [http://researchglobal.bmocapitalmarkets.com/Public/Company\\_Disclosure\\_Public.aspx](http://researchglobal.bmocapitalmarkets.com/Public/Company_Disclosure_Public.aspx).



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## Coverage List

### Exhibit 1. Coverage Summary

Valuation	Ticker	6/6/12			Shares Out (mm)	Market Cap (mm)	EV/Rev.		EV/EBITDA		P/E		2013	2013	FCF Yield		Div. Yield
		Price	Target	Rating			2011	2012	2011	2012	2011	2012	PEG	vs S&P	2011	2012	
Google	GOOG-US	\$580.57	\$755	OP	332	\$192,538	5.2x	3.3x	9.5x	7.6x	16.1x	13.5x	0.6x	0.9x	5.9%	7.8%	na
Yahoo!	YHOO-US	\$15.36	\$17	Mkt	1,210	\$18,589	1.0x	0.6x	2.9x	1.9x	18.4x	16.2x	1.0x	1.1x	4.8%	5.1%	na
WPP plc	WPP-LN	£7.50	£8	Mkt	1,342	£10,070	1.3x	1.2x	8.1x	7.7x	13.2x	12.6x	2.4x	0.9x	8.4%	9.4%	2.2%
Omnicom Group	OMC-US	\$47.24	\$49	Mkt	278	\$13,109	1.0x	0.9x	7.5x	6.4x	14.5x	12.8x	0.8x	0.9x	8.0%	9.1%	2.5%
Publicis Groupe	PUB-FR	€ 37.75	€ 39	Mkt	221	€ 8,345	1.2x	1.2x	6.9x	6.9x	14.3x	12.3x	0.7x	0.9x	6.6%	8.1%	1.9%
LinkedIn	LNKD-US	\$93.08	\$115	Mkt	93	\$10,710	19.9x	10.6x	105.1x	54.7x	267.4x	139.7x	0.9x	6.4x	0.1%	0.0%	na
Alliance Data Systems	ADS-US	\$125.13	\$125	Mkt	63	\$7,936	3.2x	2.5x	10.2x	7.5x	16.4x	14.7x	1.2x	1.1x	6.7%	7.6%	na
Interpublic Group	IPG-US	\$10.69	\$13	OP	467	\$4,994	0.6x	0.6x	5.3x	4.8x	14.7x	12.9x	0.8x	0.9x	8.5%	9.5%	2.2%
Sapient	SAPE-US	\$11.09	\$15	OP	145	\$1,612	1.3x	1.2x	9.1x	8.0x	19.4x	18.6x	3.0x	1.1x	6.8%	6.7%	na
ValueClick	VCLK-US	\$17.40	\$18	Mkt	82	\$1,434	2.7x	1.9x	8.5x	6.2x	17.4x	15.5x	1.1x	1.1x	9.6%	11.0%	na
Axiom	ACXM-US	\$13.85	\$17	OP	78	\$1,076	1.0x	1.2x	4.5x	6.1x	21.3x	21.9x	-6.4x	1.3x	6.9%	4.6%	1.7%
Valassis	VCI-US	\$20.69	\$23	OP	43	\$886	0.6x	0.6x	4.3x	4.2x	7.5x	6.7x	0.5x	0.5x	19.8%	19.2%	na
Constant Contact	CTCT-US	\$20.99	\$24	Mkt	32	\$662	2.9x	2.1x	17.0x	12.0x	29.9x	24.3x	0.8x	1.5x	2.8%	3.5%	na
Harte-Hanks	HHS-US	\$8.57	\$9	Mkt	63	\$542	0.7x	0.7x	6.2x	5.7x	12.2x	12.3x	-14.9x	0.9x	10.9%	10.6%	4.0%
MDC Partners	MDCA-US	\$9.84	\$19	OP	30	\$294	0.7x	0.6x	7.4x	5.8x	nm	nm	nm	5.4x	6.1%	14.6%	5.7%
Marchex	MCHX-US	\$3.55	\$8	OP	43	\$151	0.8x	0.9x	4.9x	6.6x	11.9x	13.5x	-0.9x	0.8x	11.3%	10.2%	2.3%
Mean							2.8x	1.9x	13.6x	9.5x	33.0x	23.2x	-0.6x	1.6x	7.7%	8.6%	2.8%
Median							1.1x	1.2x	7.4x	6.5x	16.1x	13.5x	0.8x	1.0x	6.8%	8.6%	2.2%

Estimates	Ticker	Revenue				Growth		EBITDA				EPS				Growth	
		2012	Cons.	2013	Cons.	2012	2013	2012	Cons.	2013	Cons.	2012	Cons.	2013	Cons.	2012	2013
Google	GOOG-US	\$44,565	\$35,338	\$58,798	\$42,580	53.2%	31.9%	\$19,538	\$18,932	\$22,742	\$22,371	\$43.00	\$43.27	\$50.00	\$50.39	20.7%	15.9%
Yahoo!	YHOO-US	\$4,511	\$4,502	\$4,687	\$4,596	3.0%	3.9%	\$1,461	\$1,454	\$1,636	\$1,616	\$0.95	\$0.96	\$1.12	\$1.12	14.0%	17.9%
WPP plc	WPP-LN	£10,549	£10,557	£10,951	£11,059	4.1%	3.9%	£1,695	£1,709	£1,767	£1,839	£0.72	£0.74	£0.79	£0.81	6.9%	8.6%
Omnicom Group	OMC-US	\$14,443	\$14,378	\$15,161	\$15,042	5.0%	4.0%	\$2,123	\$2,094	\$2,299	\$2,220	\$3.70	\$3.68	\$4.20	\$4.07	13.8%	13.5%
Publicis Groupe	PUB-FR	€ 6,278	€ 6,276	€ 6,566	€ 6,559	5.0%	4.0%	€ 1,133	€ 1,156	€ 1,207	€ 1,228	€ 3.15	€ 3.21	€ 3.45	€ 3.45	19.1%	9.3%
LinkedIn	LNKD-US	\$904	\$908	\$1,300	\$1,354	75.7%	42.7%	\$176	\$182	\$308	\$313	\$0.67	\$0.68	\$1.18	\$1.24	91.4%	76.5%
Alliance Data Systems	ADS-US	\$3,514	\$3,515	\$3,780	\$3,806	10.7%	7.6%	\$1,167	\$1,137	\$1,277	\$1,252	\$8.50	\$8.56	\$9.55	\$9.63	11.3%	12.4%
Interpublic Group	IPG-US	\$7,234	\$7,216	\$7,595	\$7,535	3.6%	4.0%	\$913	\$918	\$1,003	\$1,017	\$0.85	\$0.81	\$0.96	\$0.98	16.1%	13.5%
Sapient	SAPE-US	\$1,158	\$1,162	\$1,367	\$1,341	13.5%	18.0%	\$177	\$142	\$219	\$173	\$0.53	\$0.75	\$0.69	\$0.94	4.6%	35.0%
ValueClick	VCLK-US	\$692	\$699	\$752	\$781	23.5%	8.7%	\$216	\$219	\$237	\$250	\$1.12	\$1.13	\$1.26	\$1.33	12.2%	12.0%
Axiom	ACXM-US	\$1,121	\$1,123	\$1,165	\$1,160	0.0%	0.0%	\$220	\$212	\$244	\$256	\$0.63	\$0.61	\$0.85	\$0.75	-15.4%	33.8%
Valassis	VCI-US	\$2,142	\$2,196	\$2,101	\$2,210	-4.2%	-1.9%	\$323	\$0	\$312	\$302	\$3.08	\$3.06	\$3.35	\$3.43	12.0%	8.9%
Constant Contact	CTCT-US	\$254	\$253	\$299	\$292	18.4%	17.7%	\$45	\$47	\$54	\$58	\$0.86	\$0.88	\$1.14	\$1.11	23.2%	31.7%
Harte-Hanks	HHS-US	\$833	\$855	\$836	\$864	-2.1%	0.3%	\$104	\$105	\$109	\$109	\$0.70	\$0.75	\$0.75	\$0.81	-0.8%	7.3%
MDC Partners	MDCA-US	\$1,088	\$1,068	\$1,193	\$1,153	8.4%	8.5%	\$115	\$104	\$132	\$128	-\$0.69	-\$0.80	\$0.15	\$0.17	52.4%	121.2%
Marchex	MCHX-US	\$143	\$144	\$159	\$160	-2.4%	11.0%	\$144	\$19	\$160	\$23	\$0.26	\$0.22	\$0.34	\$0.30	-12.0%	28.8%
Mean					13.5%	10.3%	Mean				16.8%	27.9%					
Median					5.0%	5.8%	Median				13.0%	14.7%					

Source: BMO Capital Markets and company reports



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## ***Introduction and Op-Ed***

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### ***Introduction***

**Internet protocol (IP) marketing represents ~25% of all marketing spending today and should make up half of all marketing budgets by 2020.** This starts with “online/internet” spending and includes IP ads and marketing programs delivered to mobile, IPTV, digital-out-of-home, and IP platforms in-store. Hockey-stick growth in consumer data derived from IP communications systems continues to drive technology innovation that both generates and harnesses it. This report is a full upgrade of our *Digital Marketing Hub* series started in May 2009 and last updated in June 2011. In this report we aim to do three things:

1. **Examine the best-positioned companies and stocks in the still-emerging IP advertising and marketing ecosystem.** This includes both large-cap public companies that play outsized roles in the industry and small- and mid-cap public companies with differentiated offerings. We also offer brief profiles of more than 100 private companies.
2. **Examine industry trends and innovation that we believe are increasingly important.** This includes the continued intermingling of IP marketing and IP commerce, developments in ad attribution and cross-channel analytics, and the fallacy of looking to Wall Street to better understand the implications of programmatic buying and exchange-like market places.
3. **Describe the IP marketing industry, its growth drivers and constraints, against the context of the broader advertising and marketing services sectors.** The report offers several views of industry market sizes; piecing together the varying elements of total marketing spending required, pulling together data from different sources, debating definitions and ultimately trying to paint the best of picture of the addressable market as we see it. The report explores the secular drivers of IP marketing, both infrastructural changes (expanding IP networks capacity and proliferation of devices) and thematic ones, like social, mobile, and loyalty. The report also explores the legal, cultural, and competitive elements that constrain (for perfectly good reasons in many cases) the growth of IP marketing.

**As always, we welcome your feedback at [dan.salmon@bmo.com](mailto:dan.salmon@bmo.com).** This is a fast-moving industry and companies are constantly evolving their offerings; likewise, new technology stops certain trends in their tracks and creates new ones just as quickly. So if you think we've missed something herein, let us know.

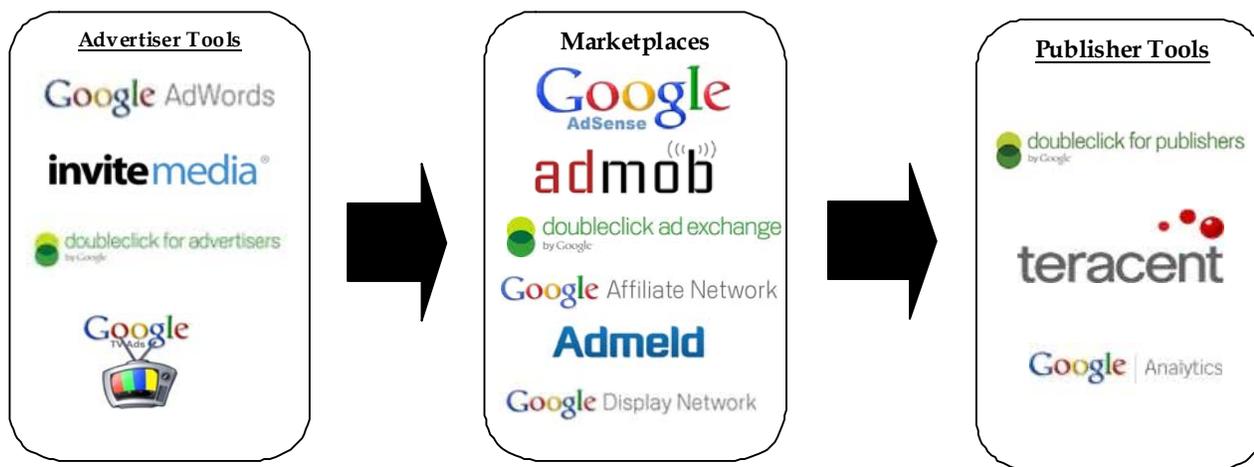
## What Are the Best Positioned Stocks for the IP Marketing World...

### Google

**Google offers YouTube’s video ad inventory – where branding dollars are increasingly headed -- and a dominant display technology stack.** While Google is not the leader in the sale of display ads on proprietary media/products and DoubleClick and other “ad tech” services are not in and of themselves major revenue drivers, we believe their value to Google is underappreciated by investors. Estimates vary, but DoubleClick probably serves around half of the web’s non-Facebook display ads; and on June 5, the company unveiled a more unified technology suite called simply DoubleClick Digital Marketing. Having a dominant franchise in other areas of the media value chain has always mattered in advertising (see TV below) and in our opinion, they are only becoming more valuable because of the data they generate. DoubleClick’s unparalleled reach gives Google another dominant dataset to go alongside its flow of search keywords (from both PCs and mobile) and the still growing usership of YouTube.

**Moreover, Google has executed the strongest acquisition strategy of any major IP Marketing company** and the latest one – sell-side platform AdMeld – comes as ad tech innovation swings to the publisher side, and away from the buy-side. From buying platforms like Invite Media and AdWords through marketplaces like DoubleClick Ad Exchange that blur into nominally sell-side products like AdMeld, AdMob, and AdSense, Google has defined the value chain with its end-to-end system. When fortified with products like Google Analytics (and the original acquisition, Urchin) and internally built Google TV Ads, we believe Google has unparalleled IP marketing assets.

### Exhibit 2. Google Display Products



Source: Company reports and BMO Capital Markets

**Through the lens of secular trends, we believe there is far too much attention on Google+ and not enough on YouTube as Google’s social strategies are examined.** While we believe Google+ -- and the broader +1 efforts -- are important “big bets,” the subsequent investor attention has led to YouTube be overlooked as the original “social” product at Google. Not only has YouTube proven to be immune to fashion risk, but its content – online video – is where brand advertisers are looking more often for story-telling capabilities they have traditionally sought on television. In mobile, Android may have intellectual property

hurdles and challenges around tablets, but it has also shown Google's ability to develop and scale IP platforms and serves a foundation for incremental ad dollars (even if they are lower priced).

## Agencies

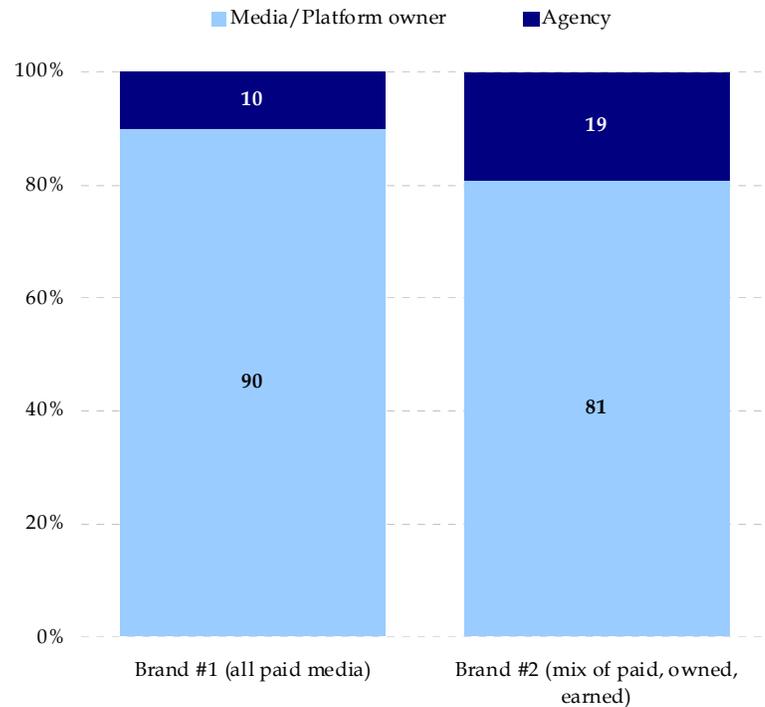
**As social networks and smartphone usage increases, agencies have the opportunity to capture a greater share of clients' spending as they increase budgets for owned and earned media.** The concept of paid, earned, and owned media is not new, but we believe it is becoming more important. Its components are:

- **Paid media:** spending whereby a brand is paying a media or marketing services provider to deliver an impression to a consumer. For example, a 30-second TV commercial, an online banner ad, or a direct mail campaign. The primary cost of paid media campaigns is the money paid to a media or marketing services provider to deliver the impression, while agencies are paid a much smaller fee to provide the business services for planning, creating, and executing the paid campaigns.
- **Owned media:** includes a brand's owned assets where marketing messages can be delivered. For example, a branded website or mobile app. The primary cost of most owned media is the money paid to build and maintain a branded media platform; this could be managed by in-house staff and/or an agency, either of which can use off-the-shelf technology solutions and/or develop proprietary ones.
- **Earned media:** traditionally earned media was focused on public relations, as it represents spending whereby a brand is aiming to help fuel its customers' conversations and "word-of-mouth" around the brand. The use of free social media platforms to deliver information to those who have "liked" or "follow" the brand creating new earned media opportunities that agencies – including PR – are helping clients leverage.

**Agencies (of different flavors) are the traditional CMO advisors on all three types of media; however the latter two can offer very different economics.** We present a hypothetical example of two brands in Exhibit 3 below. We assume both brands have a total budget of \$100 million to spend. Brand #1 uses 100% paid media (for this example, we'll assume its all primetime TV advertising). Brand #2 instead contributes 80% of its budget to primetime TV and 10% to mobile and social marketing each. For the mobile portion, the funds are split between buying mobile display ads (paid media) and having an agency build multiple free mobile apps (owned media) for iOS, Android, and other mobile operation systems. The 10% social budget is also split: this time between paid social display ads and fees for an agency to create a free social presence (where earned media can flourish) for Brand #2 and update it regularly with news about product updates, viral videos, promotions, etc.

### Exhibit 3. Agencies Capture More Budget as Brands Focus on Owned/Earned Media

<i>Paid Media</i>	Brand #1	Brand #2
Primetime TV	100	80
% to media/platform owner	90%	90%
% to agency	10%	10%
Mobile Display Ads	0	5
% to media/platform owner	na	90%
% to agency	na	10%
Social Display Ads	0	5
% to media/platform owner	na	90%
% to agency	na	10%
<i>Owned Media</i>		
Mobile Apps	0	5
% to media/platform owner	na	0%
% to agency	na	100%
<i>Owned Media</i>		
Free Social Presence	0	5
% to media/platform owner	na	0%
% to agency	na	100%
Total budget to:		
<b>Media/Platform owner</b>	<b>90</b>	<b>81</b>
<b>Agency</b>	<b>10</b>	<b>19</b>
<b>TOTAL BUDGET</b>	<b>100</b>	<b>100</b>



Source: BMO Capital Markets

**This is a an important point as brand procurement officers have come to play a more prominent role in guiding marketing budgets.** The largest buckets from which to seek efficiency in total marketing budgets are paid media (advertising, direct mail, etc.). We expect successful agencies will buttress pressure from procurement on their own fees by helping guide brands toward more cost-efficient earned and owned media platforms, where they can play the role of product designer and curator. Said another way, in the above example, Brand #1 could cut its budget by more than 40% and so long as it was reallocated like Brand #2, its absolute revenue would remain on par.

**Disintermediation risk is still frequently brought up in the discussion about the increasing role of technology in marketing services, but it's mostly mistaken.** First, as we hope this report will help bear out, advertising technology and marketing automation are not new; there are technologies that go back to the 1960s. In particular, skeptics point to media buying as the area that will be disrupted. It's true that this is the part of the holding company model undergoing the most change, and automation of certain types of ad buying is happening. However, not enough of the marketing budget will be automated such that the role of the media agency will be displaced. In fact, the rise of search and display ad bidding technology, for example, has provided the opportunity to expand the scope of service. Media agencies still possess volume-based data advantages due to their wider view of the advertising marketplace and their service personnel can scale knowledge of the technology vendor landscape – functionally serving as a media tech planner and system integrator – at a lower cost than brands themselves.

**Instead, where new competition in the IP marketing era is real, is from business service providers whose primary constituency is the CTO or CIO.** Companies like IBM, Accenture, and Deloitte are capitalizing on their IT know-how and entering the marketing discussion as the CMO and CIO/CTO increasingly collaborate on business solutions. Agencies are responding; for example, WPP recently partnered with Infosys to work on behalf of GlaxoSmithKline.

**Our OUTPERFORM ratings currently lean toward small caps that are more quickly seizing upon this trend (SAPE, and MDCA) as well as IPG as it completes its turnaround.** Sapient and MDC Partners have always been recognized as being more “digital” – or as we prefer, more “IP.” Be it through earned/owned media management or more “systems integrator” approach, these two companies have consistently grown organic revenue growth at 2x-3x the rate of the larger peers in recent years.

### **Direct Marketers with Higher Exposure to Data-Rich Assets**

**Established database/direct marketers are the original math men of the industry, but their differing asset sets offer investors different opportunities.** The direct marketing industry grew up around the practice of managing brands’ customer marketing databases, which were primarily activated by direct mail. While we believe there is much resiliency in direct mail (see below), diversification for IP marketing and even greater data intensity offers more opportunity over the long term. Companies like Experian, Alliance Data Systems, and Acxiom all offer classic database marketing services, but also business models with stronger long-term opportunities than direct mail. These include coalition loyalty programs, credit bureaus, and consumer databases.

### **Brands**

**Ninety-seven of the Advertising Age Top 100 US national advertisers (see Exhibit 12) are public companies, the exceptions being the US Government (#28), Mars (#59) and SC Johnson (#82).** Never before have marketers had so many options on which to spend their budgets in order raise awareness of their goods and services amongst potential customers. Certainly this raises concerns around clutter; however as noted above, earned and owned media opportunities can offer cost-saving opportunities and greater application of analytics to paid media should also drive efficiencies. This effect could put downward pressure on marketing budgets over the long term. The counterbalancing forces include resistance from CMOs at the micro level and increased competition among brands as globalization continues to flourish at the macro level.

### **Major Television Franchises**

**Television advertising is largely consolidated between a few vertically-integrated players, which we expect to protect their share of advertising and marketing impression spending.** These players will continue to leverage competitive advantages from their assets in other areas of the TV distribution chain – namely professional movie and TV studios and cable/satellite systems – to protect broadcast and cable TV advertising revenues. In fact, integration with video distribution like cable and satellite is likely becoming more valuable to advertising revenue lines as their owners are only beginning to tap the IP data in set-top boxes and cable head-ends. While the technology development has been slow, these relatively dormant

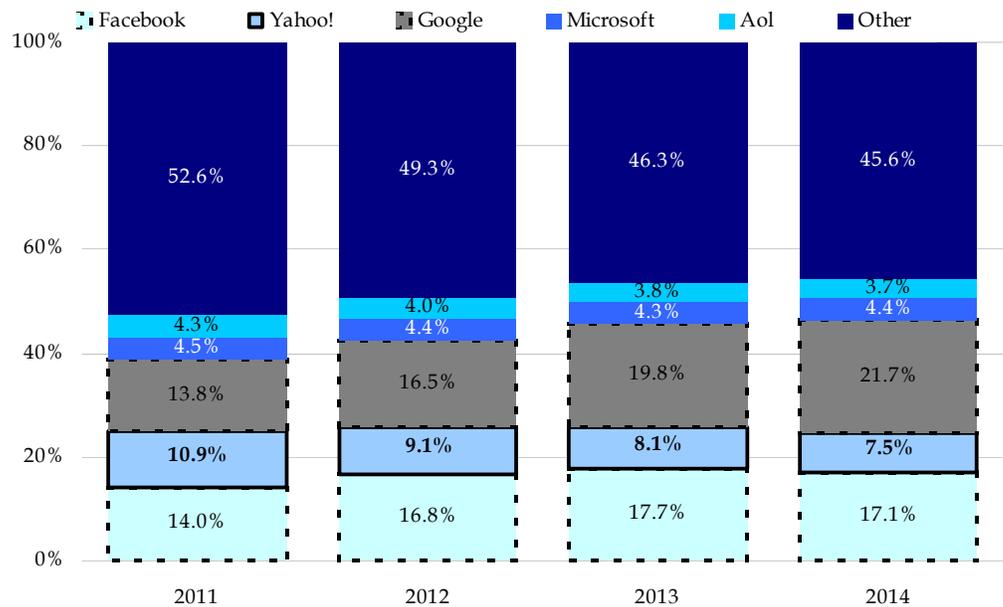
data assets are primed for leverage as the marketing world shifts to an IP worldview. Social TV is also helping support the medium as the television screen remains the center-point of a critical marketing environment, the living room, and marketers are finding ways to help viewers interact via social platforms (e.g., dancing and singing contest shows have introduced real-time voting to TV), which helps buttress TV advertising budgets.

**...And Who Has Challenges?**

**Yahoo!**

**Although there is more clarity on board/management turmoil and Asian asset monetization, Yahoo! still faces considerable challenges in its core IP advertising franchises.** The search agreement with Microsoft has not yet yielded the expected return. Worse yet, prior management’s focus on this part of the business in the 2007-2009 time period likely played a role in Yahoo! losing its edge in display advertising. Unlike Google, which acquired YouTube in 2007, Yahoo! missed the opportunity to create or buy into a large social media play. And after decisively leading the display advertising business toward exchanges and RTB with the acquisition of Right Media in 2007, the asset has languished as key employees left and innovation slowed. The company’s recent focus on leveraging Yahoo!’s still massive audience data sets was a clear positive, in our view. The launch of Yahoo! Genome – a new audience-buying solution, integrating much of the technology acquired from interclick – is a strong first step in this direction, but until management is settled, it’s difficult to judge if the product will flourish or languish.

**Exhibit 4. Estimated US Display Revenue Share**



Source: eMarketer

## Non-Television, Non-IP Advertising

**Newspaper subscription rates continue to fall in most developed markets; permanent pressure on a medium's addressable market means permanent pressure on advertising revenue.** Magazines have generally fared better, but face similar challenges as audiences shift to IP platforms like tablets. Moreover, print has not been able support prices as television has. For example, while social TV is a flourishing concept, there is no such thing as social print. Certainly many entities have been able to survive on the backs of strong brands, professional editorial content, their own adoption of IP platforms to reach consumers, and the socialization of these experiences. However, as long-tail content proliferates via IP technologies, barriers to distribution (the bedrock of analog advertising business models) continue to fall, once dominant franchises are losing market share. Elsewhere, broadcast radio and traditional outdoor/billboards cede more of the growth in audio ads and out-of-home to streaming radio and DOOH (digital-out-of-home), respectively. Where broadcast radio and billboards are very different from newspapers is in their more stable addressable markets (e.g., AM/FM tuners in cars).

## Direct Marketers With Larger Exposure to Print

**Direct mail has much better prospects than newspapers because its addressable market – households with mailboxes -- is stable in developed markets.** Put simply, until one begins reading stories about consumers chopping down their mailboxes, stocks with exposure to direct mail should see relatively stable cash flows. However as younger consumers become more accustomed to receiving phone bills via email, coupons via social networks, and compare recent fashions on flash deal sites instead of catalogues, engagement – and thus marketing return -- will fall over time, in our opinion. Harte Hanks' direct marketing division has seen success lately with its data-centric products like the Trillium business intelligence software and earned media work for its clients on social networks. However, its Shoppers division remains largely mail-driven and puts pressure on the stock's multiple. Valassis' national, co-op/shared direct mail model offers a low-cost model and the company stands as the leading contender to continue to consolidate direct mail and newspaper insert budgets. However, its investment in digital/IP products has only ramped up in the past few years and remain unproven.

## *Op-Ed*

### Marketing Cozies Up Closer to Commerce

**In a virtual IP world, commerce services mesh much more closely with marketing services.** Under the traditional paradigm, consumers were generally marketed to in their living rooms (television) and elsewhere in the home (reading the newspaper over breakfast), as well as during the daily commute (radio in the car); likewise, commerce was generally reserved for after-work and weekend visits to bricks-and-mortar retail stores. In the digital world, however, marketing and commerce are only a click-away from each other, and often blur the distinction completely. For example, the basic affiliate marketing model allows publishers to place offers from e-commerce sellers on their websites (e.g., a “10% off the latest digital camera” offer is placed on a photography bloggers' website); when clicked, the user is often dropped right into a shopping cart that hopefully ends in a sale for the e-commerce entity. So is that affiliate offer an advertisement, or simply the first step in an online shopping cart process?

**Sapient's SapientNitro arm is a standout among public companies for innovation in this area:** it led the building of Target.com and helped Coca-Cola re-build its vending machines with large touch screen displays. Recent IPO Acquity Group has also distinguished itself for integrated commerce and marketing solutions. eBay's GSI Commerce division is also well-versed in this area, having originally started as a leading e-commerce services provider and then slowly evolving its IP marketing services in recent years (acquisitions of e-Dialog for email, Fetchback for retargeting, Pepperjam for affiliate marketing, Clearsale for analytics, etc.). And even agency holding companies are evolving in this direction; for example, MDC Partners' Crispin, Porter + Bogusky helped build Domino's highly successful e-commerce platform as part of its broader work for the pizza company.

**Credit card companies have long-linked promotions to their users purchase activity,** e.g., discounts on rental cars for those booking air travel, and their loyalty programs offer consumers a virtual currency to redeem other goods and services. Moreover, companies like Valassis offer the ability to link promotions to consumers' retail loyalty cards (usually a grocer or drugstore) so that coupons can be redeemed at checkout. The emergence of the daily deal model, led by Groupon and LivingSocial, brings a new twist on the ad network model, by extending local businesses' promotions across the web. And finally, few companies can match Amazon's ability to show users offers for items "they may like" based on past purchase behavior.

**Card-linked offers bring all of these elements together: promotions and discounts + distribution across the web via an ad network + linkage directly to the commerce mechanism/credit card.** Start-ups like Linkable Networks are aiming to help more third-party advertisers put their offers in front of consumers and deliver them at the time of purchase by linking it to their credit card account. By connecting promotions to commerce/transaction experiences, this creates a more seamless experience for the user, but as importantly, allows offers to be targeted based on actual transaction data. Likewise, this opens up new opportunities to show real marketing ROI to brands and businesses, not only on the promotion itself, but also by layering on information about what else the consumer may have purchased during a single transaction (i.e., bringing more visibility on the ability of the promotion to increase basket size) and whether or not the customer turned into a repeat one. With larger retailers in particular struggling with the emerging consumer habit of "showrooming" – looking at the actual product in brick-and-mortar stores, then pulling out the smart-phone and finding it cheaper on Amazon or another e-commerce retailer – we believe delivering offers while customers are in the store will become increasingly important.

**Mobile payment solutions like Google Wallet aim to take this one step further.** We found it to be no coincidence that Google "linked" the formal announcement of its daily deal product, Google Offers, with the announcement of its mobile payment system, Google Wallet (with carrier partner Sprint). Likewise, AT&T, Verizon, and T-Mobile have joined to create the Isis mobile payment system (which uses NFC technology), where we would expect promotional offers to be interwoven as it gains traction. And Visa's V.me product is supported by a developer program (<https://developer.visa.com>) that we expect to generate innovative solutions that help businesses deliver promotions to the actual point-of-purchase.

### Exhibit 5. Areas of Overlap Between IP Commerce and Marketing

<p>eCommerce/Retail</p>	<p>Mobile Payment Systems</p>
<p>Agencies</p>	<p>Credit Services w/ Loyalty/Small Biz Solutions</p>
<p>Daily Deals/Small Biz Coupons</p>	<p>Social Commerce</p>
<p>Card Linked Offers/National Coupons</p>	

Source: BMO Capital Markets

We also continue to expect the “digital marketing hub” to be absorbed into the “digital customer hub” at major companies over the course of the next decade. As marketing and commerce increasingly overlap, Fortune 1000 companies are examining their use of customer data across the entire enterprise. Together, marketing, sales, and customer service represent the three basic stages of customer relationship management (CRM). As such we view major enterprise software companies like Oracle, SAP, and salesforce.com as semi-related players to monitor; in fact several are already starting to bleed into the marketing realm, like salesforce.com and its acquisition of social media monitoring company Radian6 or Oracle’s acquisition of social marketing start-up Vitruve. Moreover, companies like Amdocs have long provided customer service software to call center and other operations formed to address incoming customer requests/complaints.

#### “Addressable TV” Is Already Here

The lament about the lack of advancement in addressable, IPTV advertising is a long-established one. Specifically, we mean the model of targeting tailored ads to specific set-top boxes. While the challenges are various, we continually hear from executives in this area that the “basic infrastructure just isn’t there yet to deliver campaigns at scale.” This could come in the form of old set-top boxes that need to be upgraded or basic head-end technology for cable systems. The collapse of the cable industry’s Canoe Ventures JV serves as the latest data point supporting the inertia.

However while the established idea of “addressable TV” has been slow moving, the ability to deliver tailored video ads to an audience has not. Start first, with online video advertising delivered to IP devices where users (particularly younger ones) watch their favorite shows on Hulu or YouTube. Mix in viewing on major media company websites or TV Everywhere initiatives like Disney’s ESPN -- and soon Disney Channel, ABC, and ABC Family – which offer smartphones and tablet apps for authenticated cable subscribers. Then

add on the growing audience for on-demand and over-the-top video (Amazon, Rovi, TiVo, GoogleTV, and Apple TV) that reaches consumers in the living room via the set-top box.

**So don't expect "online video" and "TV" budgets to steal from one another; expect them to merge.** As a good example of how this trend happens "in practice," Publicis media buying shop Zenith Media merged its national broadcast television team with its online video group in November 2011, creating a single entity for national video buys across linear TV and "addressable" options like online video and IPTV. Another key driver of this trend is Nielsen and other analytics companies' effort to bring the traditional TV metric of gross ratings points (GRPs) to IP video outlets. In December 2011, online video technology provider INVISION and Nielsen also announced that they are working together to evolve the system of "make-goods" for guaranteed rating targets by offering appropriate "online video" ad placements instead of more traditional TV units. The practice has been used in the past, but a consistent metric across both platforms would reduce friction. Nielsen has also announced a partnership with video ad network Tremor Video to better integrate Nielsen Online Campaign Ratings (as will INVISION) in attempt to better bridge "TV" and "online video."

### **Future of Attribution: Cookies, Device IDs, and Cross-Channel Analytics**

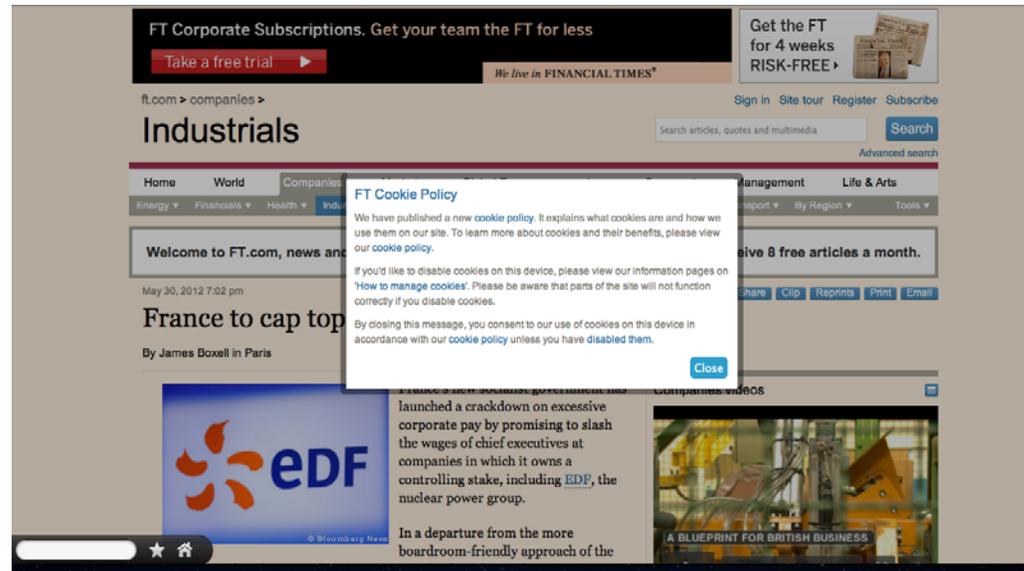
**As integrated marketing campaigns increasingly become the norm, the demand for improved cross-channel attribution is increasing.** This has been one of the most commonly mentioned "industry needs" cited in our conversations with advertising executives over the past several months. The issue is a multi-faceted one that involves questions of independence, accuracy, and appropriate metrics. However, this all starts with the technology and in this area, we believe there are important developments happening that could have significant long-term implications to how IP advertising is targeted and attributed.

**For the most part, the online advertising ecosystem is underpinned by cookies.** These tiny bits of code are dropped onto users browsers and used to collect various data (sites visited, search history, etc.). Many of the vendors and business models profiled in this report would be considered third-party cookie data collectors; first-party cookies are those dropped by the publisher itself. For example, the cookie dropped by Citibank.com to store account holders login information would be a first-party cookie, while one dropped by an ad network serving ads on behalf of a publisher (or unbeknownst to the publisher) would be third-party. The data collected can be consumer-supplied – like that which is entered into an online form to sign up for an email newsletter – or passively gathered, like for example, the device's IP address and operating system type. But as digital media and advertising evolves, the cookie's usefulness is showing some cracks.

**No where has cookie use been under more scrutiny than the EU, where an amended ePrivacy Directive (2009/136/EC) was issued in late 2009.** The new directive made website owners responsible for showing that users were actually aware that they were being tracked and consented to the practice. This is similar to how Facebook, Apple, and Google Android force developers to show a "permission dialog" to those that download apps and use them for the first time. The amended ePrivacy Directive originally gave EU member countries until May 2011 to pass the appropriate laws in their country; this was subsequently extended by 12 months, making the new deadline May 2012. The UK was the first country to pass major legislation (in May 2011) and UK publishers have begun rolling out "cookie consent" require-

ments that their users' must opt-into. Overseen by the Information Commissioner's Office (ICO), publishers can be fined up to £500,000 for non-compliance. Soon after France, Ireland and Sweden passed similar laws, and the Netherlands and Germany are looking at proposed legislation.

### Exhibit 6. Cookie Policy Notice on European Website



Source: FT.com

**In addition to regulatory concern about cookie use, new devices – especially mobile ones – are often not compliant or as accurate with cookies.** Mobile offers a much larger number of browsers than the PC environment and mobile apps generally do not work with cookies. As a result – and because Apple's iOS remains the starting point for most app franchises -- many mobile developers, ad networks, and analytics providers came to rely on devices' universally unique identifier (UDID) for attribution and ad targeting. The UDID is an alphanumeric string that is unique to nearly all digital devices, including every Apple iOS smartphone or tablet. However, beginning in August 2011 and after some negative press and building political pressure, Apple began to hint that the use of UDID for attribution and targeting would be “deprecated” (i.e., no longer supported). By March 2012, Apple had begun to reject app store applicants that relied on UDID. A cynic may suggest that Apple was simply giving their own iAd product a considerable advantage versus other advertising solutions, but it was the case nevertheless, and UDID now no longer appears to be the answer for mobile attribution without the support of the most important device maker. Likewise device fingerprinting – which uses information about a digital devices like browser type and screen resolution to create unique user profiles – has thus far failed to get significant traction. In part, UDID and device fingerprinting have drawn hesitation because, unlike cookies, the user cannot delete them, creating questions about privacy protections.

**Several working groups have emerged to try to find a solution.** The most high profile is likely the Open Device Identification Number (ODIN) group, which includes mobile marketing companies Velti, RadiumOne, Jumtap, MdotM, StrikeAd, Smaato, Adfonic, and SAY Media. The group aims to develop an anonymous secure device identifier for iOS, Android, and Windows Phone, similar to UDID in practice. ODIN generates an ID from a device's me-

dia access control (MAC) address and obfuscates or “hashes” the number to ensure anonymity. Other potential solutions are also being attempted by start-ups such as Mobile Future Group’s AD-X or MobileAppTracking, which use proprietary technology to primarily help provide app download attribution.

**Mobile attribution plays a highly important role in cross-channel attribution.** Because it’s the fastest growing category of IP devices, mobile is a vital piece of the holistic view of consumers. Over time we expect more integration between mobile attribution solutions and other cross-channel initiatives like Nielsen’s Cross-Platform Campaign Ratings, which aims to bring common measurement to television and online video.

### Watch Your Wall Street Analogies

**As programmatic buying has come to advertising, many in the industry are looking to Wall Street for a template; however the comparisons have their limits.** With the industries largely based in the same metropolitan hubs – starting with New York and London – and many similarities in their marketplaces, the association is fair. For example, both industries saw the rise of scalable, self-service business models early in the internet era. While Google’s AdWords also created an entirely new type of advertising, like E\*Trade, it aimed from the outset to be easy-to-learn, and improved over time as power users developed. Furthermore, investment banks and agencies play similar roles. Both offer scaled business services to augment their clients’ in-house staff. Both traditionally make most of their fees from Fortune 1000 companies, giving advice on capital allocation, design of financial products/advertising creative, and execution of transactions. In part because of the investment banking business’ shift to trading-driven business models, many in the advertising industry are talking about ideas like proprietary trading.

**Seeing as they are the most visible, stock markets are often where comparisons are drawn; commodity futures are a better fit, but still not great.** Both stock and commodity futures markets are much, much larger than the global advertising market and have significantly better transparency, with real-time pricing data a foundation of both today. Where commodity futures are more similar than stocks is that ~75% of transactions are entered by humans and then traded electronically, while stocks see ~70% of volume traded over high-frequency and algorithmic platforms.

### Exhibit 7. Characteristics of Advertising vs. Stocks vs. Commodity Futures

	Advertising	Stocks	Commodity Futures
Total market size (\$ in billions)	468	63,000	~100,000
Market transparency	Low	High	High
Volume proportions	Mostly primary market	Mostly secondary market	Mostly secondary market
Perishable inventory	Yes	No	Sort of...contracts normally rolled over each month
Transaction style (\$ volume)	Mostly human	Mostly programmatic	Mostly human

Source: BMO Capital Markets, GroupM, World Federation of Exchanges

**Perhaps the advertising industry would be better served by looking to the travel and leisure industry.** Marketplaces for hotel rooms and air travel may offer more similarities than financial markets. The industries are comparable in size to advertising, all around half a trillion globally. Inventory in all three marketplaces is perishable. Like advertising, hotels and air travel often incorporate annual periods when large blocks of inventory are pre-sold, such as the television upfronts or corporate travel booking negotiations. And travel and leisure has also seen the onset of easy-to-use self-service models, as the Internet age has created Price-line, Expedia, and Kayak. Where the travel industry does differ significantly however is in number of total units, especially as advertising impressions experience hockey-stick like growth as IP advertising expands, especially social display ads.

### Exhibit 8. Characteristics of Advertising vs. Hotels vs. Air Travel

	Advertising	Hotels	Airlines
Total market size (\$ in billions)	468	358	554
Market transparency	Low	Medium	Medium
Volume proportions	Mostly primary market	Mostly primary market	Mostly primary market
Perishable inventory	Yes	Yes	Yes
Transaction style (\$ volume)	Mostly human	Mostly human	Mostly human

Source: BMO Capital Markets, GroupM, International Air Transport Association and Smith Travel Research

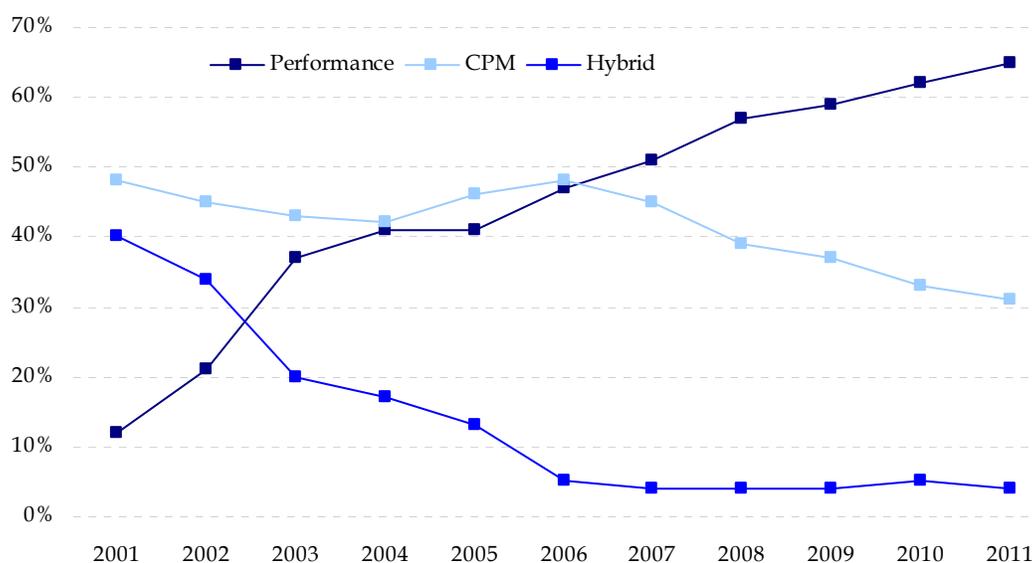
### Lingering Questions

**Below we offer three questions that we've pondered throughout the writing of this report. Put simply, we don't have good answers for them.** One has been bouncing around the industry lately – the potential conflicts of agency trading desks – while the other two are long-term ones that won't be answered for many years as the advertising and marketing ecosystem continues to shift toward IP communication platforms. In speaking with industry executives over the past several months, we've heard compelling arguments for and against them. While we're short on concrete answers, we thought they would be helpful to share as investors consider the future of this dynamic industry.

- 1. Is the price per paid impression (functionally advertising pricing) in long-term secular decline?** The increasing use of IP communications and platforms like social networks is pushing the industry toward infinite ad inventory. This massive increase in supply is the underpinning of the notorious “analog dollars to digital dimes” expression. Add to this the growth of free owned (like branded mobile apps) and earned media (like branded social network presences) and marketers have the opportunity to put their brand in front of consumers for free like never before.
- 2. Does the percentage of time spent with a given medium versus that medium's percentage of total advertising spending even matter?** The shift of ad dollars

from analog to digital media has been the cornerstone of IP advertising and marketing business models since the dawn of the internet. As the belief goes, the dollars will follow the eyeballs eventually. But is this really true in a feedback-fueled, IP marketing ecosystem? As consumers click their way around the internet – be it on a PC, smart-phone or connected TV – they are serving up data on their purchasing intent like never before. While these signals don’t always paint a complete picture of what the consumer aims to buy, they certainly create a clearer one than any type of analog, broadcast media. The continued migration of internet ad pricing toward click or performance-based pricing models suggests that marketers increasingly prefer to buy IP advertising based on the actions users take rather than what simply passes in front of their eyeballs.

**Exhibit 9. US Internet Advertising Revenue by Pricing Model**



Source: IAB

**3. Are agency trading desks really conflicted?** In many ways, ATDs represent the convergence of our research coverage: agencies’ media buying organizations (like those owned by Omnicom or WPP) are increasingly acting as system integrators, stringing together technology and data (from Alliance Data Systems or Acxiom) to purchase IP advertising impressions off of ad exchanges (owned by Google or Yahoo!). On one hand, we see this as the modern incarnation of media buying, replacing the human negotiation with a programmatic, rules-based (and often real-time) transaction. On the other hand, many complain that after already being paid their typical retainer fee for a broader media buying assignment, they are also earning a spread on the purchased paid impression, as ATDs are functionally virtual ad networks, where the business model has always been “buy low and sell high.” So are the ATDs “double-dipping” and obfuscating the real price of media? Or is this simply the new revenue model for media buying? The only thing we know for sure is that clients will eventually decide.

## Marketing Industry Forecasts

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**The global advertising and marketing services industry encompasses around \$1 trillion dollars.** Approximately 87% is spent on marketing impressions; the remaining 13% is primarily spent on agency and marketing-related business process outsourcing (BPO), marketing related data and intelligence (today, mostly market research), and marketing software.

- **Impression spending** ostensibly puts a brand in front of an audience (e.g., TV ads, an email, direct mail, or a sponsored event). This spending includes two broad subsets:
  1. **Advertising:** This pool of dollars is likely more familiar to investors as forecasts are offered by various agencies, industry bodies, and investment banks. Advertising is marketing impressions that are presented to consumers around content/infotainment. These types of forecasts typically include the familiar channels of TV (broadcast, cable, syndication, etc.), newspapers, magazines, radio, and internet advertising.
  2. **Marketing Services:** Forecasts for this significant amount of spending are less common. Marketing services are distinguished as impressions that are delivered directly to consumers whereby the “content” is the marketing message itself. It includes direct mail, sponsorships, promotions, public relations, as well as IP models like email and online lead generation.
- **Ad Agency Fees and Marketing BPO:** After impressions, the next largest bucket is external business services, namely ad agency fees and marketing-specific, business process outsourcing. As IP marketing continues to become more prevalent, these service providers are evolving, with an increasing focus on analytics expertise and digital creative skills (think: website design versus television commercial director).
- **Data & Intelligence:** This category is dominated by the well-established discipline of market research, and also includes spending that goes to list brokers and media measurement firms. However, as IP-marketing proliferates, this subset is being turned on its head. The use of cookies and other IP marketing data collection methods has led to an explosion of unstructured data. More and more, this category includes models such as “data management platforms” that help both buyers and sellers of IP advertising to create anonymous audience profiles.
- **Software & Technology:** Enterprise marketing management software, such as marketing mix optimization or marketing resource management software, are well-established business models that have served CMOs for many, many years. However the rise of web analytics, demand-side platforms, ad exchanges, etc. has brought a fresh wave of innovation to “ad tech” over the past decade-plus.

Below we offer a mosaic of forecasts from several sources that we believe best paints the picture of advertising and marketing services “addressable market” as we see it.

**Exhibit 10. Global Marketing Spending by Category**

Absolute	2009	2010	2011E	2012E	2020E
Advertising	439.5	468.0	491.1	522.2	661.2
Marketing services	279.9	300.1	315.5	329.8	468.4
<i>Total paid impressions</i>	<i>719.4</i>	<i>768.2</i>	<i>806.6</i>	<i>851.9</i>	<i>1,129.6</i>
Ad Agency /Marketing BPO Fees	58.5	62.3	67.6	71.0	109.4
Data/Intelligence	47.0	46.8	48.2	49.6	53.0
Software/Technology	<u>9.0</u>	<u>10.3</u>	<u>11.2</u>	<u>12.1</u>	<u>20.3</u>
<b>TOTAL Marketing</b>	<b>834.0</b>	<b>887.5</b>	<b>933.6</b>	<b>984.6</b>	<b>1,312.4</b>

Growth	2009	2010	2011E	2012E	'12-'20 CAGR
Advertising	-6.6%	6.5%	4.9%	6.3%	3.1%
<u>Marketing services</u>	<u>-5.8%</u>	<u>7.2%</u>	<u>5.1%</u>	<u>4.5%</u>	<u>4.5%</u>
<i>Total impression</i>	<i>-6.3%</i>	<i>6.8%</i>	<i>5.0%</i>	<i>5.6%</i>	<i>3.7%</i>
Ad Agency/Marketing BPO fees	-15.3%	6.4%	8.6%	5.0%	5.6%
Data/Intelligence	-11.6%	-0.6%	3.1%	2.8%	0.9%
Software/Technology	<u>nm</u>	<u>13.5%</u>	<u>9.0%</u>	<u>8.0%</u>	<u>6.7%</u>
<b>TOTAL Marketing</b>		<b>6.4%</b>	<b>5.2%</b>	<b>5.5%</b>	<b>3.7%</b>

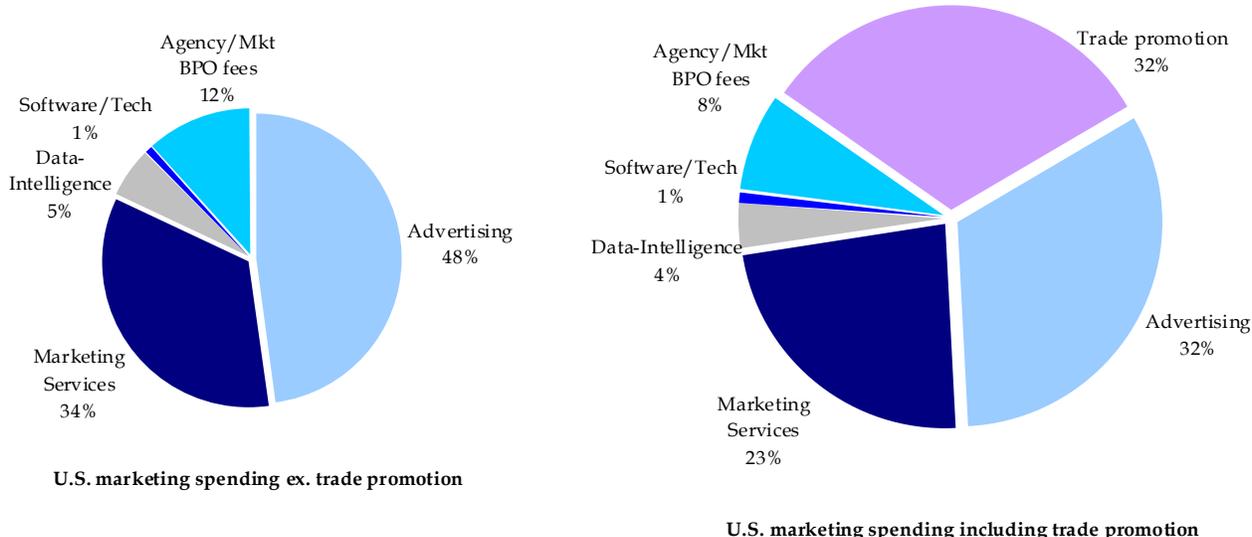
Source: GroupM, DMA, Winterberry/Axiom/Teradata, IDC, DemandTec, AdAge Data Center and BMO Capital Markets for 2020 estimates.

**While impression spending will remain the dominant portion of marketing budgets, technology is winning share.** This shift is being driven in part by the fundamental move to more “audience-based” media buying and away from “contextual” media buying (e.g., buying ads on ESPN.com in order to reach more young males). “Audience-based” media buying targets impressions based on anonymous user profiles created by a mosaic of data sources.

**Data and intelligence spending has been hit in recent years by pullbacks in market research spending (especially custom work);** however, as IP audience-based buying proliferates, the harvest and leveraging of IP marketing data should help compensate. Said another way, we expect marketing data & intelligence spending (already ~\$50B globally) to shift from more manually driven processes to more automated ones.

**And there’s also a significant pool of money that is often overlooked: trade promotion.** These are the subsidies paid by marketers (in particular consumer packaged goods makers) to retailers for special pricing, preferential shelf placement, gifts or demonstrations. While estimates are scarce, trade promotion management software provider DemandTec (owned by IBM) estimates the market to be around \$125-\$175 billion for merchandising, promotion and trade-based pricing in the US.

### Exhibit 11. US Marketing Spending: Trade Promotion Included and Not Included



Source: GroupM, DMA/Winterberry/Acxion/Teradata, IDC, DemandTec, AdAge Data Center

**Finally, our analysis does not include marketers’ in-house costs.** Be that internal creative personnel, data analysts, “marketing IT departments” or the chief marketing officer herself, these are not immaterial and particularly relevant to the ad agencies as it is these internal costs that they hope to capture with their outsourced business services.

#### **Quick Look at the Buyside**

The top categories of spending start with consumer packaged good (CPG) and food & beverage (F&B), which are often combined and categorized as “fast moving consumer goods” (FMCG). CPGs include companies like Proctor & Gamble, Unilever, and Colgate-Palmolive, while food and beverage includes the likes of Coca-Cola, Kraft, Pepsi, and Diageo. Next in the pecking order normally comes auto (General Motors, Chrysler, Toyota, etc.), while Tech-Media-Telecom (AT&T, Verizon, Time Warner) is sizable, if top-heavy. Healthcare is lead by top 10 spenders Pfizer and Johnson & Johnson, but faces some near-term challenges as many major pharmaceuticals come off patent. Retail (Wal-Mart, Home Depot, etc.) rounds out the top spending verticals.

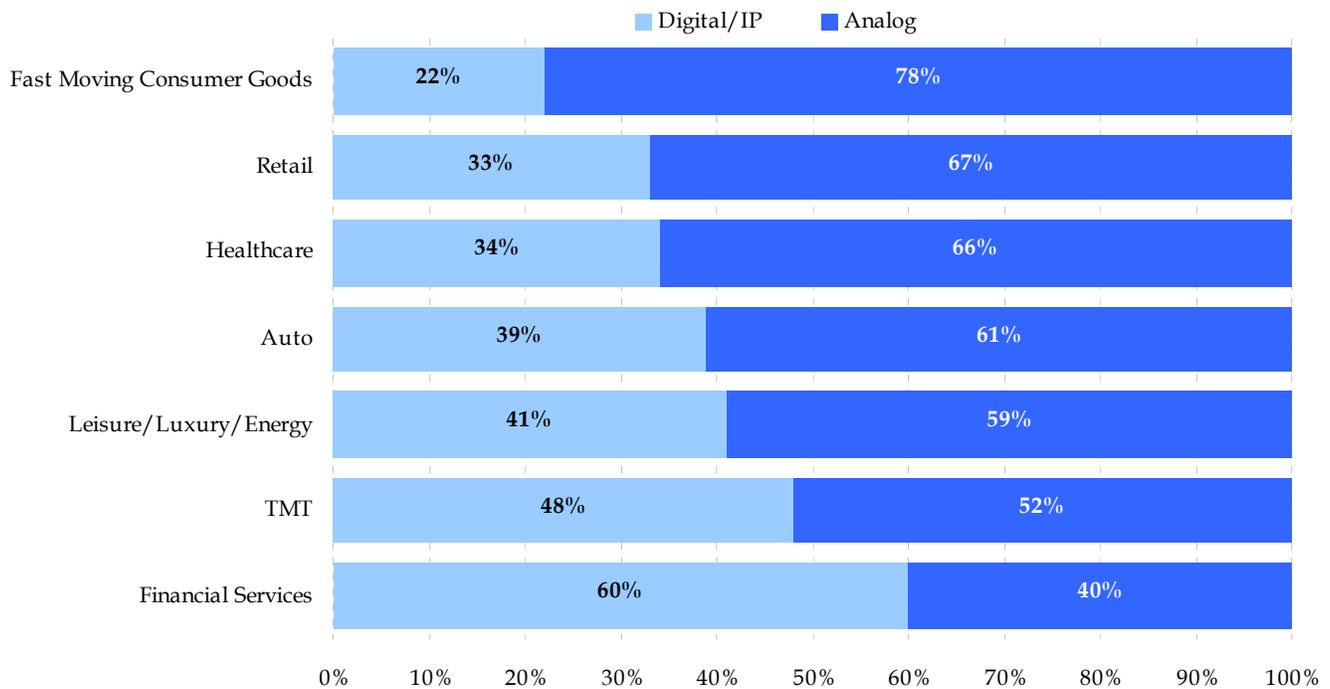
**Exhibit 12. Top 100 National Impression Spenders in the US (\$ in millions)**

Rank	Advertiser	Category	Total 2010	Rank	Advertiser	Category	Total 2010	Rank	Advertiser	Category	Total 2010
1	Procter & Gamble	FMCG	4,615	35	General Mills	FMCG	987	68	Campbell Soup	FMCG	523
2	AT&T	TMT	2,989	36	Viacom	TMT	970	69	Citigroup	Financial	507
3	General Motors	Auto	2,869	37	Microsoft	TMT	926	70	Amazon	Retail	487
4	Verizon Comm.	TMT	2,451	38	Merck	Healthcare	921	71	Subway	FMCG	477
5	American Express	Financial	2,223	39	Sony	TMT	892	72	Walgreen	Retail	468
6	Pfizer	Healthcare	2,124	40	Nike	Retail	887	73	Hyundai	Auto	468
7	Walmart	Retail	2,055	41	Capital One Financial	Financial	878	74	Discover Financial	Financial	463
8	Time Warner	TMT	2,044	42	Nissan Motor	Auto	867	75	Wendy's/ Arby's	Retail	460
9	Johnson & Johnson	Healthcare	2,027	43	Eli Lilly	Healthcare	858	76	Reckitt Benckiser	FMCG	460
10	L'Oreal	FMCG	1,979	44	SABMiller	FMCG	842	77	Fortune Brands	FMCG	457
11	Walt Disney	TMT	1,932	45	Deutsche Telekom	TMT	820	78	Hershey	FMCG	441
12	JPMorgan Chase	Financial	1,917	46	Yum Brands	FMCG	798	79	Limited Brands	Retail	436
13	Ford Motor	Auto	1,915	47	Lowe's	Retail	778	80	Abbott Laboratories	Healthcare	432
14	Comcast	TMT	1,853	48	AstraZeneca	Healthcare	774	81	DirecTV	TMT	432
15	Sears Holdings	Retail	1,779	49	Home Depot	Retail	769	82	SC Johnson	FMCG	432
16	Toyota	Auto	1,736	50	Coca-Cola	FMCG	758	83	Volkswagen	Auto	431
17	Bank of America	Financial	1,553	51	Progressive	Financial	743	84	Safeway	Retail	431
18	Target	Retail	1,508	52	Kellogg	FMCG	723	85	Daimler	Auto	427
19	Macy's	Retail	1,417	53	Estee Lauder	FMCG	698	86	Apple	TMT	420
20	Sprint Nextel	TMT	1,400	54	Samsung Electronics	TMT	683	87	Coty	FMCG	418
21	Unilever	FMCG	1,379	55	LVMH	Retail	683	88	IBM	TMT	417
22	Anheuser-Busch InBev	FMCG	1,358	56	Best Buy	Retail	667	89	Apollo Group	Other	417
23	Berkshire Hathaway	Financial	1,344	57	State Farm	Financial	666	90	Gap	Retail	413
24	News Corp.	TMT	1,320	58	Bristol-Myers Squibb	Healthcare	633	91	Kia Motors	Auto	411
25	J.C. Penney	Retail	1,317	59	Mars	FMCG	630	92	Dish Network	TMT	410
26	McDonald's	FMCG	1,296	60	Wells Fargo	Financial	630	93	Clorox	FMCG	405
27	Fiat/Chrysler	Auto	1,164	61	Time Warner Cable	TMT	629	94	Hewlett-Packard	TMT	405
28	U.S. Government	Other	1,107	62	Visa	Financial	559	95	CVS Caremark	Retail	400
29	Honda Motor	Auto	1,061	63	Diageo	FMCG	550	96	Dr Pepper Snapple	FMCG	397
30	Nestle	FMCG	1,058	64	Bayer	Healthcare	547	97	Burger King	FMCG	392
31	Kohl's	Retail	1,017	65	Allstate	Financial	542	98	Dell	TMT	391
32	Kraft Foods	FMCG	1,007	66	Kroger	Retail	533	99	Fry's Electronics	Retail	385
33	PepsiCo	FMCG	1,006	67	Novartis	Healthcare	525	100	Colgate-Palmolive	FMCG	385
34	GlaxoSmithKline	Healthcare	1,002								

Source: Advertising Age Datacenter. Note that AdAge breaks impression spending into "measured" and "unmeasured;" these are functionally the same as our "advertising" and "marketing services" delineations.

**The percentage of budgets dedicated to IP marketing can vary materially by category.** Those industry verticals where direct marketing services are most prominent were natural first movers to IP advertising and marketing services because cost-per-click (CPC) priced impressions fit naturally with the science they already employed on direct mail. This has, for example, always made telecom and financial services top IP marketing spenders. Recent innovation in display advertising has aimed to help shift brand budgets to IP marketing, in particular online video. The rise of social media has also drawn brand-focused marketers like consumer-packaged goods and food and beverage to shift attention to both the earned media and community brand-building opportunities. In Exhibit 13, we offer a snapshot of Publicis' client base by vertical and how the holding company estimates the breakdown in budget between digital/IP and analog.

### Exhibit 13. Publicis Clients' % of Spend to Digital/IP vs. Analog by Industry Vertical



Source: Publicis Groupe

### Marketing Impression Spending

The most comprehensive forecasts for marketing impressions come from the agency holding companies' media planning and buying units. We use WPP/GroupM's forecasts as the baseline for our market size of impression spending. There are two reasons for this: first, GroupM is the only media buying organization that attempts to calibrate marketing services spending, and second, because GroupM is the world's largest media buyer and by extension should have the widest view of the market. With that said, Interpublic/MAGNA data (which go back over 50 years) remains vital for any historical analysis of spending trends. And agencies like Publicis' ZenithOptimedia and Aegis' Carat have added important data points to help triangulate the market. Note that we pull GroupM's figures for market research spending and instead include them in the marketing data & intelligence forecasts as we see market research as fundamentally about insights, information and data used by marketers to inform their impression budget allocations.

**Exhibit 14. Global Marketing Impression Spending**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011E	2012E	2020E
<b>Media advertising</b>														
TV	128,940	126,535	133,217	141,971	157,966	165,512	178,709	186,085	192,331	184,853	201,645	212,653	227,536	266,595
Newspapers	94,327	90,075	89,443	93,319	98,560	101,115	102,379	103,909	98,974	86,190	86,567	85,236	85,059	66,664
Magazines	54,402	52,376	52,069	54,486	58,239	62,394	64,438	66,378	63,734	52,048	51,132	50,818	51,248	43,600
Out-of home	18,627	19,976	20,275	21,261	22,761	25,878	28,912	29,732	30,484	27,462	28,705	29,852	31,180	39,498
Cinema	939	1,009	1,020	1,085	1,167	1,238	1,226	1,297	1,246	1,145	1,250	1,316	1,376	1,743
Radio	20,689	20,105	22,031	23,472	24,436	25,100	26,471	26,988	26,352	24,883	25,639	26,437	27,569	25,439
Search	162	285	902	2,543	3,850	7,919	11,726	16,420	19,639	22,616	25,840	29,661	33,670	57,852
Display / Video	7,925	6,849	5,109	4,724	5,776	12,513	17,217	20,639	23,224	24,196	28,037	31,976	36,018	89,179
Other Internet	2,168	2,421	3,062	4,554	6,922	5,273	7,641	11,082	14,597	16,119	19,214	23,196	28,532	70,643
<b>Total Internet</b>	<b>10,255</b>	<b>9,555</b>	<b>9,072</b>	<b>11,821</b>	<b>16,548</b>	<b>25,705</b>	<b>36,583</b>	<b>48,141</b>	<b>57,459</b>	<b>62,930</b>	<b>73,091</b>	<b>84,833</b>	<b>98,220</b>	<b>217,674</b>
<b>Total media advertising</b>	<b>328,180</b>	<b>319,632</b>	<b>327,125</b>	<b>347,415</b>	<b>379,677</b>	<b>406,943</b>	<b>438,719</b>	<b>462,530</b>	<b>470,580</b>	<b>439,510</b>	<b>468,030</b>	<b>491,145</b>	<b>522,188</b>	<b>661,214</b>
<b>Marketing services</b>														
Direct and Specialist	178,158	183,125	177,447	182,187	194,243	206,246	222,302	232,065	234,113	221,651	239,300	252,125	263,950	361,234
Sponsorship	22,000	24,400	24,450	25,950	27,910	30,500	33,670	42,200	47,900	44,000	46,273	48,353	50,354	86,518
Public Relations	7,836	7,401	6,648	6,497	6,774	7,417	8,252	9,103	10,047	9,399	9,865	10,243	10,599	14,505
<b>Healthcare</b>	<b>3,620</b>	<b>3,675</b>	<b>3,961</b>	<b>4,092</b>	<b>4,325</b>	<b>4,775</b>	<b>5,275</b>	<b>5,347</b>	<b>4,920</b>	<b>4,810</b>	<b>4,700</b>	<b>4,760</b>	<b>4,850</b>	<b>6,144</b>
<b>Total marketing services</b>	<b>211,615</b>	<b>218,601</b>	<b>212,506</b>	<b>218,726</b>	<b>233,252</b>	<b>248,938</b>	<b>269,499</b>	<b>288,715</b>	<b>296,980</b>	<b>279,860</b>	<b>300,138</b>	<b>315,481</b>	<b>329,753</b>	<b>468,401</b>
<b>Total impression spending</b>	<b>539,795</b>	<b>538,232</b>	<b>539,632</b>	<b>566,142</b>	<b>612,929</b>	<b>655,881</b>	<b>708,218</b>	<b>751,245</b>	<b>767,560</b>	<b>719,370</b>	<b>768,168</b>	<b>806,626</b>	<b>851,941</b>	<b>1,129,614</b>

Source: GroupM, BMO Capital Markets for 2020 estimates

**Exhibit 15. U.S. Marketing Impression Spending**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011E	2012E	2020E
<b>Media Advertising</b>														
TV	49,191	45,260	49,363	51,197	57,385	57,838	62,323	60,813	61,559	57,886	60,275	62,425	64,900	76,041
Newspapers	24,771	22,348	23,806	26,227	28,220	28,701	28,465	26,453	23,385	19,176	16,906	15,723	14,779	9,805
Magazines	25,285	23,294	23,861	26,001	28,391	30,459	31,283	32,314	30,043	25,537	24,682	24,682	25,176	21,419
Out-of home	2,478	2,442	2,416	2,674	3,213	3,529	3,831	4,033	3,729	3,580	3,578	3,685	3,833	4,491
Radio	9,041	8,348	10,262	11,107	11,097	11,043	11,161	10,687	9,411	8,658	8,308	8,474	8,898	7,570
Search	162	285	902	2,543	3,850	5,142	6,752	9,331	10,552	12,233	13,456	15,071	16,578	24,493
Other Internet	7,925	6,849	5,109	4,724	5,776	7,400	10,127	11,875	12,896	13,794	15,312	17,149	18,864	40,437
<b>Total Internet</b>	<b>8,087</b>	<b>7,134</b>	<b>6,010</b>	<b>7,267</b>	<b>9,626</b>	<b>12,542</b>	<b>16,879</b>	<b>21,206</b>	<b>23,448</b>	<b>26,027</b>	<b>28,768</b>	<b>32,220</b>	<b>35,442</b>	<b>64,930</b>
<b>Total media advertising</b>	<b>118,853</b>	<b>108,826</b>	<b>115,718</b>	<b>124,473</b>	<b>137,932</b>	<b>144,112</b>	<b>153,942</b>	<b>155,506</b>	<b>151,575</b>	<b>140,864</b>	<b>142,517</b>	<b>147,209</b>	<b>153,028</b>	<b>184,255</b>
<b>Marketing Services</b>														
Direct and Specialist	54,424	55,813	61,291	60,698	66,338	70,805	75,934	78,650	81,030	76,167	82,340	86,128	88,970	121,761
Sponsorship	8,004	8,556	8,878	9,430	10,221	11,132	12,300	13,708	15,272	15,180	15,772	16,418	16,894	26,926
Public Relations	3,211	2,767	2,420	2,408	2,466	2,672	3,019	3,324	3,690	3,358	3,533	3,625	3,703	5,068
<b>Total marketing services</b>	<b>65,638</b>	<b>67,136</b>	<b>72,589</b>	<b>72,536</b>	<b>79,024</b>	<b>84,609</b>	<b>91,253</b>	<b>95,682</b>	<b>99,992</b>	<b>94,705</b>	<b>101,644</b>	<b>106,171</b>	<b>109,566</b>	<b>153,755</b>
<b>Total impression spending</b>	<b>184,491</b>	<b>175,962</b>	<b>188,307</b>	<b>197,009</b>	<b>216,956</b>	<b>228,721</b>	<b>245,195</b>	<b>251,188</b>	<b>251,567</b>	<b>235,569</b>	<b>244,161</b>	<b>253,380</b>	<b>262,594</b>	<b>338,010</b>

Source: GroupM, BMO Capital Markets for 2020 estimates. A 7% deflator is applied to GroupM's North American Marketing Services figures to yield US only figures

**Which brings us to an important point about marketing impression forecasts: everyone's channel definitions are slightly different.** For example, in 2011, WPP estimates the US television advertising spending to be \$213 billion, Publicis forecasts \$196 billion, and Interpublic's figure is \$175 billion. These views can arise from different measurement methodologies, different client data sets to extrapolate, as well as different opinions on its components.

**With that said, we do our best to compile a "consensus" view of the agency holding companies expectations for impression spending growth.** Again, the definitional challenges noted above make this a less-than-perfect analysis, but we thought this would be more helpful than simply offering up another "Street" estimate. In Exhibit 16 we summarize global growth forecasts from Publicis' ZenithOptimedia, WPP's GroupM, Interpublic's MAGNA GLOBAL, and Aegis's Carat.

**Exhibit 16. “Consensus” Global Growth Estimates for Marketing Impression Spending**

Channel	2011					2012E					2013E				
	PUB	WPP	IPG	AGS	Consensus	PUB	WPP	IPG	AGS	Consensus	PUB	WPP	IPG	AGS	Consensus
Newspapers	-2.7%	-1.5%	-2.4%	-1.0%	-1.9%	-1.0%	0.9%	-1.0%	0.0%	-0.3%	-0.6%	na	0.5%	1.0%	0.3%
Magazines	-1.2%	-1.1%	-0.9%	-0.7%	-1.0%	-0.4%	1.3%	-1.3%	1.8%	0.4%	-0.4%	na	-0.5%	2.0%	0.4%
Television	4.6%	5.6%	4.8%	5.5%	5.1%	6.1%	7.7%	6.7%	5.5%	6.5%	5.5%	na	5.4%	5.3%	5.4%
Radio	2.3%	1.3%	2.2%	4.5%	2.6%	3.1%	4.1%	1.6%	5.3%	3.5%	3.6%	na	2.5%	5.2%	3.8%
Cinema	4.7%	2.0%	7.7%	7.2%	5.4%	5.8%	3.9%	8.1%	4.8%	5.7%	6.0%	na	9.8%	5.4%	7.1%
Outdoor	5.3%	2.8%	6.4%	7.1%	5.4%	5.9%	5.5%	6.3%	8.8%	6.6%	5.3%	na	8.0%	9.2%	7.5%
Internet	13.3%	16.2%	16.9%	14.0%	15.1%	15.1%	15.4%	11.2%	16.5%	14.5%	15.5%	na	10.2%	13.5%	13.1%
Total	3.6%	4.8%	4.7%	4.9%	4.5%	5.2%	6.8%	5.0%	6.0%	5.8%	5.4%	na	4.9%	5.8%	5.4%

Source: GroupM (WPP), MAGNA (Interpublic), ZenithOptimedia (Publicis) and Carat (Aegis)

**Agency Fees and Outsourced Marketing Business Process Outsourcing**

**Ad agencies make up the largest portion of this figure.** Today, agency fees are largely paid on a “time and materials” basis; however performance-based elements are becoming more common. This comes after agencies were paid largely as a pure commission of the advertising budget up until the 1990s. And the fees are spread between a variety of different agency types, from creative/advertising to media planning and buying to public relations. And these totals are dominated by the major holding companies, in particular WPP, Omnicom, Publicis, Interpublic, and Dentsu.

**Exhibit 17. Global Ad Agency Revenue by Type (\$ in millions)**

	2009	2010	2011	2020E
Advertising	18,760	19,100	20,260	23,165
CRM/Direct Marketing	8,233	7,917	9,283	18,557
Media	3,800	5,000	5,580	6,103
Promotion	6,450	5,950	6,400	9,109
Healthcare	4,400	4,717	4,700	6,690
Public Relations	5,133	5,600	5,717	8,496
Digital	6,417	8,417	9,767	27,084
Total	53,193	56,700	61,707	99,203
% growth	-16.7%	6.6%	8.8%	

Source: Advertising Age for US estimates; we assume 2x US estimate for Global figures. BMO Capital Markets for 2020 estimate.

**The second piece of this bucket is marketing-related business process outsourcing.** While customer service and sales support tend to be their focus, companies like Convergys, TeleTech, and Amdocs do reach into the marketing field, particularly in call center operations. Below we present IDC’s forecasts for total customer interaction outsourced services. IDC breaks interactions down into four major function types: customer service, tech support, sales and marketing. For our purposes we have combined customer service and tech support into the same category as they are both dominated by inbound contact. The largest buckets of spending are for sales and customer service support, but IDC estimates that there was around \$6 billion of marketing BPO spending globally in 2011 and expects it to grow to around \$8 billion by 2015.

**Exhibit 18. Global Outsourced Customer Interaction Revenue by Type (\$ in millions)**

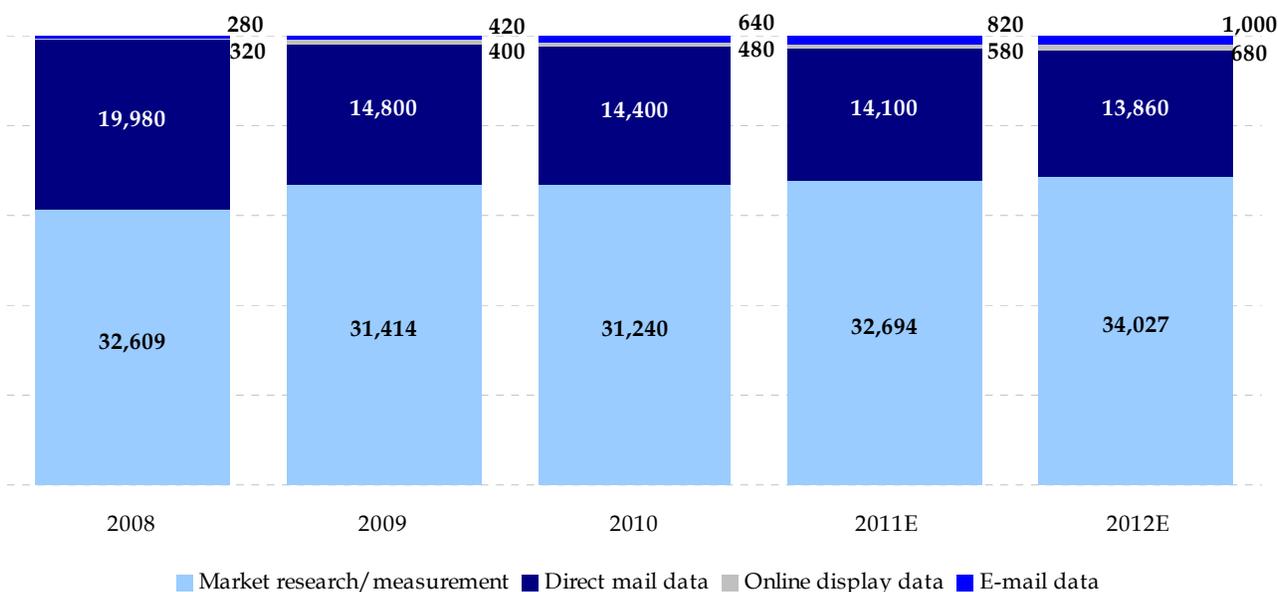
	2009	2010	2011E	2020E
Customer service/ tech support	26,203	26,328	26,879	40,102
Sales	11,286	11,658	12,047	16,892
<b>Marketing</b>	<b>5,331</b>	<b>5,586</b>	<b>5,915</b>	<b>10,235</b>
<i>% growth</i>	1.6%	4.8%	5.9%	
<i>Customer interaction</i>	42,820	43,572	44,841	67,229

Source: IDC and BMO Capital Markets for 2020 estimate.

**Marketing Data Spending**

Marketing data and intelligence spending is dominated by “market research.” This includes media measurement data to provide the “currency” for advertising transactions, focus groups and both syndicated and customer research to help inform marketers’ strategy planning. Traditionally, direct mail list brokers made up most of the rest of the spending, however spending on IP marketing data for email and display advertising is now entering the fray.

**Exhibit 19. Global Marketing Data and Intelligence Spending (\$ in millions)**



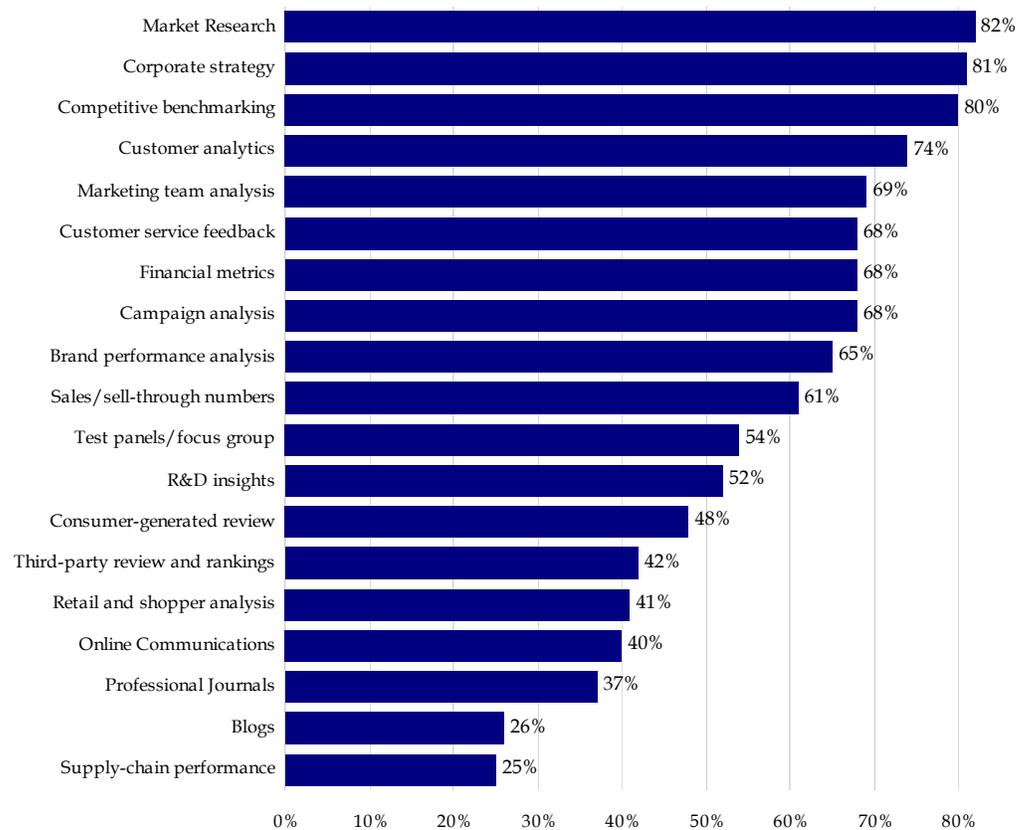
Source: GroupM for Global Market Research, DMA/Winterberry/Teradata/Axiom for US Direct/Email/Display data. We assume 2x US estimate for Global figures.

**Marketing data comes in many different slices and styles.** Some of the more common categories include:

- **Demographic data:** age, gender, ethnicity, marital status, education, household size, income, net worth, occupation, nationality, etc.
- **Psychographic data:** blends demographics with interests, opinions, hobbies, political affiliation, religion, etc. e.g., DINKS, dual-income, no kids.

- **Geographic data:** location of a device IP address, zip codes, as well as local context like population density and climate.
- **Behavioral data:** includes clicked ads, site visits and search queries. Most simple behavioral data shows “inferred interest” (e.g., using data to target a car ad on a separate web site to someone who just visited Ford.com); more complicated is “predicted response,” which usually involves multivariate modeling in order to forecast future behavior.
- **Transaction data:** This category includes data from credit card networks (Visa, MasterCard, etc.), banks/credit issuers (e.g., Citibank, CapitalOne, Alliance Data Systems), transaction processors (e.g., First Data, PayPal). It also includes consumer packaged goods sales databases like those maintained by Nielsen, IRI and dunnhumby. And of course retailers (Kroger, Wamart, Amazon, etc.) hold large caches of transactions with which promotions can be targeted.

**Exhibit 20. Sources Used to Influence CMO Strategy Decisions**



Source: From Stretched to Strengthened, Insights from the Global IBM CMO Study

***First-Party Data versus Third-Party Data***

A key distinction in the conversation about marketing data is first party versus third party. First-party data is proprietary to the brand or marketer itself, while third-party data is acquired from outside vendors and sources. An example of first-party data would be AT&T’s mobile subscriber list including the date those subscribers’ contracts end, a key knowledge advantage to AT&T when trying to get them to renew rather than defect to Verizon or Sprint.

Likewise, an example of third-party data would be Acxiom's InfoBase database, which includes information like mailing address, email, age, etc. for nearly every US household.

**In many ways, first-party data is a major source of market power in the digital ecosystem.** Companies like Google, Facebook, and Amazon have built varying business models on top of massive caches of their users' data. And players that we may not consider "internet" companies also hold enormously valuable first party, proprietary data. Some examples include major marketers like Walmart, Proctor & Gamble, AT&T, and Bank of America. By nature of their sheer scale, these companies have considerable advantages through the fact that they have some of the widest views of the marketplaces in which they compete. In this sense, data are increasingly the currency of market power.

**Media buying agencies are an interesting blurring of the third-party and first-party data.** In aggregating a variety of clients on whose behalf media agencies transact, the organizations gain a wider view of the marketplace than any single client could achieve on their own. Of course, these clients are always razor-focused on ensuring the agency does not transact on behalf of a direct competitor as well, but the view across multiple industry verticals is the traditional underpinning of the business model (as well as using that scale to extract volume discounts).

### ***Structured Data versus Unstructured Data***

**An increasingly important paradigm in marketing data is the distinction between structured and unstructured data sets.** We find the simplest way to describe structured data is the classic form of a spreadsheet. On the y-axis are a series of discrete entries (transactions, people, etc.), while on the x-axis, each of the individual fields associated with that entry appear. A simple example would be a direct mailing list, where each of the households runs down on the y-axis, while the x-axis lays out the street address, city, and zip code associated with them. Large relational databases take this concept far beyond the restraints of a simple Excel spreadsheet.

**But data generated by IP communications networks rarely fits into such a neat matrix.** The winding paths we follow through the internet drove major internet players like Yahoo! and Google to develop new tools to manage their "unstructured" data sets, such as user click-stream data. Housed within massive clusters of servers, these data are the foundations of their business models, be they advertising, e-commerce, or other. The most common technology for managing unstructured data is Hadoop. Largely developed by engineers at Yahoo! and Google, Hadoop start-ups like HortonWorks (part owned by Yahoo!) and Cloudera aim to extend the technology to the broader economy as banks, retailers, and other companies also begin generating massive amounts of unstructured data as their businesses become more "online." For much more on Hadoop and the "Big Data" enterprise opportunity, please check with our colleague Karl Keirstead, who has done several deep dives on the subject.

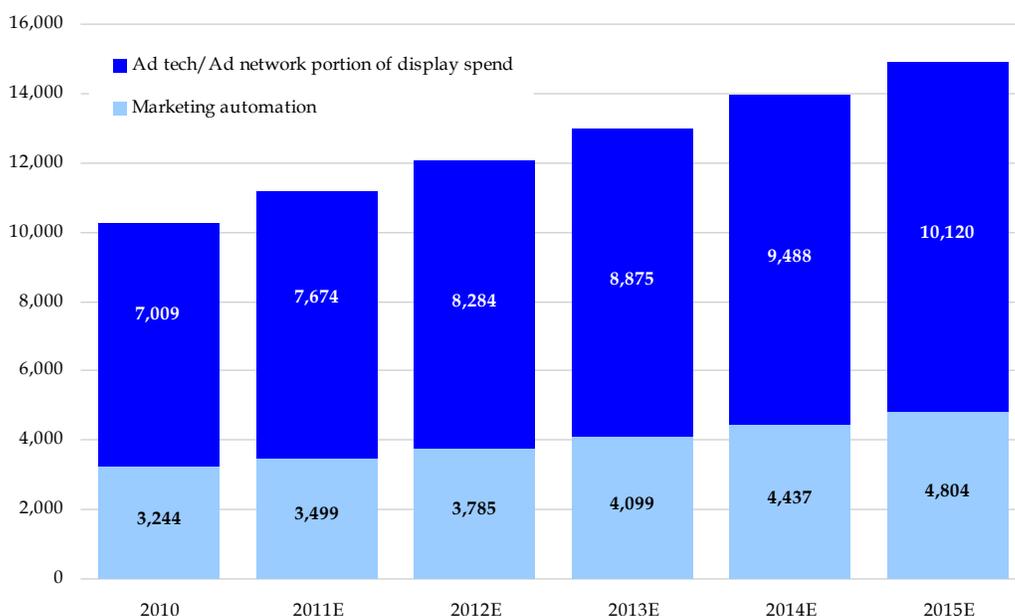
### **Marketing Software Spending**

**Marketing technology and software is undergoing considerable innovation, in large part to manage the exponential growth of data detailed above.** "Marketing software" like enterprise marketing management (EMM) suites and agency workflow tools are long-established. We therefore begin with IDC's forecast of "marketing automation" customer relation-

ship management software as a baseline for the addressable market. These forecasts largely outline the market size for enterprise marketing management software and web analytics. The former category has been established for well over a decade and the latter is one of the most widely adopted digital marketing software toolsets, thanks to SaaS providers like Adobe’s Omniture, IBM’s Coremetrics and Unica, and independent Webtrends. The businesses in this category are also largely paid on licensed seat of software-as-a -service subscription.

**However, the new wave of display ad technology typically operate under different revenue models.** Technology like ad servers, demand-side platforms, supply-side platforms and ad exchanges are not paid on a per-month subscription license like typical “software” vendors. Rather they take a percentage of impression spending that they help clients allocate. We estimate that display ad technology vendors (including ad networks) today capture ~25% of total display spending and we add this to IDC’s figures in order to roughly estimate the size of the marketing technology market (we also assume this percentage declines over time as greater efficiency is brought to the marketplace). With that said, it also creates some double-counting as this revenue overlaps with display impression spending.

**Exhibit 21. Global Marketing Software/Tech Spend (\$ in millions)**



Source: IDC for Marketing Automation and display estimates, BMO estimate for % of display spending to technology vendors

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## ***Drivers and Catalysts***

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When considering the fundamental drivers of IP advertising and “digital marketing hub” tools, we find it most helpful to break them into two categories:

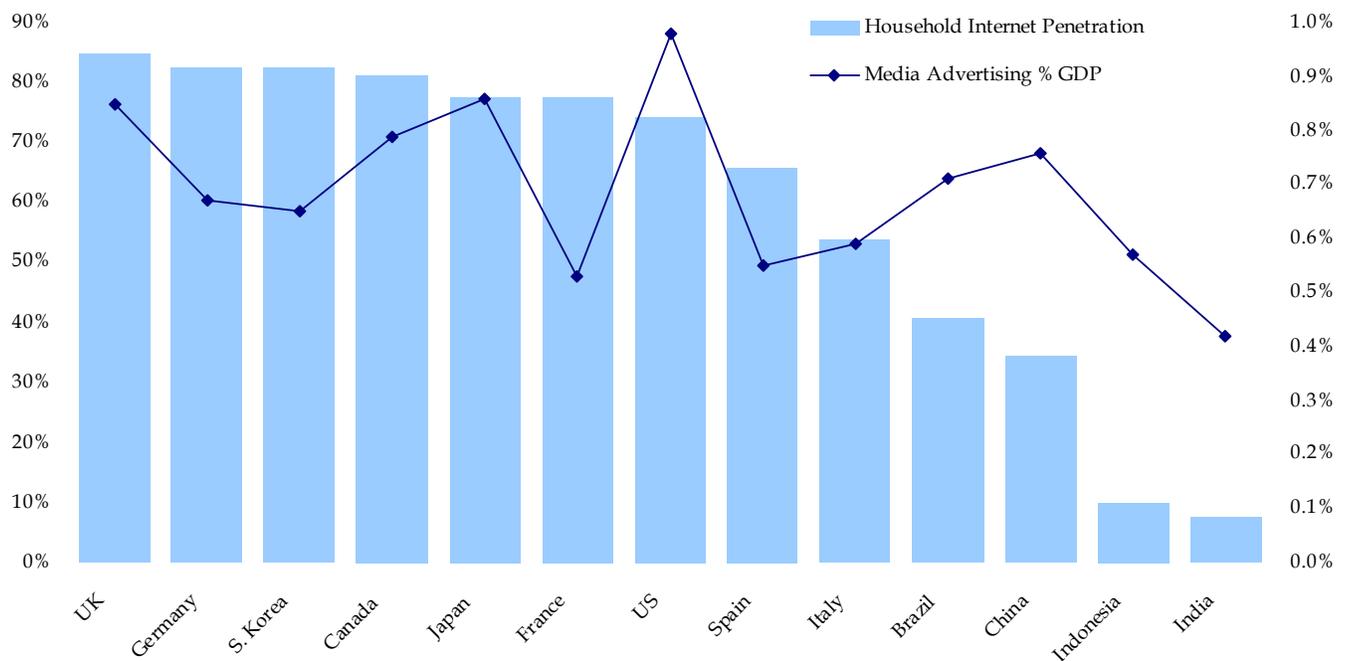
1. **Changes in communications infrastructure and consumer behavior.** These drivers are the technological and sociological changes that broadly underpin the evolution of the digital economy. They include:
  - Penetration of IP Networks and Capacity Expansion
  - IP Device Adoption and Narrowing Adoption Curves
  - Multi-Channel Marketing and More Holistic Consumer View
  - Digital Natives March to Majority Status
  
2. **Secular themes.** This group of drivers more closely focuses on “investable” themes. Many also overlap; for example, the intertwining of social, local, and mobile to produce the broader So-Lo-Mo theme that is popular today. Point being, the drivers should be looked at in concert rather than as discrete themes.
  - Social
  - Mobile
  - Local
  - Loyalty
  - Data and Analytics
  - Software-as-a-Service (SaaS)

## Technology and Consumer Behavior Trends

### Penetration of IP Networks and Capacity Expansion

The growth of IP networks creates the opportunity for brands to connect to consumers more intimately and regularly. The basic underpinning of all IP business models is connectivity, and themes like personalization and “always on” are well-trodden. For advertising and marketing services, the other important changes brought about by IP networks are the exponential growth of feedback data (from clicks to low-cost online surveys) and enablement of massive philosophical change from “talking at” consumers to “talking with” them. It’s not that this goal is new – direct mail reply cards, in-person focus groups, and direct response TV ads armed with 800 numbers to call are well-established feedback tools of the marketing industry – it’s that it has been able to flourish like never before.

**Exhibit 22. Internet Connectivity by Country vs. Advertising as a % of GDP**



Source: World Bank + GroupM

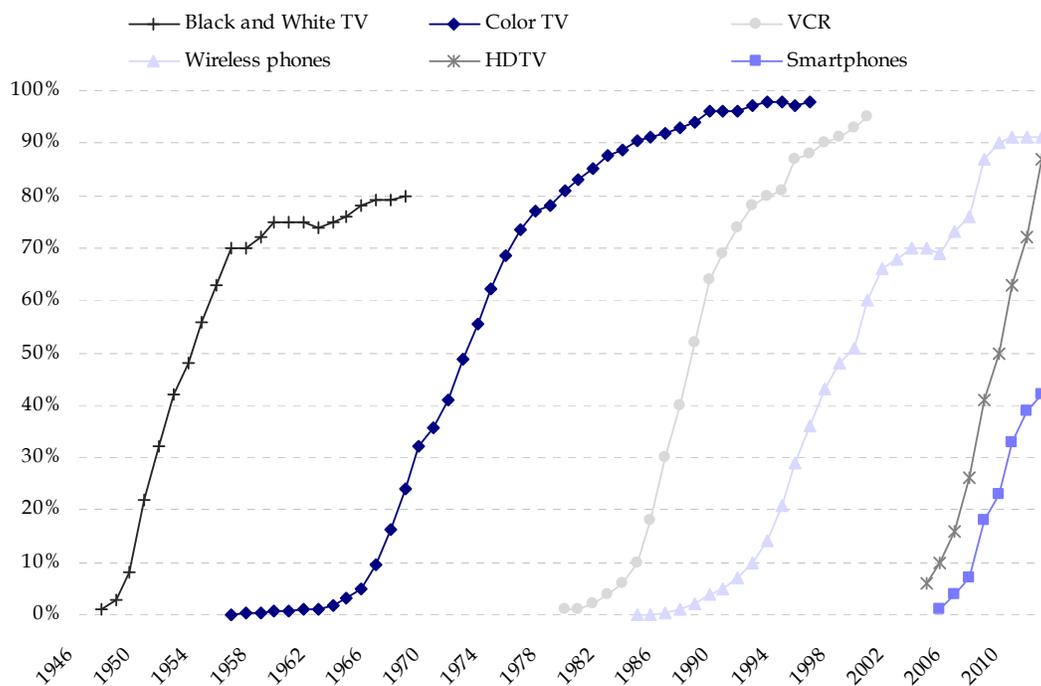
**Expansion of network capacity and broadband connections enable richer creative formats for marketing impressions.** Early IP marketing was primarily text and static images, in particular early email marketing, banner ads on web pages and text links delivered by search engines. However, in most developed markets, rich media and online video ads are growing at well-above-industry rates as adoption of broadband internet has reached mainstream adoption levels. Greater capacity allows larger file types to be delivered in a consumer-friendly manner, rather than slowing down performance. The growing availability and use of 3G, 4G/LTE, and WiFi are creating the opportunity for richer advertising experience.

## IP Device Adoption and Narrowing Adoption Curves

**At the nodes of these networks are a rapidly innovating group of devices, all potential outlets for marketing.** In terms of primary devices, the evolution of IP advertising began on the PC, evolved into its first on-the-go device, the laptop, and then moved onto mobile phones, and in the past few years, tablets. At the same time, secondary IP devices like connected televisions and digital-out-of-home billboards have brought significant change to traditionally analog marketing experiences. Innovation around form factor, processing speeds, screen quality and user interfaces, among other things, have all driven new product evolution.

**The pace at which consumer media technologies are adopted – and oftentimes cast aside – continues to accelerate as well.** New device adoption is happening more quickly in the digital era for a number of reasons, including increased velocity of marketing, particularly word-of-mouth, and Moore’s Law-like innovation that drives prices lower more quickly. For brands this means events like the annual Consumer Electronics Show in Las Vegas each January has become a magnet for the marketing industry. And just as new devices rise, others fall, creating a need for regular turnover in marketing strategy focus. Finally, on top of all of these devices are constantly shifting range of media and communication properties – portals, social networks, messaging services, etc. – that also drive growth of the advertising and marketing services industry.

### Exhibit 23. Media Technology Penetration Rates



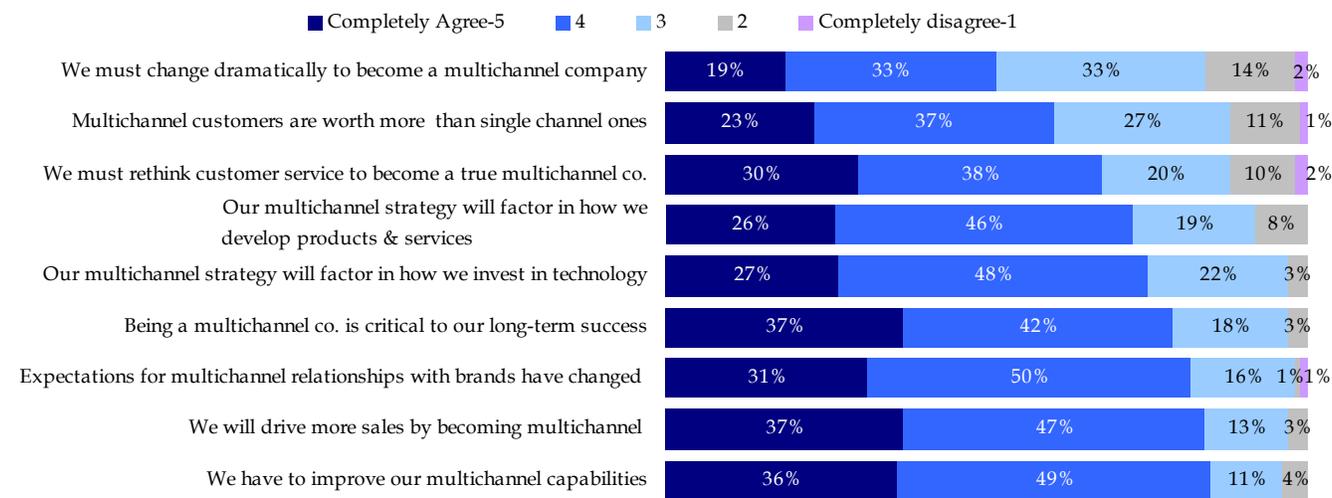
Source: Consumer Electronics Association "FastFacts Historical Sales Data - January 2012"

**More devices also create the need for more customized creative and campaign design.** These devices are embedded with different operating systems and different screen sizes (among other things), which also supports industry growth. For example in the smartphone business, marketers are developing branded apps for the Apple iOS platform that runs on all iPhones, but also apps for Google’s open-source Android platform, where the many different screen size and form factors exist.

## Multi-Channel Marketing and More Holistic Consumer View

For major marketers, these technological innovations result in a more robust picture of their customer and target base. Marketing CRM databases and strategy personnel have long-aimed to fill out the complete view of a brand’s customer base and all interactions with the brand; with IP advertising, this goal is closer to becoming a reality. Coordination of marketing across more and more consumer touch-points is becoming a more important priority for CMOs. Hurdles include challenges in cross-channel attribution/analytics and silo’ed marketing organizations, both at brands and agencies.

### Exhibit 24. Multichannel Marketing Is a Top Priority, But Change Comes Slowly



Source: Forrester Consulting on behalf of Webtrends

## Digital Natives March to Majority Status

The sociological division between digital immigrants (we’ll call them pre-1980) and digital native demographics should not be underestimated. Of course the cutoff isn’t a specific year of birth and waves of innovation create sub-groups with different rates of emerging technology adoption. But the point remains that audience and behavior trends offer tremendous demographic growth to IP based advertising and marketing services as a generation for which connectivity is ubiquitous and “second nature” and they are increasing each day.

### Exhibit 25. Channels Used for Communication by Age Group

	Overall	15-17	18-24	25-34	35-44	45-54	55-64	65+
Email	45%	10%	16%	39%	45%	55%	77%	91%
Text messages	36%	64%	55%	44%	34%	30%	14%	4%
Posting messages on Facebook	12%	15%	15%	16%	17%	7%	5%	0%
Direct mail (letters, catalogs, postcards, etc.)	2%	1%	3%	1%	2%	2%	2%	3%
Instant messaging	2%	4%	4%	4%	2%	1%	1%	0%
Messaging app on a cell phone	2%	2%	4%	1%	1%	2%	0%	0%
Posting messages on Google+	1%	2%	2%	1%	0%	0%	0%	0%
Posting messages via personal websites or blogs	1%	1%	1%	1%	0%	0%	0%	0%
Posting messages on Twitter	0%	1%	0%	2%	0%	0%	0%	0%

Source: ExactTarget 2012 Channel Preferences Survey

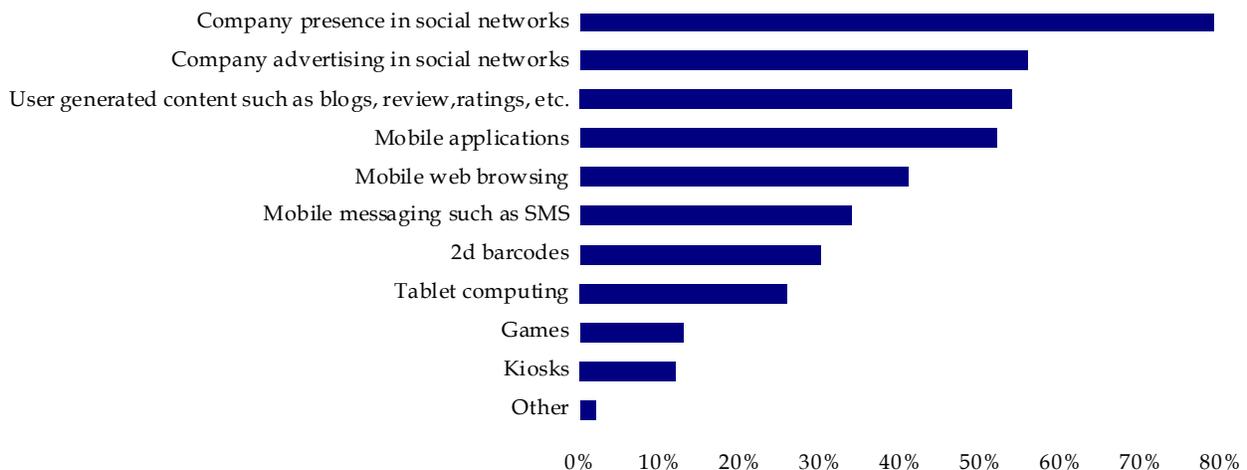
**One way we like to frame conversations around the privacy debate is by considering when digital natives will be elected or appointed government rule-making roles.** The average age of the US Congress is 58 years old (a little older for the Senate, a little younger for the House). Applying this to our arbitrary 1980 year of birth as the dividing line, it will take until 2038 before digital natives make up roughly half of the US Congress. Of course the policy impact – not to mention consumer behavior changes, device adoption rates, etc. – of digital natives will be felt increasingly as each year passes, but it serves as a reminder that innovation and regulation around IP advertising has decades to go still.

### Secular Themes

#### Social

**Social media represents platforms where the users curate the content, not professional aggregators.** Rather than the user being subject to the choices of newspaper editors or broadcast executives, social media properties are built around content users choose themselves. It also creates palettes for user-generated content, from “likes,” to surveys, to home-made online video. Social also creates a new type of overlap between media and communications by blurring them on the same platform and giving control to the user. For example, a user’s Twitter feed not only gives them the ability to choose what professional content to follow, but it can also be enabled for commentary and conversation with other users. With that said, the definition of social is itself constantly evolving as companies innovate. For example, witness Google+ the social network, but also Google+ the social layer across so many of products, where over 120 products are integrated with the “social network.”

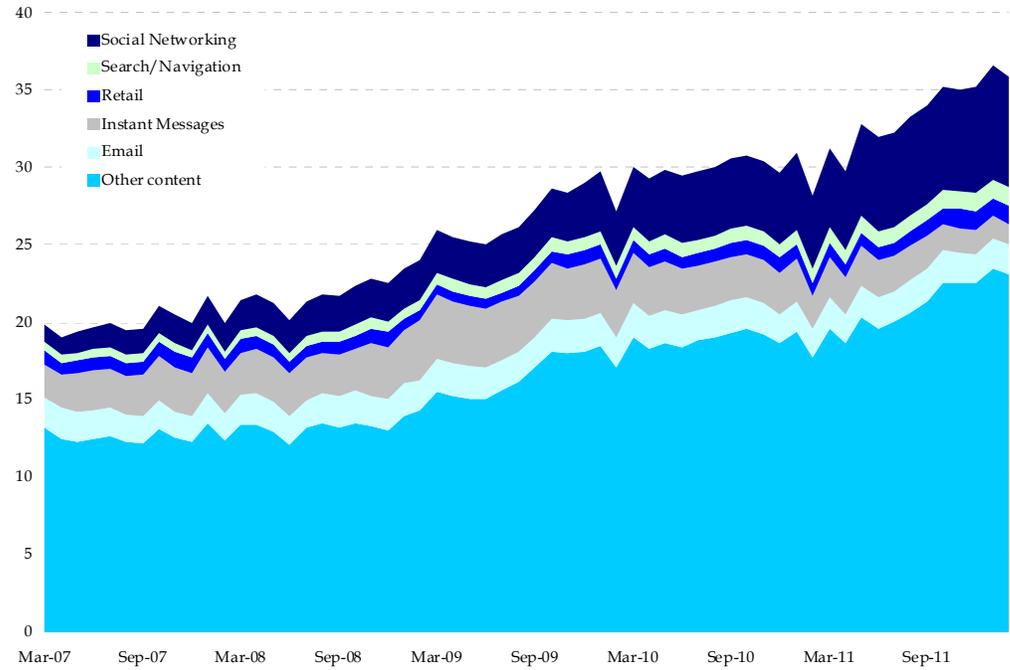
### Exhibit 26. In Which Emerging Channels Is Your Company Conducting Marketing?



Source: Forrester Consulting on behalf of Webtrends, July 2011

**Global social network usage has increased from ~4% of time spent online in 2007 to ~10% today.** Social is also driving a key shift in audiences, the underpinning of any advertising or marketing business. Social media usage continues to climb relative to other digital activities such as email and general web surfing. This trajectory should continue on a natural upward trend as younger generations are generally the most engaged (i.e., time spend on the property) on social media. More and more of this engagement is happening on mobile devices, and social networks are shifting product development accordingly.

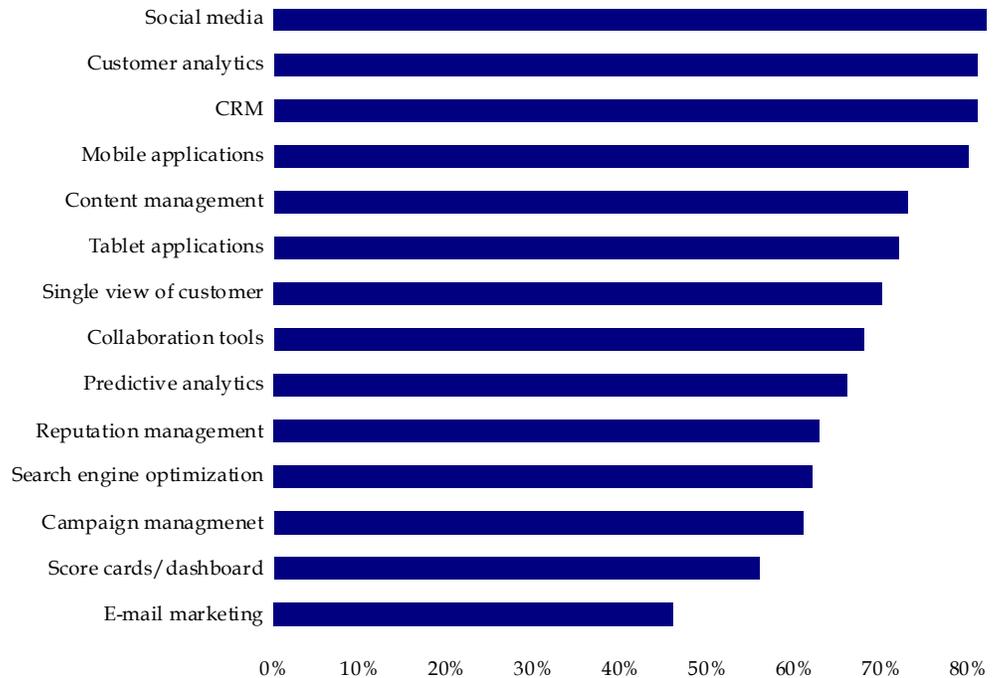
**Exhibit 27. Global Hours Spent Online (in billions)**



Source: comScore

**Social media creates far more earned media opportunities.** Industry conversations are more regularly centering around the concepts of paid media (i.e., purchased advertising), owned media (e.g., branded website or app), and earned media (e.g., social sharing). Traditionally earned media was largely contained to public relations and word-of-mouth marketing; however sharing marketing content across social platforms has opened up entirely new opportunities for brands to earn awareness and by offering compelling content their customers want to share with others.

### Exhibit 28. CMO Plans to Increase the Use of Technology



Source: From Stretched to Strengthened, Insights from the Global IBM CMO Study

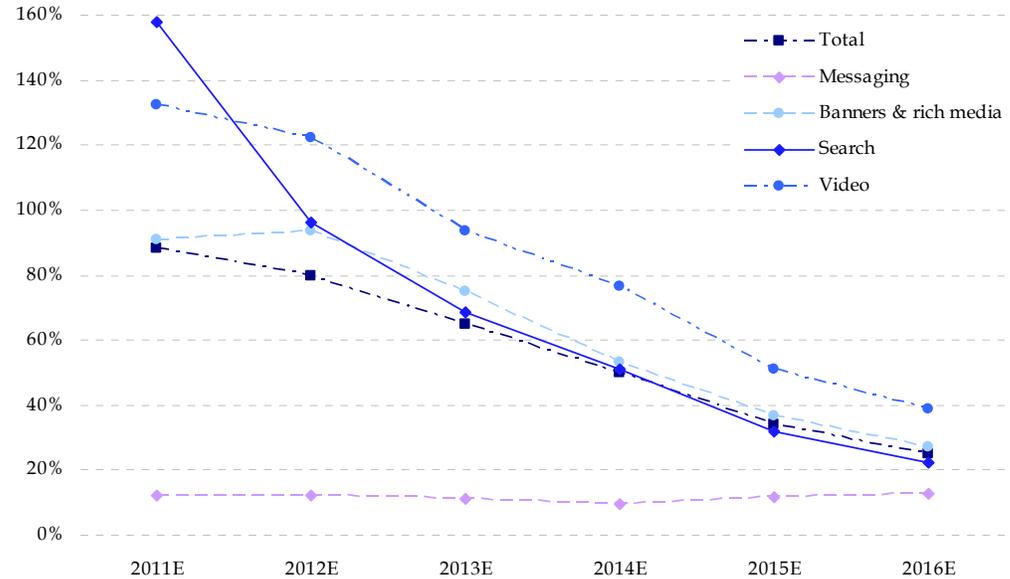
**Social also opens a new category of signals for multi-channel marketing optimization.** While there are larger conversations around data ownership and usage – not to mention anonymity -- one key trend we see in advertising and marketing services is brands’ interest in taking the data and insights they glean from social networks and integrating it into the broader marketing mix.

**In this sense, we see a lot of parallels between social advertising and the development of audience-based, exchange ad buying on the rest of the web.** Fundamentally, innovation in both areas has been focused on ad delivery to specific individuals, rather than a wide audience. And as programmatic ad buying underpins both, innovation could be increasingly intertwined as many in the industry are expecting social networks to look at more RTB strategies. For example, social media properties launching private real-time exchanges and DSPs integrating more and more social data into their targeting algorithms are areas of potential development. Likewise, there is regular speculation about social networks creating their own broader “ad networks” to leverage their buying platforms. We’d suggest the step could be much simpler: social networks could simply sell user data to third-parties using audience targeting and RTB elsewhere on the web.

### Mobile

**While IP networks are always on, mobile keeps IP advertising always on-person.** The continued fast pace of smartphone and tablet form factor innovation – particular (touch)screen quality -- opens up new marketing experiences that traditional, mostly text-based, feature phones could never deliver. This began with email integration (the Blackberry revolution) and today includes apps, geo-location services, and touch-screen functionality (the iPhone revolution). These are some of the factors that are helping drive share gains for mobile in the CMO’s budget.

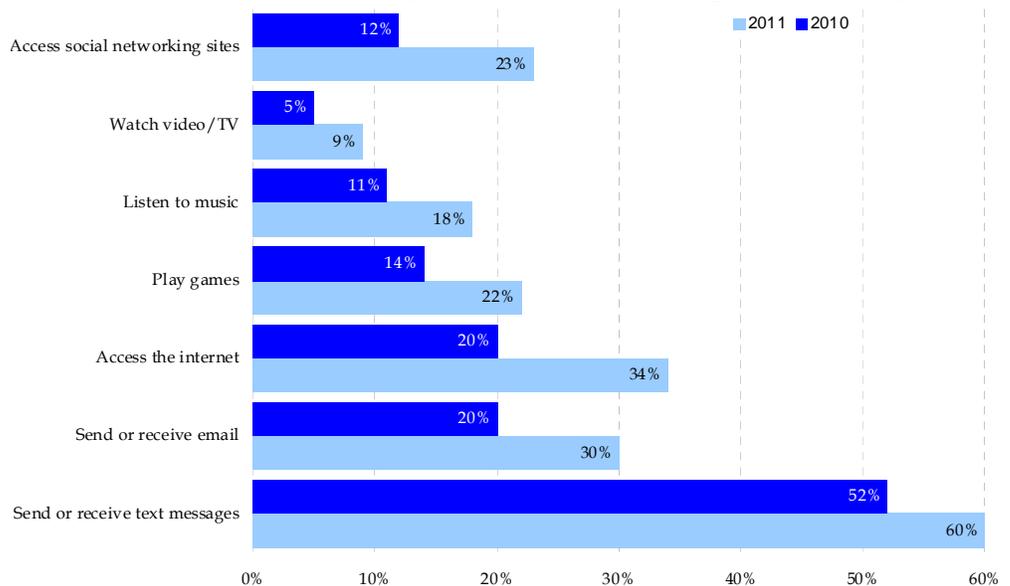
### Exhibit 29. US Mobile Ad Spending Growth by Format



Source: eMarketer

**Mobile’s role as the first truly personal – as in no sharing – device creates truly personalized marketing opportunities.** Radio, TV and consumers’ first home PCs are all generally shared, as is the advertising for the most part. Certainly direct marketing’s legacy is individual-level targeting, like direct mail or email. But these generally don’t comport with the definition of advertising as marketing that happens around entertainment/news/information. This is why the mobile revolution represents a watershed change for personalization of *advertising*. Entertainment/news/information are now consumed via mobile. Mobile’s enablement of the first personal media device – including two-way feedback – basically bridges the divide between direct marketing and advertising.

### Exhibit 30. At Least Weekly Mobile Phone Usage by Activity



Source: Forrester Research, Mobile Marketing: Three Principles For Success

**Mobile also opens up new possibilities for activating cross-channel marketing.** For example, in-store marketing is an area where the impact of mobile is transformational. Whereas retailers largely controlled the media and advertising venues within their walls, mobile has shattered that. With users able to compare prices on-the-go, retailers are looking to mobile to re-engage consumers at a critical point in the purchase decision-making process. This is likely a large part of what prompted Walmart to acquire OneRiot, a mobile and social ad targeting start-up to build out its WalmartLabs division.

**Exhibit 31. Mobile eCPMs by Category and Overall Desktop vs. Mobile eCPM**

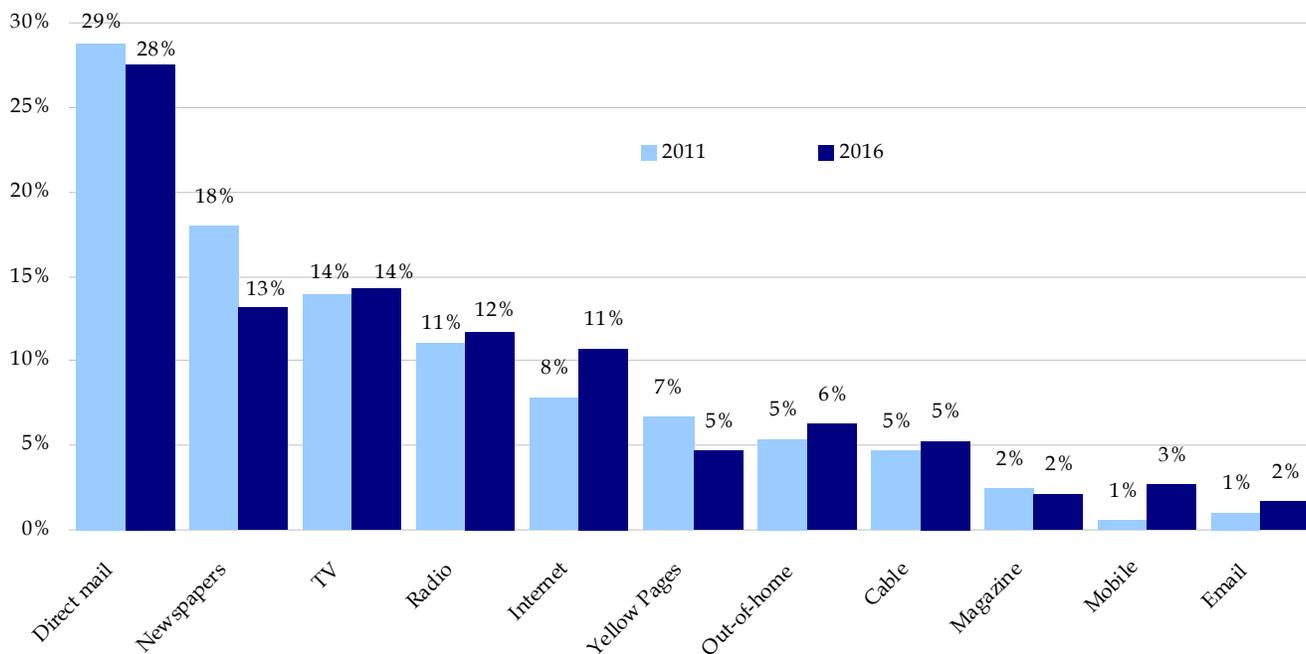


Source: Internet Trends, D10 Conference, Mary Meeker, CPCB, 5/30/2012

**Local**

**IP-connectivity has essentially rendered this fundamentally geographic view obsolete.** IP connectivity and e-commerce have changed the nature of local businesses. Now a single physical location can act as a hub for a national and global business. For this reason, we find it increasingly helpful to use software-speak of “enterprise versus SMB” in conjunction with marketing speak of “national vs. local.” The correlation of “enterprise to national marketer” and “SMB to local marketer” isn’t 100% but it is well above 50%. While local print, local radio and direct mail remain staples of local marketing budgets, they are increasingly being augmented by small-business oriented consumer engagement platforms (like Constant Contact, which combines tools for email, social marketing, deals/promotions, events and soon, customized loyalty programs) and more user-friendly online advertising buying platforms like Google’s recently released AdWords Express.

### Exhibit 32. US Local Marketing Spending by Media



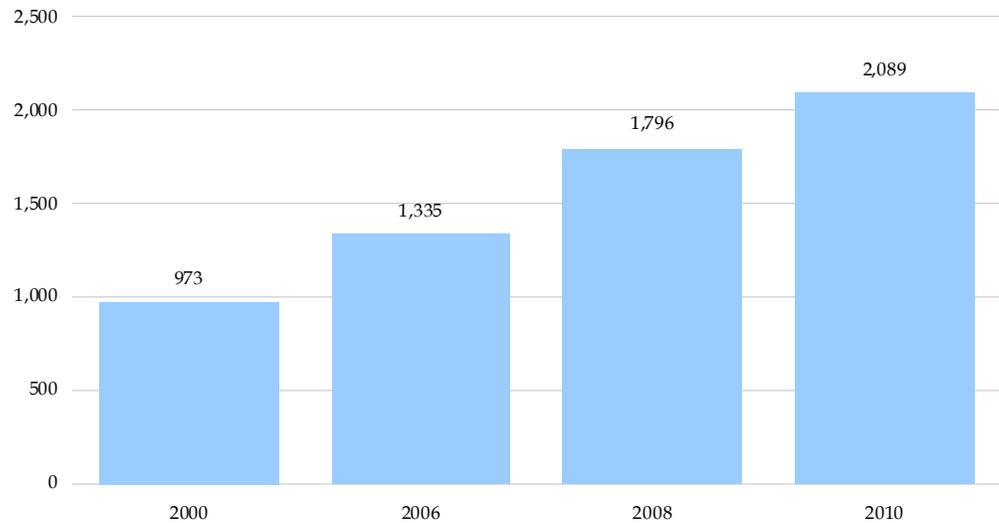
Source: eMarketer/BIA Kelsey

**Scaling of local marketing business models tends to require large, localized sales teams.** “Feet on the street” and/or call-center based customer service have always been required to help small and local businesses understand the benefits of marketing and explain the process of buying impressions. It’s important to remember that small and local businesses often don’t have any internal staff dedicated to marketing. Instead, employees are normally focused on running the actual business. Local sales-people have always delivered less revenue per client than those geared to serve national and global brands. Large local sales forces are a hallmark of traditional local media (think: Clear Channel radio, AT&T local directories) and while IP marketing’s self-serve platforms can attract local dollars, the need for “feet on the street” has proven the same for IP marketing. For example, the rise of the daily deal promotional model, lead by Groupon and LivingSocial, has been accompanied by the hiring of large sales forces that both get out and visit brick-and-mortar businesses and staff large call center operations.

### Loyalty

**Loyalty marketing is a broadly defined consumer engagement strategy primarily focused on the retention of a marketer’s best customers through communications and incentive programs.** But more than just being a customer retention tool, loyalty programs can act as a customer acquisition channel, a brand advocacy program or an up-selling tool, all the while increasing the “lifetime value” of the members. Loyalty marketing calls on specific disciplines, including database marketing and direct mail, and increasingly IP marketing; email is a well established channel and social presences and mobile touch-points like SMS are becoming increasingly common.

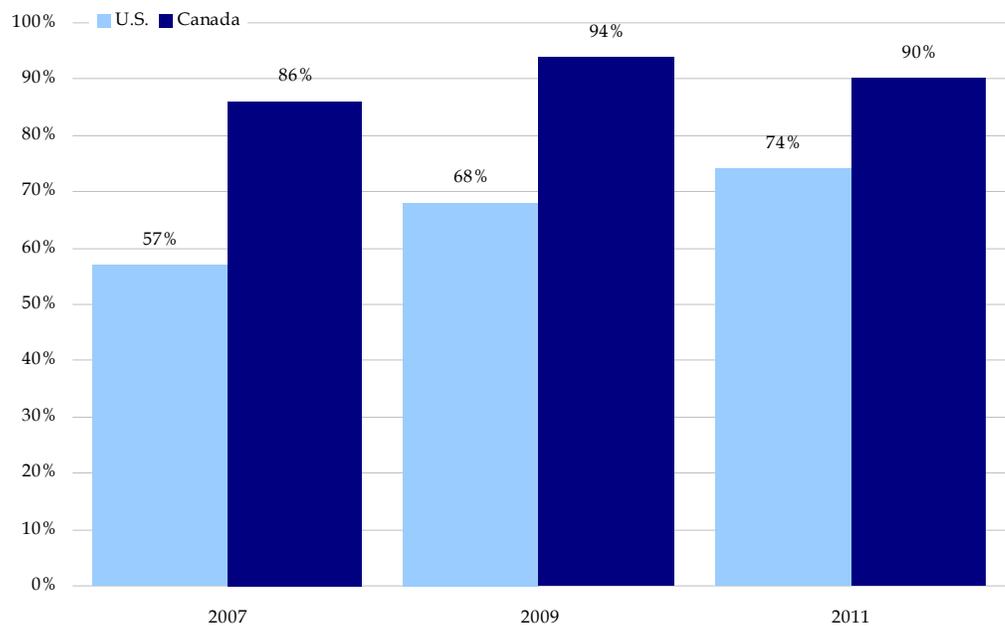
### Exhibit 33. US Loyalty Program Memberships (in millions)



Source: COLLOQUY talk; The Billion Member March The 2011 COLLOQUY Loyalty Census

A loyalty program can revolve around one company/brand only (e.g., Starwood Preferred Guest) or encompass multiple marketers in a coalition model (e.g., Canada’s AIR MILES or Aeroplan). And because the model ties closely with what consumers actually buy, credit cards are often cornerstones of the program (e.g., American Express Membership Rewards) or a key driver of spend and “point accumulation” (e.g., BMO MasterCards account for around half of the AIR MILES program and AMEX is also a credit card partner). As shown in Exhibit 34 below, coalition programs tend to drive higher rates of loyalty program penetration among the population, as in Canada.

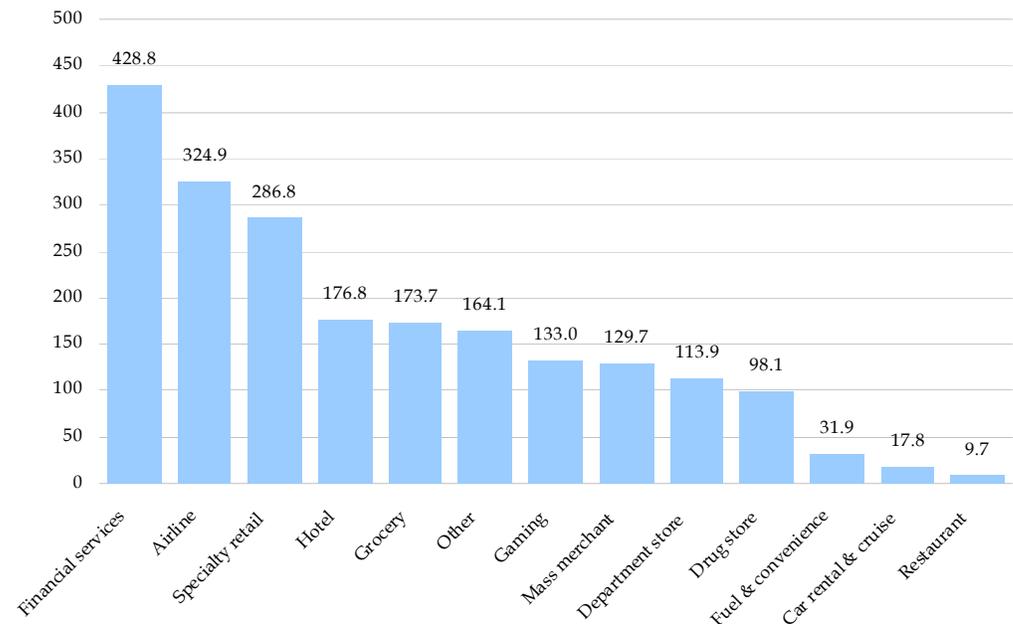
### Exhibit 34. Loyalty Program Penetration: US vs. Canada



Source: COLLOQUY talk; The Rules of Engagement, Loyalty in the U.S. and Canada

**Loyalty program growth in the US has been driven by the increases in financial services programs.** Companies such as Capital One have made membership perks key selling features of their credit cards, helping the category shoot past travel/leisure as the top vertical for loyalty program membership.

**Exhibit 35. US Loyalty Program Membership by Vertical (in millions)**

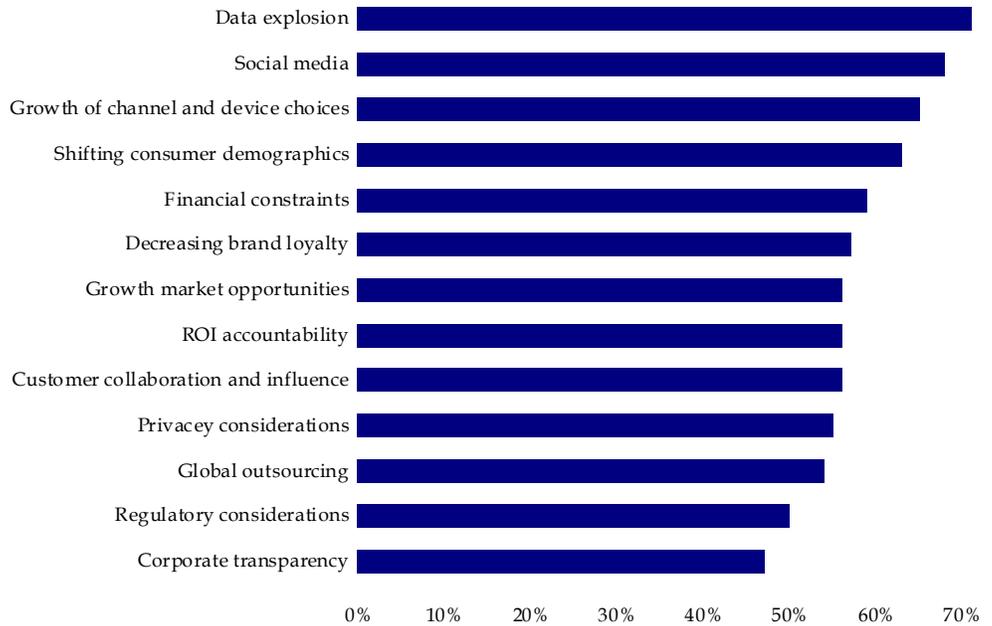


Source: COLLOQUY talk; The Billion Member March The 2011 COLLOQUY Loyalty Census

**Data and Analytics**

**Proliferation of devices and networks has created an endless stream of data to be used to optimize advertising and marketing.** As it has in other departments of the enterprise, the hockey stick-like growth of business data has driven innovation around marketing technology tools to collect, cleanse, organize, analyze, and present in actionable format to humans. Like most secular themes, it is not new – each of these functions has been getting tackled by database marketing since 1970s – but IP technology has radically altered it and changed the game in terms of personalization of marketing. As shown in Exhibit 36, the massive increase in available data is a top priority for increased focus by CMOs.

### Exhibit 36. % of CMOs Underprepared for New Marketing Trends



Source: From Stretched to Strengthened, Insights from the Global IBM CMO Study

**Data and analytics has been an important driver breaking down silos within brands’ marketing departments and IP-immigrant marketing services companies.** Whereas traditional forms of marketing data and intelligence were focused on the department itself (e.g., Nielsen TV ratings), data and analytics have opened up new points of contact for marketing in sales, customer support, supply chain management, product design, and back office. This has created a new set of competitors in the advertising and marketing services industry as companies like IBM build out marketing specific platforms. Moreover, business intelligence companies like Qlik have built enterprise-wide tools that bring data visualization to multiple stakeholders in the enterprise.

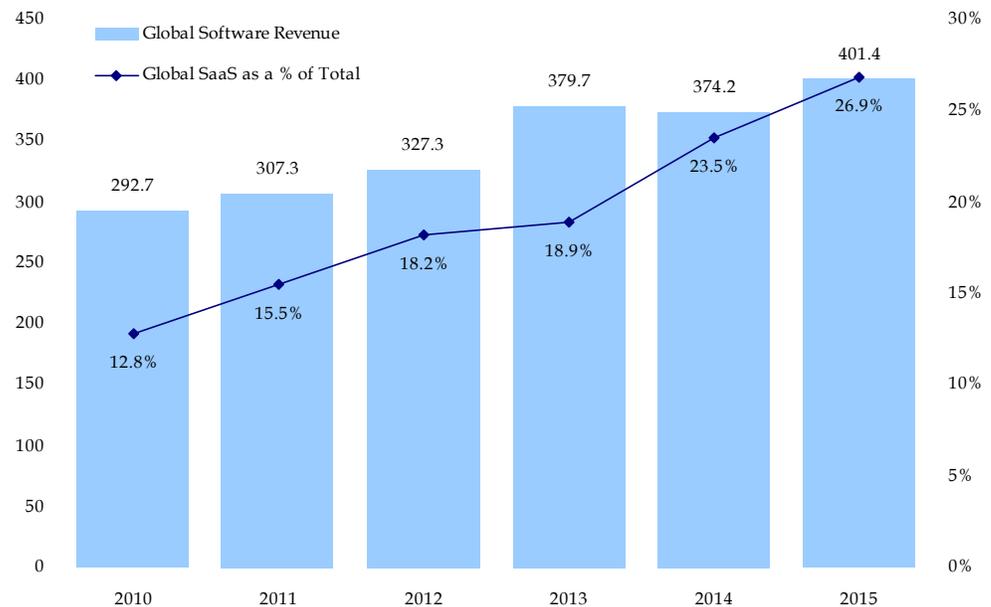
**Analytics are also creating new human roles in the advertising and marketing services industry.** The rapidly changing role of data and technology is feared by many in the advertising and marketing services industry, and certainly many roles will become obsolete. However, there is a growing silent minority whose roles wouldn’t exist without these very trends. For example, marketing services companies are hiring employees focused on “data science” or quantitative analysis. Recently many are coming from the financial services industry; the trend has been helped by the contraction of the financial services industry in places like London and New York.

### Software-As-a-Service (SaaS)

**SaaS models provides cost and scale advantages versus legacy, hosted/licensed software models.** Almost every IP-native marketing technology business model described in this report has been created under the as-a-service model, and the IP-immigrant models (like Enterprise Marketing Management, or EMM software) are increasingly being offered through this model. SaaS models are also one of the ways that advertising and marketing service companies have been able to tap into cloud computing. Advantages of SaaS versus the traditional hosted application service provider (ASP) model include:

- **Software upgrades and new components can be integrated much more easily.** Users then enjoy the added value immediately upon next accessing or logging into the product. This can also be a key factor in nudging M&A among point solution providers by shortening integration timelines and lowering risk.
- **SaaS allows companies to more easily integrate third-party applications via application programming interfaces (APIs).** For example, Adobe/Omniture’s Genesis platform helped turn it into one of the first cross-channel “digital marketing hubs” by allowing third-party vendors to “plug into” their platform.
- **SaaS offers the familiar browser-based user interface.** And increasingly, they come in mobile app-based form as well. Delivery via browsers and apps shorten the learning curve for becoming basic to advanced users of advertising technology.
- **More customer service can be done remotely** without the need to visit a user to help maintain a hosted application. Webinars and other offsite customer service tools are frequently utilized.
- **The incremental cost of an additional user is lower** than for ASP solutions as the new user simply becomes the latest node the platform’s network.

**Exhibit 37. Global SaaS Revenue & Share of Total Software (\$ in billions)**



Source: IDC

**Barriers to adoption of as-a-service models have included security and data control concerns.** However, we see these barriers being gradually eroded as data centers become more sophisticated and redundant and security measures continue to improve.

**Agencies have begun rolling out and pitching services under SaaS model.** Since agencies have always been business services companies, the SaaS model shares many similarities with the fee-based, retainer-style economics of most agencies. SaaS-like work includes customized technology solutions, such as CMO dashboards, aka the user interface of the “digital marketing hub.” This is one of many elements that are also bringing agencies into close competition with IT system integrators and consultants like Accenture and Deloitte.

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## ***Constraints and Risks***

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### **Incumbents Defense of Legacy Business Models**

**Business models are of course operated by companies, and for many defense of legacy ones is an important competitive path.** It can buy companies time to internally develop or acquire new business models in order to sustain revenue and cash flow growth (it can also be done to simply maximize the remaining profits in the run down a legacy business model too). These are basic free market principles and perfectly rational.

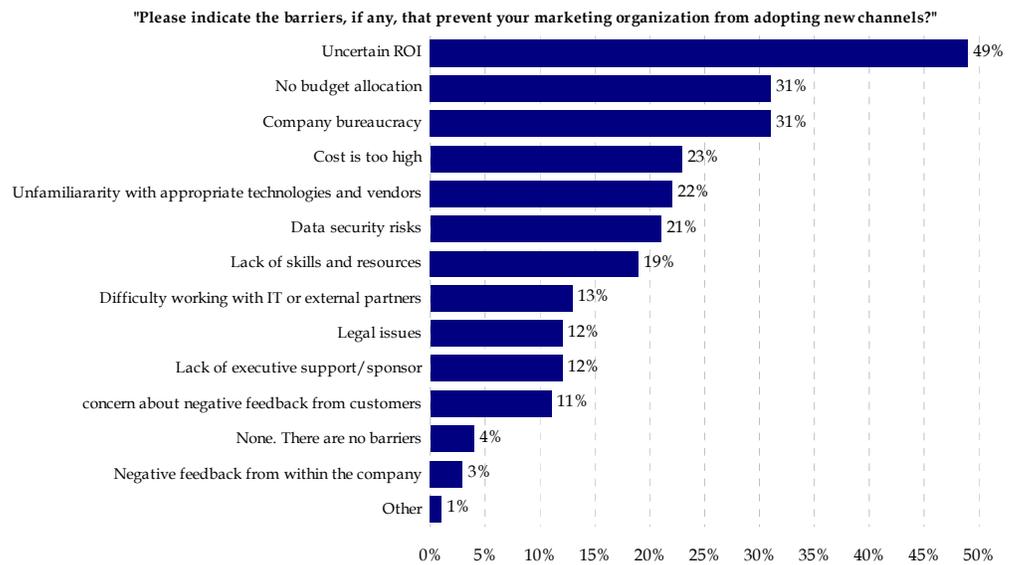
**Media and marketing technology infrastructure takes time to upgrade and innovate.** For example, the slow (and rational) capital expenditure cycle of cable, DBS and telecom companies (including ones with major advertising businesses, like Comcast, even pre NBC Universal) have slowed the adoption of addressable TV advertising as legacy physical plant/head-end challenges remain. Moreover, media conglomerates, like Disney or News Corporation, have significant professional content assets and businesses and have been tentative in bringing it IP platforms. This is because of rampant piracy and illegal use of content/intellectual property.

**At agencies, where relationships remain a top currency, defense of legacy models can often be about keeping the key people happy.** The sources of revenue within agencies have always centered on key people and this remains the case today. Those key people are morphing such that expertise is more geared around IP marketing, and with this comes the normal pull-and-tug of managing human resources. While we believe the shift to much more media-agnostic agency models has accelerated in the past three to four years, legacy org charts and personnel “turf battles” slow many service providers advancements..

### **Marketers’ Organizational Inertia**

**Brands’ marketing departments are also often silo’ed along legacy “channel-based” view of the advertising.** They are slowly lurching toward greater unification based around data, technology, and connectedness to the consumer, but it takes time. Justifiable uncertainty around the effectiveness of new IP-marketing opportunities also slows adoption. For example, internet and other IP-enabled marketing comes with the promise of varying degrees of measurability and more certain ROI. In practice, they present many of the same challenges as non-IP media and marketing, and also offer new ones. Major CMO job tenure remains notoriously short (normally cited at around 18-24 months) and so lack of adoption of IP marketing can driven by job security issues and fear of failure. The slow march of younger executives into marketing decision making roles will gradually erode this barrier, but it remains an important one today.

## Exhibit 38. Proving ROI and Lack of Budget Create a Cycle of Barriers



Source: Forrester Consulting on behalf of Webtrends

### Fragmentation and Lack of Standardization

**The constant wave of IP marketing technology innovation has created an ever more fragmented set of vendors and lack of standardization of tools, ad formats, and other elements.** This presents challenges both from technical integration standpoint, but also in confusing and slowing decision-making of brands and marketers. Like any emerging technology, the co-ordination of competing interests and creation of effective industry bodies takes time to gel. In some cases, fragmentation is being solved through industry consolidation. For example, Google’s acquisitions of DoubleClick, Invite Media, AdMeld, and Teracent (among others) have helped create a unified technology platform for both the buy-side and sell-side of display advertising.

### Privacy Regulation Always Waiting in the Wings

**Government plays an essential role in oversight of IP communications and advertising and regulatory regimes are regularly chasing innovation.** For the largest advertising and marketing services companies, this also requires managing the shifting sands across multiple jurisdictions/nations, each with their own legal framework and cultural norms. It can also involve multiple bodies including various arms of federal, state/provincial and local governments and consumer watch dog groups. As in other areas, like trade and foreign policy, we would over time expect more and supra-national bodies and regulatory supervision (e.g., the EU or NAFTA), and this could be very helpful to IP marketing companies as they seek to expand more efficiently to new markets.

**Regulation is driven by bad actors, consumer data breaches, and scams.** Acting as a determinant to bad actors is a cornerstone of good regulation. The IP marketing industry has often executed effective and well coordinated self-regulatory models, but they tend to offer more weight when helped, shaped, and implemented by government bodies.

## Intellectual Property Litigation Grows More Complicated

**Like other areas of technology development, advertising technology is familiar with the increase in intellectual property (the other IP) litigation.** Court proceedings can be long and expensive. The rise of “patent trolls” – non-operating companies that acquire patent portfolios in order to pursue litigation – is an increasingly important element as well. Recent examples of litigation affecting major IP marketing companies include Google v Oracle (contesting the use of Java IP in Android’s source code) and Yahoo! vs. Facebook (regarding social networking, advertising privacy and other technologies).

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## ***Business Model Descriptions***

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Herein we describe some of the most common “modules” of the digital marketing hub and how they help brands navigate the IP marketing ecosystem, particularly programmatic features. The majority of IP marketing spending – i.e., impressions, particularly advertising -- flows to major media companies. This group includes stalwarts like Comcast, Disney, Time Warner, NewsCorp, CBS, and Viacom, as well “new media” like Yahoo!, Google, and Facebook. But unlike non-IP media, the use of data and software to coordinate this spend creates an opportunity for value to shift to the technology and services providers that can maximize ROI across paid media (to say nothing of managing earned and owned media elements). A few things to remember for context when considering various technology-enabled advertising and marketing services models:

1. **Many of the models were birthed in the online display advertising channel which is most familiar to users on the PC or laptop in a browser-based web experience.** But they are also seen on smart-phones and tablets, or app-based web experiences too. As IP communications evolve, these business models affect more and more touch-points/devices and “channels” like addressable TV, digital-out-home, streaming radio, digital in-store/point-of-sale, and call centers.
2. **Human roles remain vital, especially for high-priced and/or customized advertising and marketing services.** Certainly the onset of digital audiences has changed the nature of labor at advertising and marketing services companies, as well as the marketers’ themselves. And technology will continue to automate many of the processes required to serve the near-infinite inventory of advertising impressions in the digital world. But global enterprises will always require human customer service, strategy and creative insight, negotiating skills and basic administrative duties (among other things). And of course, analytic, engineering and product development roles are increasingly in demand.
3. **Offline media may not be powered by these technologies, but the digital marketing hub has always coordinated them and will do so increasingly.** For example, direct mail will always be an analog channel, but it has been targeted for decades with consumer marketing databases and will always offer feedback data in the form of replies or redemptions.
4. **There are tons of enterprise-wide tools that are increasingly encroaching on advertising-specific solutions.** Companies like IBM, Adobe, Accenture, salesforce.com, Oracle, SAP, Infosys and other software and services providers are taking advantage of incumbent positions in other business priorities (enterprise-wide analytics and BI, IT services, CRM platforms, creative software, etc.) and incorporating more of the below models. Many have entered the marketing industry via acquisitions that focused, while others have built out in-house expertise, especially on the services side.

5. **Beyond highlighting a few leaders and better-known companies, we have specifically refrained from offering a list of companies operating each business model.** The reason for this is because the companies developing this technology are constantly evolving, pulling in elements of different models and solutions to create unique offerings. Instead, please refer to the public and private company sections that follow for details on specific ecosystem players.
  
6. **We've roughly grouped the business models based on their "era" of development.** Certainly companies built around business models established in prior eras have innovated and acquired capabilities from the next generation(s); the aim is instead to highlight the well-established history of digital technology's role in advertising and marketing services, as well as the increasing pace of change and business model innovation.
  - a. **The Software Era: Before 1995**
    - Agency Services
    - Database Marketing and CRM
    - Enterprise Marketing Management (EMM) Software
  
  - b. **Web 1.0 era: 1995-2005**
    - Email Marketing and ESPs
    - Ad Serving
    - Ad Operations (aka Ad Ops)
    - Ad Networks
      - Affiliate Marketing
      - Online Lead Generation
    - SEM and SEO
  
  - c. **The Web 2.0 era: 2005-Present**
    - Marketing Analytics
      - Web Analytics
      - Social and Mobile Analytics
      - Third-Party Analytics and Measurement
        - Audience Verification
    - Ad Exchanges
      - Retargeting
    - Demand-Side Platforms (DSPs)
      - Agency Trading Desks (ATDs)
    - Sell-side Platforms (SSPs)
      - Private Exchanges
    - Data Management Platforms (DMPs)
    - Creative Optimization

## ***The Software Era***

### **Agency Services**

**Broadly speaking, agency services are the “human” or “service” layer for IP marketing.** The term *agency* is a broad one, typically applied to the types of firms owned by holding companies (or their independent counterparts). They are typically categorized based on the service offering and can include:

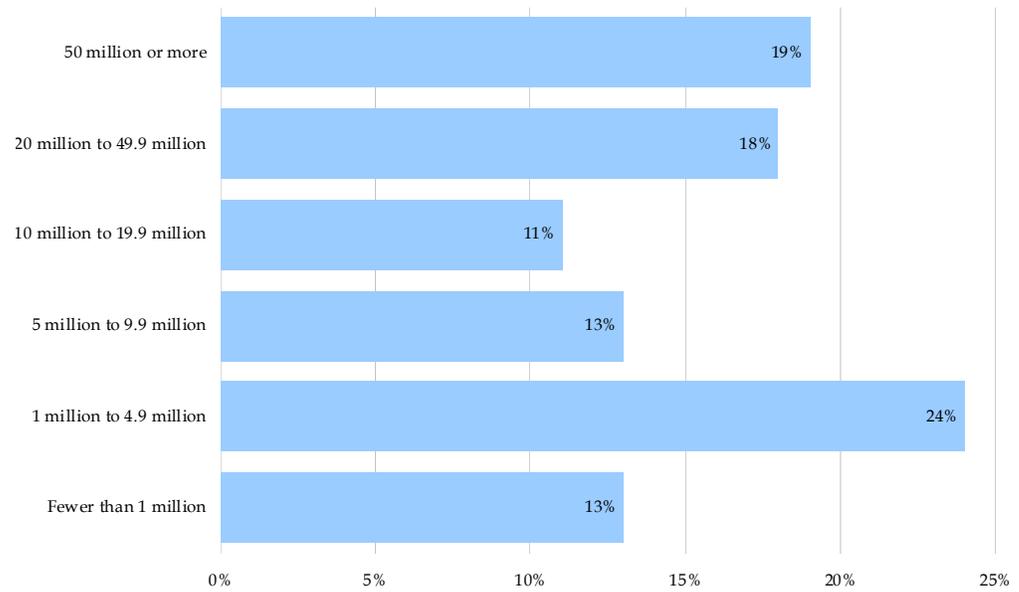
- **Integrated agencies:** full marketing and advertising services
- **Media agencies:** media planning and buying
- **Creative agencies:** services focused on creating advertisements
- **Digital agencies:** focused solely on IP advertising and marketing services
- **Direct marketing agencies:** targeted marketing services; no advertising
- **Design agencies:** logo and packaging creative services
- **Promotional and Shopper Marketing agencies:** in-store and other “offers-based” marketing

**But in its basic form as the “service layer,” agency services can sit within technology companies too; here they often go by the term “managed services.”** Said another way, we consider any human that is assisting a brand in allocating and executing its marketing budget to be an “agent.” Where the difference lies is that a technology company also offers a platform or product that is built once and re-sold (i.e., higher margins) whereas agency services are typically paid on a “time and materials + mark-up” basis and therefore are not scalable (i.e., lower margins).

### **Database Marketing and CRM**

**Collecting and organizing various forms of individual customer and/or lead data is the foundation of modern direct marketing techniques.** These data could include contact and demographic information (name, address, gender, etc.) and transaction data (e.g., e-commerce sales, warranty data, etc.). Database marketing vendors are normally charged with hosting the client’s first-party database, and then maintaining it through cleansing (e.g., updating address information after a customer moves), adding new profiles, eliminating users who opt-out (aka “suppression”) and layering in third-party data help build more robust profiles. This data can be gleaned from many sources including public government services, charity organizations, credit card applications, or responses to contests/special offers (such as those sold by online lead generators).

### Exhibit 39. How Many Customers Are Stored in your Database?



Source: Forrester Research, "What Customers Really Think About Their Database Marketing Services Providers"

**Databases can be oriented around business-to-business data and/or business-to-consumer, depending on the client's products/services.** Database marketers also develop sophisticated models in order to identify the customers most likely to respond to a particular marketing message and frequently tack on execution services such as email or direct mail.

**As more and more marketing spending migrates online, digital analytics capabilities (see below) are often bundled with core database marketing services.** Whereas database marketers have developed expertise in tracking long-established "structured" customer data-points about consumers (name, address, transaction history, credit ratings), digital analytics have been natural extensions for IP-marketing data such as page views, click-stream data, and other "unstructured" data.

### Enterprise Marketing Management (EMM) Software

**Since the beginning of the software industry, there have been specific versions created to help enterprises' marketing departments organize people, assets, and processes.** Marketing technology has long-used acronyms to describe its offerings. Well-established ones that fall under the broad category of EMM include:

- **Marketing Asset Management (MAM):** organize and store creative work from 30-second TV commercials to print ads; today it increasingly houses online banner and rich media ads.
- **Marketing Resource Management (MRM):** track expenses and overall budgets, streamline processes and improve collaboration.
- **Marketing Mix Modeling (MMM):** evaluate spending through multivariate regressions and other statistical analysis

**There has also been software suites created specifically for ad agencies.** Known for agency-specific workflow and billing solutions as well as traditional ad trafficking and management. Much of this market was consolidated into the newly-named MediaOcean when the

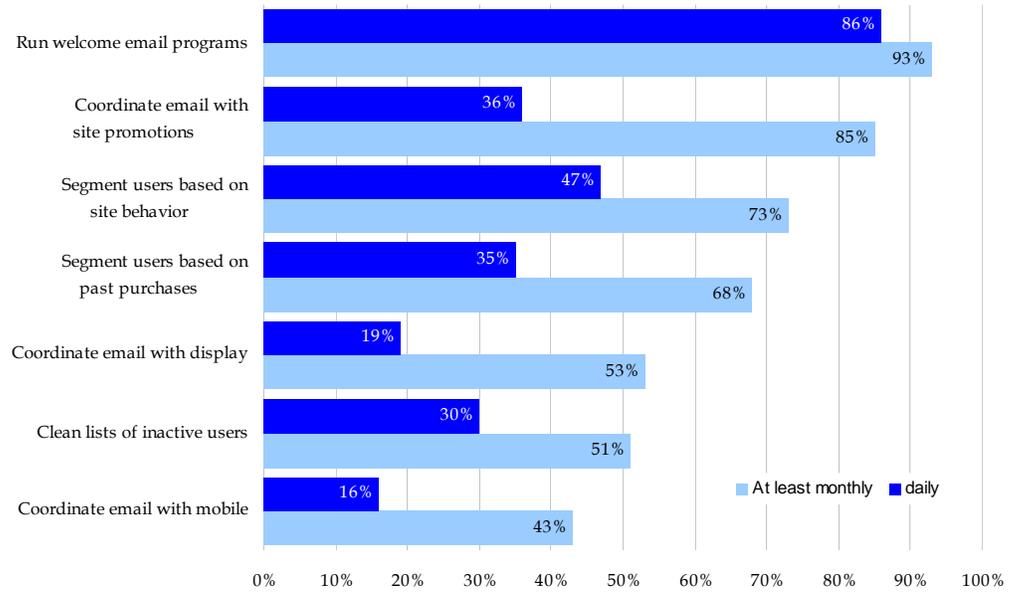
long-standing #1 player Donovan Data Systems merged with recent start-up Mediabank. Both companies have acquired and developed various start-ups focused on programmatic, IP advertising, and also developed in-house solutions.

### The Web 1.0 Era

#### Email Marketing and ESPs

**Email is now ubiquitous in developed nations as free web/cloud-based services have flourished over the past decade.** Email service providers (ESPs) offer creative templates, subscriber list management, internet service provider (ISP) relations, campaign organization and execution. ESPs compete against internal solutions as much as they do with each other.

**Exhibit 40. Methods Used to Manage Delivery of Marketing Emails**



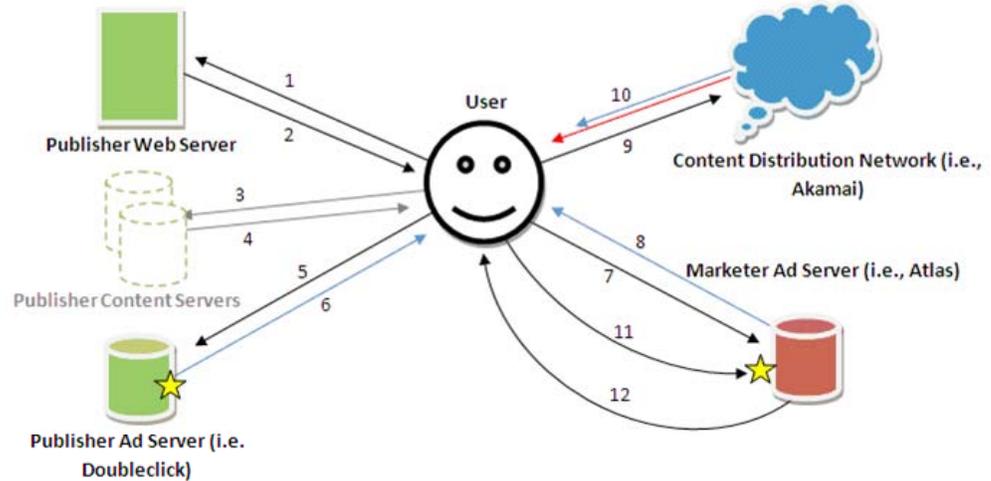
Source: Forrester Research, The Forrester Wave: Email Marketing Vendors, Q1 2012

**A key question for email marketing in recent years has been its role in a social world and ESPs have evolved as a result.** Amongst digital marketing channels, it is one of the most mature and thus growth rates specific to the channel are too. Most social media properties (particularly Facebook and Twitter) are built around communications; in this sense we tend to view email as “the original social network.” And while, social networks present challenges to traditional email in that users can now use social networks to do similar communication, it’s worth remembering that pretty much every social network requires an email address for registration and regular updates. As such, as audiences have gathered around social networks, ESPs have broadened their capabilities to take advantage of them and apply their core competencies in understanding the effectiveness of timing and frequency, as well as list or “fan” or “follower” management.

### Ad Serving

**Ad serving technology begins with the placement of ads on a given webpage or app or user interface.** Essentially, it manages a very elaborate set of “call and answer” functions. A standard ad serving process would start when a user is browsing and clicks on a web link. As content is being rendered, the web publisher also sends a request to its ad server, e.g., DoubleClick. This server can process the request itself or it can send a request to the advertiser/agency’s ad server, which delivers the ad.

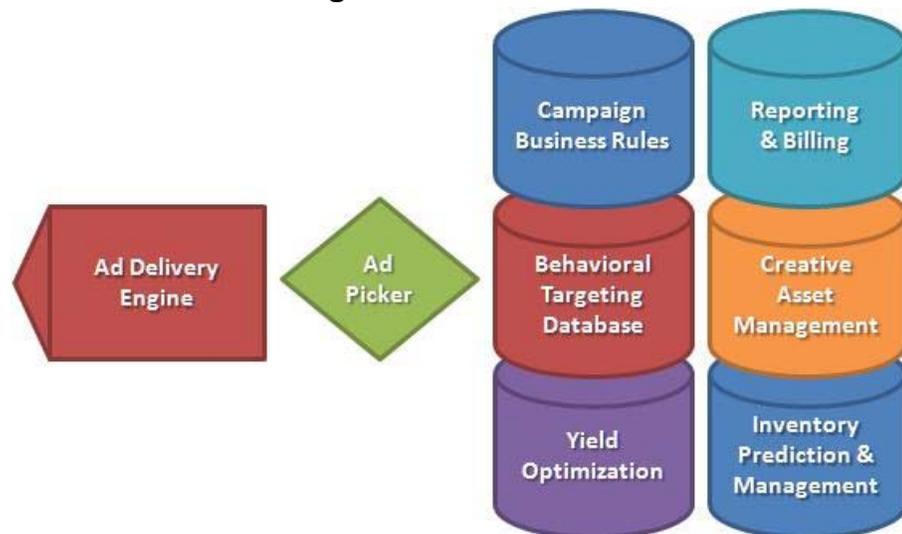
#### Exhibit 41. How Third-Party Ad Serving Works



Source: AdOpsinsider

**The selection of the given ad is a complicated process that must be filtered through a number of tracking/targeting/segmenting/decision-making technologies.** These include reporting and billing, targeting (behavioral, contextual, geographical, etc.) and yield optimization. All of these “back office” functions/decisions are executed in a matter of milliseconds. Increasingly, many of the business models profiled below overlay onto the process as well.

#### Exhibit 42. Ad Serving Functions



Source: ClickZ.com

**Ad serving solutions have evolved as digital ad formats and channels have matured.** For example, solutions like Google's DoubleClick and Microsoft's Atlas are 10+ years old and began by delivering simple static display banners. In the mid-part of the last decade a class of rich media ad serving companies like Eyewonder, Eyeblaser and Unicast (all acquired by DG Systems) were founded and focused on delivering ads with sound and moving images. And in more recent years, the rise of ad servers focused on the mobile channel has been a key theme.

**"Ad serving" has also been intimately tied to "ad networks" (see below).** The technology companies that have created ad serving technology have also often operated ad networks of publishers as well. For example, ValueClick is well-known as one of the largest independent ad networks for over a decade, however they also offer their own proprietary ad serving technology (MediaPlex).

## Ad Operations (aka Ad Ops)

**Ad Ops technically isn't a module or "business model;" it's a publisher's internal staff that manages ad trafficking and many of these featured technologies.** Because Ad Ops coordinate all of these technologies for a website, it is primarily oriented on the "sell-side" of the IP-advertising ecosystem. A publisher's Ad Ops department plays a key role in the optimization of different sales channels (i.e., both human-sold ad campaigns and programmatically-driven ones) to maximize ad revenue.

**Ad Ops manage ad serving, yield optimization/SSPs and relationships with ad exchanges,** among other things. Whereas once Ad Ops was viewed as sleepy department that trafficked the salesforce's quota and coordinated ad network relationships, today it requires constant evaluation of new sell-side vendor offerings and increasingly complex sales channel organization, including private exchanges.

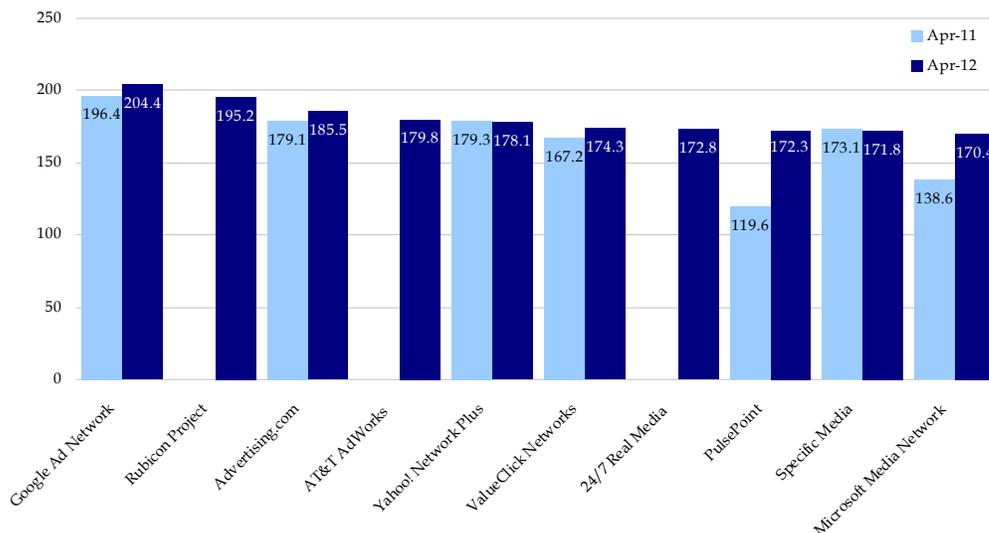
## Ad Networks

**The business model called "ad network" originally represented a company where salespeople sell ad space on behalf of hundreds or thousands of website publishers.** As noted above, these companies also frequently developed the ad serving technology as well (and also regularly offer analytics tools as well). Ad networks can also purchase inventory from other networks (and increasingly ad exchanges, see below) and earn a spread over that cost by re-selling the audience/click, creating a "daisy-chain" effect. Pricing models are normally either cost-per-click (CPC) or cost-per-thousand impressions (CPM). Traditional categories of ad network include those with a vertical focus (sports, health & beauty, etc.) or those with certain types of targeting methods (contextual, behavioral, etc.). And ad networks can differ across ad formats like text, static display and video, as well as variation in focus on platforms, like mobile ad networks.

**Ad networks frequently service as the "second channel" for publishers' sales department.** Small website publishers like a stay-at-home blogger, may use ad networks as their sole channel for generating ad revenue. However, large publishers – particularly those that are part of larger media organizations – have large human salesforces that focus on higher priced "premium" ad sales. Premium typically implies "guaranteed" ad sales, but can also involve better ad formats and premium placement, as well as larger integrated deals that include full-site sponsorship, etc. Once all premium, guaranteed demand is fulfilled a large publisher can back-fill their remaining ad impressions using an ad network. The relationship between premium ad sales to total ad sales is often referred to as the publisher's "sell through rate."

**But since the advent of the ad exchange model (see below) successful ad networks have been evolving at a faster pace** and those that haven't have perished or been forced to consolidate. First, they have used their own data assets culled from the cookies they drop on users' browsers (as well as third party, purchased cookie data) to tap into exchanges to further improve performance of impressions for their advertisers. Second, the technology they use to do this has advanced to compete alongside demand-side platforms (see below again) to offer more programmatic and real-time bidding capabilities. Put simply, successful ad networks are adapting to the exchange-based, programmatic world that has emerged in recent years and adapted to become even more technology and data-driven and move increasingly away from the idea of simply being an "outsourced sales team."

**Exhibit 43. Top 10 Ad Networks Unique Users (in millions)**



Source: comScore (Rubicon Project, AT&T AdWorks and 24/7 Real Media did not have data for April 2011)

**Like the phrase “agency,” we see “ad network” as both a business model that comes in various flavors, but also a catch-all phrase for a basic business arrangement.** For example, if two people lease an office and start working on behalf of a brand on some part of their marketing work, those two people are already an “agency” in some form in our mind; that is the basic idea of multiple people working for a brand. Likewise, if a company starts selling and delivering ads on behalf of more than one website or publisher, they’ve already put together an “ad network”; even if that’s just your sister and mother’s blogs.

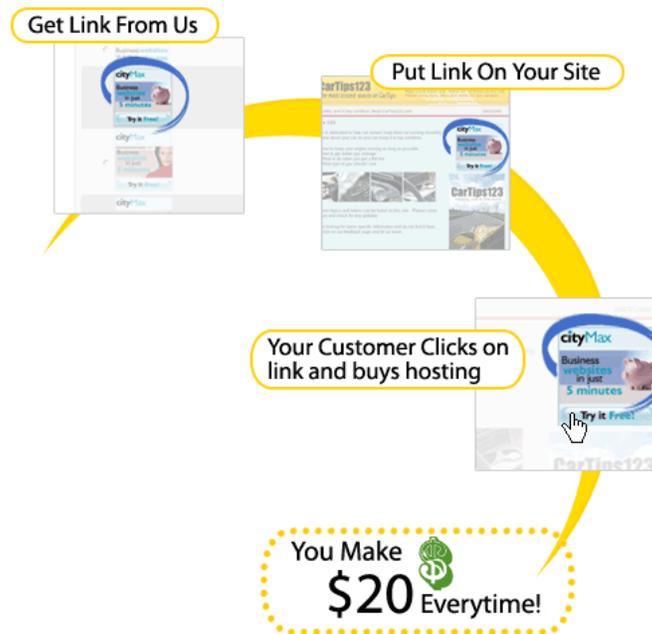
**“Twists” on the Basic Ad Network Model**

**In addition to the different specializations of ad networks (vertical networks, mobile networks), there are several business models that we would consider “twists” on the basic model.** Each of these monikers regularly stand alone as unique business models, however, in our mind, they are all related in the sense that they don’t deviate from the basic model of connecting advertisers to large, aggregated audiences from across other third-party digital properties.

## Affiliate Marketing

**Affiliate marketing is another referral-based strategy.** However it differs from lead generation in that the desired action is not generating a lead but rather an actual sale online. The model begins with an online merchant who hopes to drive more traffic to his site to increase sales. Rather than buy display advertising or paid search terms, the merchant can instead place an advertisement/link for a specific good or service on an affiliate site where the users would be inclined to purchase said product. When a user clicks on the offer, she is then directed to the merchant's website and hopefully makes a purchase. If so, the affiliated site pays a commission to the original referrer. As such, affiliate marketing companies are normally paid on a "cost per acquisition" (CPA) basis or revenue share. Exhibit 44 below shows how an affiliate marketer offers publishers a different type of ad to serve on their site.

### Exhibit 44. Sample Affiliate Marketing Program



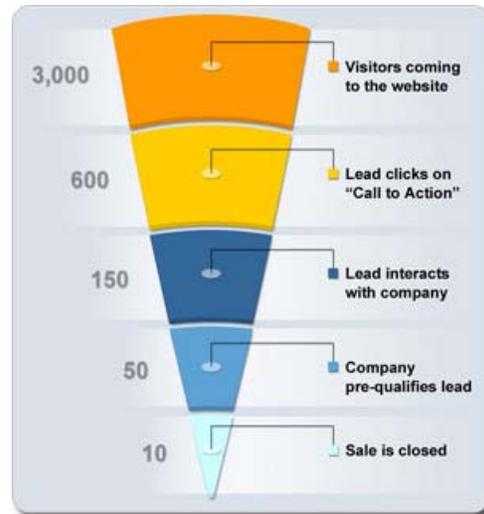
Source: Citymax.com.

**To look at the example in reverse, Amazon has filled gaps in its own inventory by organizing a network of smaller sites to which it drives traffic and receives a commission for any transactions.** As such, Amazon acts as a massive "affiliate" for its partner merchant sites. Likewise, comparison shopping sites, in a sense, act as "affiliate hubs" by using merchant offers as the "content" that brings traffic to their sites.

## Online Lead Generation

**The online lead generation model normally starts with a central web property (or email or other digital "entry point") that lists a potential offer (or multiple offers).** After clicking on the ad/link, users are eventually asked to enter personal data in a registration form. This is the key difference between an online lead and an online ad, where the user is directed to the advertised website or product instead. These leads are aggregated and then resold. Online lead generation units can often offer an incentive (a contest entry, actual goods, etc.) in return for their personal information, though this model has increasingly fallen out of favor and viewed as "scammy."

## Exhibit 45. Online Lead Generation Process



Source: R3R.com

**The other frequent difference between an ad network and lead generation is the pricing of the unit.** Online lead generation more frequently employs the cost-per-acquisition (CPA) pricing model, whereby the marketer purchasing the lead actually closes a sale. CPA can also often refer to “cost-per-action” where the action is specified as something other than a financial transaction, such as mailing list sign up. Success for online lead generators starts with the ability to drive traffic to the “entry point,” for example, growing website visitation or an email newsletter list. This can occur by placing lead generation ads on other highly trafficked sites or creating promotional websites specifically to generate leads. These sites drive traffic through direct navigation (i.e., users typing the website URL directly into their browser) or through traffic derived from search engines, both the natural/organic search results and the paid ones. As such, most successful online lead generation businesses have powerful SEM and SEO (see below) practices as well; increasingly, acquiring leads from social networks is becoming more important too. Profitability is driven by compiling proven, high quality lists with high lead-to-transaction conversion rates (higher conversion = more value to marketers = higher price) and lowering lead acquisition costs.

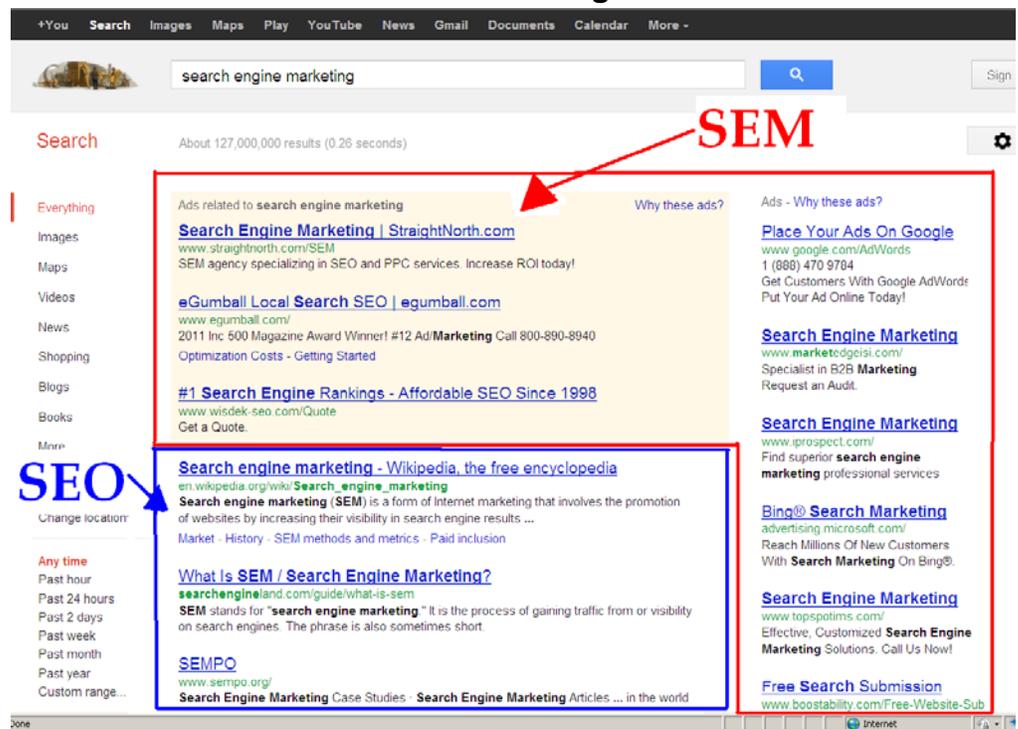
**Taking a step back to include both the IP and non-IP world, lead generation is a term seen frequently in marketing services, one that tends to have many meanings.** In traditional, offline marketing, direct response TV advertising (more colloquially known as infomercials) can be used to drive immediate sales, but can also act as the starting point for lead generation and incubation, whereby, for example, a caller dials the 800 number on the TV and the marketer then schedules a follow up visit at a nearby office or showroom. Taken in such a context “lead generation” is nearly as ubiquitous as “marketing services” seeing as nearly every marketing value chain sees customers transition from “prospect” to “lead” before hopefully becoming a “buyer.” That being said, for the purposes of this section, we boil lead generation down to the more specific practice.

**Traditionally, lead generation involved buying or using lists of consumers (both individuals and businesses) to seek out potential customers.** Lists could be sold in many forms including, spreadsheets or on small cue cards. The lists were compiled from organizations where the collection of personal user data was critical. These include credit card and loan applications, magazine subscribers or donors to a charity. The traditional list brokerage business continues to thrive today, augmenting individual businesses’ internal customer databases.

## SEM and SEO

**Search engine marketing (SEM) and search engine optimization (SEO) address optimization of paid and organic search results, respectively.** SEM involves the organization of keyword lists (which can run up into hundreds of thousands) and optimizing bidding strategy. The goal is to improve an ad’s placement in the paid search rankings in order to drive traffic to the website. Search engine optimization (SEO) is the practice of improving individual website designs and functionality so that they are made more relevant to search algorithms and are ranked higher in the “natural” search results. Search engines rank results based on a complicated formula, however factors such as the number of times a site is linked to and from another and the depth of content on the site are amongst the most important variables. As search engines routinely tweak and change their algorithms in order to increase the relevancy of their results (among other reasons), demand for SEO increases as a single agency can make adjustments to strategies across a wide client base.

### Exhibit 46. SEM/Paid Links vs. SEO/Organic Links



Source: BMO Capital Markets

**Google has traditionally not taken part in the SEO and SEM market due to its dominant search engine marketing share, but that has changed in recent years.** When DoubleClick was acquired in 2006, the SEM portion of the Performics division was hived off and eventually sold to Publicis Groupe to avoid conflicts of interest with Google’s core search engine business, around which all SEM and SEO firms were based. However, in recent years, DoubleClick has begun to offer search optimization tools (though not agency-style customer services). DoubleClick Search v3 can be used for search campaigns across Google, Bing, Yahoo! and other search engines.

## ***The Web 2.0 Era***

### **Marketing Analytics**

**The term analytics is frequently used a broad category of business models, like agency or ad network.** In fact, analytics is an even broader term as it's a theme that frequently runs across the enterprise. From a marketing perspective, analytics live on both the buy-side and the sell-side of the ecosystem. For example, publishers that sell online ads frequently use web analytics, like Adobe/Omniture's SiteCatalyst, to track website usage; on the other hand, an advertiser can use the same tools and data from their own website to optimize their own marketing campaigns. The term analytics is also being increasingly used to describe the tools offered by "market research" companies like Nielsen and WPP's Kantar as well. And is growing to be a theme of this section, analytics services crossover with so many of the accompanying business models; put simply, any company operating an ad technology module is generating data about its usage that can be re-packaged into a usable format for marketing decision-makers and be called "analytics." While it's a broad term, below we describe a few of the more recognizable business models:

### ***Web Analytics***

**Web analytics vendors provide the tools to calibrate and analyze a web property's traffic.** Using these tools, publishers can bolster customer profiles and test the effectiveness of one ad versus another (i.e., A/B or multivariate testing). Moreover web analytics vendors have long since incorporated and synthesize other internal sources, such as point-of-purchase and call center data. And as the technology evolves it will be able to incorporate essentially any customer data sources that are derived digitally. Moreover, vendors also often act as a platform for "plug-and-play" integrations for third-party marketing applications, forming a basis of a broader "digital marketing hub."

### ***Social and Mobile Analytics***

**As the social and mobile ecosystems have developed so too have analytics services based around the channels and properties.** These can come in the form of first-party services offered by major properties; for example, Facebook offers advertisers analytics tools derived from its social media property, while iTunes offers developers feedback (aka "analytics" on usage of the apps they've developed and sold). But the term is more commonly used for third parties; this can include broader third-party analytics companies mentioned above, as well as start-ups focused on social or mobile specialties. For example, salesforce.com acquired Radian6, a social analytics provider to offer to its broader customer base built around sales CRM.

### ***Third-Party Analytics and Measurement***

**What was once called market research and/or media measurement is increasingly being categorized as "customer insights" or third-party analytics.** Information collection techniques traditionally included panels and focus groups, whose data was then overlaid with human analysis to create, for example, broadcast TV ratings. Today, third-party analytics increasingly involves the harvest of digital data – both from cookies and APIs -- and digestion into usable formats for advertisers and publishers, like online advertising performance benchmarks. This is the evolution currently going on at companies like Nielsen, WPP's Kantar, GFK, and Ipsos.

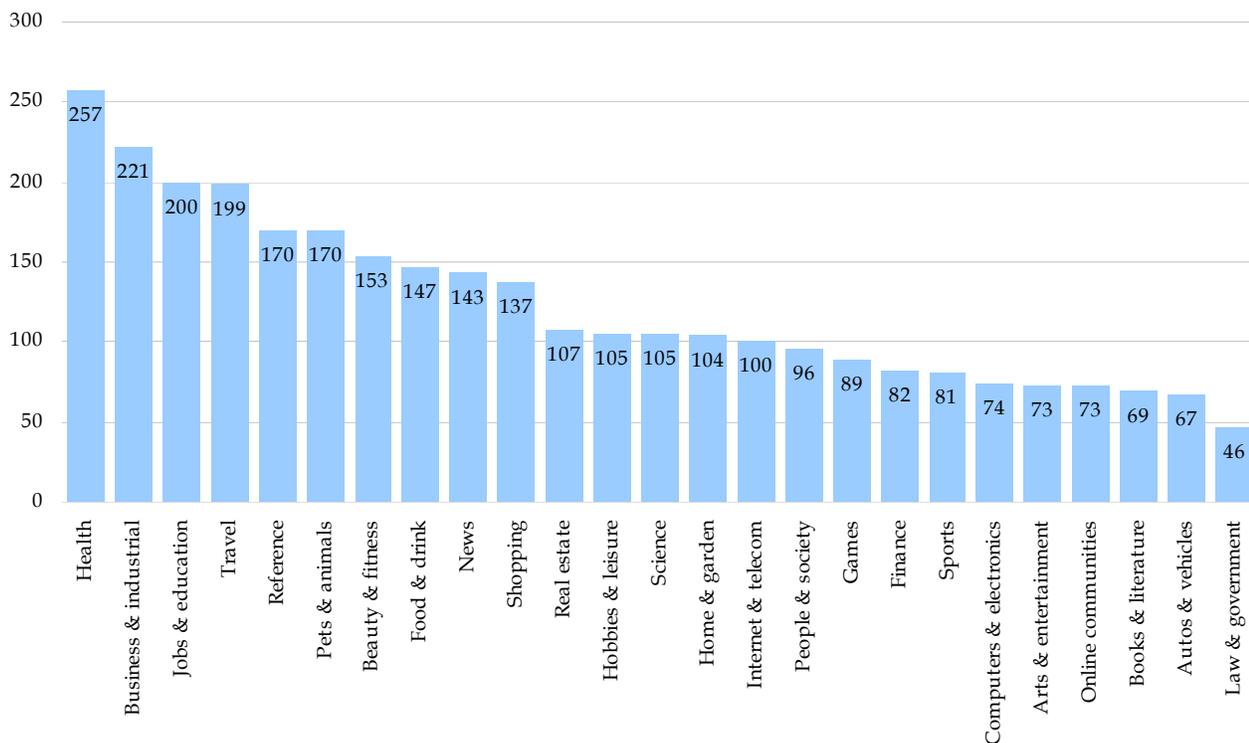
### Ad Verification

Ad verification vendors rose to help address the always persistent question around discrepancies in ad impressions and budgets fulfilled between the buy-side and the sell-side, and the various layers of the display ad ecosystem. These third-party services help act as an independent check, however, they are not seen as final authority or cure-all for discrepancies between different vendors either.

### Ad Exchange

The onset of ad exchanges in the middle part of the last decade became a key driver of the rise of programmatic display ad buying and real-time bidding. In the early days, ad exchanges were the marketplaces around which the tools of search marketing (e.g., preset rules and budgets, targeting parameters and other elements of programmatic buying) could be used to buy display advertising like banner ads. Agencies, ad networks, and individual advertisers can take part in the marketplace individually or in support of each other. Each player uses its own special mix of data and targeting algorithms to buy and/or sell ads. Right Media (acquired by Yahoo!) is normally viewed as the original ad exchange and today Google’s DoubleClick Ad Exchange has become the leader, while Microsoft has also been a player in a variety of forms for many years.

**Exhibit 47. Indexed Comparison of CPMs on DoubleClick Ad Exchange by Vertical**



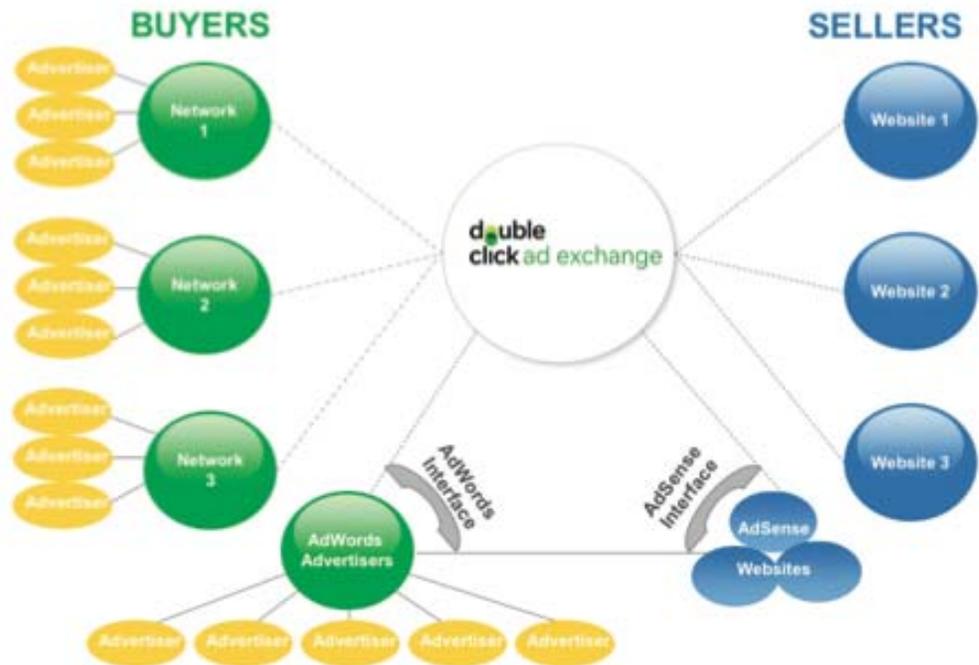
Source: Google "What's Trending in Display for Publishers?" May 30th 2012

Ad exchanges have come to stand along ad networks as the primary “second channel” distribution model. Both business models have long-promised advertisers more efficient marketing campaigns by using data to target ads, both based on web content and context, as well as audience-based characteristics. And because of the exponential growth of digital ad inventory, publishers have often viewed their services as “raise to the bottom” pricing mecha-

nisms. This has naturally resulted in innovation focused on the sell-side, such as the sell-side platforms and private exchanges, which are explored more below.

**Ad exchanges are increasingly offering online video and mobile advertising.** For example, Google's DoubleClick Ad Exchange offers ad inventory from YouTube and mobile ad network AdMob. This underscores how the business models profiled here are increasingly underpinning all IP advertising. Whether on a smartphone, tablet, PC or IP-connected television, the exchange model is increasingly spreading through more and more advertising.

### Exhibit 48. DoubleClick Ad Exchange Overview



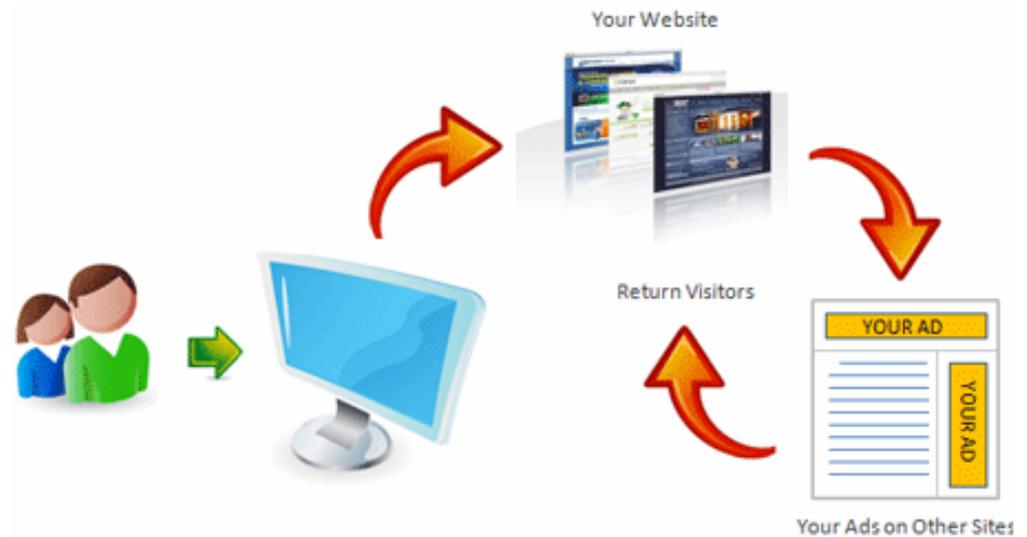
Source: Google

### Retargeting

**Retargeting isn't new, however the term has risen to prominence in recent years.** The basic "twist" of re-targeting is using data from users that showed intent signals to optimize targeting. This data used to re-engage the user could include simple site visitation, shopping cart abandonment, search keywords or data from, for example, an auto-comparison site. For the user, this has the effect of seeing an advertisement "follow" them around the web, as the re-targeter purchases ads from other networks and ad exchanges in order to deliver an ad for the product the user was shopping/searching/learning about based on an anonymous profile. By engaging users after they have shown intent, re-targeting (like search) is normally seen as bottom-half-of-the-funnel marketing.

**E-commerce-based re-targeting is well-established; more recently it has been the use of search query data that has garnered more attention.** As it does in many conversations around digital marketing, Google is a key cog in the discussion due to its significant share in search engine usage. As multi-channel optimization gains traction, the company is increasingly at the center of the conversation around "unified" data from across various media and advertising channels. This marks a good moment to move onto the section business model.

### Exhibit 49. Retargeting Process

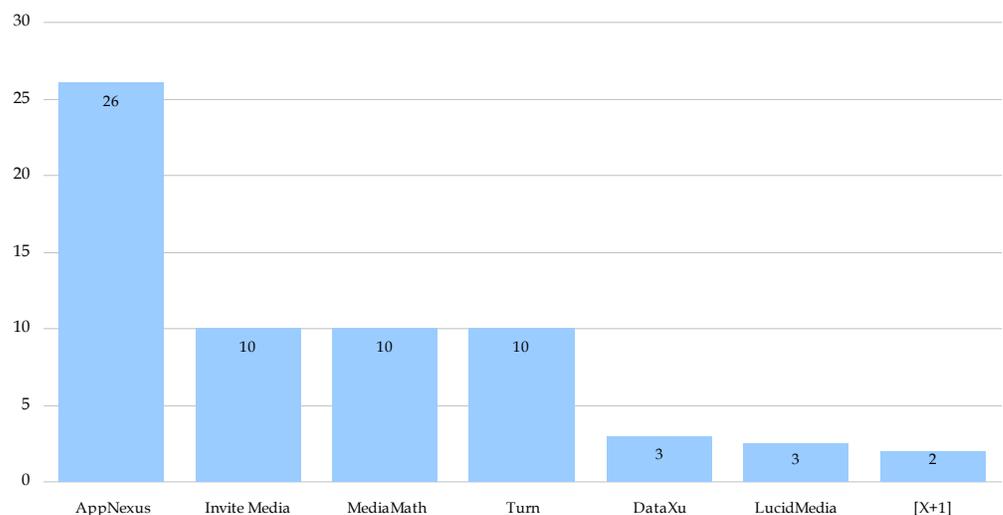


Source: Dotsauce.com

### Demand-Side Platforms (DSP)

Ad exchanges soon spawned demand-side platforms (DSPs), which are automated buying platforms – originally for display advertising – that buy programmatically and increasingly in real-time. DSP technology combines user data from multiple sources and can tap into multiple ad exchanges. The term began to get popular in late 2009 and early 2010; it is often viewed as the first in the wave display ecosystem acronyms (we hope the prior business model profiles illustrated that acronyms are in fact nothing new in marketing technology).

### Exhibit 50. DSP Monthly Volume (billions of impressions)

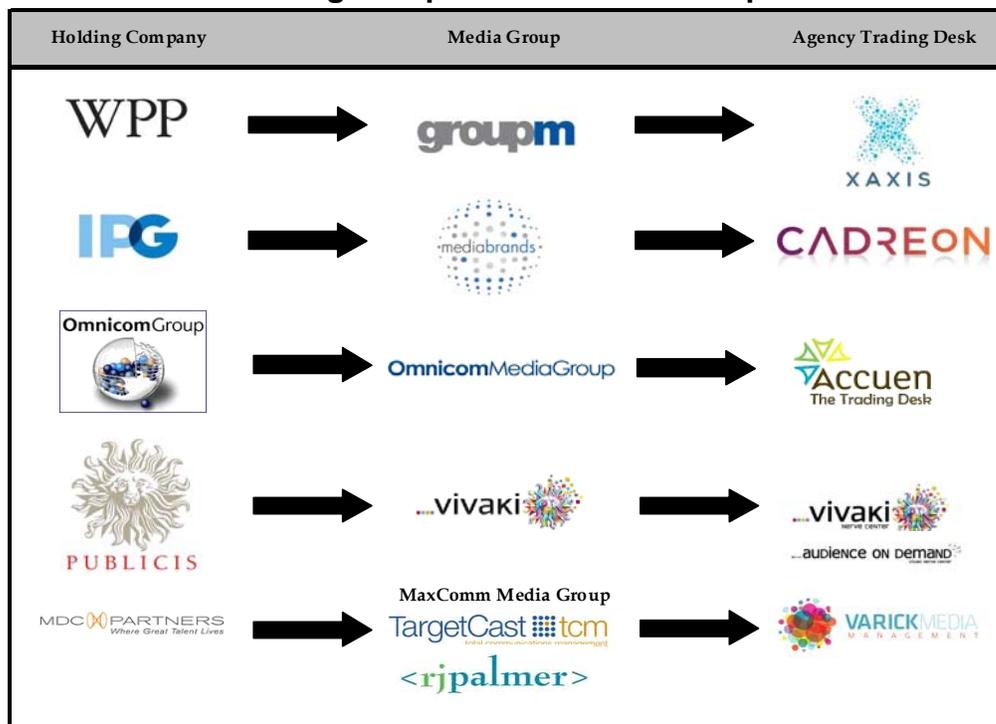


Source: Forrester Research, The Forrester Wave: Demand-Side Platforms, 4Q11 (Invite Media figure is estimated).

### Agency Trading Desks (ATD)

Agency trading desks are the major communications holding companies primary entry into the programmatically bid, IP-advertising ecosystem. ATDs are often built upon licensed DSP technology and are housed within the holding companies broader media planning and buying arms. Along with other ad technologies, the holding companies (aka agencies) have generally been leaning toward partnering with the technology developers (which is complicated at times by the fact that they buy advertising from many of these same companies).

**Exhibit 51. Ad Holding Companies and Their Respective ATDs**



Source: Company reports.

### Sell-Side Platforms (SSP)

The term sell-side platform came to prominence in 2010 and grew out of a category we used to call “yield optimization.” These tools are designed for publishers to maximize ad sales, essentially a counter to buy-side tools like DSPs and ATDs. By optimizing the inventory for a variety of publishers, sell-side platforms can also serve as liquidity pools, similar to ad exchanges. In fact, like with the ad network-ad exchange relationship, SSPs, DSPs, and ATDs can also tie and buy and sell impressions from each other.

Sell-side platforms also deliver intelligence to the human sales force in order to optimize rate cards for premium/guaranteed advertising. By giving a more transparent view than a “blind” ad exchanges or ad networks, publishers gain greater insight into what impressions and individual advertiser or agency is buying from them. This data can then be used by the broader sales and ad ops teams to optimize revenue generation.

## ***Private Exchanges***

**In aiming to maintain control over “second channel” ad pricing, private exchanges have become common in the past 18-24 months.** These are exclusive marketplaces where a single website publisher (or group of publishers, e.g., Disney/ESPN family of websites) can sell its non-guaranteed inventory directly to buyers, including agencies/ATDs and DSPs. Private exchanges allow publishers to select and exclude certain buyers and set price floors for its inventory. At times, access to newly created private exchanges has required buyers to guarantee that they will spend more with the publisher in the following year.

**Tools to manage “direct buys” are increasingly being integrated into each of DSPs, ATDs, SSPs, and private exchanges.** For example, independent DSPs and SSPs have recently begun connecting select pre-approved buyers and sellers, creating smaller, more controlled marketplaces that still take advantage of programmatic and real-time bidding technology. The point, as always, is that these business models are constantly overlapping and shape-shifting as innovation continues apace.

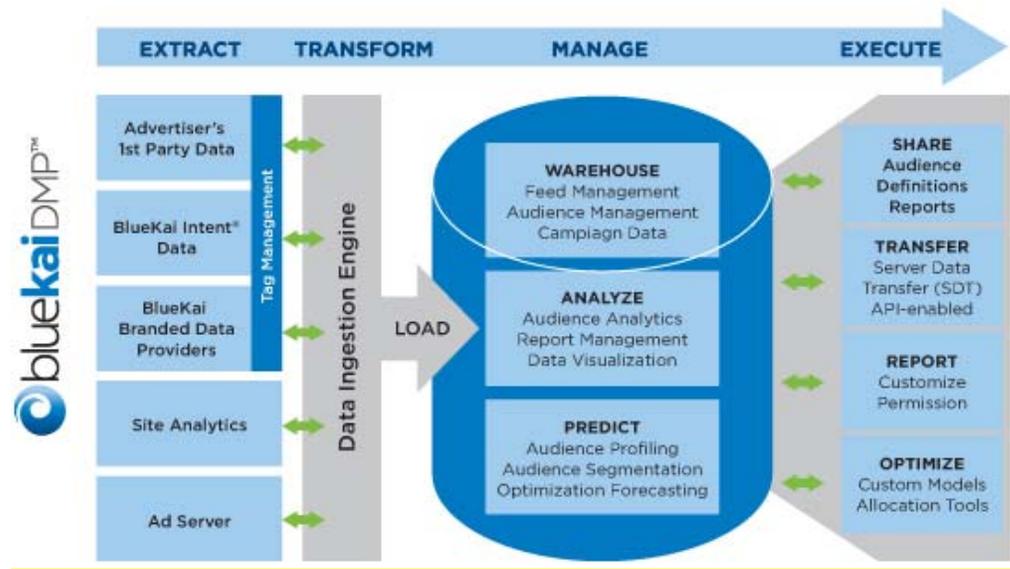
## **Data Management Platforms (DMP)**

**Up until now, we’ve mostly been describing these the Web 2.0 ad tech business models as being based around media/impressions; but in IP advertising ecosystem, data can be viewed as a separate asset/input altogether.** Each impression generates multiple types of data (IP address, browser type, etc.), in a sense making it a much larger potential “marketplace.” In this sense, modern digital advertising data finds its roots in business models like direct mailing list vendors.

**The term “data management platform” has been a popular one lately, but remains relatively elusive to pin down.** We first heard the term applied to start-ups like Bluekai, Exelate, Lotame and TargusInfo (acquired by public Neustar) in recent years. These companies began by creating massive caches of online usage data through cookies and then sold it to parties on both the buy and sell-side of the ecosystem in order to help optimize ad buys and sales. Today many of these companies also offer first-party data (see below) management tools and are increasingly integrating intent and purchase data. From here, we’ve seen the term adopted by more established players like Acxiom and Alliance Data’s Epsilon over the past six months. These companies have long-established relationships hosting marketers’ first-party marketing databases – including services to “cleanse” them and remove duplicates -- and then often layered on (or appended) their own third-party data products. Moreover, other ad technology companies that may normally be recognized as demand-side platforms, ad networks or other terms have built their own proprietary “data management platforms.” No doubt, the business model is in store for much more innovation and evolution in years to come.

**The term data management platform (DMP) has come to describe companies that deliver data via programmatic technology tools, in particular APIs.** The source of the data was primarily from cookies that the DMP would drop on users’ browsers. Often called and/or branded as aggregators or exchanges, DMPs began to play the role of third party “fuel source” for the Web 2.0 display advertising ecosystem. Because of the intimate connection between media and data, DMP-like functionality is often found in DSPs, ad networks, and other business models (another example of the always innovating and overlapping ecosystem).

### Exhibit 52. Bluekai's Data Management Platform



Source: BlueKai

Many database and marketing CRM providers, like Acxiom and Epsilon, are pivoting their services in this direction too. Not only have these companies long-offered third-party marketing data like mailing lists and co-op catalogue data, but they have established practices in managing enterprise marketers' first-party marketing databases.

### Creative Optimization

This module puts the "right message" in the utopian advertising principle "the right person, with right message at the right time." Creative optimizers dynamically select from different ad copy or assets and insert it into the ad serving workflow. Many of the most well-known creative optimization companies have been acquired in recent years including Teracent (by Google), Dapper (by Yahoo!) and Adroit (by independent DSP, MediaMath). Moreover, many of the leading vendors in several other of the business models described herein have developed the technology in-house.

## Major IP Marketing Public Company Profiles

In this section, we profile the dozen large-cap public companies we believe are the most relevant across the set of business models listed above. These include the big four agency and communications holding companies (WPP-LN, OMC, PUB-FP, IPG), which are adding more IP services as their clients evolve, IP media owners with significant marketing technology arms (GOOG, YHOO, MSFT), major software/hardware players that have made notable investments in the digital marketing technologies (IBM, ADBE) and companies that are well-known for their marketing and transaction data-rich businesses. (ADS, NLSN, EXPN-LN).

**Exhibit 53. Major Public Company Cheat Sheet**

	ADBE	ADS	EXPN-LN	GOOG	IBM	IPG	MSFT	NLSN	OMC	PUB	WPP	YHOO
Database/CRM		✓	✓			✓			✓	✓	✓	
EMM	✓				✓		✓					
Email/ESP		✓	✓		✓	✓			✓	✓	✓	
Ad serving				✓			✓					
Ad networks		✓	✓	✓			✓					✓
Online lead generation		✓	✓	✓			✓					
Affiliate marketing				✓			✓					
Retargeting				✓			✓					
SEM/SEO		✓	✓	✓	✓	✓			✓	✓	✓	
Web analytics	✓			✓	✓							✓
Third party analytics		✓	✓	✓		✓		✓	✓	✓	✓	
Social/mobile analytics	✓		✓	✓		✓		✓	✓	✓	✓	
Ad exchange				✓			✓					✓
Demand side platform				✓								
Agency trading desk						✓			✓	✓	✓	
Sell side platform				✓								
DMP		✓	✓	✓								
Creative optimization				✓			✓					✓
Ad verification				✓				✓				

Source: Company websites and reports, BMO Capital Markets.

## Adobe (ADBE, Not rated)

Since its acquisition of Omniture in 2009, Adobe has steadily increased its presence in marketing technology. The company's Digital Marketing segment represented 25% of total revenue in its FY1Q12, up from 21% a year ago. The Adobe Digital Marketing Suite helps organizations optimize branded websites and online marketing and offers data analytics across multiple IP channels (online, mobile, social, etc.). Omniture's business was built on the **Site-Catalyst** web analytics tool and early complimentary products including **Discover** (data segmentation and analysis), **Test & Target** (A/B and multivariate testing) and **SearchCenter+** for SEM campaigns. And the **Genesis** platform allows integration between Adobe/Omniture technologies and third-party marketing partners to support customers' multi-channel strategies.

**Subsequent acquisitions have increased the suite's focus on video, real time bidding (RTB) for display ads and social marketing.**

- **Day Software**, acquired in 2010 is web content management provider. The acquisition aimed to help companies create, manage and monetize web content.
- **Demdex** brought a data management platform (DMP) to the suite and has since been re-branded as **Audience Manager**.
- **Auditudo** brought supply side video publishing management and monetization to the suite. The acquisition solidified the internally developed **Prime Time** product (video ad-serving for tablets, internet connected TVs and other devices).
- **Efficient Frontier** added RTB optimization for display, search engine marketing (SEM), and social marketing management. The acquisition helped bolster SearchCenter and Adobe's internally built SocialAnalytics product.

### Exhibit 54. Adobe IP Marketing Acquisitions and Partnerships

<i>Selected Acquisitions:</i>		
<b>Target:</b>	<b>Date:</b>	<b>What they offer:</b>
• Omniture	9/15/2009	Web analytics and digital marketing platform
• Day Software	7/28/2010	Web content management
• Demdex	1/18/2011	Data management platform
• Auditudo	11/1/2011	Video ad monetization
• Efficient Frontier	11/30/2011	SEM, RTB display and social
<i>Selected Partnerships:</i>		
<b>Partner:</b>	<b>Date:</b>	<b>What it does:</b>
• Experian	Jun-11	Compare internal site trends with external sites
• Optimine	Sep-11	Improve search ROI
• BrightEdge	Nov-11	SEO platform to support SEM campaigns

Source: Company websites and trade press reports.

## Alliance Data Systems (ADS, MARKET PERFORM, \$125 target)

### *Investment Thesis*

We rate ADS shares MARKET PERFORM as valuation currently reflects strong growth opportunities. Management has consistently executed its goal of creating three flavors of end-to-end, data-driven, marketing services, both through M&A and internal product devel-

opment. Moreover, improved disclosure has markedly improved investor sentiment. With M&A expected to slow, capital return to shareholders could accelerate. Upside risk to our rating could occur from improved organic growth at Epsilon (where data sales have been a drag), while downside could result from unexpected execution missteps in Brazil.

### **Company Description**

**Alliance Data Systems is a diversified marketing and payment services company, with a particular strength in fast-growing loyalty marketing.** Over the past decade, ADS has evolved to offer major brands three different models that capitalize on data-driven strategies (particularly transaction data) and ride the secular growth of loyalty marketing:

- **Epsilon (27% of revenue)** works one-on-one with brands for customer acquisition and loyalty. The full-service engagement marketing firm offers strategy, creative agency services, database services, analytics and campaign execution (e-mail, in-store, catalog, online, call centers etc.). Epsilon is comprised of three divisions:
  - **Epsilon Targeting** specializes in giving a 360 degree view of customer lifestyles, attitudes and behaviors using three proprietary data sets (transactional data, compiled data and survey data). **Abacus** is a cooperative database (primarily retail cataloguing data) which warehouses purchasing information on consumers and business buyers. **Online Audience Central** is a DMP that brings together online and offline data assets in a central audience management platform. **Epsilon Digital Receipt** enables brands to deliver purchase receipts to consumers via email and combine, up sell and cross sell offers with loyalty program and transaction data in real-time.
  - **Marketing Technology** combines Epsilon's database expertise with cross-channel, real-time contact strategies, to develop and host multi-channel database marketing solutions. Its products include **Sonar** (deliver the most appropriate and meaningful content across different touch points), **Agility** (consolidates a marketers' data to create the most current, accurate and complete view of its customers), Loyalty Marketing Solutions, Customer Database Solutions and Acquisition Database Solutions.
  - **Aspen** is a direct marketing agency that was acquired by ADS in 2011. Services include targeted marketing, consumer promotions and event marketing. Aspen's acquisition helped bolster Epsilon's existing agency **purple@epsilon**.
- **Private Label (47% of revenue)** adds a credit card option to one-on-one marketing services. Like Epsilon, this option features end-to-end marketing services, but also adds transaction processing and credit from ADS' issuer/bank subsidiaries (mostly World Financial Network). The client base is traditionally focused on specialty retail clients like Victoria's Secret and Pier 1.
- **LoyaltyOne (27% of revenue)** offers brands entry into coalition loyalty programs delineated by country. The coalition model helps loyalty marketing move beyond the traditional "hardcore" customer. The majority of the segment is made up of the well established Canadian program AIR MILES, which spans 130+ different marketers and has 70% Canadian household penetration. LoyaltyOne is also active in Brazil where ADS has invested in and is helping expand the dotz program throughout the country, expecting to reach ~4 million members by year end. The company aims to reach AIR MILES like economics on dotz by reaching 15 million members by 2015.

## Exhibit 55. ADS IP Marketing Acquisitions and Partnerships

<i>Selected Acquisitions:</i>		
<b>Target:</b>	<b>Date:</b>	<b>What they offer:</b>
• BigFoot Interactive	9/8/2005	Email services provider
• DoubleClick Email Solutions	2/14/2006	ESP for retailers
• CPC Associates	9/22/2006	Data for direct response marketing effectiveness
• Abacus	12/28/2006	Consumer and business co-op databases
• Equifax DMS	6/2/2010	Direct marketing services division of Equifax
• Aspen Marketing	4/25/2011	Direct marketing agency services
<i>Selected Partnerships:</i>		
<b>Partner:</b>	<b>Date:</b>	<b>What it does:</b>
• Aggregate Knowledge	Dec-11	Bring together online and offline data
• Rentrak	May-11	Epsilon's HH demo data + Rentrak's TV ratings
• Infogroup	Feb-12	B2B Advantag marketing solution

Source: Company websites and trade press reports.

### Experian (EXPN-LN, Not rated)

**Experian is a diversified information services company.** It operates in four segments: Credit Services (43% of revenue), Decision Analytics (10% of revenue), Marketing Services (19% of revenue), and Interactive (28% of revenue). Decision analytics is based around converting data to help with business decisions. Credit Services provides tools such as customer acquisition, customer management and debt collection among others. However, most of Experian's IP marketing solutions are in the Marketing Services and Interactive divisions.

**Experian Marketing Services utilizes IP and offline data to engage consumers with targeted advertising.** Its services include digital advertising, email marketing, data management and competitive insight. Key products and services include:

- **Hitwise** collects data from ISPs to measure website traffic, online consumer behavior, and search marketing information. Products include:
  - **Competitive Intelligence** (marketing benchmarks)
  - **Search Intelligence** (SEO/SEM)
  - **AudienceView** (identify and target customers)
  - **Conversion Intelligence** (target customers buying from competitors' sites)
  - **Ad Effectiveness** (audience profiling and behavioral insights)
- **CheetahMail** is Experian's engagement marketing management platform with a foundation in email. CheetahMail offers strategic and creative services, social and mobile marketing (through CheetahMobile), and display ad targeting.
- **AudienceIQ** is a display advertising platform that allows advertisers to integrate consumer data to create anonymous user profiles for better targeting relevant marketing impressions.
- **Techlightenment**, acquired in January 2011, develops social media and marketing technologies. Its products include:
  - **Alchemy:** social advertising creation, management and optimization tool
  - **BrandDashboard:** brand research tools

- **SocialCRM:** social data, CRM and experience optimization

**Experian Interactive** owns:

- Freecreditscore.com (credit score reporting to consumers)
- Affiliatefuel.com (performance marketing and lead generation network)

On May 10, Experian Interactive announced that it is selling PriceGrabber.com, LowerMyBills.com and ClassesUSA.com to Ybrant Digital for \$175 million.

## Exhibit 56. Experian IP Marketing Acquisitions and Partnerships

<i>Selected Acquisitions:</i>		
<b>Target</b>	<b>Date:</b>	<b>What they offer:</b>
• Hitwise	4/19/2007	Third party analytics
• Emailing Solution	5/3/2007	Email services provider (France)
• pH Group	7/20/2007	B2B marketing analytics
• United MailSolutions GmbH	10/1/2009	Email services provider (Germany)
• A-Care Systems	1/5/2012	Email services provider (Japan)
• Techlightenment	1/17/2011	Social media marketing tools
• Virid	7/22/2011	Email services provider (Brazil)
• 192business	7/28/2011	Online identity verification services
• Altovision	3/27/2012	Email services provider (Japan)
• Conversen	5/21/2012	Bridge online and traditional marketing services
<i>Selected Partnerships:</i>		
<b>Target</b>	<b>Date:</b>	<b>What it does:</b>
• Turn	Apr-11	Power display ad buying for AudienceIQ platform
• AdKnowledge	Apr-11	Brand research on Facebook
• Kantar	Jun-11	Provide each other demo and viewing data for TV
• Adobe	Jun-11	View internal site trends compared with competitors
• Movable Ink	May-12	Streams email content in real-time, even after opened

Source: Company websites and trade press reports.

## Google (GOOG, OUTPERFORM, \$755 target)

### *Investment Thesis*

We rate GOOG shares **OUTPERFORM** for its under-appreciated strength in display (both YouTube and DoubleClick) and reasonable valuation. We believe the Street has an accurate view of opportunities in Android and particularly mobile search, however we see upside to views on display: brand marketers are increasingly seeking out online video for their paid media campaigns, and Google is a leader in this area via YouTube. Likewise, DoubleClick's suite of display technology services to both display buyers and sellers are unparalleled. Risks include various government inquiries into anti-competitive behavior and increasing IP litigation activity.

### *Company Description*

**Google is both an IP advertising seller and a marketing services provider.** Google's most prominent media/advertising properties include:

- Google.com paid search engine, powered by AdWords
- YouTube
- Gmail

- Android and Google mobile apps

**Google’s IP advertising services are numerous and encompass most of the Web 1.0 and Web 2.0 business models featured above.** Key products include:

- **DoubleClick** products provide ad management and ad serving solutions primarily through DoubleClick for Publishers (DFP) and DoubleClick for Advertisers (DFA). The recently introduced DFP Optimization increases ad performance to help publishers increase the value of premium inventory and non premium inventory.
- **DoubleClick Ad Exchange** is a real-time marketplace for buying and selling display ads.
- **AdSense** is Google’s original ad network service. It originally grew out of the AdWords platform first developed for the search engine. It extended “contextual keyword” targeting to third-party websites, using mostly text-based ads. Since then, Google’s ad network services have become diversified including:
  - **Google Display Network**, which offers static image and video ad units.
  - **Admob**, which serves targeted ads to mobile publishers and apps.
- **Invite Media** is a demand side platform (DSP) that enables advertisers and agency trading desks to use real-time bidding (RTB) to buy and optimize display media.
- **Admeld** is a sell-side platform (SSP) and is Google’s most recent addition to its display advertising stack.
- **Teracent** is a creative optimization platform for advertisers. Teracent’s Intelligent Display Platform allows advertisers to deploy and track ads in real-time to optimize ad campaigns.
- **Google Analytics** provides marketers with details on web, mobile, and social traffic. It has both a free version and a premium/paid version which is geared toward enterprises. Social Reports was launched in March to help advertisers measure branded social media sites and marketing campaigns.

**Exhibit 57. Google IP Marketing Acquisitions and Partnerships**

<i>Selected Acquisitions:</i>		
<b>Target:</b>	<b>Date:</b>	<b>What they offer:</b>
• DoubleClick	4/13/2007	Ad serving and diversified marketing technology
• Admob	11/9/2009	Mobile ad network
• Teracent	11/23/2009	Creative optimization
• Invite Media	6/3/2010	Demand side platform
• Admeld	6/14/2011	Sell side platform
<i>Selected Partnerships:</i>		
<b>Partner:</b>	<b>Date:</b>	<b>What it does:</b>
• VivaKi (PUB)	Oct-10	Buying video and mobile display ads
• Omnicom	Jul-10	Display ad buying
• DISH	May-10	Google TV ads
• DirecTV	May-11	Google TV ads

Source: Company websites and trade press reports.

## IBM (IBM, MARKET PERFORM by Keith Bachman, \$200 target)

IBM is a diversified software, hardware, and services provider. IBM's Enterprise Marketing Management (EMM) solutions are based within IBM's Smarter Commerce initiative. While digital marketing services are likely less than 1% of the company's revenues, we highlight the company because of several high profile IP marketing acquisitions.

- **Coremetrics** was acquired in June 2010 and provides digital marketing optimization solutions and web analytics.
  - **Digital marketing optimization** products include:
    - **AdTarget** (display ad targeting)
    - **LIVEmail** (targeted email ads)
    - **Intelligent Offer** (personalized product recommendations)
    - **Search Marketing** (SEM)
  - **Web analytics** products include:
    - **Web Analytics** (analytics and comparative benchmarks)
    - **Enterprise Analytics** (optional addition to Web Analytics)
    - **Impression Attribution** (impression based analytics)
    - **Lifecycle** (customer conversion cycles)
    - **NetInsight on Premise** (multi-channel analytics)
    - **Digital Data Exchange** (collection and distribution of IBM and third-party real-time behavioral digital data)
- **Unica** was acquired in August 2010 for nearly \$500 million and provides cross channel campaign management and marketing resource management.
  - **Cross channel campaign management** products include:
    - **Campaign** (cross-channel marketing)
    - **Interact** (inbound marketing strategy)
    - **Optimize** (customer contact strategy)
    - **eMessage** (digital messaging)
    - **Detect** (event based marketing)
  - **Marketing resource management** products include:
    - **Marketing Operations** (marketing management)
    - **Marketing Operations OnDemand** (turn-key marketing resource management)

## Exhibit 58. IBM IP Marketing Acquisitions and Partnerships

<i>Selected Acquisitions:</i>		
Target:	Date:	What they offer:
• SPSS	7/28/2009	Predictive analytics software
• Coremetrics	6/15/2010	Web analytics
• Unica	8/13/2010	Enterprise marketing management
• DemandTec	12/8/2011	Retail and CPG marketing optimization
• Tealeaf	5/2/2012	Customer experience analytics software
<i>Selected Partnerships:</i>		
Partner:	Date:	What it does:
• Targetbase	Mar-00	Use Unica's predictive modeling suite for Targetbase clients
• Sapient	Sep-07	Jointly offer EMM technology to marketers
• Silverpop	Oct-07	Silverpop customers use Coremetrics' LIVEmail 2.0 interface
• Ogilvy/Pluris	Jan-09	Data and analytics platforms

Source: Company websites and trade press reports.

## Interpublic Group (IPG, OUTPERFORM, \$13 target)

### *Investment Thesis*

**We like IPG shares for margin improvement and adoption of performance-based pricing.** The company should also be able to drive above-peer EPS growth through continued balance sheet actions, including re-financing its 4.75% senior notes that are callable in 2023, and steady share repurchase. Moreover, as management attention continues to shift from defense to offense, more FCF is being dedicated to low-risk, tuck-in style M&A to build out offerings and capture more of current clients' work. Risks include the inability to fill client roster holes at DraftFCB after two sizable losses (SC Johnson in late 2011, MillerCoors at the beginning of May 2012) and needed improvement at McCann Worldgroup where margins remain below the broader holding company.

### *Company Description*

**The Interpublic Group of Companies is the No. 2 US-based communications holding company and No. 4 in the world.** IPG services encompass all aspects of communication, from creative advertising to media services and public relations. Interpublic's digital agencies include MRM, Huge and R/GA and are involved in all aspects of IP advertising including creative work and execution of IP ad campaigns for brands. Likewise, its major networks – McCann WorldGroup, DraftFCB, Lowe + Deutsch – all offer full-service IP marketing suites, as well as traditional services.

**Like the other holding companies, the media planning and buying units are a center of innovation around IP marketing.** Mediabrands is the umbrella organization for Interpublic's major media agencies (Universal McCann and Initiative, as well as a new third platform) and several specialty agencies which include:

- **Cadreon** is Interpublic's agency trading desk. It purchases impressions in real-time based on the audience the advertiser is trying to reach.
- **Reprise Media** provides search engine marketing and optimization, social media marketing services and custom solutions for brands.

- **Ansible** is Interpublic’s full-service mobile marketing agency and offers search, strategy, media, creative and analytics, creating mobile apps, mobile websites, text alerts and QR codes for marketers.
- **Geomentum** is a hyper-local marketing and media strategy agency.
- **Shopper Sciences** is a full service shopper marketing consultancy.
- **IPG Media Lab** was launched in November 2011 as a resource for marketers to experiment with new products, platforms, and services and understand their relevancy to marketing and advertising.

**Exhibit 59. Interpublic IP Marketing Acquisitions and Partnerships**

<i>Selected Acquisitions:</i>		
<b>Target:</b>	<b>Date:</b>	<b>What they offer:</b>
• Reprise Media	4/11/2007	SEO, SEM, social media marketing
• HUGE	7/30/2008	Full-service digital agency
• CUBOCC	3/25/2010	Digital agency in Brazil
• Interactive Avenues	6/22/2010	Digital agency in India
• Blue Barracuda	5/4/2011	Full-service digital agency
• AllofUs	8/4/2011	Interactive design consultancy
• Meteorite	10/5/2011	Digital agency in the UK
• Spring Creek	10/5/2011	Social media marketing
<i>Selected Partnerships:</i>		
<b>Partner:</b>	<b>Date:</b>	<b>What it does:</b>
• adap.tv	Mar-11	adap.tv's video ad solutions + Cadreon ATD
• Networked Insights	Dec-11	TV-related social media analytics

Source: Company websites and trade press reports.

**Microsoft (MSFT, Not Rated)**

**Microsoft develops enterprise software as well as consumer electronics and online properties and services.** Like Google, Microsoft is both an IP advertising seller and a marketing services provider. Microsoft’s properties include:

- **Bing search engine.** Bing is also the paid and algorithmic search provider for Yahoo! Search, which handles premium sales for both search engines.
- **MSN media and communications** properties include Windows Live Email, MSNBC.com, Fox Sports.com and Today.com and are generally monetized with display advertising.
- **Xbox Live** has shifted from just a video game system to the platform Microsoft is using to create interactive TV “brand destination experiences” in the living room. Microsoft sells 30 second spots within Xbox applications and is using its Kinect platform, which enables people to use voice commands and hand gestures to interact with content. Microsoft has also entered into an alliance with AOL and Yahoo! to cross-sell each other’s non-guaranteed display advertising.

**Also housed within Microsoft Advertising is the company’s technology services business, where Microsoft first entered in 2007 with the purchase of aQuantive.** Microsoft Advertising has a host of ad solutions that can deliver a marketer’s message across different

platforms, including search, online display, TV, email, mobile, and social. Key products include:

- **Microsoft Ad Exchange** (formerly AdECN) is the company's RTB marketplace for audience-buying. In October 2010 Microsoft invested in privately-held AppNexus, whose technology is increasingly being used to underpin the exchange.
- **Atlas** is Microsoft's ad serving and delivery measurement unit and is best known as an "agency-side" server.
- **Microsoft Advertising TV Network** (formerly Navic) is an addressable TV product, targeting ads based on near real-time set-top box data and other sources. It has inventory across 30 top-tier national networks.
- **Microsoft Media Network** is Microsoft's ad network reaching more than 65% of total US internet users. Microsoft Media Network offers targeting capabilities, campaign planning and measurement, and analytics.

## Exhibit 60. Microsoft IP Marketing Acquisitions and Partnerships

<i>Selected Acquisitions:</i>		
<b>Target:</b>	<b>Date:</b>	<b>What they offer:</b>
• aQuantive	5/18/2007	Atlas ad server, Razorfish agency, DrivePM ad network
• AdECN	6/24/2007	Ad exchange
• Facebook	10/26/2007	Bought 1.6% share for \$240 million
• Navic Systems	6/18/2008	Interactive TV advertising solutions
• AppNexus	10/7/2010	Participated in funding; integrated with ad exchange
• VideoSurf	11/22/2011	Video search technology
<i>Selected Partnerships:</i>		
<b>Partner:</b>	<b>Date:</b>	<b>What it does:</b>
• Adchemy	Sep-11	Will use Adchemy's technology on Adcenter
• BazaarVoice	Feb-12	Adding social ability to display ads
• AOL/Yahoo!	Nov-11	Cross-sell non-guaranteed display ads
• 24/7 Media (WPP)	May-12	Cross-selling display ads

Source: Company websites and trade press reports.

## Nielsen (NLSN, Not Rated)

**Nielsen is an information services and measurement company.** Nielsen has long been established in traditional media metrics (especially TV ratings) and is evolving to accommodate IP media measurement as well. The company reports in three segments: what consumers buy (62% of revenue), what consumers watch (35% of revenue), and expositions (3% of revenue). Key IP marketing products include:

- **Nielsen Online Campaign Ratings** are ratings for online advertising, which are comparable to TV and other media. The product measures key metrics such as reach, frequency and Gross Rating Points (GRPs).
- **Nielsen Cross-Platform Campaign Ratings** is a collaboration between GroupM (WPP) and Nielsen to create a new measurement service that will standardize measurement across television and online ads. It will leverage Nielsen Online Campaign Ratings, and its existing television audience measurements to provide total and overlapped reach and frequency of marketing campaigns.

- **Nielsen Catalina Solutions** is a joint venture of Nielsen and Catalina and provides marketing performance analytics by integrating Nielsen’s media and household purchasing information with Catalina’s household shopper data. Nielsen Catalina Solutions enables CPG marketers and media companies to match audiences with the right media, measure the resulting sales impact, and use analytics to make appropriate adjustments to marketing plans.
- **Marketing Analytics**, acquired by Nielsen in August 2011, helps clients measure the impact of marketing on sales. Its products include:
  - **Market In-Sights** (model based sales analysis)
  - **Marketing Analytics Planner** (marketing planning and optimization)
  - **Coefficient Generator Web** (measure sales response to price, promotion, advertising and external factors like weather and economic trends)
- **NM Incite** is a collaboration between Nielsen and Mckinsey and Company. NM Incite’s solutions helps marketers maximize the benefits and insights it can garner from consumer discussions about their brands on social media outlets.
- **Scarborough Research** is a joint partnership between Nielsen and Arbitron. Scarborough measures the lifestyle and shopping patterns, media behaviors and demographics of American consumers.

**Exhibit 61. Nielsen IP Marketing Acquisitions and Partnerships**

<i>Selected Acquisitions:</i>		
<b>Target:</b>	<b>Date:</b>	<b>What they offer:</b>
• GlanceGuide	5/4/2010	Video analytics
• Marketing Analytics	8/9/2011	Analytics and advanced planning software
<i>Selected Partnerships:</i>		
<b>Partner:</b>	<b>Date:</b>	<b>What it does:</b>
• 4INFO	May-11	Shopper tracking data + mobile tracking data
• Facebook	May-11	Household data panel to help CPG advertisers
• TRAFFIQ	Sep-11	Combine ad-buying platform + target-marketing platform
• Adometry	Dec-11	Use offline data to reach online customers
• Tremor Media	Dec-11	Tremor will integrate Nielsen's GRPs into VideoHub
• Specific Media	Dec-11	Shopper Access - analytics geared towards CPG companies
• Invision	Dec-11	Invision + Nielsen's online GRP ratings system
• Exelate	Feb-12	Help CPGs reach consumers online based on in-store activity

Source: Company websites and trade press reports.

**Omnicom Group (OMC, MARKET PERFORM, \$49 target)**

**Investment Thesis**

**We rate OMC shares MARKET PERFORM as we see limited upside to fundamental estimates at this time.** Potential acceleration of share buyback is a key risk to this thesis. Omnicom has accelerated its investment in data and analytics solutions – including an agency trading desk. While it may not have been the first mover in the space, judging by the considerable new level of hiring this year, Omnicom is catching up quickly and helping solidify the strong performance of the OMD media services business in recent years. From an account perspective, the record has been solid lately but there is risk in the Bank of America review.

## Company Description

**Omnicom Group is the largest advertising and communications agency holding company in the US and second-largest in the world.** Omnicom's offering spans the breadth of marketing disciplines, including advertising creative, brand management, interactive and mobile advertising and database and direct marketing. Omnicom's agencies are involved in broad aspects of IP advertising including digital creative work and execution of IP ad campaigns for brands. While the other of the big four agencies are acquiring large digital agencies and creating digital networks, Omnicom's strategy has been to integrate digital and IP advertising capabilities into its core agency brands which include DDB, BBDO, and TBWA. The belief is that all services will eventually be digital and there will no longer be a distinction between traditional and digital advertising services.

**Omnicom Media Group (OMG) is the media services division of Omnicom Group.** OMG currently includes full-service media networks PHD and OMD and specialty communications companies which include:

- **Annalect** is a data and analytics-driven marketing technology platform. Annalect combines data, technology and analytics to provide insight into marketing campaigns. Annalect is being used by nearly all of the holding company's media planning and buying clients in order to build out segmentation and insight dashboards and also activate trading platforms. Reporting into Annalect are Accuen, Resolution Media and BrandScience.
  - **Accuen**, Omnicom's agency trading desk, combines media, data, technology and strategy to buy the appropriate inventory for its marketers.
  - **Resolution Media** is a digital agency whose services include behavioral marketing, search marketing, social media marketing, mobile marketing, and display advertising.
  - **BrandScience** is OMG's business and marketing effectiveness consultancy. It uses data and econometrics to generate efficiency in clients' marketing budgets.
- **TargetBase** is a database marketing agency that provides creative, analytics, technology solutions, and strategy.
- **Prometheus**, which was spun off from OMD in 2005, is a media agency with strength in ROI and accountable media.

## Exhibit 62. Omnicom IP Marketing Acquisitions and Partnerships

<i>Selected Acquisitions:</i>		
Target:	Date:	What they offer:
• The Modellers	2/4/2011	Marketing research and analytics
• Fanscape	1Q11	Social marketing
• Clemenger	1Q11	Integrated agency
• TouchCast	3Q11	Digital brand activation
<i>Selected Partnerships:</i>		
Partner:	Date:	What it does:
• Blinq Media	Jul-11	OMC agencies get access to Blinq's software
• Kenshoo	Sep-11	Track mobile check-ins and location based activity
• TubeMogul	Sep-11	Accuen + TubeMogul's DSP to buy RTB video ads

Source: Company websites and trade press reports.

## Publicis Groupe (PUB-FR, MARKET PERFORM, €39 target)

### *Investment Thesis*

**We believe PUB-FP shares have limited estimate upside due to margin challenges and so we maintain a MARKET PERFORM rating.** Settlement of the Dentsu shares creates more opportunity for use of FCF for M&A: Publicis has demonstrated a strong recent track record for acquiring mid-to-large independent digital agencies (Digitas, Razorfish, Rosetta) and scaling them -- in effect creating digital-native networks -- rather than only acquiring tuck-ins for the established networks (Saatchi, Leo Burnett, etc.). Publicis was an early mover among the holding companies in data-driven, programmatic media buying with the creation of VivaKi in 2008; however, the early-mover advantage has been closed.

### *Company Description*

**Publicis Groupe is the fourth-largest advertising and marketing services holding company.** The group has a broad range of services which include creative, media, public relations, event marketing, design and interactive marketing. Publicis' agencies are involved in broad aspects of IP advertising including digital creative work and execution of IP ad campaigns for brands. In March 2012, Publicis and France Telecom Orange announced a partnership with Iris Capital Management to create a venture capital fund focused on the digital economy.

**VivaKi is the umbrella organization for most of Publicis' digital agencies** and its two primary media agencies Starcom MediaVest and ZenithOptimedia. VivaKi's digital agencies include:

- **Digitas** has a heritage in direct marketing and has evolved to be the number one digital agency in the US by revenue.
- **Razorfish** was acquired by Publicis in 2009 and is one of the world's largest interactive agencies. Razorfish is involved in all aspects of digital campaigns for clients from creative to media buying across digital channels including online, mobile, in-store technologies, and social media.
- **Big Fuel** is a social marketing agency, which was founded in March 2004 and was acquired by Publicis in July 2011.
- **CRM365** launched in October 2011 as a social/mobile data-lead offering. The CRM365 Intelligence Platform will be the center of the product which is more of a SaaS company than a traditional agency.
- **Performics** provides search engine marketing and search engine optimization services.
- **VivaKi Nerve Center** is a resource shared, and added to, by the entire VivaKi network. The VivaKi Nerve Center is dedicated to creating new technologies that connect brands with their audiences. Initiatives include:
  - **The Pool:** test and create new advertising models
  - **Audience on Demand:** includes bid management technology, proprietary media and data partnerships, and talent exclusively focused on the display media exchange space
  - **Benchtools:** tracks competitive search strategies
  - **Campaigns on Demand:** digital campaign management

- **Insights on Demand:** analytics
- **VivaKi Ventures:** develop new digital technologies
- **Audience Insights:** partnership between VivaKi Nerve Center and BlueKai creating a new DMP that provides scale and data aggregation with less complexity for marketers

**Rosetta is an interactive agency acquired in 2011, which was not folded under the VivaKi umbrella but instead remained a standalone entity.** Rosetta provides services such as e-commerce solutions, mobile marketing and app development, search engine marketing, display advertising, media optimization, segmentation and targeting.

### Exhibit 63. Publicis IP Marketing Acquisitions and Partnerships

<i>Selected Acquisitions:</i>		
<b>Target:</b>	<b>Date:</b>	<b>What they offer:</b>
• Digitas	12/20/2006	Full service digital agency
• Razorfish	8/9/2009	Full service digital agency
• Rosetta	5/17/2011	Full service digital agency, with healthcare focus
• Big Fuel	7/18/2011	Social media marketing agency
• Wangfan	11/2/2011	Chinese digital agency
• Flip Media	2/1/2012	Middle Eastern digital agency
<i>Selected Partnerships:</i>		
<b>Partner:</b>	<b>Date:</b>	<b>What it does:</b>
• Google	Oct-10	Buying video and mobile display ads via Vivaki
• Aol	Oct-11	Online video ad via Vivaki
• Bluefin Labs	Jul-11	Social TV analytics
• Marin Software	Jan-12	SEM, display and social campaigns
• BlueKai	May-12	Co-developed new data platform, Audience Insights

Source: Company websites and trade press reports.

## WPP plc (WPP-LN, MARKET PERFORM, £8 target)

### *Investment Thesis*

**We are MARKET PERFORM on WPP as we see limited upside to EPS estimates at this time.** Sluggishness in Consumer Insights – particularly custom work – has weighed on recent results; however, 1Q12 showed revenue picking up. The new account record has been strong (highlighted by Bank of America). Margins at the half year results will be key, in our opinion. We believe 13% 1Q organic revenue growth at GroupM reflects consolidation trends, but could be sustained if recent investment and initiatives around data, analytics, and audience-buying can flourish. If Consumer Insights and Young & Rubicam can stabilize, expansion of services with clients around data (e.g., WPP Data Alliance) and technology and systems integration (recent partnership with Infosys) could provide sustained, profitable organic revenue growth acceleration.

### *Company Description*

**WPP is the world's largest communications holding company.** The company operates full-services agency networks (Y&R, Ogilvy, Grey, JWT), which each have embedded IP marketing capabilities. The company also owns several IP marketing specialists such as Possible Worldwide (which combined four smaller agencies, Schematic, Bridge, Blue and Quasar).

**GroupM is WPP's media operations arm and includes media agencies:** Mindshare, MEC, MediaCom and Maxus. Within GroupM also falls a series of specialist and IP agencies focused on execution of marketing campaigns:

- **24/7 Media** is a digital ad management platform for both advertisers and publishers. Open AdStream is the publisher ad management platform that integrates a sell-side platform (SSP), ad serving and real-time analytics. 24/7 provides an ad network for agencies and marketers with targeting and analytics capabilities. The acquisition of Panache in December of 2011 allows for the integration of video and rich media into the ad network buys.
- **Xaxis** is a data management platform used for audience-buying by GroupM agencies. Xaxis products include:
  - **Xaxis Awareness:** brand recognition
  - **Xaxis Engagement:** audience engagement
  - **Xaxis Action:** increase conversions and e-commerce
  - **Xaxis Insight:** analytics
- **The Media Innovation Group (MIG)** develops technology to improve the process of acquiring, optimizing, and measuring digital media. Its two main products include:
  - **B3:** agency tool for acquiring and optimizing display ads
  - **ZAP:** integrated advertising and analytics tool
- **GroupM Next** is a recently launched research offering that will focus on online, search, social, mobile and emerging markets for brands within the WPP media division and will also serve the wider global ad holding company.

**The Consumer Insight segment accounts for 30% of revenue** and includes a variety of marketing research, media measurement, and other data and analytics businesses. Although there has been a great deal of integration after recent M&A brought new capabilities to the segment, there are still three prominent brands:

- **Kantar Group** includes Kantar Media Intelligence, Kantar Media Audiences (Kantar/Direct View, Kantar/Charter, Kantar RapidView), Compete, and Cymphony.
- **TNS** offers both custom and syndicated market research and analytics.
- **Millward Brown** is a research agency focusing specifically on brands and specializing in advertising, marketing communications, media and brand equity research.

**WPP Digital** is the venture capital arm of WPP that makes acquisitions and investments in companies that improve the Group's understanding of the digital space. The recently launched **WPP Data Alliance** aims to coordinate and leverage data assets from across WPP.

## Exhibit 64. WPP plc IP Marketing Acquisitions and Partnerships

<i>Selected Acquisitions:</i>		
<b>Target:</b>	<b>Date:</b>	<b>What they offer:</b>
• 24/7 Real Media	5/17/2007	Ad server, ad network, other ad technology
• Taylor Nelson Sofres	10/7/2008	Market research
• Panache	12/7/2011	Integrate into 24/7's Open Adstream ad server
<i>Selected Partnerships:</i>		
<b>Partner:</b>	<b>Date:</b>	<b>What it does:</b>
• Domedia	Sep-11	Starcom will use to purchase DOOH ads
• Cablevision	Mar-11	Addressable TV advertising
• Experian	Jun-11	Kantar provides demo data, Experian provides viewing data
• Linkable Networks	Nov-11	Coupons to credit cards by clicking on Linkable tagged ads
• Infosys	Apr-12	BrandEdge platform
• MediaMind (DG)	Apr-12	24/7 uses MediaMind for ad serving and TV ad delivery
• ThinkVine	Apr-12	Marketing mix modeling and consumer insights
• Moat	May-12	Brand metrics
• Microsoft	May-12	Cross-selling display ads

Source: Company websites and trade press reports.

## Yahoo! (YHOO, MARKET PERFORM, \$17 target)

### *Investment Thesis*

We are MARKET PERFORM rated on YHOO shares until we can get a better view of the company's strategy among further changes at the CEO position. We like the appointment of Ross Levinsohn as interim CEO due to his strong media background and tenure at Yahoo!. We believe the previously announced and headcount reductions will remain in place; however, we believe multiple expansion will be constrained until the consistent revenue growth comes more into view. The recently announced three step exit of Yahoo!'s ownership in Alibaba is positive as well, though we do not expect any resolution on Yahoo! Japan in the near term.

### *Company Description*

Yahoo! is one of the largest media properties on the internet attracting ~700 million users a month. Yahoo! is a major seller of IP advertising through its search engine (which is powered by Microsoft) and display advertising places around its various, well-trafficked properties, including Yahoo! Homepage, Yahoo! Sports, Yahoo! News and Yahoo! Mail. In addition to its media properties Yahoo! has a number of advertising technology services which include:

- **Right Media Exchange** is where Yahoo! sells its Class 2 inventory for both its video and static display advertising. Right Media was the original ad exchange, which Yahoo! purchased in 2007. In November 2011, Yahoo! announced it would not allow re-targeting firms to purchase on the exchange and only those members with seats on the exchange would be allowed to use it as Yahoo! aimed to wrest control of its inventory from the middlemen and enable better pricing control.
- **Yahoo! Network Plus** is Yahoo!'s ad network, which serves ads on third-party sites and comprises of many Yahoo! sites.

- **APT** allows developers to build applications that interact with Yahoo!’s advertising platform to help manage accounts and automate tasks associated with buying and selling ads online.
- **Yahoo! Web Analytics** provides the tools for marketers to measure and analyze the success of their digital campaigns and website traffic. Among others, tools include real-time data collection, demographic and behavioral reports, tracking PPC, display and email campaigns, merchandise reports and an analytics dashboard.
- **Genome** is an audience data analytics-as-a-service platform designed to help brands leverage large amounts of unstructured data to better target advertising. Its data management platform and audience targeted capabilities are largely based on technology acquired via **interclick**, (January 2012) which also brought a sales force with strength in selling audience-based, real-time display ad programs.

**In November Yahoo!, AOL, and Microsoft entered into a display alliance to cross-sell each other’s non guaranteed inventory.** In February, AOL announced that Right Media Exchange (RMX) would be the marketplace for the alliance.

**Exhibit 65. Yahoo! IP Marketing Acquisitions and Partnerships**

<i>Selected Acquisitions:</i>		
<b>Target:</b>	<b>Date:</b>	<b>What they offer:</b>
• Right Media	4/30/2007	Ad exchange
• BlueLithium	9/4/2007	5th largest ad network in the U.S. at the time
• Dapper	10/5/2010	Creative optimization
• Interclick	11/1/2011	Data management platform and ad network
<i>Selected Partnerships:</i>		
• Bing	Jul-09	Bing will provide search results for Yahoo!
• Twitter	Feb-10	Integrate with Yahoo! properties
• Nokia	May-10	Map services provider
• Facebook	Jun-10	Integrate with Yahoo! properties
• ABC	Oct-11	GoodMorningAmerica.com on Yahoo!
• AOL/Microsoft	Nov-11	Cross-sell each others ad inventory

Source: Company websites and trade press reports.

## ***Other Covered Public Company Profiles***

### **LinkedIn (LNKD, MARKET PERFORM, \$115 target)**

**We rate LNKD shares MARKET PERFORM; our view is balanced by the company's user growth story and multiple revenue lines, balanced by full valuation.** LinkedIn offers a “pure-play” on secular social trends – including paid advertising/media – and a compelling user growth story. By establishing itself as the leading “social professional network,” LinkedIn offers a play on IP marketing that is ripe for B2B marketers, as well as high-end B2C (e.g., certain financial services, luxury, travel & leisure, and high-end technology). LinkedIn's user base is particularly attractive to advertisers as 33% of its users have a median household income of \$100K+. The company's CEO has noted publicly that he views Marketing Solutions' potential addressable market as \$70 billion globally, or essentially the global market for digital advertising and marketing services. The immediately addressable market is focused on the roughly \$25 billion of business-to-business advertising; however, LinkedIn's traction with high-end consumer brands will help expand share. We believe the company's paid advertising products are still in their infancy, with relatively straightforward text and display ads encompassing most of the Marketing Solutions segment's revenue at the moment; in fact, we expect Marketing Solutions to be the starting point as LinkedIn looks to begin monetizing its growing mobile engagement. Moreover, opportunities around online video advertising remain largely untapped. Furthermore, with the rollout of brand communities, like the recently launched “Connect: Professional Women's Network, Powered by Citi” – which features discussions and other content geared around female financial professionals – brands are increasingly leveraging earned media opportunities on LinkedIn.

### **Sapient (SAPE, OUTPERFORM, \$15 target)**

**We rate SAPE shares OUTPERFORM for the unique positioning of its digital agency SapientNitro and the compliance-oriented nature of its IT services business** (i.e. its largest clients are global financial services companies facing a host of new compliance that mandates IT system upgrades). In particular, the SapientNitro agency is building momentum by pushing the envelope in integrating marketing with commerce. Of note is the agency's work with Coca Cola on kiosk/vending machine redevelopment and use of the iPad in-store with Target. SapientNitro's acquisition of CLANMO should capitalize on mobile marketing and mobile commerce convergence. The company reports three segments, SapientNitro (integrated marketing technology and agency solutions), Sapient Global Markets (capital and commodity markets support) and Sapient Government Services (consulting, technology and marketing services for the US government).

### **ValueClick (VCLK, MARKET PERFORM, \$18 target)**

**We rate VCLK shares MARKET PERFORM; our view is balanced by revenue trends that slowed in 1Q12 (and lower than expected 2Q guidance) offset by moderate valuation** (i.e. less than 15x 2013 P/E). ValueClick is a diversified interactive marketing services company with a legacy in performance based online advertising, which forms the basis for the Media segment. The company's other segments include Affiliate Marketing (under the Commission Junction brand), Owned & Operated (including the Smarter.com and CouponMountain.com brands), and Technology (including the MediaPlex ad serving/analytics platform). The acquisition of Greystripe gives ValueClick access to both mobile web and app opportunities and the more recent acquisition of Dotomi added retargeting capabilities.

### **Acxiom (ACXM, OUTPERFORM, \$17 target)**

**We rate ACXM shares OUTPERFORM for the opportunity provided by the repositioning of its core marketing and data services** (i.e. higher margins long-term) and return of capital to shareholders via share buyback. Under the guidance of a new management team, Acxiom has begun repositioning its core marketing offering as a "data management platform". The company has sold its consumer background screening business and is exploring strategic options for its IT management business in order to tighten its focus on marketing services. Relevant products include MarketEdge-X (marketing database solution), InfoBase-X (data and analytics), Relevance-X (performance and behavioral targeted advertising), ConnectionPoint-X (real-time predictive offers), Personix (consumer segmentation), MarketScape-X (segmentation analysis), BI Platform-X (information processing and analysis) and Kefta (personalization tool).

### **Valassis (VCI, OUTPERFORM, \$23 target)**

**We rate VCI shares OUTPERFORM for the company's sustainable Shared Mail business (and its 40-50% incremental EBITDA margins) and robust share buyback.** Valassis is a direct marketing company that delivers coupons to consumers through shared mail, free standing inserts (FSI), preprinted/solo inserts, and digital channels as well. Its digital coupons reached consumers through RedPlum Display Advertising (which includes redplum.com and a premium ad network), RedPlum Email Marketing and RedPlum Digital Coupon Distribution, including Offer-to-Card/ID, which allows consumers to view and select coupons and save it directly to the loyalty cards for grocery and drug chains primarily.

### **Constant Contact (CTCT, MARKET PERFORM, \$24 target)**

**We rate CTCT shares MARKET PERFORM and like Constant Contact's evolution beyond its original email services to become a broader engagement marketing platform** (essentially a "digital marketing hub" for small business), but remain on the sidelines until net subscriber gains can show signs of reaccelerating; this is proving a challenge as US small businesses continue to feel the effect of challenged economy and international efforts are still nascent. Constant Contact is software-as-a-service provider focused on helping small and medium-sized businesses market their products and services through email, events, online surveys, social media, daily deals and loyalty programs. The company's target segment is companies or organizations with 20 or fewer employees. Constant Contact's social marketing tools include email marketing, event marketing, online surveys, Social Campaigns (social media/Facebook marketing tool), NutshellMail (social media monitoring), SaveLocal (local daily deals program), and Social Media Quickstarter (social media starter kit).

## Harte Hanks (HHS, MARKET PERFORM, \$9 target)

We rate HHS shares **MARKET PERFORM** as we have been impressed with the work done in social marketing by Harte Hanks' two digital agency arms, Mason Zimbler and The Agency Inside Harte Hanks; however top-line growth is being restrained by specific client challenges (JC Penney) and the Shoppers' segment continues to struggle due to the weak Florida and California economies. Harte Hanks' direct marketing unit offers enterprise customer database solutions and is complemented by market research, web analytics, online and offline creative services, and execution via direct mail, email and other addressable media. Products and services include Trillium (software marketing database and related services), Allink Connect (sales force optimization), CiTDB (market intelligence), SuppressMax (data quality), Aberdeen Group (research), Postfuture (email marketing), nexTouch (order management) and prEtrak (direct mail tracking through USPS). The Shopper's segment is largely dominated by print products, but Digital Services include web hosting and introductory mobile services.

## MDC Partners (MDCA, OUTPERFORM, \$19 target)

We rate MDCA shares **OUTPERFORM** for margin expansion in 2H12 and beyond and the opportunity to re-finance its 11% coupon bonds in November 2013. The company is also in the early stages of extending client relationships beyond North America (increasing MDC's share of wallet) to international markets and launching a media planning/buying arm; moreover, the net new business record has been very strong to begin 2012 (nearly \$50 million of new revenue in 1Q12 alone). MDC Partners is the world's 8th largest ad agency holding company. The company has two operating units: 1) Strategic Marketing Services which includes full-service, diversified agencies including Crispin Porter + Bogusky, Doner, 72andsunny, Anomaly and kirshenbaum bond senecal + partners and; 2) Performance Marketing Services which includes agencies focused on data analytics, CRM and other targeted marketing efforts.

## Marchex (MCHX, OUTPERFORM, \$8 target)

We rate MCHX shares **OUTPERFORM** for its focus on digital call advertising, the increasing interest from agencies/national marketers and strategic review of its non-core businesses. The key risk is the company's exposure (20%+ of revenue) to AT&T's Directories business as it is sold to private equity interests. Marchex's primary product is its digital call-based ad solutions, including both a robust analytics platform and ad network. The company is exploring strategic options for its 200,000+ domain portfolio as well as its pay-per-click, bid and feed management, search engine optimization and reputation management tools. Products and services include Marchex Digital Call Marketplace, Marchex Call Analytics, Marchex Local Leads, Marchex Reputation Management, Marchex Pay-Per-Click and Marchex Publishing.

## Other IP Marketing-Related Public Profiles

### Exhibit 66. Selected Public Company Profiles

Company	Company Description and Key Digital Marketing Hub Brands/Services/Units	Ticker
		Market Cap Headquarters
 <p>High performance. Delivered.</p>	<p><b>Rated MARKET PERFORM by Keith Bachman, \$67 target.</b> Accenture is an IT services and consulting company. Its digital marketing solution, Accenture Interactive, was launched in September 2009, and focuses on the convergence of technology, data and creative. Its services include analytics, digital strategy, website transformation, social media marketing, performance strategy, media planning, consumer data management, search optimization, and web inventory management.</p>	ACN
		\$37,649
		Dublin, Ireland
	<p>Acquity Group is a brand e-commerce and digital marketing company that leverages the internet, mobile devices and social media to enhance its clients' brands and e-commerce performance. Acquity Group's IP-marketing related services include experience design, digital marketing, eCommerce solutions, content management, digital strategy, and digital intelligence.</p>	AQ
		\$194
		Chicago, IL
 <p>the e-advertising network</p>	<p>Adpepper is a diversified digital marketing services company servicing media agencies, advertisers and publishers. Products include adXplus (RTB), iSense Display (campaign placement/targeting), SiteScreen (brand safe network), iLead (lead generation), Mail Pepper (email marketing), Webgains (affiliate marketing), and Emediate (ad serving).</p>	APM-XE
		\$30
		Nuremberg, Germany
	<p>Aegis Group is the sixth largest global agency holding company, primarily focused on media planning and buying. Agencies under the Aegis media umbrella include Carat (digital and diversified media solutions), Vizeum (media agency), Posterscope (out of home advertising), Isobar (digital communications), iProspect (search engine marketing and other digital services) and Aztec (scan-based market and consumer insights company).</p>	AGS-LN
		\$2,914
		London, UK
	<p><b>Rated OUTPERFORM by Tim Casey from our Canadian affiliate, BMO Nesbitt Burns, C\$15 target.</b> Aimia is a pure-pay loyalty marketing services company; it owns coalition loyalty programs (Aeroplan in Canada, Nectar in the UK and Italy), proprietary loyalty programs (several credit card issuers in Canada) and an Analytics business called Intelligent Shopper Solutions (ISS). ISS collects and analyzes data, including demographics and purchase history to create a deep customer understanding and effectively communicate with them.</p>	AIM-TSX
		\$2,165
		Montreal, Canada
	<p>Akamai is a content delivery network, and provides live and on-demand streaming video, application performance and digital media solutions. The Akamai Intelligence Platform is a cloud service that delivers content securely to any device. Akamai's marketing related services include: media analytics, download analytics, global traffic management, ADS Predictive Segments (display-ad targeting) and ADS Descriptive Segments (audience segmentation based on shopping data).</p>	AKAM
		\$5,198
		Cambridge, MA
	<p>Amazon.com is the world's largest retailer. The company also produces electronics like the Amazon Kindle. While the business mainly revolves around e-commerce it has products and services that play a significant role in IP marketing including Amazon Product Ads, Amazon Display Ads, Amazon Local (daily-deals) and Amazon Associates (affiliate program).</p>	AMZN
		\$98,120
		Seattle, WA
	<p>American Express is a diversified global transaction and payment services company. The company partners with AdReady to enable the AdManager online marketing suite for businesses and agencies, while its SearchManager product is powered by Clickable. The company also acquired a German coalition loyalty program called Loyalty Partner and the company's CFO sits on the Board of Groupcon.</p>	AXP
		\$63,738
		New York, NY
	<p>Aol is a diversified digital media and services company. Beyond its core media properties, ad technology products includes advertising.com, one of the world's largest ad networks. At the heart of Advertising.com's technology is AdLearn, an optimization and bid management system, and AdLearn Open Platform, the company's DSP solution. ADTECH is an integrated ad server that enable web publishers, ad networks, agencies and advertisers to manage, serve and report on their online advertising campaigns - including display, video and mobile formats. In April Aol launched Aol On Network a video hub which includes original programming. Aol has also partnered with Yahoo! and Microsoft to cross-sell each other's non-guaranteed display inventory, and has partnered with Yahoo!'s Right Media for execution.</p>	AOL
		\$2,562
		New York, NY
	<p><b>Rated OUTPERFORM by Keith Bachman, \$695 target.</b> Apple designs and sells consumer electronics, computer software and personal computers. Apple's iAd network is the platform used for advertising in apps that run on Apple's operating system, iOS. iAd for developers allows app developers to advertise in and monetize their apps, and iAd for brands allows advertisers reach app users on the iPhone and iPad. iAd campaign reporting provides measurement and analytics.</p>	AAPL
		\$534,659
		Cupertino, CA
	<p>Arbitron is a media and marketing research firm. Arbitron's businesses include: measuring radio audiences across the US; surveying the retail, media and product patterns of US consumers; providing mobile audience measurement and analytics and developing application software used for analyzing media audience and marketing information data.</p>	ARB
		\$915
		Columbia, MD
	<p><b>Rated OUTPERFORM by Peter Rhamey, \$34 target.</b> AT&amp;T is a telecom services provider. Its IP marketing services include AT&amp;T AdWorks, a major ad network which provides access to data from 100 million subscribers across its platform to improve TV campaign through set top box optimization, reach more precise mobile audiences with subscriber data, and better target online advertising. In March 2012, Adworks entered two key IP marketing partnerships. One was with DMP and DSP Turn to create an audience management platform for AdWorks, and the other was with Foursquare, which allows users to "check-in" directly through AdWorks placed ads.</p>	T
		\$202,625
		Dallas, TX

Source: Company websites and trade press reports

### Exhibit 67. Selected Public Company Profiles (continued)

Company	Company Description and Key Digital Marketing Hub Brands/Services/Units	Ticker Market Cap Headquarters
	Augme Technologies is a mobile marketing solutions and technology provider. Products include AD LIFE Platform (mobile marketing platform), AD LIFE Ad Network (mobile ad network), mCONSUMER (mobile engagement product) and mHealth (pharmaceutical mobile marketing).	AUGT \$190 New York, NY
	<b>Rated OUTPERFORM by Karl Keinstead, \$24 target.</b> Bazaarvoice lets consumers create and share ratings, reviews, questions, answers, and stories about products and brands on client websites, and then syndicates it across the web. Products include Ratings & Reviews (customer feedback), Ask & Answer (answers to customer questions), Social Connect (social brand engagement), Stories (customer reviews) and Customer Intelligence (focus group). Bazaarvoice recently acquired its closest competitor PowerReviews for \$125 million.	BV \$930 Austin, TX
	Blinkx is an online video search engine. Marketing related products include blinkx AdHoc (contextual advertising), blinkx AdHoc BT (behavioral targeting), blinkx Advanced Media Platform (video monetization), blinkx it (video integration), blinkx Mobile Video Search (mobile video), Cheep (social shopping service), Video SEO, and blinkx Internet TV API.	BLNX-LN \$210 London/San Francisco
	CBS is a major diversified media company. CBS interactive is the collection of CBS's digital properties which include CBSNews.com, CBSSports.com, CBSMoneywatch.com, CBS.com, CNET, Gamespot, last.fm, Urbanbaby.com and ZDNet among others. CBS interactive ranked #12 in comScore's April 2012 Top 100 properties list with ~75 million unique visitors.	CBS \$19,308 New York, NY
	comScore is a third-party analytics company focused on insights into consumer behavior, usage of online properties, and information on consumer demographics, attitudes, lifestyles and offline behavior. Marketing related products include MediaMetrix (media planning), AdMetrix (display advertising measurement) and AdXpose (analytics), which was acquired in August 2011. Validated Campaign Essentials (vCE) continues to integrate AdXpose with increased online ad campaign measurement and validation.	SCOR \$638 Reston, VA
	CSG Systems International is a business support solutions and services company serving global communications services providers. Quaero is CSG's marketing solution provider and customer engagement agency. Quaero's marketing related products and services include Marketing Opportunity Roadmap, Customer Engagement Solution, Customer Lifecycle Solution, Marketing Operations Solution and QuaeroCare.	CSGS \$563 Englewood, CO
	D&B is a leading source of commercial information and insight on businesses; its global commercial database contains more than 195 million business records. Marketing related products include D&B Sales and Marketing Solutions and D&B Internet Solutions.	DNB \$3,177 Short Hills, NJ
	<b>Rated OUTPERFORM by Jeff Logsdon, \$55 target.</b> Disney is a diversified media company. Disney Interactive Media Group includes Disney Online (portfolio of family websites) and Disney Games (casual and social games). IP advertising supported properties include ABC.com, ABCNews.com, ABCFamily.com, ESPN.com (ranked 30th in comScore's April Top 100 property list with ~34 million unique visitors), Family.com, Video.com and SOAPnet.com among others. Disney also owns one-third of Hulu, an ad-supported online video platform.	DIS \$81,379 Burbank, CA
	Dentsu is the fifth-largest ad agency in the world and derives most of its revenue from its home country of Japan. In recent years it has been an active acquirer of US agencies with strength in IP marketing including megarrybowen (full-service agency) and Innovation Interactive, whose divisions include 360i (digital marketing agency), IgnitionOne (digital marketing suite) and Netming (display targeting solutions). Other IP-marketing related services include Adjug (ad exchange), Dentsu Digital Holdings, and Dentsu Digital Fund.	4324-TO \$7,935 Tokyo, Japan
	DG provides services that enable the electronic delivery of advertisements, syndicated programs, and video news releases to traditional broadcasters, online publishers and other media outlets. The acquisitions of Unicast, MediaMind and EyeWonder have been united as the online advertising division of DG, which also acquired Peer39 (webpage level data provider) in April 2012 to improve its RTB capabilities.	DGIT \$334 Irving, TX
	eBay is an online marketplace with more than 100 million active users. eBay's IP marketing services are primarily housed within GSI Commerce, which eBay acquired March 2011. After beginning the company with a focus on e-commerce services, GSI built a suite of marketing services through the acquisitions of ClearSaleing (analytics and attribution), e-Dialog (email marketing), FetchBack (retargeting), MB Mobile (mobile targeting), MBS (database driven marketing services), PepperJam (affiliate marketing), Silverlign (integrated marketing agency) and TrueAction Network (full-service digital agency). We also highlight PayPal, eBay's payment services division, which includes the PayPal Media Network ad platform that ties together data, location, and purchase history to deliver relevant local advertising.	EBAY \$52,902 San Jose, CA
	ExactTarget is an engagement marketing platform that offers permission-based email, mobile marketing and social media marketing. Products include Interactive Marketing Hub (real-time marketing platform), ExactTarget Mobile Connect (mobile marketing), XpressMarketing (email marketing) and the recently launched SocialEngage (social media management).	ET \$1,470 Indianapolis, IN
	Facebook is the world's largest social media platform with ~900 million members. Facebook offers paid advertising services for major brands and small businesses and the Facebook Credits online currency for developers, particularly game makers. Facebook's products and services include Timeline (personalized Facebook page), Sponsored Stories (for both PC and mobile), Ads (display ads) and Facebook Platform (integrating Facebook within third-party websites). It also provides APIs for developers including Ads API, Pages API, Open Graph API, Insights API, Chat API and Legacy API.	FB \$61,663 Menlo Park, CA

Source: Company websites and trade press reports

### Exhibit 68. Selected Public Company Profiles (continued)

Company	Company Description and Key Digital Marketing Hub Brands/Services/Units	Ticker
	Facilitate Digital creates digital advertising and direct marketing solutions for agencies and marketers. Products include Symphony (digital workflow and trading platform for agencies), Facilitate for Agencies (3rd party ad serving), Facilitate Search (search marketing optimization), Fusion (media ROI optimization) and Data Intelligence (analytics).	Market Cap
		Headquarters
		FAC-AU
		\$17
		Sydney, Australia
	The GfK Group is a market research company. Products include AD CHALLENGER (ad campaign pre-testing), AD*VANTAGE/Multimedia (communications pre-testing), AFECTS (measure link between communications and consumer demand) and Advertising Tracking System (campaign measurement).	GFK-XE
		\$1,729
		Nuremberg, Germany
	Groupon developed the daily deal model for small businesses and has evolved to offer national promotions and loyalty services. Groupon initially had offered deals for services only but has recently launched deals for goods and getaways (in conjunction with Expedia) and live events (in conjunction with Live Nation). The social power of the coupons allows for deep discounts of often 50% or more; Groupon then shares the revenue from the coupons with the merchants. Groupon is currently testing a mobile payment offering that provides merchants with an iPod Touch and card reader as part of the service.	GRPN
		\$6,724
		Chicago, IL
	Havas is the seventh largest agency holding company in the world. Havas Media is the global media division which includes MPG (media communications), Havas Digital, Havas Sports and Entertainment and Arena Media (tailor-made communications network). Havas also has an equity stake in Adnetik (digital trading network and agency). Havas also owns several integrated agencies including Euro and Arnold.	HAV-FR
		\$2,180
		Paris, France
	Ipsos is a global market research company. Its products and services include Ipsos/MORI (market research), Loyalty (consumer relationship building), ASI (advertising research), MediaCT (media, content and technology research), Public Affairs (social research), and Ipsos Observer (survey management).	IPSF-FR
		\$1,422
		Paris, France
	<b>Rated MARKET PERFORM by Keith Bachman, \$48 target.</b> Infosys is a global technology services company providing companies with consulting, IT, engineering and outsourcing services. In April, Infosys and Fabric (a WPP company) co-created BrandEdge, a cloud-based digital marketing platform for agency selection and briefing, creation and management of digital properties, coordination with multiple partners, and campaign execution. Infosys' other IP marketing products and services include Digital Media Enterprise, Infosys Social Edge (social analytics solution), and Flypp (application marketplace).	INFY
		\$25,141
		Bangalore, India
	Jive is a social business software provider; its Engage Platform integrates social networking tools so companies can engage their employees and customers while monitoring their brand on social media.	JIVE
		\$1,008
		Palo Alto, CA
	LivePerson provides solutions to corporations for real-time online customer assistance in chat, voice/click-to-call and email. Products include LP Chat (website, social media, mobile), LP Voice (connection between website and voice platform), LP Expert Platform (live chat with experts), LP Marketer (real-time data-driven targeting solution) and LP Insights (analytics).	LPSN
		\$1,014
		New York, NY
	Local.com is an online local media company enabling brick-and-mortar businesses to connect with online customers using a variety of digital marketing products. The company distributes daily deals via Spreebird.com, rich media ads via Rovion.com, and real-time product inventory information from more than 50,000 retailers nationwide via Krillion.com.	LOCM
		\$51
		Irvine, CA
	MasterCard is a global payments and technology company. Its IP marketing related operations include its Advisors Merchant solutions, which offer marketing analytics to clients, and the company has also been working with several major ad agencies to help them better understand consumer spending patterns to better optimize advertising.	MA
		\$50,721
		Purchase, NY
	Millennial Media is a mobile advertising and data platform that helps developers and mobile website publishers maximize advertising revenue, drive app downloads and gain insights about users. Products and services include mMedia (turn-key self-service mobile ad solution), MYDAS (mobile ad technology platform), and mmDev (developer portal).	MM
		\$978
		Baltimore/New York
	<b>Rated MARKET PERFORM by Jeff Logsdon, \$21 target.</b> News Corporation is a diversified media company. News Corp Digital Media Group oversees the company's digital media operations including IGN, AmericanIdol.com, AskMen.com, FoxSports.com, Scout.com and Fox New Digital Network. The company also owned the social network MySpace from 2006 to 2011. News Corp also owns one third of Hulu, an ad-supported online video platform.	NWSA
		\$31,845
		New York, NY
	Neustar provides technology and directory services. In November 2011, Neustar purchased TARGUSinfo, which offers real-time, on demand information service provider, including analytics and customer insights. In 2010, the company acquired Quova for audience targeting solutions and rebranded as Neustar IP Intelligence.	NSR
		\$2,133
		Sterling, VA
	<b>Rated MARKET PERFORM by Karl Keirstead, \$30 target.</b> Oracle is an enterprise software company that provides database and middleware software, applications software, and hardware systems. Oracle's IP marketing related products include Oracle Marketing Analytics (marketing planning, campaign performance, customer insights) and Siebel Enterprise Marketing Suite (email marketing, analytics, web marketing, event management, loyalty management, event management, marketing resource management). In May 2011, Oracle acquired Vitruve, a social marketing platform. The Vitruve Social Relationship Management (SRM) platform includes Vitruve Publisher (social media publishing), Vitruve Tabs (Facebook fan-page templates), Vitruve Shop (e-commerce solutions) and Vitruve Analytics (social media analytics).	ORCL
		\$136,218
		Redwood City, CA

Source: Company websites and trade press reports

### Exhibit 69. Selected Public Company Profiles (continued)

Company	Company Description and Key Digital Marketing Hub Brands/Services/Units	Ticker
		Market Cap
		Headquarters
	PointRoll is a provider of digital marketing solutions and technology owned by major newspaper publisher Gannett. PointRoll enables advertisers, agencies, and publishers to create, deliver, and measure video, display, mobile and social campaigns. Marketing products include AdPortal (creative), AdControl (ad serving), and AdTracker (ad trafficking).	GCI
		\$3,019
		King of Prussia, PA
	QuinStreet is vertical marketing and online lead generation company. The company focuses on clients in large, information-intensive industries including education services, medicine/health, home services, and financial services. QuinStreet is predominantly paid on "per lead" or "per click" basis. Its offering includes brand management and search engine marketing solutions and reaches customers through the online display and email channels.	QNST
		\$377
		Foster City, CA
	ReachLocal is a local online advertising company. Products include ReachSearch (local search platform), ReachDisplay (display ad platform), TotalTrack (call-tracking) and ReachLocal Exchange (ad exchange).	RLOC
		\$322
		Woodland Hills, CA
	Rentrak is a digital media measurement and research company. Its "Essentials" branded products include measurement solutions for TV, Box Office, Home Video, Mobile, and Broadband. Rentrak's partnership with Bluefin Labs has yielded the Stickiness Index for tracking social media conversations around TV viewing.	RENT
		\$175
		Portland, OR
	Responsys is a consumer engagement marketing platform reaching consumers across email, social media, mobile and the broader web. Its platform -- the Responsys Interact Suite -- has multiple modules including Interact Program (program design and automation), Interact Campaign (campaign creation and execution), Interact Team (workflow and approvals), Interact Insights (reporting and analytics), Interact Connect (data transfer), Interact API (application control and development) and Interact Social Data Cloud (access social profiles and behavioral data of customers and apply them to cross channel marketing platforms).	MKTG
		\$508
		San Bruno, CA
	<b>Rated MARKET PERFORM by Tim Casey from our Canadian affiliate, BMO Nesbitt Burns, C\$40.50 target.</b> Rogers Media is a division of Rogers Communications, a diversified Canadian media company with operations in TV, radio, publishing, digital and sports entertainment. In April, Rogers partnered with Shaw Media and the CBC to create the Canadian Premium Audience Exchange (CPAX) - a private real-time bidding exchange that provides digital inventory from the three media companies.	RCI
		\$14,298
		Toronto, CA
	rVue operates an integrated advertising exchange and digital distribution platform for the Digital Out Of Home (DOOH) industry. Products include rVue Direct (direct response advertising such as QR codes) and rVue DSP.	RVUE
		\$9
		Ft. Lauderdale, FL
	<b>Rated OUTPERFORM by Karl Keirstead, \$170 target.</b> Salesforce.com is a Customer Relationship Management (CRM) software-as-a-service provider. The Salesforce Marketing Cloud offering was primarily created through the acquisition of Radian6, an social media listening platform, and Buddy Media, the leading social marketing technology provider. Salesforce also partners with Marin Software to help connect paid search with CRM activities.	CRM
		\$18,903
		San Francisco, CA
	<b>Rated MARKET PERFORM by Karl Keirstead, \$55 target.</b> SAP is enterprise software provider. SAP's IP marketing products and services include Web Channel Experience Marketing (e-marketing; campaign management, loyalty marketing, analytics) and SAP Digital Asset Management by OpenText (collect, manage, find, use, and distribute media content including movie clips, audio files, flash animations, PDFs, and more).	SAP
		\$70,666
		Walldorf, Germany
	SDL is a translation software and web management company. SDL provides web content management, ecommerce, structured content and language technologies. SDL recently acquired Alterian, products and services include SM2 (social media engagement), Dynamic Messenger (email engagement solution), Web Engagement Solutions, Engagement Management and Analytics Solution which run on the Alterian Integrated Marketing Platform.	SDL-LN
		\$773
		Maidenhead, UK
	<b>Rated MARKET PERFORM by Tim Casey from our Canadian affiliate, BMO Nesbitt Burns, C\$20 target.</b> Shaw Media is a division of Shaw Communications, a diversified communications and media company. Shaw Media operates one of the largest TV networks in Canada, Global Television, as well as a number of specialty networks. In April it partnered with Rogers Media and the CBC to create the Canadian Premium Audience Exchange (CPAX) - a private real-time bidding exchange that provides digital inventory from the three media companies.	SJR
		\$7,959
		Calgary, Canada
	Comcast is the largest cable operator in the United States; its digital properties include the websites for its cable networks like E! and G4. Comcast also owns 51% of NBC Universal, whose digital properties include DailyCandy, iVillage and Fandango. NBCU also owns a one-third of Hulu, an ad-supported online video platform. Strata Marketing is a media buying and selling software provider owned by Comcast. Strata helps clients buy all media types, as well as providing software solutions for most electronic media, and data and analytics.	CMCSA
		\$62,774
		Chicago, IL
	<b>Rated OUTPERFORM by Ed Williams, \$10 target.</b> Synacor develops and manages customer-branded websites for cable, satellite, telecom service providers and consumer electronic manufacturers. The company generates ~80% of its revenue from advertising. Related services include content publishing, web analytics, email and marketing support, as well as support for TV Everywhere initiatives.	SYNC
		\$324
		Buffalo, NY

Source: Company websites and trade press reports

### Exhibit 70. Selected Public Company Profiles (continued)

Company	Company Description and Key Digital Marketing Hub Brands/Services/Units	Ticker
		Market Cap
		Headquarters
	Teradata is an enterprise data warehousing and analytics company. Teradata's exposure to IP marketing largely came through the acquisition of Aprimo in 2010; its products include Aprimo Marketing Studio (integrated marketing management solution for both B2B and B2C), Aprimo Real-Time Interaction Manager (inbound marketing or offer management solution), Aprimo Relationship Manager (enhance communications with customers), Aprimo Master Data Manager and Aprimo Demand Chain Manager.	TDC
		\$11,647
		Dayton, OH
	<b>Rated OUTPERFORM by Jeff Logsdon, \$46 target.</b> Time Warner is a diversified media and entertainment company. Time Warner's digital brands include TheWB.com, KidsWB.com, TMZ.com, Time.com, CNNMoney.com, People.com, SI.com, CartoonNetwork.com, TheSmokingGun.com, AdultSwim.com. The Turner Digital division (TNT.tv, TBS.com, Team Coco, CN.com, NBA.com, TCM.com) ranked 11th in comScore's April Top 100 Properties list with ~75 million unique visitors.	TWX
		\$33,463
		New York, NY
	<b>Rated OUTPERFORM by Ed Williams, \$15 target.</b> TiVo provides technology and services for TV, including digital video recorders (DVRs) and connected televisions. It also provides targeted advertising solution on its platform and TV audience measurement services under the Stop Watch brand.	TIVO
		\$1,047
		San Mateo, CA
	TradeDoubler offers performance-based marketing solutions. Products include tdAffiliate (affiliate marketing), tdCampaigns (online ad campaign management), tdIntegral (cross-media marketing) and tdSearch (search marketing).	TRAD-ST
		\$100
		Stockholm, Sweden
	Velti is a mobile marketing and advertising solutions provider. The core product is called the Velti mCage platform, which includes both a self-service toolset and managed services. Recent acquisitions include mobile ad network C.A.S.E.E., mobile marketing company Mobile Interactive Group and mCRM provider Air2Web.	VELT
		\$439
		Dublin, Ireland
	<b>Rated OUTPERFORM by Jeff Logsdon, \$59 target.</b> Viacom is a media and entertainment content company. Viacom has approximately 500 digital media properties, many of which center around its TV content. Some of the top ones include BET.com, Nick.com, TheDailyShow.com, ColbertNation.com, MTV.com, RateMyProfessor.com, MTVu.com and VH1.com. Viacom Digital ranked 15th in comScore's April Top 100 Properties list with ~72 million unique users.	VIAB
		\$22,234
		New York, NY
	Visa is a global payments technology company. Like other credit card networks, Visa offers merchant marketing services to generate awareness for new acceptance channels and locations and also develop special offers and promotions. Visa has also applied for several patents that would help target IP advertising using cardholders' anonymous buying histories and the company is also an investor in Square, a mobile payment start-up.	V
		\$61,426
		San Francisco, CA
	<b>Rated MARKET PERFORM by Wayne Hood, \$68 target.</b> Wal-Mart is the world's largest retailer. It's @WalmartLabs unit aims to connect the dots between Social, Mobile, and Retail. Recently Wal-Mart Stores launched approximately 3,500 store-specific Facebook pages that enable consumers to receive offers and updates from local Wal-Mart retail locations. The company's iPhone app includes barcode scanners, coupons, Siri voice command, and a budgeting tool. The iPad app allows consumers to search local and online inventories at home.	WMT
		\$223,077
		Bentonville, AR

Source: Company websites and trade press reports

# Selected Private Company Profiles

## Exhibit 71. Selected Private Company Profiles

Company	Company Snapshot	Financial Sponsors Include:	Headquarters
	33Across is a social targeting platform that builds a unique Brand Graph for customers. Each Brand Graph plots the anonymous social engagement, influence and interests of a brand's customers against 33Across' US-user social graph. Products include The Brand Graph (brand loyalty measurement) and SocialDNA (social targeting).	<ul style="list-style-type: none"> <li>• First Round Capital</li> <li>• RoseTech Ventures</li> </ul>	New York, NY
	Accordant Media is a specialized media buying and optimization company that integrates strategy, technology and execution to help agencies and advertisers succeed in exchange-traded media and audience targeting. Accordant uses micro-segmentation, audience insights and dynamic ad pricing to unlock value. Audience Optics is Accordant Media's main product.	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	New York, NY
	Acquisio provides technology for agencies to buy, track, manage, optimize, retarget, and report on media across search, display/RTB and social media, allowing them to handle all tasks associated with performance advertising within a single integrated platform. Acquisio's preferred RTB partner is The Trade Desk and also works with Tum and AppNexus.	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	Montreal, Canada
	Ad-Juster is a third-party reporting and discrepancy management tool. Ad-Juster currently provides actionable data to over 60 digital agencies, networks and publishers. Ad-juster streamlines data aggregation providing daily third-party updates, campaign delivery reports along with discrepancy reports.	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	Poway, CA
	adap.tv connects publishers, advertisers, and partners for online video advertising campaigns. adap.tv helps publishers sell video inventory, monetizing across multiple ad sources and multiple screens, without handling ad operations. Products include, adap.tv ad server (ad serving), adap.tv marketplace (online video ad marketplace), and adap.tv campaign manager (campaign management).	<ul style="list-style-type: none"> <li>• Bessemer Venture Partners</li> <li>• Gemini Israel Funds</li> <li>• Redpoint Ventures</li> <li>• Spark Capital</li> </ul>	San Mateo, CA
	adBrite's ad exchange reaches 300 million global unique visitors every month, including more than 150 million in the US. adBrite uses first and third-party audience data for advanced targeting, ROI measurement and real-time reporting and analysis. Products include the adBright exchange (ad exchange).	<ul style="list-style-type: none"> <li>• Sequoia Capital</li> <li>• Artis Management</li> </ul>	San Francisco, CA
	adchemy creates digital advertising targeting solutions for advertisers using consumer intent technology. Products include Adchemy Intent Map (consumer intent technology), Adchemy Actions (ad targeting) and Adchemy Digital Marketing Platform (performance marketing).	<ul style="list-style-type: none"> <li>• August Capital</li> <li>• Mayfield Fund</li> <li>• Hellman &amp; Friedman</li> <li>• Accenture (ACN)</li> </ul>	Redwood City, CA
	Adconion is an independent video and advertising content network delivering reach across multiple platforms. Products include Adconion direct (digital distribution platform), Adconion Audience Targeting Product Suite (behavioral and demographic targeting), Joost Video Network (online video advertising solution) and smartclip (recently acquired European digital video advertising company).	<ul style="list-style-type: none"> <li>• Index Ventures</li> <li>• Wellington Partners</li> </ul>	Santa Monica, CA
	Adfonic is a global mobile advertising marketplace. Adfonic provides advertisers with tools to build, execute, monitor and control their mobile ad campaigns. The company provides publishers with tools and real-time reporting and analytics to maximize their earning potential from mobile advertising.	<ul style="list-style-type: none"> <li>• Gordon Shields</li> </ul>	London, UK
	AdKeeper enables consumers to engage with digital advertising on their own time and terms. AdKeeper places a "Keep" button on the lower corner of an ad (like Facebook's like button). Clicking on the button saves the ad in your "Keeper" on the AdKeeper website. Your keeper aggregates the ads you save and allows you to rate, print or share the ads. AdKeeper also allows you to explore more ads in the AdKeeper Gallery.	<ul style="list-style-type: none"> <li>• Oak Investment Partners</li> <li>• DCM</li> <li>• True Ventures</li> <li>• Spark Capital</li> <li>• First Round Capital</li> </ul>	New York, NY
	adknowledge is an ad marketplace specializing in performance-based marketing solutions that help make the "long tail" web accessible to advertisers. adknowledge connects advertisers with consumers across email, search, mobile, domains, and social networks. Products include Adknowledge Targeting Technology (consumer targeting), BidSystem (campaign management), AdStation for Email (email marketing management), AdStation for Games (online game monetization) and AdStation for Websites (website monetization for publishers).	<ul style="list-style-type: none"> <li>• JMI Equity</li> <li>• Bank of America (BAC)</li> <li>• Technology Crossover Ventures</li> </ul>	Kansas City, MO
	Admeta is an independent technology provider that runs ad platforms for advertisers and publishers. Products include Admeta Tango (yield optimization for publishers and networks) and Admeta Echo (campaign management for advertisers and agencies).	<ul style="list-style-type: none"> <li>• Chalmers Innovation Seed Fund</li> <li>• Layline Partners</li> <li>• KL Ventures</li> </ul>	Göteborg, Sweden

Source: Company websites and trade press reports

### Exhibit 72. Selected Private Company Profiles (continued)

Company	Company Snapshot	Financial Sponsors Include:	Headquarters
	Adnetik is an independent trading desk. Its Audience Investment Management (AIM) enables the intelligent management of data across ad exchanges, ad networks, publisher sites, supply-side platforms and video exchanges. It utilizes real-time bidding technology and targeting to make buying decisions that get closer to the absolute value of each impression.	<ul style="list-style-type: none"> <li>• Group ISP</li> <li>• Havas (HAV.FR)</li> </ul>	Boston, MA
	Adometry is a provider of ad analytics and traffic quality solutions for agencies, publishers, and ad networks. Products include Adometry Ad Analytics (analytics), Adometry TagScan (ad tag management), CPC Ad Analytics (click fraud protection) and Adometry Attribute (track the impact of offline channels on online conversations).	<ul style="list-style-type: none"> <li>• Austin Ventures</li> <li>• Shasta Ventures</li> <li>• Sierra Ventures</li> </ul>	Austin, TX
	AdReady is a demand-side platform that enables marketers and agencies to improve their display advertising reach and conversions. The company's core product is the AdReady Display Advertising Platform (online ad campaign management).	<ul style="list-style-type: none"> <li>• Madrona Venture Group</li> <li>• Bain Capital Ventures</li> <li>• Khosla Ventures</li> </ul>	Seattle, WA
	AdSafe provides an independent content rating and certification platform to help standardize and control the online advertising ecosystem. AdSafe enables ad networks to monitor their inventory performance and provides a certification of site content. Products include Firewall Control and Network Control.	<ul style="list-style-type: none"> <li>• Atlas Ventures</li> <li>• Founder Collective</li> <li>• Select angel investors</li> </ul>	New York, NY
	Aggregate Knowledge provides an analytics and tracking platform for digital advertisers. The AK Platform automates "trading desk" like features for advertisers by bundling hardware, software, tools and training, into a singular offering. Products include ak:media (media campaign insights), ak:audience (data performance measurement), ak:mta (campaign effectiveness measurement), ak:creative (creative management), ak:science (data related insights) and ak:crm (CRM platform).	<ul style="list-style-type: none"> <li>• DAG Ventures</li> <li>• Foundation Capital</li> <li>• Kleiner, Perkins, Caufield &amp; Byers</li> <li>• OVP Venture Partners</li> </ul>	San Mateo, CA
	AKQA is a creative ad agency that specializes in interactive marketing. Clients include Audi, Coca-Cola, Heineken, Nike, Target, Unilever and Visa and the company has offices in New York, London, Paris, Amsterdam, Washington DC, San Francisco, Shanghai and Berlin. AKQA's specialties include digital marketing, product development, content creation and ecommerce.	<ul style="list-style-type: none"> <li>• General Atlantic</li> </ul>	San Francisco, CA
	Allant is a full-service direct marketing services provider. Its services include analytics, data management, database services, strategy, budget/campaign/list optimization; customer acquisition/growth/retention; marketing automation; and telemarketing management.	<ul style="list-style-type: none"> <li>• Allant Management</li> <li>• MidOcean Partners</li> </ul>	Naperville, IL
	AlmondNet is a media and advertising technology company that distributes relevant paid search ads to people wherever they go, based on recent searches they made. In July 2011 AlmondNet spun off its data division into a stand alone company called Datonics. IntentIQ (cross platform addressable advertising) is an AlmondNet subsidiary.	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	New York, NY
	AlphaBird delivers audiences for advertisers' video on premium website publishers and YouTube by distributing videos in-page (not in-banner) across premium publishers, portals, and blogs. Products include In-Page Click2Play (in page video content placement), Contextual Editorial Click2Play (contextual placement) and YouTube Click2Play (YouTube video ad placement).	<ul style="list-style-type: none"> <li>• Joe Abrams</li> </ul>	San Francisco, CA
	AppNexus is a real-time ad platform for ad networks, demand-side platforms (DSPs), and other leading online advertising companies. AppNexus offers a suite of core infrastructure and ad technology capabilities including ad serving, data management, yield optimization, APIs, financial clearing and support for directly negotiated media campaigns. The AppNexus Market allows users to integrate third-party apps into AppNexus' user interface.	<ul style="list-style-type: none"> <li>• Marc Andreessen</li> <li>• Ben Horowitz</li> <li>• First Round Capital</li> <li>• Venrock</li> <li>• Kodiak Venture Partners</li> <li>• Ron Conway</li> <li>• Khosla Ventures</li> <li>• Microsoft (MSFT)</li> </ul>	New York, NY
	Appssavvy connects social media publishers with brand advertisers and agencies. Products include activity (interactive advertising platform) and Social Activity Index (social advertising measurement).	<ul style="list-style-type: none"> <li>• True Ventures</li> <li>• Aol Ventures (AOL)</li> <li>• The New York Times (NYT)</li> </ul>	New York, NY
	AudienceScience is a behavioral ad network. AudienceScience uses its technology to target customers across its own ad network while marketers can also choose to target across other networks using AudienceScience's technology. The core Audience Delivery System platform consists of AudienceScience Gateway (audience targeting and data management) and AudienceScience Connect (media transaction platform).	<ul style="list-style-type: none"> <li>• Mayfield Fund</li> <li>• Mohr, Davidow Ventures</li> <li>• Integral Capital Partners</li> <li>• Meritech Capital Partners</li> </ul>	New York, NY

Source: Company websites and trade press reports

**Exhibit 73. Selected Private Company Profiles (continued)**

Company	Company Snapshot	Financial Sponsors Include:	Headquarters
	Bizo is used by marketers to reach and engage business professionals online through retargeting. Bizo targets the business audience around the world, including more than 80 percent of the US business population. Products include Bizo Audience Marketing Platform (display ad targeting, social media measurement, analytics) and Business Audience Exchange (RTB premium exchange).	<ul style="list-style-type: none"> <li>• Ascent Ventures</li> <li>• Bessemer Venture Partners</li> <li>• Venrock</li> <li>• Vulcan Capital</li> </ul>	San Francisco, CA
	blackarrow provides addressable TV advertising technology for network programmers and content distributors. The blackarrow Advanced Advertising Solution is focused on enabling advertisers to connect with audiences wherever they are watching. Products include blackarrow Sales Suite (ad sales operation) and blackarrow Decision Suite (campaign execution).	<ul style="list-style-type: none"> <li>• Cisco (CSCO)/NDS (NDS.LN)</li> <li>• Comcast Ventures (CMCSA)</li> <li>• Intel Capital (INTL)</li> <li>• Mayfield Fund</li> <li>• Motorola (GOOG)</li> <li>• Polaris Venture Partners</li> <li>• Time Warner Cable (TWC)</li> </ul>	San Jose, CA
	BLiNQ Media delivers media and technology solutions to companies advertising in social networks using media management technology, performance-based pricing and quantitative analysis. Products include Blinq Ad Manager (BAM) and BAM Facebook ad campaign management engine.	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	New York, NY
	BlueCava provides technology that identifies and profiles the devices used by consumers to increase online advertising effectiveness, reduce fraud risk, and improve customer satisfaction. BlueCava can help marketers with ad targeting, eliminate click fraud, tie devices to one another and help with the householding of devices, which means understanding what diverse sets of devices are related within a given household.	<ul style="list-style-type: none"> <li>• S3 Ventures</li> <li>• Mark Cuban</li> <li>• Tim Headington</li> </ul>	Irvine, CA
	Bluefin Labs is a social TV analytics company. The company allows clients to tap into data that links social media commentary (mainly through Twitter but also Facebook) to the shows and commercials they watch on TV. Bluefin Signals is the analytics platform that runs Bluefin Solutions for Networks, Bluefin Solutions for Brands and Bluefin Solutions for Agencies.	<ul style="list-style-type: none"> <li>• Redpoint Ventures</li> <li>• Lerer Ventures</li> <li>• SoftBank Capital</li> <li>• Time Warner Investments (TWX)</li> </ul>	Cambridge, MA
	BlueKai is a data exchange and DMP operator. The exchange offers access to data available to target audiences at any stage of the purchase funnel. Products include BlueKai Data Exchange (data exchange) and BlueKai Registry (consumer privacy management). BlueKai partnered with VivaKi Nerve Center in May 2011 to create Audience Insights a new DMP that provides scale and data aggregation with less complexity.	<ul style="list-style-type: none"> <li>• GGV Capital</li> <li>• Battery Ventures</li> <li>• Redpoint Ventures</li> </ul>	Bellevue, WA
	blurbIQ turns video commercials into interactive "games" that increase viewer engagement, video completion rates, and ad retention. The interactive video units are distributed as pre-roll, in banner, mobile, tablet, and social media advertising units. Products include blurbIQ Interactive Video Units (for advertisers) and blurbIQ Interactive Video Advertising Platform (for publishers).	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	Garden Grove, CA
	Brand.net is an ad network focused exclusively on brand advertising across hundreds of premium publishers. Products include Media Futures Platform (buying platform), SafeScreen (brand safety), SalesLink (offline sales measurement), ActivityLink (online engagement measurement) and Attitudinal (brand awareness measurement).	<ul style="list-style-type: none"> <li>• Interwest Partners</li> <li>• Norwest Venture Partners</li> </ul>	San Mateo, CA
	BrightRoll is an online video advertising services provider. The company offers In-Stream (pre-roll with companion banner and interactive pre-roll), In-Banner (click to play, mouse over to play and auto preview) and Marquee (standard, custom and multi-play) ads. Products include BRIQ (ad buying platform), BrightRoll Exchange (BRX) (video exchange), Targeting (behavioral, contextual, demographic, geographic) and BrightRoll Optimization Engine.	<ul style="list-style-type: none"> <li>• Trident Capital</li> <li>• True Ventures</li> <li>• Adams Street Partners</li> <li>• Scale Venture Partners</li> <li>• Comerica Bank (CMA)</li> </ul>	San Francisco, CA
	Burst Media provides products and services to web publishers that help them attract and meet the needs of advertisers. Products include adConductor (ad network management and optimization technology), adConductor Inventory Exchange (ad exchange) and BDirect (performance advertising).	<ul style="list-style-type: none"> <li>• Summit Partners</li> </ul>	Burlington, MA
	Buzzlogic is a digital media platform that improves brand metrics and ROI through its media index and analytics platform. Products include, Buzzlogic ad targeting platform and Spectrum (emotive based advertising).	<ul style="list-style-type: none"> <li>• Bridgescale Partners</li> <li>• Adams Capital Management</li> </ul>	San Francisco, CA

Source: Company websites and trade press reports

### Exhibit 74. Selected Private Company Profiles (continued)

Company	Company Snapshot	Financial Sponsors Include:	Headquarters
	Canoe Ventures is the cable industry's joint venture to bring advanced technology to TV advertising. The company recently reeled in its efforts at addressable TV advertising and is now primarily focused on VOD advertising.	<ul style="list-style-type: none"> <li>Comcast (CMCSA)</li> <li>Cablevision (CVC)</li> <li>Cox Communications</li> <li>Charter</li> <li>Bright House Networks</li> </ul>	New York, NY
	Casale Media is a diversified ad network that sells inventory on behalf of publishers. The company offers a number of targeting capabilities and pricing models. Products include MediaNet (ad network), Optimax (campaign management) and Casalex (RTB exchange).	<ul style="list-style-type: none"> <li>Not available</li> </ul>	Toronto, Canada
	Catalina is precision marketing company that helps brand acquire, maximize and retain customers both in-store and out based on transaction-level data. The company's BuyerVision tool helps deliver ads at the point-of-sale (both online and in-store) while Coupon Network is online source for deals and offers. Catalina recently acquired Modiv Media, a mobile shopper marketing whose products include Modiv Mobile (mobile commerce), Modiv Shopper (mobile self service checkout), Modiv MDS (campaign management), and Modiv Screen (digital signage).	<ul style="list-style-type: none"> <li>Hellman &amp; Friedman</li> </ul>	St. Petersburg, FL
	Centro streamlines the entire process of media buying and selling for hundreds of national advertisers and agencies across more than 15,000 media opportunities. Products and services include Media Logistics Services (digital media operations and logistics), Transis (media logistics software and automated media buying and execution technology) and Centro Brand Exchange (high quality inventory ad exchange).	<ul style="list-style-type: none"> <li>FTV Capital</li> </ul>	Chicago, IL
	Chango is a search retargeting platform that delivers display ads based on consumer's recent search activity. Products include Chango RTB platform, near real time reporting system (campaign performance) and Chango data management system.	<ul style="list-style-type: none"> <li>Rho</li> <li>iNova Capital</li> <li>Metamorphic Venture Partners</li> <li>Extreme Venture Partners</li> </ul>	Toronto, Canada
	Clearspring's AddThis platform enables leading publishers to distribute and track digital content such as web pages, widgets, and videos to social networks, bookmarking sites, blogs, and more. Products include Clearspring Launchpad (social media distribution), WidgetMedia (social media monetization), Clearspring Audience Platform (integrated with demand-side platforms) and Audience Insights (analytics).	<ul style="list-style-type: none"> <li>Institutional Venture Partners</li> <li>New Enterprise Associates</li> <li>Novak Biddle Venture Partners</li> </ul>	McLean, VA
	Clickable provides solutions that enables advertisers to manage their performance across Pay-Per-Click (PPC) networks. Products include Social Media Advertising Resource Center, ActEngine (PPC profitability tool) and Clickable Pro Tool (paid click ad technology).	<ul style="list-style-type: none"> <li>Monster Venture Partners</li> <li>FirstMark Capital</li> <li>Schoffstall Ventures</li> <li>Union Square Ventures</li> <li>The Founders Fund</li> <li>American Express (AXP)</li> </ul>	New York, NY
	ClickMotive creates interactive marketing software exclusively for the automotive industry. The ClickMotive suite of FUSION products includes dealer websites, auto group websites, regional websites, OEM websites, mobile websites, search engine marketing (SEM) programs, search engine optimization (SEO) expertise, video marketing, lead delivery, administrative tools, content management, reporting/analytics, customization and support.	<ul style="list-style-type: none"> <li>Not available</li> </ul>	Plano, TX
	Collective provides display advertising solutions to advertisers and publishers. Collective can match audiences exposed to an advertisers television ads and serve them additional ad impressions online, through display and video. Products include AMP Platform (media and data management), Ensemble Dynamic Creative (creative solutions) Ensemble Rich Media (rich media platform), and Audience HD (campaign analytics). Collective purchased ad targeting and optimization company, Tunmri in July 2011.	<ul style="list-style-type: none"> <li>Accel Partners</li> <li>Greycroft Partners</li> <li>Novia Capital</li> </ul>	New York, NY
	Crimson Hexagon is a social media analytics platform that provides social media monitoring and analysis software and services to global brands, agencies, media firms and their partners. The Crimson Hexagon ForSight platform allows customers to tap into online conversations taking place in social media and uncover keywords, consumer opinions and insights about their company, products, industry and competitors.	<ul style="list-style-type: none"> <li>Golden Seed</li> <li>Beacon Angels</li> <li>The Angel Investor Forum</li> <li>Zelkova Ventures</li> </ul>	Boston, MA
	Criteo is a search retargeting company who's technology enables e-commerce sites to re-engage with potential customers. Products include CPC Search Expansion Platform (Search retargeting).	<ul style="list-style-type: none"> <li>Index Ventures</li> <li>Bessemer Venture Partners</li> <li>AGF Private Equity</li> <li>Eliaia Partners</li> </ul>	Paris, France
	Cross Pixel Media is an audience retargeting company. The company displays targeted banner advertising to consumers based on their previous online shopping activity and provides cross targeting to help online retailers generate new sales from new customers.	<ul style="list-style-type: none"> <li>Not available</li> </ul>	New York, NY

Source: Company websites and trade press reports

### Exhibit 75. Selected Private Company Profiles (continued)

Company	Company Snapshot	Financial Sponsors Include:	Headquarters
	Crowd Factory adds a social boost to digital interactions through its Social Marketing Suite. Products include Social Campaign (social media platform) and Social Offer (social media coupons and offers).	<ul style="list-style-type: none"> <li>• Hummer Winbald</li> <li>• Peninsula Ventures</li> <li>• Storm Ventures</li> </ul>	San Francisco, CA
	CPX Interactive is a ad network that provides advertisers and publishers with display ad solutions, including media campaign management, data integration, strategy, and account management. Products include CPX Network (ad network), and CPX adROI platform (ad management platform).	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	Westbury, NY
	cXense provides online advertising services, web analytics, and search services on a subscription basis. Products include cX::ad (customizable SaaS ad platform), cX::analytics (real-time analytics platform) and cX::search (hosted search solution).	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	Oslo, Norway
	Datalogix integrates database marketing and digital media. The company offers audience segmentation and integrated programs directly and through all leading digital media companies. Products include DLK Closed Loop (online campaign measurement), DLX Database (data), DLX Net (ad network) and DLX Platform (targeting).	<ul style="list-style-type: none"> <li>• General Catalyst Partners</li> <li>• Wolf Ventures</li> <li>• Sequel Venture Partners</li> </ul>	Westminster, CO
	DataPop's paid search application creates messages specifically tailored to each consumer based on their demographics, location and intent. Using a marketers unique set of offers, DataPop will help deliver more relevant and effective messages.	<ul style="list-style-type: none"> <li>• Rincon Venture Partners</li> <li>• IA Ventures</li> <li>• Momentum Ventures</li> <li>• Accelerator Ventures</li> </ul>	Hollywood, CA
	Data Square integrates database and decision support technology with advanced analytics, strategy and research in order to raise marketing, sales, finance and operations ROI for clients. Products include CRM Square (CRM solution), DB360 Square (enterprise marketing and sales database), Report Square (analytics), Campaign Square (multi-channel campaign management) and Digital Square (email, text, social and other digital campaign management).	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	Wilton, CT
	DataXu provides a real-time media management platform for digital advertising campaigns across online, mobile and video channels. Products include DX3 Platform (DSP), DX Social (social DSP), DX Brand (brand management), DX Mobile (mobile DSP), and DX Video (video DSP). DataXu acquired Mexad in January, expanding its footprint in Europe.	<ul style="list-style-type: none"> <li>• Atlas Venture</li> <li>• Flybridge Capital Partners</li> <li>• Menlo Ventures</li> </ul>	Boston, MA
	Datonics is an aggregator and distributor of behavioral purchase intent, life-stage and demographic data. Datonics' 300+ pre-packaged segments and custom keyword-based segments facilitate the delivery of highly-relevant, privacy-sensitive ads to online consumers. Products include Datonics Post Search (targeting) and Datonics Post Search Retargeting.	<ul style="list-style-type: none"> <li>• Spun off from AlmondNet</li> </ul>	New York, NY
	Deloitte offers audit and enterprise risk services, consulting, tax advice and preparation, and financial advisory services. However, the company is branching out into IP marketing services. It recently launched Deloitte Digital, offers strategy, creative, user experience, engineering and implementation services for marketers in digital channels. Deloitte also acquired Ubermind a mobile-agency in January 2012.	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	New York, NY
	DoubleVerify is an ad verification company. DoubleVerify works with publishers, advertisers, ad networks, ad exchanges, and demand-side platforms to verify the correct placement and display of every single impression of a verified online advertising campaign. Products include BrandShield (blocking solution), Navigator (network and platform management) and Online Behavioral Targeting OBA, (behavioral targeting self regulatory program).	<ul style="list-style-type: none"> <li>• Blumberg Capital</li> <li>• Genacast Ventures</li> <li>• First Round Capital</li> <li>• Institutional Venture Partners</li> </ul>	New York, NY
	dunnhumby analyzes data sources such as transactions and loyalty cards and then overlays research, media and online data to help companies understand their customers. The dunnhumby Group also includes the Word of Mouth marketing experts BzzAgent and price optimization company KSS Retail.	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	London, UK
	eBureau offers solutions that provide real-time insight to help interactive marketers cut through the complexity, identify their ideal prospects and deliver the right offer at the right time. Hub and real time marketing products include lead quality scoring, contact center optimization and risk management. In January, eBureau spun off its online ad targeting business into a new company called TruSignal.	<ul style="list-style-type: none"> <li>• Split Rock Partners</li> <li>• Redpoint Ventures</li> <li>• Pinnacle Ventures</li> <li>• Tenaya Capital</li> </ul>	St. Cloud, MN

Source: Company websites and trade press reports

### Exhibit 76. Selected Private Company Profiles (continued)

Company	Company Snapshot	Financial Sponsors Include:	Headquarters
	Eloqua is a marketing automation and demand generation company that provides business insight to inform marketing and sales decisions. The Eloqua Platform includes campaign automation, contact management, data management, event management and multi-channel marketing.	<ul style="list-style-type: none"> <li>• Bessemer Venture Partners</li> <li>• JMI Equity</li> <li>• Bay Partners</li> </ul>	Vienna, Virginia
	Emailvision is an on-demand email and social marketing provider. Emailvision delivers 5 billion messages per month on behalf of more than 4,000 clients worldwide. The company's core product is Campaign Commander (email and social marketing software).	<ul style="list-style-type: none"> <li>• Francisco Partners of CA</li> </ul>	New York, NY
	Epic Advertising is a digital marketing solutions company, managing a full spectrum of advertising services, from brand-building and engagement to performance-based customer acquisition solutions. Products include Epic Marketplace (ad network), Epic Direct (direct response network), eyengage (interactive creative) and Online Intelligence (brand protection). Kineticsocial (social media and marketing) was recently spun out from the company.	<ul style="list-style-type: none"> <li>• Stripes Group</li> <li>• TA Associates</li> </ul>	New York, NY
	Evidon is a provider of privacy and compliance solutions for digital media. The company provides strategy and technology to help leading brands, agencies, publishers, and solutions providers comply with privacy law and self-regulatory programs across North America and Europe. Products include Evidon Inform, Ghostery Audit (site tracking) and Evidon Ecompass (data and analytics).	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	New York, NY
	eXelate is an open marketplace exchange for behavioral targeting data. Products include eXelate Targeting eXchange (behavioral targeting data exchange), eXelate Marketplace (data exchange) and datalinX (data management platform).	<ul style="list-style-type: none"> <li>• Carmel Ventures</li> <li>• Menlo Ventures</li> </ul>	New York, NY
	Exponential Interactive is a provider of advertising intelligence and digital media solutions to brand advertisers across display, search and mobile via the eX Advertising Intelligence Platform. Audience engagement divisions include display advertising provider Tribal Fusion, brand engagement platform Firefly Video, and in-stream video advertising specialist AdoTube.	<ul style="list-style-type: none"> <li>• Housatonic Partners</li> </ul>	Emeryville, CA
	Extreme Reach is a provider of video advertising management and distribution solutions. The company's network connects advertisers and agencies, with broadcast networks and media destinations across the digital TV ad distribution network. The Extreme Reach video platform simplifies the management, delivery and tracking of ad campaigns across video media, including: TV, web, outdoor and mobile.	<ul style="list-style-type: none"> <li>• Village Ventures</li> <li>• Long River Ventures</li> <li>• Greycroft Partners</li> </ul>	Needham, MA
	Eyeview develops technology that allows advertisers and agencies to create and target personalized video ads. Eyeview personalizes ads bases on local info, weather, time, custom user data, demographics, real-time deals and prices, social information, and behavioral retargeting.	<ul style="list-style-type: none"> <li>• Gemini Israel Funds</li> <li>• Lightspeed Venture Partners</li> <li>• Innovation Endeavors</li> </ul>	New York, NY
	Federated Media is a publishing company that connects conversational content with leading brand marketers. The company works with blogs, websites and social networking applications to connect them with leading brands.	<ul style="list-style-type: none"> <li>• Omidyar Network</li> <li>• NY Times (NYT)</li> <li>• JP Morgan Partners (JPM)</li> <li>• Oak Investment Partners</li> </ul>	San Francisco, CA
	Fiksu is a mobile marketing technology company. Fiksu for Mobile Apps is the company's solution designed to help mobile apps monetize and grow their audience.	<ul style="list-style-type: none"> <li>• Charles River Ventures</li> </ul>	Boston, MA
	Fluid delivers digital agency services focused on innovating digital commerce across the web, social and mobile. Products include Fluid Experience (dynamic imaging for eCommerce), Fluid Configure (product customization solution), and Fluid Social (social+shopping convergence).	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	San Francisco, CA
	Foursquare is a location-based social/mobile platform. By "checking in" via a Smartphone app or SMS, users share their location with friends while collecting points and virtual badges. Merchants and brands leverage the foursquare platform by utilizing a set of tools to obtain, engage, and retain customers and audiences.	<ul style="list-style-type: none"> <li>• Andreesen Horowitz</li> <li>• Union Square Ventures</li> <li>• O'Reilly AlphaTech Ventures</li> </ul>	New York, NY
	FreeWheel offers a system to account for the monetization of online video syndication. Products include Monetization Rights Management or MRM (ad management, optimization and monetization technology) and Revenue and Payments Management or RPM (operational efficiency technology).	<ul style="list-style-type: none"> <li>• Steamboat Ventures</li> <li>• Turner Broadcasting (TWX)</li> <li>• Battery Ventures</li> <li>• Foundation Capital</li> </ul>	San Mateo, CA

Source: Company websites and trade press reports

### Exhibit 77. Selected Private Company Profiles (continued)

Company	Company Snapshot	Financial Sponsors Include:	Headquarters
	GraphEffect helps companies integrate social advertising and conversational marketing programs from a single platform. The company's core product, GraphEffect 2.0, includes ReachBoost (recommends new target audiences), StoryBoost (analyzes which stories are best to become paid ads on Facebook), ViralBoost (place ads around viral content), and SmartAnalytics (analyze how paid media is translating into earned and owned media).	<ul style="list-style-type: none"> <li>• Lerer Ventures</li> <li>• Thrive Capital</li> <li>• Founder Collective</li> <li>• Rincon Venture Partners</li> <li>• CrossCut Ventures</li> <li>• Baroda Ventures</li> </ul>	Santa Monica, CA
	Horizon Media, plans, coordinates, and negotiates deals across the media spectrum (television, radio, newspapers, billboards, and digital). Services include digital strategy, social strategy, digital media planning and buying, mobile marketing services and technology.	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	New York, NY
	HubSpot offers a marketing software platform for small and medium sized businesses. Applications include website management, blogging, search engine optimization, lead management, marketing analytics, email marketing, landing pages, and social media monitoring.	<ul style="list-style-type: none"> <li>• Sequoia Capital</li> <li>• Google Ventures (GOOG)</li> <li>• Salesforce.com (CRM)</li> <li>• Matrix Partners</li> <li>• Scale Venture Partners</li> <li>• General Catalyst Partners</li> </ul>	Cambridge, MA
	Hulu is an online video service that offers a selection of hit shows, clips, movies at Hulu.com and destination sites online. The company offers both ad-supported free viewing and a subscription service, Hulu Plus. Hulu's premium programming is provided by more than 350 content companies. Providence Equity Partners' sale of its 10% stake in April 2012 valued the company at \$2 billion.	<ul style="list-style-type: none"> <li>• NBCUniversal</li> <li>• Disney</li> <li>• NewsCorp</li> </ul>	Los Angeles, CA
	iCrossing is a global digital marketing agency. The company's services include SEM, SEO, web development, social media, mobile, research and analytics. iCrossing was acquired by Hearst Corporation for ~\$325 million in June 2010.	<ul style="list-style-type: none"> <li>• Hearst Corporation</li> </ul>	New York, NY
	Improve Digital, is sell-side platform (SSP) that provides web publishers with the technology to build, control and manage their own private ad market and exchange. The company's core product is the 360 Yield Platform (RTB exchange).	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	Amsterdam, Netherlands
	Infectious Media provides online media buying services to advertisers and agencies. Products include Aware (brand awareness), Acquire (customer targeting using RTB), Retarget (retargeting), X and Up (tailored display ads) and Impression Desk (Infectious Media's proprietary technology suite).	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	London, UK
	Infogroup helps companies increase sales and customer loyalty through high-value data, market intelligence and innovative digital solutions. Products include B2B database, B2C database, target ready models (targeting), YesMail Enterprise (cross-channel marketing platform), Salesgenie.com (prospecting and targeting), and infoUSA (direct marketing data).	<ul style="list-style-type: none"> <li>• CCMP Capital Advisers</li> </ul>	Omaha, NE
	InMobi is a mobile advertising network that reaches 340 million consumers, in over 165 countries, through more than 50 billion mobile ad impressions monthly. InMobi Ad Tracker integrates with the ad network and incorporates real-time analytics. The acquisition of Sprout, an HTML5 platform for mobile rich media, helps expand InMobi's offering for rich media. InMobi SmartPay offers content publishers and app developers a solution for mobile payments and in-app monetization.	<ul style="list-style-type: none"> <li>• Softbank</li> <li>• Kleiner Perkins Caufield &amp; Byers</li> <li>• Sheralo Ventures</li> </ul>	Singapore
	InsightExpress is a leading provider of digital marketing research solutions, specializing in the measurement of advertising and brand communications. Products include CreativeInsights (campaign pre-testing), Cross Media Symphony (campaign optimization and measurement), AdInsights (ad effectiveness measurement), LiveInsights (real-time measurement), Mobile AdInsights (mobile research), Mosaix (market segmentation) and Brand eValuator.	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	Stamford, CT
	Intent Media offers solutions for e-commerce sites to maximize the profitability of their site traffic through targeting. The company's strength is in the leisure category and products include Sponsored Search (enables hotels to target through online travel sites) and Ads for Travel (networks for advertisers to target customers on online travel sites).	<ul style="list-style-type: none"> <li>• Matrix Partners</li> <li>• Redpoint Ventures</li> </ul>	New York, NY

Source: Company websites and trade press reports

### Exhibit 78. Selected Private Company Profiles (continued)

Company	Company Snapshot	Financial Sponsors Include:	Headquarters
	INVIDI provides cable, satellite and IPTV operators the opportunity to target television advertising and promotion while simultaneously delivering different commercials to different houses. Products include INVIDI Ads (addressable TV advertising) and Advatar (demographic targeting).	<ul style="list-style-type: none"> <li>• Menlo Ventures</li> <li>• Business Dev't Bank of Canada</li> <li>• EnterTech Capital</li> <li>• InterWest Partners</li> <li>• Westbury Partners</li> <li>• Motorola Ventures</li> <li>• Google (GOOG)</li> <li>• WPP (WPP-LN)</li> </ul>	New York, NY
	INVISION develops software to support ad sales and traffic processes for cable networks, broadcast networks, television syndicators, radio stations, and digital publishers. Products include DealMaker Suite (inventory management and pricing optimization), DealMaker Crossroad (integrated sales and commercial operations platform), DealMaker Digital (digital ad sales management system), DealMaker Business Intelligence (analytics), Brand Allocation (allocation system), Stewardship (media performance tracking) and Traffic (media traffic system for syndicators).	<ul style="list-style-type: none"> <li>• ABS Capital Partners</li> <li>• Garvin Hill Capital Partners</li> <li>• Wellington Financial</li> </ul>	New York, NY
	Involver is a social media marketing company. Products include Audience Management Platform (publishing, monitoring, analytics) and Social Markup Language or SML (social application development tool).	<ul style="list-style-type: none"> <li>• Bessemer Venture Partners</li> <li>• Cervin Ventures</li> <li>• Western Technology Investment</li> </ul>	San Francisco, CA
	iovation protects online businesses and their end users against fraud and abuse. Verticals include retail, financial services, social network and gaming companies. Products include ReputationManager 360 (fraud management) and QuickCheck (fraud management for high volume low risk interactions such as logins).	<ul style="list-style-type: none"> <li>• Intel Capital</li> <li>• SAP Ventures</li> <li>• European Founders</li> <li>• Epic Ventures</li> </ul>	Portland, OR
	Isis is a national mobile commerce platform. The Isis mobile wallet will eliminate the need to carry cash, credit and debit cards, reward cards, coupons, tickets and transit passes, doing it all via smartphones. The Isis mobile commerce platform will be available to merchants, banks, and mobile carriers.	<ul style="list-style-type: none"> <li>• AT&amp;T Mobility (T)</li> <li>• T-Mobile USA (DT)</li> <li>• Verizon Wireless (VZ)</li> </ul>	New York, NY
	Kenshoo is a digital marketing software company that provides solutions for search marketing, social media and online advertising. Products include Kenshoo Enterprise, Kenshoo Local and Kenshoo Social, which are all part of the the Kenshoo Universal Platform.	<ul style="list-style-type: none"> <li>• Arts Alliance</li> <li>• Sequoia Capital</li> </ul>	Tel Aviv, Israel
	Klout measures social media influence based on a person's ability to drive action. The Klout Score uses data from social networks in order to measure true reach (how many people you influence), amplification (how much you influence them), and network (the influence of people in your network).	<ul style="list-style-type: none"> <li>• Kleiner Perkins Caufield &amp; Byers</li> <li>• Greyfrost Partners</li> <li>• ff Asset Management</li> </ul>	San Francisco, CA
	Knowledge Networks provides online research in marketing, media, health and social policy. Knowledge Networks Media provides insights into audience measurement and advertising effectiveness. Products include MultiMedia Mentore (media measurement and planning), Knowledge Panel (surveys), and KN Dimstore (online campaign optimization).	<ul style="list-style-type: none"> <li>• Oak Investment Partners</li> <li>• Alloy Ventures</li> <li>• Meritech Capital Partners</li> <li>• Maveron</li> </ul>	Palo Alto, CA
	Korrelate allows brand marketers to directly correlate their digital marketing spend with users who purchased their product or their competitors' product offline. Products includes O2O analytics (offline to online campaign management).	<ul style="list-style-type: none"> <li>• Avalon Ventures</li> <li>• Masthead Venture Partners</li> <li>• Avalon Ventures VIII</li> </ul>	New York, NY
	Legolas is a demand-side platform (DSP) that brings together buyers and sellers to execute audience buys. Legolas' core product is the Legolas Audience 'Futures' Marketplace.	<ul style="list-style-type: none"> <li>• Greylock Partners</li> <li>• Blumberg Capital</li> <li>• Valhalla Partners</li> </ul>	New York, NY
	LevelUp is a mobile wallet/payment company. The company offers credits and future coupons to consumers who use the system at participating merchants, fostering customer loyalty to the merchants.	<ul style="list-style-type: none"> <li>• Google Ventures (GOOG)</li> <li>• Balderton Capital</li> <li>• Highland Capital Partners</li> <li>• DreamIT Ventures</li> <li>• Bantam Group</li> </ul>	Cambridge, MA
	LifeStreet Media helps brands build mobile and social apps on Facebook, Apple/iOS and Google/Android. According to the company, it's RevJet platform has generated over 200 million social and mobile app installations and has paid out \$100mm of ad revenue to developers.	<ul style="list-style-type: none"> <li>• Nautic Partners</li> <li>• Exigent Ventures</li> </ul>	San Carlos, CA

Source: Company websites and trade press reports

### Exhibit 79. Selected Private Company Profiles (continued)

Company	Company Snapshot	Financial Sponsors Include:	Headquarters
	Linkable Networks (formerly CLOVR Media) converts TV, radio, print banner, text, video, or mobile ads into linkable offers, known as "Linkables." The company's technology allows consumers to link store-level and item-level offers directly to their credit or debit card of choice, with no point-of-sale integration, no mail-in rebates and no paper coupons. In March 2012, the company introduced My Linkables (enables Linkable offers to be mobile and shareable) and Linkable recently launched mobile APIs with mphoria and CardStar (acquired by Constant Contact).	<ul style="list-style-type: none"> <li>• Bain Capital Ventures</li> <li>• CommonAngels</li> <li>• Kepha Partners</li> <li>• Citi Ventures (C)</li> </ul>	Boston, MA
	Lithium is a social media marketing company. Products include the Social Customer Suite (hosting, monitoring and managing social conversations), LevelUp for Facebook (Facebook fan page management), Customer Intelligence Center (analytics), Lithium Social Marketing, Lithium Social Commerce and Lithium Social Support.	<ul style="list-style-type: none"> <li>• Emergence Capital</li> <li>• Shasta Ventures</li> <li>• Benchmark Capital</li> <li>• DAG Ventures</li> <li>• Tenya Capital</li> <li>• Greenspring Associates</li> </ul>	Emeryville, CA
	LiveIntent delivers real-time display ad serving within email and works with advertisers, publishers and agencies to provide ad serving, DSP/trading desk and exchanges capabilities. Products include LiveIntent Email Exchange, LiveIntent Trading Desk (email and display trading desk) and safeRTB Auction (email exchange).	<ul style="list-style-type: none"> <li>• Shasta Ventures</li> <li>• Battery Ventures</li> <li>• First Round Capital</li> <li>• Lerer Ventures</li> <li>• Grape Arbor VC</li> </ul>	New York, NY
	LiveRail provides technology for online video advertising. LiveRail handles over 2 billion video ad impressions per month for media and advertising clients. Services include real-time-bidding, yield optimization, ad serving, analytics, and private exchange solutions.	<ul style="list-style-type: none"> <li>• Pond Ventures</li> </ul>	San Francisco, CA
	LivingSocial offers is an online source for discovering local experiences. The company's products include Daily Deals, Escapes (travel), Family (kid + parent offers), Adventures (packaged activities), Takeout & Delivery (food from local restaurants) and Gourmet (high-end restaurants). The company operates in 100+ markets across six continents and recently launched a rewards credit card with Visa and Chase.	<ul style="list-style-type: none"> <li>• Amazon (AMZN)</li> <li>• Institutional Venture Partners</li> <li>• LightSpeed Venture Partners</li> <li>• Grotch Ventures</li> </ul>	Washington, D.C.
	Lotame is a data exchange company. Products include Crowd Control (audience DMP), Smart Data (audience targeting for brand campaigns), Crowd Control Intelligence (audience insight) and Goal-driven Optimized Audiences or G.O.A.L. (audience segment optimization against campaign goals).	<ul style="list-style-type: none"> <li>• Battery Ventures</li> <li>• Emergence Capital</li> <li>• Hillcrest Management</li> <li>• Pinnacle Ventures</li> </ul>	New York, NY
	LucidMedia is a demand-side platform (DSP). LucidMediaDSP with ClickSense page-level contextual analysis and real-time bidding (RTB) is available as both self-service and managed services to interactive agencies and brand advertisers.	<ul style="list-style-type: none"> <li>• Intel Capital (INTC)</li> <li>• Lake Street Capital</li> <li>• MMV Financial</li> <li>• RBC Capital Markets (RY)</li> <li>• Redleaf Group</li> </ul>	Reston, VA
	Magnetic is a search retargeting company. Products include Magnetic Frame (full-service search retargeting platform for advertisers), Magnetic Focus (self-service platform for advertisers), Magnetic Field (data buying interface), and Magnetic Force (site retargeting).	<ul style="list-style-type: none"> <li>• Charles River Ventures</li> <li>• NY Seed</li> <li>• IA Capital Partners</li> <li>• Founder Collective</li> <li>• NYC Investment Fund</li> <li>• Ron Conway</li> </ul>	New York, NY
	Marin Software provides an advertising management platform for advertisers and agencies to manage their paid search, social, display, and mobile campaigns. Marin Enterprise is designed for customers who spend \$100,000+/month on online media while Marin Professional is designed for those who spend less than \$100,000/month. Products and services include reporting and analytics, campaign management, optimization, Facebook advertising workflow, analysis and optimization solution, Marin Connect (analytics and data platform) and Marin Retargeting.	<ul style="list-style-type: none"> <li>• Crosslink Capital</li> <li>• Benchmark Capital</li> <li>• DAG Ventures</li> <li>• Focus Ventures</li> <li>• Triangle Peak Partners</li> <li>• Temasek</li> <li>• SAP Ventures</li> </ul>	San Francisco, CA
	Marketo is a revenue performance management and marketing automation company. Products include Marketo Lead Management (automated campaign management), Marketo Social Marketing (social media marketing), Marketo Sales Insight (sales lead enhancement), Marketo Revenue Cycle Analytics (measure, optimize and forecast the revenue cycle), and Spark by Marketo (SMB solution).	<ul style="list-style-type: none"> <li>• Institutional Venture Partners</li> <li>• Battery Ventures</li> </ul>	San Mateo, CA
	Maxifier is an ad optimization engine used by publishers to optimize the performance of their advertisers' premium campaigns. The adMAX product suite includes Campaign Performance Optimization (campaign management), Advertising Information Reporting (analytics), and Inventory Performance Forecasting (forecasting).	<ul style="list-style-type: none"> <li>• Eurovestech company</li> </ul>	New York, NY
	Media6Degrees is a social marketing technology company that identifies patterns in web data in order to help marketers advertise to their best new customer prospects.	<ul style="list-style-type: none"> <li>• Menlo Ventures</li> <li>• Venrock</li> <li>• U.S. Venture Partners</li> <li>• Contour Venture Partners</li> <li>• Coriolis Ventures</li> </ul>	New York, NY

Source: Company websites and trade press reports

### Exhibit 80. Selected Private Company Profiles (continued)

Company	Company Snapshot	Financial Sponsors Include:	Headquarters
 <p><b>MEDIALETS</b></p>	<p>Medialets is a mobile rich media ad platform for advertiser/agencies and publishers/developers. Products include Medialets Muse (rich media ad campaign management), Medialets Private Marketplace (mobile ad buying and planning platform) mobile ad serving/targeting and campaign analytics.</p>	<ul style="list-style-type: none"> <li>• DFJ Gotham Ventures</li> <li>• Foundry Group</li> <li>• 500 Startups</li> <li>• Great Barn Ventures</li> </ul>	New York, NY
 <p><b>MediaMath</b></p>	<p>MediaMath is a demand-side platform (DSP) that provides technology, strategy, services and insights to trade across the leading display advertising exchanges and supply sources. Products include TerminalOne (RTB, campaign management, targeting), Feature Spotlight (audience buying and private marketplace), and MathClarity (analytics). In May 2012, MediaMath spun out its agency services from the core software business, naming it Kepler Group.</p>	<ul style="list-style-type: none"> <li>• Silicon Valley Bank</li> <li>• Safeguard Scientifics</li> <li>• QED Investors</li> <li>• European Founders Fund</li> </ul>	New York, NY
 <p><b>mediaocean</b></p>	<p>MediaOcean was created through the merger of MediaBank and Donovan Data Systems, the leading providers of agency enterprise and workflow systems. Solutions include media buying and planning, media management, analytics and reporting, media sales (US only), TV radio and digital platforms, production workflow and financials. The MediaOcean OS enables agencies to orchestrate complex functions across systems, from syncing ad delivery to foot traffic in stores, to optimizing campaigns globally, to telling seamless brand stories cross-channel. MediaOcean OS offers an open source API that enables agencies and third-party developers to develop programs that easily plug into the system.</p>	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	New York, NY
 <p><b>MediaTrust</b></p>	<p>MediaTrust enables direct marketers to create and deploy pay-for-performance marketing campaigns through the MediaTrust PerformanceExchange (MTPX). MTPX is a real-time CPC bid exchange for search engine marketing. MTPX also has solutions for email campaigns and content management.</p>	<ul style="list-style-type: none"> <li>• Ropart Asset Management</li> </ul>	New York, NY
 <p><b>MERKLE</b> A Customer Relationship Marketing Agency</p>	<p>Merkle is a customer relationship marketing agency that works with clients to design, execute and evaluate integrated customer marketing programs. Products include CognitiveDATA (marketing technology), Merkle Analytics, Data Sourcing Group, and Digital CRM (social media, mobile, email, search display).</p>	<ul style="list-style-type: none"> <li>• Technology Crossover Ventures</li> </ul>	Columbia, MD
 <p><b>mixpanel</b></p>	<p>Mixpanel is a web and mobile analytics platform. Mixpanel's three key product areas are: segmentation, funnel analysis (where users came from) and cohort analysis and retention (what happens to users after they join).</p>	<ul style="list-style-type: none"> <li>• Sequoia Capital</li> <li>• Andreessen Horowitz</li> </ul>	San Francisco, CA
 <p><b>mixpo</b> MAKE VIDEO ADS SMARTER</p>	<p>Mixpo is a video advertising technology provider that enables publishers, ad networks, and agencies to deliver dynamically tailored, interactive video ads that are customized in real-time for unique audience segments. Formats include in-stream, in-banner, mobile and in-app advertising platforms. Products includes Mixpo SmartVideo (interactive video customization).</p>	<ul style="list-style-type: none"> <li>• GrowthWorks</li> <li>• Madrona Venture Group</li> <li>• SpringBank</li> <li>• TechVentures</li> <li>• Yaletown Venture Partners</li> </ul>	Seattle, WA
 <p><b>mocean mobile</b> The mobile ad serving standard</p>	<p>The Mocean Mobile platform offers publishers, mobile ad networks and app stores easy-to-use tools, analytics, and is integrated with most mobile rich media providers in the industry. Services include real-time reporting and analytics, conversion tracking, yield optimization, inventory forecasting, ad serving, and targeting.</p>	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	New York, NY
 <p><b>MULTIVIEW</b></p>	<p>MultiView is a B2B digital publishing company that creates digital publishing assets for trade associations. Its products and services include Buyer's Guides (industry specific marketplace for buyers and sellers), MultiBriefs (e-news briefs sent to members and industry professionals), MultiWeb (display advertising), and MultiView Media (education media).</p>	<ul style="list-style-type: none"> <li>• Warburg Pincus</li> </ul>	Irving, TX
 <p><b>neolane</b></p>	<p>Neolane provides conversational marketing technology. Products include Neolane Social Marketing (conversational marketing), Neolane Campaign (campaign management), Neolane Message Center (email campaign management), and Neolane Leads (lead generation).</p>	<ul style="list-style-type: none"> <li>• Auriga Partners</li> <li>• Xange Capital</li> </ul>	Newton, MA
 <p><b>netmining</b></p>	<p>Netmining is a provider of display targeting solutions. Products include LiveMarketer (profile engine) Audience Network (audience targeting) and NetMining True Interest Profile (retargeting solution).</p>	<ul style="list-style-type: none"> <li>• Arkafund</li> <li>• SYDES</li> </ul>	New York, NY
 <p><b>NETWORKED INSIGHTS</b></p>	<p>Networked Insights is an analytics software company. The company captures and analyzes millions of social media conversations from channels including blogs, forums, microblogs like Twitter and social networks like Facebook. Services include Audience Intelligence (brand discovery, audience identification), Trend Discovery Engine (trend discovery), Brand Perceptions, and Media Optimization (TV, digital media).</p>	<ul style="list-style-type: none"> <li>• Kegonsa Capital Partners</li> <li>• Goldman Sachs Asset Mgmt (GS)</li> </ul>	Madison, WI

Source: Company websites and trade press reports

### Exhibit 81. Selected Private Company Profiles (continued)

Company	Company Snapshot	Financial Sponsors Include:	Headquarters
	OpenX is an ad exchange and digital ad serving company that enables publishers to manage their ad inventory. Products include OpenX Enterprise (ad serving), OpenX OnRamp (customizable ad serving platform), OpenXMarket (ad exchange), and Orange Ad Market (European ad exchange).	<ul style="list-style-type: none"> <li>• Index Ventures</li> <li>• First Round Capital</li> <li>• SAP Ventures</li> <li>• AOL Ventures (AOL)</li> <li>• Mitsui Global Investment</li> <li>• Presidio Ventures</li> <li>• Accel Partners</li> </ul>	Pasadena, CA
	Operative is a sell-side platform (SSP). The Operative.One digital platform brings together the business processes and systems necessary to package, sell, traffic, manage, optimize and collect revenue via advertising. Other services include ad trafficking, campaign management, and ad serving support.	<ul style="list-style-type: none"> <li>• Edison Venture Fund</li> <li>• Orix Venture Finance</li> </ul>	New York, NY
	OptiMine Software is an advertising optimization provider. The flagship product, OptiMine Paid Search Bid Management, forecasts the performance of paid search ads and automatically sets optimal bids. OptiMine's SaaS offering is model-based rather than rule-based, optimizes at the keyword level, and is automated.	<ul style="list-style-type: none"> <li>• Bill Watkins (angel investor)</li> <li>• Stuart Larkins (angel investor)</li> <li>• Calument Venture Fund</li> </ul>	St. Paul, MN
	Pardot is a B2B cloud marketing automation software provider whose platform features CRM integration, email marketing, lead nurturing, lead scoring and ROI reporting. Products include Pardot Marketing Automation (cloud-based marketing automation solution), Pardot Mobile for iPhone (access Pardot records on iPhone) and LeadDeck (Pardot desktop application).	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	Atlanta, GA
	Payfone authorizes and processes mobile payment transactions for app stores and merchants. Payfone processes transactions using the same network used by mobile operators giving consumers a credit card-like mobile purchasing experience on their mobile phones. The flagship product is called SmartBill.	<ul style="list-style-type: none"> <li>• American Express (AXP)</li> <li>• Verizon Ventures (VZ)</li> <li>• Rogers Ventures</li> <li>• B'berry Partners Fund (RIMM)</li> <li>• Opus Capital</li> <li>• RRE Ventures</li> </ul>	New York, NY
	Pluris Marketing is a data provider specializing in processing large data to create offer catalogues and execute cross-channel offer optimization programs. Products and services include MORE (offer management) and Integrated Marketing Solutions or IMS (segmentation, targeting, campaign management, reporting, analytics and strategy).	<ul style="list-style-type: none"> <li>• Providence Equity Partners</li> </ul>	Boston, MA
	Pontiflex operates mobile advertising platform for "signup ads" on mobile platforms. With signup ads, consumers can opt in to receive ads from the brands they like without leaving a mobile app or website. In March 2012, the company launched its self-service platform called AdLeads	<ul style="list-style-type: none"> <li>• New Atlantic Ventures</li> <li>• Tribeca Venture Partners</li> <li>• RRE Venture</li> </ul>	Brooklyn, NY
	PubMatic is a sell-side platform (SSP) that combines an impression-level ad auction, brand protection tools, and enterprise ad operations support to online publishers. Products include PubMatic Premier (ad solutions for large media companies), AdFlex (campaign-based inventory purchasing system for ad networks), REVV (yield optimization platform) and PubMatic Ad Auction Engine. The recent acquisition of MobilPrimo expands platform to mobile and allows for cross-device support for publishers.	<ul style="list-style-type: none"> <li>• Draper Fisher Jurvetson</li> <li>• Helion Venture Partners</li> <li>• Nexus India Capital</li> <li>• Nexus Venture Partners</li> </ul>	Palo Alto, CA
	PulsePoint was created via the merger of ContextWeb and Datran Media, and provides contextual advertising, ad exchange and email marketing services across display, social, mobile, video and email. Services include data management and media mix optimization, content distribution, contextual ad exchange capabilities, performance price optimization, RTB and crowd sourcing.	<ul style="list-style-type: none"> <li>• Draper Fisher Jurvetson</li> <li>• DFJ Gotham Ventures</li> <li>• DFJ New England</li> <li>• Investor Capital Growth</li> <li>• Updata Partners</li> <li>• VantagePoint Capital Partners</li> </ul>	New York, NY
	Quantcast connects the planning, buying, and media fulfillment processes, delivering consistent and accountable audiences. Products include Quantcast Measurement (audience measurement solution), Quantcast Lookalikes (targeting) and Quantcast demographics (audience segmentation)	<ul style="list-style-type: none"> <li>• Founders Fund</li> <li>• Polaris Venture Partners</li> <li>• Revolution Ventures</li> <li>• Cisco (CSCO)</li> </ul>	San Francisco, CA
	RadiumOne is a social advertising company. The company's Dynamic Audience Platform (DAP) uses social interaction data to capitalize on real-time interests. Products on the RadiumOne DAP include Via.Me (social publishing platform), Po.st (social sharing monetization platform), Expressions (social ads), and PingMe (cross platform group messaging).	<ul style="list-style-type: none"> <li>• Adams Street Partners</li> <li>• Trinity Ventures</li> <li>• Crosslink Capital</li> <li>• DFJ Esprit</li> </ul>	San Francisco, CA
	Rallyverse is a social media monitoring provider. Rallyverse examines a brand's content assets (blog posts, videos, images, etc.) as well as approved third-party content sources to discover items and links that match trending topics, enabling marketers to connect with the right messages to consumers in the right places such as Facebook fan pages.	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	New York, NY

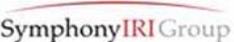
Source: Company websites and trade press reports

### Exhibit 82. Selected Private Company Profiles (continued)

Company	Company Snapshot	Financial Sponsors Include:	Headquarters
	Rapleaf targeted advertising and email company. Products include Instant Data (email audience data and analytics), personalized emails, and media recommendation systems.	<ul style="list-style-type: none"> <li>• Rembrandt Venture Partners</li> <li>• The Founders Fund</li> </ul>	San Francisco, CA
	Rocket Fuel is an ad network focused on large brand marketers. Products include Audience Booster (targeting), Brand Booster Suite (campaign optimization), Social Booster (social media optimization), Tune-in booster (video optimization across online, social and mobile), Video Booster (online video targeting/optimization), Mobile Booster (mobile video), Retargeting Booster (retargeting), Search Booster (search), and Insights Booster (analytics).	<ul style="list-style-type: none"> <li>• Mohr Davidow</li> <li>• Nokia Growth Partners</li> <li>• Northgate</li> <li>• Labrador Ventures</li> <li>• MF Capital</li> </ul>	Redwood Shores, CA
	The Rubicon Project is a sell-side platform (SSP). Products, including REVV Yield Optimization Platform and REVV Marketplace (display advertising marketplace), are engineered to accelerate revenue for premium Web publishers and recently acquired Fox Audience Network (ad technology platform).	<ul style="list-style-type: none"> <li>• Clearstone Venture Partners</li> <li>• Mayfield Fund</li> <li>• IDG Ventures</li> <li>• Peacock Equity</li> </ul>	Los Angeles, CA
	SAS is a business analytics and services company. SAS for Media services include audience insight, advertising yield, media mix and modeling and the Customer Intelligence Platform product provides strategy, planning and analytics to effectively manage marketing programs. Its products include: SAS Marketing Operations Management (web-based EMM solution), SAS Marketing Mix Advisor (analyze, forecast and optimize mix of advertising and promotions), SAS for Marketing Performance Management (combines tactical and strategic insights and delivers them via a single marketing framework).	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	Cary, NC
	Seethroo examines user-generated content to provide real-time targeting data for advertising networks. Services include content-driven behavioral targeting, analytics and trend-reporting and link-spam filtering.	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	Los Angeles, CA
	Silverpop is an engagement marketing platform. Products include Silverpop Engage, which provided opt-in email marketing, lead scoring, lead generation, lead nurturing, marketing automation, reporting and analytics and social engagement.	<ul style="list-style-type: none"> <li>• D.E. Shaw</li> <li>• Draper Fisher Jurvetson</li> <li>• ePlanet Partners</li> <li>• European Founders Fund</li> <li>• NeoCarta Ventures</li> <li>• TTV Capital</li> </ul>	Atlanta, GA
	Smaato is a mobile advertising company. SOMA (Smaato Open Mobile Advertising) is Smaato's mobile ad optimization platform that partners with 70+ mobile publishers and 400K+ app developers and publishers.	<ul style="list-style-type: none"> <li>• Neidhart</li> <li>• Aeris Capital</li> </ul>	San Francisco, CA
	Hyper Marketing brings together the services of SolutionSet, MediaWhiz and D.L. Ryan to create an integrated performance marketing agency network. It offers relationship marketing, digital solutions, local marketing, data management and media services. It is the largest independent marketing services network in North America.	<ul style="list-style-type: none"> <li>• Lake Capital</li> </ul>	Chicago, IL
	Specific Media is a digital media company driving viewership for video content owners. Services include, original programming for advertisers, addressable advertising, premium ad network, multiple video ad formats data and analytics. Specific Media bought video ad network BBE in 2010.	<ul style="list-style-type: none"> <li>• Enterprise Partners</li> <li>• Francisco Partners</li> </ul>	Irvine, CA
	Spectate is a SaaS marketing solution for tracking and analyzing websites, site SEO, website content, social media, and email marketing. Spectate provides a holistic view of Google Analytics, social media, competitor monitoring, and keyword monitoring, while assembling analysis in a central location.	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	Atlanta, GA
	Spongecell transforms standard banner ads into video ads. Spongecell has capabilities that include video, social media, interactive maps, carousels, and downloadable/SMS coupons and are easily integrated without disrupting the creative workflow.	<ul style="list-style-type: none"> <li>• Eric Schmidt</li> <li>• Jim Palotta</li> <li>• Brian Rooney</li> <li>• Silverhaze Partners</li> <li>• Halo Group</li> <li>• Interpublic (IPG)</li> <li>• Pilot Group</li> </ul>	New York, NY
	SpotXchange is an online video ad network, reaching more than 110 million unique visitors each month. Products include Otto (video advertising optimization technology) SpotMarket RTB (real-time bidding) and Turn Platform (partnership with Turn allows marketers to integrate SpotXchange inventory into display and mobile campaigns).	<ul style="list-style-type: none"> <li>• H.I.G. Growth Partners</li> </ul>	Denver, CO

Source: Company websites and trade press reports

### Exhibit 83. Selected Private Company Profiles (continued)

Company	Company Snapshot	Financial Sponsors Include:	Headquarters
 Square	Square allows merchants to accept credit card payments through mobile phones using an attachment to swipe a credit card. Square's platform currently works with iPhone, iPad, and Android. Most major credit companies accept the service and Square charges a 2.75% fee with every transaction. The system is targeted to small businesses as an alternative to traditional credit card payment systems.	<ul style="list-style-type: none"> <li>• Kleiner Perkins Caulfield &amp; Byers</li> <li>• Tiger Global Management</li> </ul>	San Francisco, CA
 StrikeAd Powering mobile advertising	StrikeAd is a mobile advertising company. StrikeAd's platform allows media buyers and planners to create dynamic campaigns across multiple Supply Side Platforms, Ad Networks, operators and territories. Products include StrikeAd Fusion (mobile DSP) and StrikeAd Engage (mobile campaign management).	<ul style="list-style-type: none"> <li>• eValue Venture Capital</li> </ul>	London, UK/ New York, NY
 StrongMail.	StrongMail is an engagement marketing platform. Products include Message Studio (email marketing solution), StrongMail Lifecycle Marketing (automated event-triggered email marketing), StrongMail On-Demand (turnkey on-demand marketing solution), StrongDelivery Tools (campaign delivery and tracking management), StrongMail Influencer (word-of-mouth and referral marketing solution), StrongMail Social Direct (social media publishing), and StrongMail Social Notes (social sharing tool).	<ul style="list-style-type: none"> <li>• Sequoia Capital</li> <li>• Evercore Ventures</li> <li>• Globespan Capital Partners</li> <li>• DAG Ventures</li> </ul>	Redwood City, CA
 SymphonyIRI Group	SymphonyIRI Group provides solutions and services for driving revenue and profit in CPG, retail and healthcare companies. SymphonyIRI offers two families of solutions: Core IRI solutions for market measurement and Symphony Advantage solutions for enabling new growth opportunities in marketing, sales, shopper marketing, and category management. SymphonyIRI solutions combine content, analytics, and technology.	<ul style="list-style-type: none"> <li>• New Mountain Capital</li> </ul>	Chicago, IL
 SYNAPSE	Syncapse is a social media management company. The Syncapse platform is tailored for large enterprises. Products and services include the Syncapse Analytics Suite, social marketing reports and SocialSYNC (data and content management).	<ul style="list-style-type: none"> <li>• ABS Capital Partners</li> <li>• BDC</li> </ul>	Toronto, Canada
 tapad™	Tapad operates a real-time advertising platform for smartphones and smart TVs. Tapad combines audience intelligence and cross-device targeting, enabling advertisers to reach consumers no matter what device they are using.	<ul style="list-style-type: none"> <li>• Metamorphic Ventures</li> <li>• Avalon Ventures</li> <li>• Quotidian Ventures</li> <li>• Angel investors</li> </ul>	New York, NY
 TAP ME!	Tap me is a mobile game advertising developer. Tap me integrates within a mobile game, advertisements and coupons or rewards that users can win. Players are able to save the coupons to a dashboard, or share them with friends over social networks if they don't want to use them.	<ul style="list-style-type: none"> <li>• Hyde Park Angels</li> <li>• i2A Fund</li> <li>• David Cohen</li> </ul>	Chicago, IL
 targetspot	TargetSpot is a digital audio advertising network. Advertisers work with TargetSpot or use its self-service platform to create campaigns delivering audio, display and pre-roll video advertising across online properties. TargetSpot has 80 distribution partners, including CBS Radio, AOL, Entercom, Live 365, Yahoo! Music, and MySpace Music. TargetSpot provides targeting by demographics, listening preferences, and geography down to zip code level as well as real time reporting and analytics.	<ul style="list-style-type: none"> <li>• Bain Capital Ventures</li> <li>• CBS Radio (CBS)</li> <li>• Milestone Venture Partners</li> <li>• Union Square Ventures</li> </ul>	New York, NY
 Taykey	Taykey performs semantic analysis across the web in real-time, to find out what's trending for an advertiser's demographics at any given moment, and automatically delivers ads on the appropriate social media and display ad networks.	<ul style="list-style-type: none"> <li>• Sequoia Capital</li> <li>• Softbank Capital</li> <li>• CP Lantern</li> </ul>	Tel Aviv, Israel/ New York, NY
 TellApart	TellApart is an audience retargeting company. Based on TellApart's data platform, the company targets the products that the consumer has shown the most engagement with. Products include TellApart Data Platform and TellApart Transactional Retargeting.	<ul style="list-style-type: none"> <li>• Greylock Partners</li> <li>• Bain Capital Ventures</li> </ul>	Burlingame, CA
 TRA	TRA's Media TRAnalytics platform matches household TV tuning data with consumer purchase data, helping clients to find the program audience that buys the advertised products. Other Products include Custom Analytics and TV HealthRatings (audience targeting for pharmaceutical industry).	<ul style="list-style-type: none"> <li>• Intel Capital (INTC)</li> <li>• WPP (WPP.LN)</li> <li>• Arbitron (ARB)</li> </ul>	New York, NY
 thetradedesk	The Trade Desk is a buying platform for digital media. Products include The DESK (DSP for search, email, social, video and display) and The AD SERVER (data management, tracking and reporting).	<ul style="list-style-type: none"> <li>• Founder Collective</li> <li>• IA Ventures</li> <li>• Wider Wake Networks</li> </ul>	Ventura, CA
 TRAFFIQ DIGITAL MEDIA. SMARTER.	TRAFFIQ is an end-to-end self-service digital media planning and buying platform. Products include TRAFFIQ Search Desk (SEM), TRAFFIQ Trading Desk (exchange), and Insight Engine (analytics). TRAFFIQ's media budget optimization business was recently spun off into its own company called Rare Crowds.	<ul style="list-style-type: none"> <li>• Court Square Ventures</li> <li>• Grotech Ventures</li> <li>• GSA Venture Partners</li> </ul>	New York, NY

Source: Company websites and trade press reports

### Exhibit 84. Selected Private Company Profiles (continued)

Company	Company Snapshot	Financial Sponsors Include:	Headquarters
	TRANZACT leverages and integrates digital data and direct marketing solutions to deliver qualified leads, fully provisioned sales, and customer management systems.	<ul style="list-style-type: none"> <li>• Veronis Suhler Stevenson</li> </ul>	Fort Lee, NJ
	Tremor Video is a video ad network and technology provider. Its SE2 product offers advertisers reach and engagement in brand-safe environments, while Acudeo provides publishers the ability to manage and monetize video impressions. Other Products include VideoHub (video advertising buying/measurement/campaign management), AdLab and Mobile Creative Platform (toolset that helps advertisers build and deliver interactive video across mobile). Tremor purchased in-stream video ad network ScanScout in 2010 and video analytics platform InPlay from TubeMogul in January 2012, which it will integrate into VideoHub.	<ul style="list-style-type: none"> <li>• Canaan Partners</li> <li>• DFJ Growth Fund</li> <li>• Draper Fisher Jurvetson</li> <li>• Edbi</li> <li>• General Catalyst Partners</li> <li>• Masthead Venture Partners</li> <li>• Meritech Capital Partners</li> <li>• SAP Ventures</li> <li>• Time Warner (TWX)</li> <li>• Triangle Peak</li> </ul>	New York, NY
	Triggitt is a demand-side platform (DSP) with both a full-service and self-service offering. Triggitt offers full account management for advertisers or agencies with large data driven campaign budgets.	<ul style="list-style-type: none"> <li>• Spark Capital</li> <li>• The Foundry Group</li> <li>• Triple Point Capital</li> <li>• Westwood Ventures</li> <li>• DG Incubation</li> </ul>	San Francisco, CA
	TruSignal is an online data company that works with partners such as data management and demand-side platforms as well as exchanges. TruSignal creates the "TruSignal Ideal Audience" targeting formula which is compatible with rich media campaigns on video pre-roll networks, trading desks, premium publisher sites, portals, and mobile networks.	<ul style="list-style-type: none"> <li>• Split Rock Partners</li> <li>• Tenaya Capita</li> <li>• RedPoint Ventures</li> </ul>	St. Cloud, MN
	TubeMogul is a online video DSP and ad technology provider. TubeMogul integrates real-time media buying, ad serving, targeting, optimization and brand measurement. Products include PlayTime platform (video brand campaign management), OneLoad video, InPlay (video analytics), and PlaySafe (ad verification).	<ul style="list-style-type: none"> <li>• Foundation Capital</li> </ul>	Emeryville, CA
	Turn is a demand-side platform (DSP) and data management platform (DMP). The Turn Audience Platform is the DMP that centralizes data from both online and offline sources combining it with analytics to drive multi channel marketing decisions. The Turn Media Platform is the DSP that assists in the planning, buying, managing and reporting of digital media campaigns.	<ul style="list-style-type: none"> <li>• Greenspring Associates</li> <li>• Focus Ventures</li> <li>• Norwest Venture Partners</li> <li>• Shasta Ventures</li> <li>• Trident Capital</li> </ul>	Redwood City, CA
	Twitter is an online social network and microblogging service. It allows users to send and receive messages up to 140 characters long. Twitter earns revenue through its Promoted Products which include Promoted Tweets (extends the reach of tweets to a broader audience), Promoted Trends (feature a trending topic at the top of Twitter's trending topics list), Promoted Accounts (quickly scale a follower base), enhanced profile pages, and analytics.	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	San Francisco, CA
	Undertone's Digital Advertising Suite is a single solution to manage multi-format, digital ad campaigns for advertisers and publishers. The product portfolio supports targeting, optimization and reporting across display and in-stream video.	<ul style="list-style-type: none"> <li>• JMI Equity</li> <li>• Orix Venture Finance</li> </ul>	New York, NY
	Vibrant is a contextual ad technology provider. Products include VXPlatform (contextual advertising platform), which powers Vibrant Image (ad overlay), Vibrant In-Text Ads, Vibrant Display (display creative that matches page content), Vibrant Bar (toolbar), and Vibrant Related Content (related content navigation).	<ul style="list-style-type: none"> <li>• ABS Capital Partners</li> <li>• Gorilla Park Ventures</li> </ul>	New York, NY
	Videology is the recently rebranded TidalTV. Videology provides campaign optimization targeting, data and analytics to publishers, agencies, and marketers. The Videology Addressable Audience Platform is a screen-agnostic video advertising technology delivering ads across online, mobile and connected TVs.	<ul style="list-style-type: none"> <li>• Comcast Interactive Capital</li> <li>• New Enterprise Associates</li> <li>• Valhalla Partners</li> <li>• Boulder Ventures</li> <li>• New Market Growth Fund</li> </ul>	Baltimore, MD
	Visible Measures is an analytics and advertising platform for social video that powers the Viewable Media choice-based video ad network. The company's flagship products are Visible Measures for Advertisers (VM/A) and Visible Measure for Publishers (VM/P).	<ul style="list-style-type: none"> <li>• General Catalyst Partners</li> <li>• Mohr Davidow Ventures</li> <li>• DAG Ventures</li> <li>• Advance Publications</li> </ul>	Boston, MA

Source: Company websites and trade press reports

### Exhibit 85. Selected Private Company Profiles (continued)

Company	Company Snapshot	Financial Sponsors Include:	Headquarters
	Visible World is a provider of addressable television advertising solutions that can deliver campaigns to approximately 80% of US cable television households. Products include Visible World (addressable TV advertising) and VisibleWorld Conductor (campaign management).	<ul style="list-style-type: none"> <li>• Adams Street Partners</li> <li>• Alliance Bernstein</li> <li>• Comcast Ventures (CMCSA)</li> <li>• DawnTreader</li> <li>• Leucadia National Corp</li> <li>• Sofus Capital</li> <li>• Time Warner Cable (TWC)</li> <li>• Viacom (VNN)</li> <li>• Waterview Advisors</li> <li>• WPP (WPP-LN)</li> </ul>	New York, NY
	Visible is a social media monitoring, analytics, and services provider for enterprises. Products include Maestro (social listening and analysis platform), Visible Intelligence (social hub) and V.I.Q (social performance dashboard). Recently acquired Cymphony adds another large from the social media monitoring and analytics space.	<ul style="list-style-type: none"> <li>• Investor Growth Capital</li> <li>• Joe Grano</li> <li>• Ignition Partners</li> </ul>	Bellevue, WA
	Vizu brings the metrics used to measure brand advertising effectiveness in the offline world to the online medium. Vizu's Brand Advertising Effectiveness platform includes Audience Incite (audience characterization solution) and Ad Catalyst (campaign measurement and optimization).	<ul style="list-style-type: none"> <li>• Amicus Capital</li> <li>• Angels Forum</li> <li>• Draper Fisher Jurvetson</li> <li>• Greycroft Partners</li> </ul>	San Francisco, CA
	Visual IQ is a cross channel marketing intelligence software provider. The company's IQ Intelligence Suite consists of several products designed for marketers and agencies: IQ Insight (dashboard and reporting interface), IQ Envoy (attribution modeling for cross channel optimization), Audience IQ (demographic and behavioral data and audience analytics) and IQ Sage (marketing data modeling and forecasting).	<ul style="list-style-type: none"> <li>• Fog City Capital</li> </ul>	Needham, MA
	WebTrends provides Web analytics and online marketing solutions. Products include WebTrends Social (social media management), WebTrends Mobile Analytics, Reinvigorate (web analytics), Webtrends Optimize (optimization and targeting), and Segment and Score (targeting).	<ul style="list-style-type: none"> <li>• El Dorado Ventures</li> </ul>	Portland, OR
	WhaleShark Media is a marketplace for national coupons and deals. The WhaleShark Media portfolio of websites includes RetailMeNot.com, VoucherCodes.co.uk, Deals.com, Deals2Buy.com, CouponSeven.com, CouponShare.com, and Gutscheine-Codes.de.	<ul style="list-style-type: none"> <li>• Adams Street Partners</li> <li>• Austin Ventures</li> <li>• Google Ventures</li> <li>• Institutional Venture Partners</li> <li>• J.P. Morgan Asset Management</li> <li>• Norwest Venture Partners</li> </ul>	Austin, TX
	Wildfire provides social media marketing software. Wildfire's Social Marketing Suite combines social promotion and advertising software, mobile and desktop page management, messaging and sophisticated real-time analytics in one platform. Products include Promotion Builder (build promotions across multiple social networks), Page Manager (create custom social pages), Messenger (manage messaging across social networks), and Analytics.	<ul style="list-style-type: none"> <li>• Summit Partners</li> </ul>	Redwood City, CA
	[x+1] work with brands, agencies and media companies to determine the most valuable customer attributes and then interact with them across multiple IP touch-points. The [x+1] Origin Digital Marketing Hub platform includes the Origin Media DSP, Origin Analytics, Origin Data Management Platform and Origin Site (site optimization). The platform is powered by the Predictive Optimization Engine (POE) which learns how messages affect customer behavior at key points in the purchase process and leverages that knowledge to drive conversion.	<ul style="list-style-type: none"> <li>• Intel Capital</li> <li>• Advanced Technology Ventures</li> <li>• Bantam Group</li> <li>• Echelon Ventures</li> <li>• WS Capital</li> <li>• Blue Chip Venture Company</li> <li>• Hudson Venture Partners</li> </ul>	New York, NY
	XA.net helps clients buy media and data via real-time and non-real-time systems including advertising exchanges, marketplaces, aggregators and publishers. Products and services include PlatformX (online campaign management), CPMatic (media buying platform), optim.al (Facebook ad platform) real-time bidding, targeting and retargeting.	<ul style="list-style-type: none"> <li>• Not available</li> </ul>	San Francisco, CA
	Yieldex addresses publishers' need for tools to manage and optimize their inventory, including accurate forecasting of overlapping inventory and best possible campaign allocation. The company's primary product is called Ad Revenue Manager (ARM) and its complimentary products are called Deal Planner and Revenue Planner.	<ul style="list-style-type: none"> <li>• Triangle Peak Partners</li> <li>• Hearst Ventures</li> <li>• Sequel Venture Partners</li> <li>• Madrona Venture Group</li> <li>• FPP Holdings</li> </ul>	New York, NY

Source: Company websites and trade press reports

### Exhibit 86. Selected Private Company Profiles (continued)

Company	Company Snapshot	Financial Sponsors Include:	Headquarters
	<p>YuMe is a video advertising technology company. YuMe's Relevance Engine powers both its premium in-stream video ad network, The YuMe Connected Audience Network, and its advertising management solutions, ACE for Publishers and ACE for Advertisers. The YuMe Relevance Engine matches the right ad to the right audience on whatever screen they are viewing – PC, mobile, or connected TV.</p>	<ul style="list-style-type: none"> <li>• Samsung Ventures</li> <li>• Translink Capital</li> <li>• Accel Partners</li> <li>• BV Capital</li> <li>• DAG Ventures</li> <li>• Khosla Ventures</li> <li>• Menlo Ventures</li> </ul>	<p>Redwood City, CA</p>
	<p>ZEDO is an ad server for publishers. ZEDO provides premium publishers with options to help increase their revenue for all three types of inventory: direct, self service, and remnant without switching ad servers. Products and services include Zed Ad Server (ad serving, tracking, trafficking), AdNet RevMax (yield optimization), AdMagic (performance measurement), and mobile ad serving solutions.</p>	<ul style="list-style-type: none"> <li>• Andheion Capital II</li> <li>• Russian Hill Ventures</li> <li>• Wilson Sonsini Investments</li> <li>• Esther Dyson</li> </ul>	<p>San Francisco, CA</p>

Source: Company websites and trade press reports

## Appendix A: IP Marketing Acquisitions

### Exhibit 87. Selected Acquisitions

Date	Acquirer	Target	Target company offerings
6/4/2004	Aol	Advertising.com	Performance-based ad network
4/13/2007	Google	DoubleClick	Ad serving and diversified digital marketing technology. Purchased for \$3.1 billion.
4/19/2007	Legardere	Jumpstart	Vertical ad network
4/30/2007	Yahoo!	RightMedia	Ad exchange
5/15/2007	Aol	Third Screen Media	Mobile ad network
5/16/2007	Aol	ADTECH	Ad serving and diversified digital marketing technology. Purchased for \$3.1 billion.
5/17/2007	WPP	24/7 Real Media	Ad serving and ad network
5/18/2007	Microsoft	aQuantive	Atlas ad serving, Razorfish digital agency, DrivePM ad network Acquired for \$6 billion.
6/24/2007	Aol	Tacoda	Behavioral targeted ad network. Acquired for \$275 million.
7/26/2007	Microsoft	AdECN	Ad exchange
9/4/2007	Yahoo!	BlueLithium	Ad network
9/18/2007	Nokia	Enpocket	Mobile ad network
10/26/2007	Microsoft	Facebook	Bought 1.6% share for \$240 million valuing Facebook at \$15 billion at the time.
11/6/2007	Aol	Quigo	Contextually targeted ad network. Acquired for \$300 million.
1/24/2008	GSI Commerce	e-Dialog	Email services provider
4/29/2008	Cox Enterprises	Adify	Ad network. Acquired for \$300 million.
5/8/2008	DG FastChannel	Enliven Marketing Technologies	Included Unicast rich media ad serving platform
6/18/2008	Microsoft	Navic Systems	Interactive television advertising solutions.
7/10/2008	WPP Group plc	Taylor Nelson Sofres	Custom and syndicated market research
10/21/2008	Akamai	Acerno	Ad network
7/28/2009	IBM	SIFSS	Predictive analytics
10/10/2009	Publicis Group	Razorfish	Full-service digital agency
10/23/2009	Adobe Systems	Omniture	Web analytics and digital marketing services technology
11/3/2009	Groupe Aeroplan	Carlson Marketing	Direct marketing services, including loyalty programs.
11/9/2009	Google	Admob	Mobile ad network
11/23/2009	Google	Teracent	Creative optimization
1/5/2010	Apple	Quattro Wireless	Mobile ad network. Acquired for \$275 million.
1/26/2010	Dentsu Inc.	Innovation Interactive	Performance-based digital marketing services
4/14/2010	MediaMath	Adroit	Creative optimization
5/4/2010	Nielsen	GlanceGuide	Video analytics
5/25/2010	CDC Software	Marketbright	Marketing automation
5/28/2010	Oracle	Market2Lead Technology	Marketing automation
6/1/2010	GSI Commerce	Fetchback	Retargeting
6/2/2010	Alliance Data Systems	Equipax Database Services	Direct marketing services
6/2/2010	Hearst Corporation	iCrossing	SEM, social marketing and digital marketing services
6/3/2010	Google	Invite Media	Demand-side platform
6/11/2010	CrowdGather	ADISN	Social media marketing agency
6/15/2010	IBM	Coremetrics	Web analytics and digital marketing services technology
7/9/2010	Automatic Data Processing	Cobalt Group	Digital marketing services for the automotive industry.
7/29/2010	Aegis Group	Mitchell Communications	Full-service agency services
8/10/2010	Webtrends	Transpond	Social and mobile marketing services
8/13/2010	IBM	Unica	Web analytics and enterprise marketing management
10/1/2010	Velti	Mobclix	Mobile ad exchange
10/5/2010	Yahoo!	Dapper	Creative optimization
10/16/2010	American Express	Loyalty Partner GmbH	Coalition loyalty programs
10/18/2010	Specific Media	BBE	Web video clips for advertisers
10/18/2010	Operative	Solbright	Ad management software provider
11/1/2010	The Rubicon Project	Fox Audience Network	Enhance end-to-end display platform
11/8/2010	Tremor Media	ScanScout	Online video advertising
11/10/2010	Undertone	Jambo Media	Online video advertising
1/10/2011	GSI Commerce	ClearSaleing	Analytics and attribution
1/18/2011	Adobe Omniture	Demdex	Data management platform
1/26/2011	Bluekai	TrackSimple	Media campaign analytics
1/31/2011	Motricity, Inc.	Adenyo	Diversified online and mobile marketing solutions
2/2/2011	Teradata	Aprimo	Diversified digital marketing services
2/4/2011	OMC's Diversified Agency Services	The Modellers	Analytics
3/1/2011	Click Forensics	Adometry	Ad analytics and verification
3/24/2011	Collective	Oggifnogi	Rich media analytics
3/28/2011	eBay	GSI Commerce	Diversified e-commerce and IP marketing solutions
3/29/2011	Collective	WebTV Enterprise	Online video ad network
3/30/2011	Salesforce.com	Radian6 Technologies	Social media monitoring and listening
4/8/2011	Blinkx	Burst Media	Ad network
4/18/2011	Walmart	Kosmix	Search technology
4/27/2011	Alliance Data Systems	Aspen Marketing Services	Direct marketing agency
4/28/2011	MediaBank	AdBuyer	Demand-side platform
5/2/2011	Limelight Networks	Clickability	Web content management
5/4/2011	Efficient Frontier	Context Optional	Social marketing agency. Acquired for \$50 million.
5/17/2011	Publicis Groupe	Rosetta Marketing Group	Full-service digital agency, with strong healthcare practice
5/17/2011	WPP Digital	nPario	Data analytics
5/18/2011	Yahoo!	Stol	Publisher ad platform
6/14/2011	Google	Admeld	Sell-side platform
6/14/2011	Emailvision	smartFOCUS	Social media marketing
6/16/2011	HubSpot	Performable	Marketing automation

Source: Company reports and trade press reports

**Exhibit 88. Selected Acquisitions (continued)**

Date	Acquirer	Target	Target company offerings
6/16/2011	DG	MediaMind	Rich media ad serving and buying. Acquired for \$517 million.
6/20/2011	Augme Technologies	Jagtag	2D barcode developer
7/6/2011	Collective	Tumri	Creative optimization
8/2/2011	Valueclick	Dotomi	Retargeting.
8/2/2011	InMobi	Sprout	Rich media/HTML5 ad creation
8/4/2011	comScore	AdXpose	Ad verification
8/8/2011	Webtrends	Reinvigorate	Real-time analytics
8/9/2011	Nielsen	Marketing Analytics	Analytics
8/15/2011	Dentsu	AdJug	Ad exchange
8/18/2011	HubSpot	oneforty	Social media marketing
8/30/2011	DG	EyeWonder	Rich media ad serving and creation. Purchased for \$66 million.
8/30/2011	List Services	Accession Media	Digital ad agency
9/13/2011	Exponential	AdoTube	Online video ad network
9/14/2011	Wal-Mart	OneRiot	Mobile and social ad targeting
9/22/2011	Datran Media	ContextWeb	Diversified digital marketing services, merged company renamed PulsePoint
9/26/2011	MediaBank	Donovan	Merged to form MediaOcean, the leading provider of agency software
9/26/2011	Velti	Air2Web	Mobile customer relationship management
9/27/2011	Mobile Interactive Group (MIG)	Digital Jigsaw	Digital agency
10/5/2011	Silverpop	PlacePunch	Location-based marketing services
10/11/2011	NeuStar	TARGUS Information Services	Online data services
10/17/2011	Inuvo	Vetro	Merger to create more scaled diversified marketing solutions
11/1/2011	Clearspring	XGpah	Social data analytics
11/1/2011	Yahoo!	Interclick	Data management platform and ad network
11/1/2011	Adobe	Auditude	Online video ad management
11/1/2011	Adknowledge	AdParlor	Social media marketing tools
11/2/2011	Infusionsoft	CustomerHub	Content management
11/8/2011	Adconian Media Group	smartclip	Online video advertising
11/9/2011	Blinkx	Prime Visibility Media Group (PVMG)	Video advertising technology
11/15/2011	Velti	Mobile Interactive Group (MIG)	Mobile marketing
11/19/2011	Webxu	Lot6 Media	Customer acquisition solutions
11/21/2011	eBay	Hunch	Recommendation personalization
11/30/2011	Adobe	Efficient Frontier	SEM, social marketing and digital marketing services
12/2/2011	SDL	Alterian	Marketing customer relationship management
12/7/2011	iCrossing	Red Aril	Audience optimization platform
12/7/2011	24/7 Real Media	Panache	Online video advertising
12/8/2011	IBM	DemandTec	Retail price optimization
12/14/2011	RichRelevance	Searchandise	Retailer search monetization
12/14/2011	RadiumOne	Focal Labs	Photo-sharing and geo-location app developer
1/5/2012	@WalmartLabs	Small Society	Mobile ad agency
1/9/2012	DataXu	Mexad	Demand-side platform (Europe)
1/12/2012	SolutionSet MediaWhiz	D.L. Ryan	Integrated performance marketing, merged company renamed Hyper Marketing
1/20/2012	Vibrant Media	Image Space Media	In-image ad technology
1/23/2012	Tremor Media	InPlay (from TubeMogul)	Video analytics platform
1/24/2012	OwnerIQ	DijiPOP	Shopper marketing technology platform.
1/25/2012	33Across	Tynt	Analytics
2/14/2012	Merkle	Social Amp	Facebook open graph marketing capabilities
2/27/2012	OpenX Technologies	LiftDNA	Sell-side platform
2/27/2012	Buddy Media	Brighter Option	Social ad buying
3/1/2012	Komli	AdMax	Ad network
3/5/2012	Verifone	LIFT Retail Marketing Technology	In store display advertising
3/6/2012	SingTel Corp	Amobee	Mobile marketing
3/9/2012	Pubmatic	MobiPrimo	Mobile publisher advertising tools
3/12/2012	Infogroup	GoTime	Collects and delivers data in real-time
3/27/2012	Experian	Altovision	Email services provider (Japan)
4/6/2012	Visible	Cymfony	Social media monitoring and analytics.
4/17/2012	Twitter	Hotspots.io	Social analytics
4/23/2012	DG	Peer39	Semantic ad targeting
4/25/2012	Bee Media	Adcentricity	Digital out-of-home ad network
5/1/2012	Catalina	Modiv Media	Mobile shopper marketing
5/2/2012	IBM	Tealeaf Technology	Customer experience management'
5/2/2012	Teradata	eCircle	Email and social advertising tools
5/21/2012	Experian	Conversen	Cross-channel analytics
5/23/2012	Rubicon Project	Mobsmith	Mobile ad creation platform

Source: Company reports and trade press reports

## Appendix B: IP Marketing Partnerships

### Exhibit 89. Selected Partnerships

Date	Partner #1	Partner #2	Notes
Jun-08	Havas	Right Media	Proprietary media trading platform.
May-09	Drafftcb	MediaBank	Expanding relationship to digital media buying platform.
Oct-09	Accenture	Adchemy	Accenture makes an investment in Adchemy
Jan-10	Cisco	Quantcast	Cisco led the series C financing raising \$27.5 million.
Oct-10	AdExpose/ Mpire	ZEDO	AdXpose's campaign verification software integrated into ZEDO's ad server.
Jan-11	adap.tv	Flingo	Allows publishers to reach internet connected TVs.
Feb-11	Donovan Data Systems	Rentrak	Rentrak's data + Donovan's agency software.
Mar-11	Cablevision	GroupM (WPP)	Addressable TV advertising
Mar-11	Donovan Data Systems	Canoe Ventures	DDS cable TV buying systems + Canoe's ad solutions.
Mar-11	Rentrak	One Domain	Local TV software provider One Domain + Rentrak's TV ratings data.
Mar-11	adap.tv	Cadreon (Interpublic)	adap.tv's video ad solutions + Cadreon ATD
Mar-11	4A's	BlackArrow and other media companies	Will research consumer perception of ads in VOD vs. live TV.
Apr-11	Techlightenment (Experian)	Adknowledge	Brand research on Facebook.
Apr-11	D&B	Microsoft	D&B 360 (DaaS solution) + Microsoft's Dynamics CRM.
Apr-11	Payfone	American Express	Amex led \$19 million funding for mobile payment provider.
Apr-11	Invidi Technologies	DirecTV	Invidi + DirecTV can place ads strategically on specific DVRs.
Apr-11	Discover	Money Messenger (powered by Paypal)	Can send money from mobile phone number to mobile phone number.
Apr-11	Visa	Gap	Send promotions in real-time to consumers via text message.
Apr-11	Visa	Square	Visa invested in Square, a mobile payment device company.
May-11	Rentrak	Strata (Comcast)	Will measure set-top box data for better targeting.
May-11	4INFO	Nielsen Catalina Solutions	Neilson Catalina's shopper tracking + 3INFO's mobile tracking data.
May-11	TidaITV	Eyeview	Offer customized video.
May-11	American Express	LevelUp	Amex members can use loyalty offers without coupons.
May-11	adap.tv	Horizon Media	Video platform customized for Horizon.
May-11	Time Warner	BlackArrow	BlackArrow powers dynamic ad insertion in VOD.
May-11	Rentrak	Epsilon (ADS)	Epsilon's household demo data + Rentrak's TV ratings
May-11	Google	DirecTV	Google offers multi distributor airings of select networks.
May-11	Facebook	Nielsen	Household data panel to help CPG advertisers.
May-11	American Express OPEN	AdReady	adManager to power display ad campaigns for small businesses.
Jun-11	TRA	MediaBank	TRA data + MediaBank's analytics system.
Jun-11	Charm Communications	Aegis Media China	Will consolidate buying to achieve better scale.
Jun-11	American Express	Patch (Aol)	Create a local deals platform.
Jun-11	ExactTarget	Marketo	Marketo's Revenue Performance Mgmt. + ExactTarget's Interactive Marketing Hub.
Jun-11	Kantar (WPP)	Experian	Kantar provides demo data. Experian provides viewing data.
Jun-11	Experian	Adobe	Understand how internal site trends compare with behavior on competitor sites.
Jun-11	GfK MRI	comScore	Combines print readership data with online activity.
Jun-11	MediaBank	Rentrak	Mediabank agency software + Rentrak ratings and targeted advertising tools.
Jun-11	American Express	Foursquare	Amex users who link with foursquare get coupons on their cards.
Jun-11	Collective	AppNexus	Create an ad exchange and media platform for publishers.
Jul-11	ad summos	Polk (automotive marketing solutions)	ad summo (O2O analytics) determines the vehicle purchase history of web users.
Jul-11	Omnicom	Blinq Media	OMC agencies get access to Blinq's software.
Jul-11	Isis	Visa, Mastercard, Discover, American Express	Isis enabled phones can make purchases using any credit card network.
Aug-11	TRA	dunnhumbyUSA	Expands TRA's database of consumer purchase behavior.
Aug-11	D&B	Salesforce.com	D&B is exclusive provider of company information on Salesforce's data.com
Aug-11	Verizon Wireless	American Express	Verizon will use American Express technology for mobile phone payments.
Sep-11	Marin Software	Salesforce.com	Connect paid search with social media and CRM platforms.
Sep-11	Tremor Media	Pointroll	Deliver locally targeted ads for Ford.
Sep-11	Adobe	Optimine	Adobe will use Optimine software to deliver better ROI in search.
Sep-11	TidaITV	SymphonyIRI	Will work with CPG companies to tie video spending with in store sales.
Sep-11	IgnitionOne	DataPop	Digital marketing suite + ad tech company improve search ad relevancy.
Sep-11	Collective	Rentrak	TV Accelerator can target online those who watched TV ads.
Sep-11	Kenshoo	Annalect Group (Omnicom)	Will track mobile check-ins and location based activity.
Sep-11	Havas Digital	MediaMind	MediaMind rich media ad serving + Artermis analytics solution.
Sep-11	Microsoft	Adchemy	Adchemy consumer intent technology on Microsoft's adCenter.
Sep-11	TRAFFIQ	Nielsen	TRAFFIQ's ad-buying platform + Nielsen's target-marketing platform @Plan.
Sep-11	TidaITV	Roku	TidaITV will serve ads in Roku programming.
Sep-11	Accuen (Omnicom)	TubeMogul	Accuen + TubeMogul's DSP to buy online ads in real-time.
Sep-11	Starcom MediaVest	DOmedia	Starcom will use the platform to purchase DOOH ads.
Oct-11	Aol	Vivaki (Publicis)	Accelerate online video ad spending.
Oct-11	Datonics	TRAFFIQ	Datonics keyword and segment data to TRAFFIQ clients.
Oct-11	Akamai	Evidon	Akamai customers get access to Evidon's privacy and compliance services.
Oct-11	American Express	Clickable	AmEx + Clickable provide search and social marketing to small businesses.
Oct-11	Vizu	Firefly	Brand awareness measurement through online video ads.

Source: Company reports and trade press reports

**Exhibit 90. Selected Partnerships (continued)**

Date	Partner #1	Partner #2	Notes
Nov-11	Rentrak	Bluefin Labs	Rentrak's TV Essentials + Bluefin's data map social media related to TV.
Nov-11	Linkable Networks	24/7 Real Media (WPP)	Coupons to credit cards by clicking on Linkable tagged ads.
Nov-11	TradeDoubler	NetBooster	TradeDoubler provides performance marketing; NetBooster provides SEM.
Nov-11	Quova (Neustar)	XA.net	Quova's Audience Targeting Solutions (ATS) + XA.net's DSP
Nov-11	Symphony IRI	Legolas Media	Brand marketers can buy online ads based on in-store purchase behavior.
Nov-11	QlikTech	Trillium Software (Harte-Hanks)	QlikTech + Trillium offer higher quality data.
Nov-11	Adobe	BrightEdge	Adobe + BrightEdge (SEO platform) support search marketing campaigns.
Nov-11	TidaITV	Korrelate	Auto dealers can see if online ad viewers purchased a vehicle.
Dec-11	Epsilon (ADS)	Aggregate Knowledge	Online Audience Central brings together online and offline data.
Dec-11	Adometry	Acxiom, Datalogix, Nielsen, TARGUSinfo	Adometry can help advertisers use offline data to reach customers online.
Dec-11	Tremor Media	Nielsen	Tremor will integrate Nielsen's GRP ratings into VideoHub.
Dec-11	comScore	Buddy Media	Integrate comScore data into Buddy Media.
Dec-11	Nielsen Catalina	Specific Media	Shopper Access - analytics system geared towards CPG companies.
Dec-11	Horizon Media	Legolas Media	Horizon uses Legolas for online display buys.
Dec-11	AdKeeper	Tremor Video	AdKeeper's Keep functionality + Tremor's ad network.
Dec-11	IPG Mediabrands (Interpublic)	Networked Insights	Mediabrands + Networked Insights for TV-related social media analytics.
Dec-11	Starcom Mediavest (Publicis)	Bluefin Labs	Starcom + Bluefin for TV-related social media analytics.
Dec-11	TidaITV	Polk	Audience targeting for the auto industry.
Dec-11	Invision	Nielsen	Invision + Nielsen's online GRP ratings system .
Jan-12	Alliant Data	Lotame	Integrate Alliant's customer database with Lotame's DMP.
Jan-12	BrightTag	Criteo	Criteo joins BrightTag ONE Partner program.
Jan-12	Videology	i-Behavior/Kantar Shopcom	Help marketers reach users based on their in-store activity and demographics.
Jan-12	Rosetta (Publicis)	Marin Software	Optimize customers' paid search, display and social campaigns.
Jan-12	TubeMogul	Proxemic	Created BrandSafe; brand security on real time media buying platform.
Feb-12	Exelate	Nielsen Catalina Solutions	Help CPGs reach consumers online more effectively based on in-store activity.
Feb-12	TiVo	AT&T	Improve TiVo's research and ad inventory by incorporating AT&T U-Verse data.
Feb-12	Microsoft	Bazaarvoice	Creating "People Powered Stories," adding social signals to display ads.
Feb-12	Infogroup	Epsilon (ADS)	Creating B2B Advantage, a business to business marketing solution.
Feb-12	Wildfire	Adaptly	Social marketing solution integrated with paid-media ad technology .
Mar-12	Infosys	Fabric Worldwide (WPP)	BrandEdge platform to Improve engagement for galaxosmithkline consumers.
Mar-12	adap.tv	BannerConnect	Expanding RTB for online video in Europe.
Mar-12	AT&T Adworks	Foursquare	Users can check into foursquare straight through ads served on AT&T ad net.
Mar-12	AT&T Adworks	Turn	New audience management platform for AdWorks
Mar-12	American Express	Twitter, Facebook Foursquare	Use AmEx application to sync cards with social media for location based deals.
Apr-12	MediaMath	PubliGroupe	JV called Spree 7: a media buying platform in Germany, Switzerland & Austria.
Apr-12	Samsung	OpenX	Introduced a private ad exchange exclusively for mobile.
Apr-12	Local.com	ConsumerInfo.com	Targeted ad campaigns.
Apr-12	comScore	i360	Provide digital marketing insights for political campaigns and advocacy groups.
Apr-12	Aol	Nielsen	Aol will use Nielsen's GRPs for ratings comparable to TV.
Apr-12	MediaMind (DG)	24/7 Media (WPP)	24/7 will endorse MediaMind for online ad serving and TV ad delivery.
Apr-12	KBM Group (WPP)	ThinkVine	Adds marketing mix modeling and optimized consumer insights to solutions.
May-12	AT&T	Verifone	Verifone GlobalBay Solutions is a mobile app that can be used for POS functions.
May-12	Experian CheetahMail	Movable Ink	Streams email content in real-time, even after an email has been opened.
May-12	CBC + Rogers Media + Shaw Media	na	Formed Canadian premium audience exchange delivering private RTB.
May-12	x+1	WDA	WDA allows x+1 to extend into the mobile platform.
May-12	24/7 Media (WPP)	Moat	Offer brand-focused metrics to measure an ad campaign beyond click-throughs.
May-12	VivaKi Nerve Center (PUB)	BlueKai	Co-developed new data platform, Audience Insights.
May-12	American Express	Zynga	Co-branded prepaid Serve card offers in-game incentives for using the card.
May-12	Evidon	DoubleVerify	Evidon will plug into DoubleVerify to provide regulatory compliance services.
May-12	Microsoft	24/7 Media (WPP)	WPP's & Microsoft's advertisers can purchase ad space offered by either co.
May-12	OpenX	cyber communications inc. (Dentsu)	OpenX Market Japan will ad mobile inventory to existing web inventory.

Source: Company reports and trade press reports

# Appendix C: Full Valuation Comparables

## Exhibit 91. Advertising and Marketing Services Trading Data

Company	Ticker	6/6/2012		Market			52 Wk		Price Change			Div.	Yield
		Price	Shares	Cap (m m)	Target	Rating	High	Low	1 Month	3 Month	YTD		
Omnicon Group	OMC-US	\$47.24	278	\$13,109	\$49	Mkt	\$52.19	\$35.27	-0.9%	-6.7%	6.0%	\$1.20	2.5%
WPP plc	WPP-LN	£7.50	1,342	£10,070	£8	Mkt	£8.84	£5.61	-3.1%	-12.2%	-9.2%	£0.17	2.2%
Interpublic Group	IPG-US	\$10.69	467	\$4,994	\$13	OP	\$12.91	\$6.73	2.9%	-6.3%	9.9%	\$0.24	2.2%
Publicis Groupe	PUB-FR	€ 37.75	221	€ 8,345	€ 39	Mkt	€ 43.30	€ 29.10	0.9%	-8.7%	6.2%	€ 0.70	1.9%
Dentsu	4324-TO	¥2,208	278	¥614,230	NR	NR	¥2,665	¥2,042	0.5%	-16.2%	-6.0%	na	na
Havas	HAV-FR	€ 4.03	433	€ 1,745	NR	NR	€ 4.49	€ 2.46	1.0%	-7.6%	26.7%	na	na
Aegis	AGS-LN	£1.61	1,172	£1,891	NR	NR	£1.88	£1.12	-0.7%	-12.7%	12.0%	na	na
Sapient	SAPE-US	11.09	145	1,612	\$15	OP	16.25	9.00	0.8%	-10.9%	-12.0%	na	na
MDC Partners	MDCA-US	\$9.84	30	\$294	\$19	OP	\$20.99	\$9.24	1.3%	-11.5%	-27.2%	\$0.56	5.7%
<b>Agency Holding Companies</b>							<b>Mean</b>	<b>Median</b>	<b>0.3%</b>	<b>-10.3%</b>	<b>0.7%</b>	<b>2.9%</b>	<b>2.9%</b>
							<b>Median</b>	<b>0.8%</b>	<b>-10.9%</b>	<b>6.0%</b>	<b>2.2%</b>	<b>2.2%</b>	<b>2.2%</b>
Experian	EXPN-LN	£9.17	1,026	£9,404	NR	NR	£10.05	£6.52	1.3%	-5.9%	4.8%	na	na
Alliance Data Systems	ADS-US	125.13	63	7,936	\$125	Mkt	130.66	80.38	-0.7%	-0.7%	20.5%	na	na
Equifax	EFX-US	45.38	120	5,463	NR	NR	47.24	28.59	0.5%	2.5%	17.1%	0.72	1.6%
Multiplex	MPLU3-BR	BRL 46.61	161	BRL 7,522	NR	NR	BRL 50	BRL 22	0.7%	24.0%	44.5%	na	na
Aimia	AIM-T	C\$13.07	172	C\$2,251	C\$15	OP	13.93	10.50	-1.2%	6.0%	9.5%	0.60	4.6%
Axciom	ACXM-US	13.85	78	1,076	\$17	OP	14.92	8.94	-1.6%	-5.7%	13.4%	0.24	1.7%
Harte-Hanks	HHS-US	8.57	63	542	\$9	Mkt	10.24	7.00	1.5%	-5.3%	-5.7%	0.34	4.0%
Valassis	VCI-US	20.69	43	886	\$23	OP	31.95	14.71	3.9%	-10.0%	7.6%	na	na
<b>Direct and Database Marketing</b>							<b>Mean</b>	<b>Median</b>	<b>0.6%</b>	<b>0.6%</b>	<b>14.0%</b>	<b>3.0%</b>	<b>3.0%</b>
							<b>Median</b>	<b>0.6%</b>	<b>-3.0%</b>	<b>11.4%</b>	<b>2.9%</b>	<b>2.9%</b>	<b>2.9%</b>
Google	GOOG-US	\$580.57	332	\$192,538	\$755	OP	\$670.25	\$473.02	0.0%	-9.5%	-10.1%	na	na
Amazon	AMZN-US	217.64	451	98,047	NR	NR	246.71	166.97	2.2%	7.5%	25.7%	na	na
Facebook	FB-US	26.81	2,332	62,521	NR	NR	36.66	25.75	-9.4%	nm	nm	na	na
eBay	EBAY-US	40.94	1,291	52,863	NR	NR	41.96	26.86	4.5%	10.9%	35.0%	na	na
Yahoo!	YHOO-US	15.36	1,210	18,589	\$17	Mkt	16.79	11.09	0.8%	0.9%	-4.8%	na	na
Groupon	GRPN-US	10.63	643	6,839	NR	NR	27.78	8.80	-0.1%	nm	-48.5%	na	na
LinkedIn	LNKD-US	93.08	115	10,710	\$115	Mkt	120.63	55.98	-3.1%	-8.7%	-47.7%	na	na
IAC	IACI-US	45.70	76	3,469	NR	NR	52.78	34.12	1.7%	-6.9%	7.3%	na	na
Aol	AOL-US	27.40	94	2,562	NR	NR	27.94	10.06	-0.1%	44.4%	81.5%	na	na
ExactTarget	ET-US	22.30	66	1,470	NR	NR	29.88	18.53	12.6%	-14.2%	nm	na	na
ValueClick	VCLK-US	17.40	82	1,434	\$18	Mkt	21.86	13.35	-0.8%	-11.9%	6.8%	na	na
Millennial Media	MM-US	12.83	76	976	NR	NR	25.58	10.98	-6.9%	-45.4%	nm	na	na
Demand Media	DMD-US	9.26	84	777	NR	NR	15.48	5.24	1.1%	27.7%	39.2%	na	na
QuinStreet	QNST-US	8.54	44	377	NR	NR	15.23	7.80	5.3%	-18.6%	-8.8%	na	na
Infospace	INSP-US	12.48	40	500	NR	NR	13.98	7.96	-2.2%	-2.6%	13.6%	na	na
Constant Contact	CTCT-US	20.99	32	662	\$24	Mkt	32.18	14.46	3.7%	-29.5%	-9.6%	na	na
Marchex	MCHX-US	3.55	43	151	\$8	OP	10.87	3.14	-0.8%	-20.4%	-43.2%	0.08	2.3%
<b>Interactive Advertising and Marketing Services</b>							<b>Mean</b>	<b>Median</b>	<b>0.5%</b>	<b>-5.1%</b>	<b>9.4%</b>	<b>2.3%</b>	<b>2.3%</b>
							<b>Median</b>	<b>0.0%</b>	<b>-8.7%</b>	<b>7.0%</b>	<b>2.3%</b>	<b>2.3%</b>	<b>2.3%</b>
Microsoft	MSFT-US	29.35	8,401	246,565	NR	NR	32.95	23.65	0.5%	-9.0%	13.1%	0.80	2.7%
IBM	IBM-US	193.99	1,153	223,765	\$200	MP <sup>2</sup>	210.69	157.13	0.6%	-7.0%	5.5%	3.40	1.8%
Adobe	ADBE-US	31.69	496	15,723	NR	NR	34.78	22.67	2.1%	-7.6%	12.1%	0.03	0.1%
Akamai	AKAM-US	28.99	179	5,195	NR	NR	39.14	18.25	-1.2%	-21.0%	-10.2%	na	na
Teradata	IDC-US	69.04	169	11,647	NR	NR	79.89	43.19	3.9%	1.3%	42.3%	na	na
SDL	SDL-LN	£6.29	80	£503	NR	NR	£7.67	£5.86	-0.1%	-15.1%	-5.5%	na	na
Responsys	MKTG-US	10.57	48	508	NR	NR	18.19	7.30	2.9%	-11.7%	18.9%	na	na
DG	DGIT-US	12.13	28	334	NR	NR	33.24	7.51	27.5%	18.8%	1.8%	na	na
Velti	VELT-US	6.99	63	439	NR	NR	20.00	5.61	-4.2%	-48.4%	2.8%	na	na
Augme	AUGT-US	2.01	95	190	NR	NR	4.32	1.17	-6.9%	-6.9%	50.0%	na	na
<b>Advertising Technology</b>							<b>Mean</b>	<b>Median</b>	<b>2.5%</b>	<b>-10.7%</b>	<b>13.1%</b>	<b>1.5%</b>	<b>1.5%</b>
							<b>Median</b>	<b>0.6%</b>	<b>-8.3%</b>	<b>8.8%</b>	<b>1.8%</b>	<b>1.8%</b>	<b>1.8%</b>
<b>Marketing Information Services</b>													
Nielson	NLSN-US	27.52	361	9,928	NR	NR	32.06	24.38	-0.8%	-8.7%	-7.3%	na	na
Neustar	NSR-US	31.74	67	2,123	NR	NR	38.69	22.24	-1.4%	-14.8%	-7.1%	na	na
CoreLogic	CLGX-US	16.49	107	1,761	NR	NR	17.99	7.64	-2.9%	1.0%	27.5%	0.60	3.6%
GfK	GFK-XE	€ 37.90	36	€ 1,361	NR	NR	€ 40.80	€ 26.73	1.1%	-5.2%	23.7%	na	na
Ipsos	IPS-FR	€ 25.15	32	€ 817	NR	NR	€ 32.30	€ 18.75	0.2%	-6.5%	11.9%	na	na
Arbitron	ARB-US	34.58	26	915	NR	NR	44.61	30.46	3.4%	-6.5%	0.5%	0.40	1.2%
comScore	SCOR-US	18.05	35	638	NR	NR	28.22	12.50	-0.6%	-15.6%	-14.9%	na	na
Rentrak	RENT-US	15.83	11	175	NR	NR	23.27	11.23	-2.3%	-30.3%	10.9%	na	na
<b>Marketing Information Services and Research</b>							<b>Mean</b>	<b>Median</b>	<b>-0.4%</b>	<b>-11.1%</b>	<b>7.5%</b>	<b>2.4%</b>	<b>2.4%</b>
							<b>Median</b>	<b>-0.6%</b>	<b>-6.5%</b>	<b>10.9%</b>	<b>2.4%</b>	<b>2.4%</b>	<b>2.4%</b>
<b>Advertising and Marketing Services Universe</b>							<b>Mean</b>	<b>Median</b>	<b>0.9%</b>	<b>-7.1%</b>	<b>8.2%</b>	<b>2.5%</b>	<b>2.5%</b>
							<b>Median</b>	<b>0.5%</b>	<b>-7.6%</b>	<b>7.3%</b>	<b>2.2%</b>	<b>2.2%</b>	<b>2.2%</b>

Source: BMO Capital Markets and company reports

### Exhibit 92. Advertising and Marketing Services Multiples

Company	Ticker	EV/Revenue			EV/EBITDA			P/E			2013 PEG	FCF Yield			Price to Book		
		2011	2012	2013	2011	2012	2013	2011	2012	2013		2011	2012	2013	2011	2012	2013
Omnicom Group	OMC-US	1.0x	0.9x	0.8x	7.5x	6.4x	5.5x	14.5x	12.8x	11.3x	0.8x	8.0%	9.1%	10.0%	3.3x	2.9x	2.4x
WPP plc	WPP-LN	1.3x	1.2x	1.2x	8.1x	7.7x	7.1x	13.2x	12.6x	11.5x	2.4x	8.4%	9.4%	10.2%	1.5x	1.4x	1.2x
Interpublic Group	IPG-US	0.6x	0.6x	0.6x	5.3x	4.8x	4.2x	14.7x	12.9x	10.8x	0.8x	8.5%	9.5%	12.2%	2.0x	2.1x	2.1x
Publicis Groupe	PUB-FR	1.2x	1.2x	1.1x	6.9x	6.9x	5.8x	14.3x	12.3x	11.2x	0.7x	6.6%	8.1%	8.8%	2.1x	2.4x	2.2x
Dentsu	4324-TO	0.3x	1.5x	1.4x	8.8x	7.1x	6.4x	18.6x	16.1x	14.8x	0.9x	8.0%	9.0%	9.4%	1.1x	1.0x	1.0x
Havas	HAV-FR	1.1x	1.0x	1.0x	7.6x	6.6x	5.9x	14.4x	11.0x	10.0x	0.3x	10.9%	12.1%	13.1%	1.3x	1.3x	1.1x
Aegis	AGS-LN	1.8x	1.6x	1.4x	9.0x	7.6x	7.0x	16.1x	13.2x	12.1x	0.5x	7.7%	9.6%	10.1%	3.2x	3.7x	3.1x
Sapient	SAPE-US	1.3x	1.2x	1.0x	9.1x	8.0x	6.3x	19.4x	18.6x	13.8x	3.0x	6.8%	6.7%	8.7%	3.4x	2.7x	2.2x
MDC Partners	MDCA-US	0.7x	0.6x	0.6x	7.4x	5.8x	5.0x	nm	nm	66.8x	nm	6.1%	14.6%	22.0%	nm	nm	nm
<b>Agency Holding Companies (ex Asian cos.)</b>	<b>Mean</b>	<b>1.1x</b>	<b>1.0x</b>	<b>0.9x</b>	<b>7.4x</b>	<b>6.5x</b>	<b>5.8x</b>	<b>14.5x</b>	<b>12.5x</b>	<b>19.1x</b>	<b>0.9x</b>	<b>8.0%</b>	<b>10.3%</b>	<b>12.3%</b>	<b>2.2x</b>	<b>2.2x</b>	<b>1.9x</b>
	<b>Median</b>	<b>1.1x</b>	<b>1.0x</b>	<b>1.0x</b>	<b>7.5x</b>	<b>6.6x</b>	<b>5.8x</b>	<b>14.5x</b>	<b>12.7x</b>	<b>11.3x</b>	<b>0.7x</b>	<b>8.0%</b>	<b>9.5%</b>	<b>10.2%</b>	<b>2.1x</b>	<b>2.2x</b>	<b>2.1x</b>
Experian	EXPN-LN	2.6x	2.2x	2.2x	8.2x	7.0x	6.4x	13.1x	11.8x	10.6x	0.9x	12.7%	15.1%	15.3%	3.5x	3.1x	2.8x
Alliance Data Systems	ADS-US	3.2x	2.5x	2.3x	10.2x	7.5x	6.9x	16.4x	14.7x	13.1x	1.2x	6.7%	7.6%	8.7%	1.8x	1.6x	1.8x
Equifax	EFX-US	3.2x	2.9x	2.5x	9.9x	8.6x	7.6x	18.0x	15.6x	14.1x	0.9x	7.4%	8.0%	nm	3.2x	2.8x	nm
Multiplex	MPLU3-BR	5.3x	4.3x	3.3x	21.0x	20.0x	15.4x	27.6x	29.8x	23.6x	-3.2x	8.0%	4.6%	4.9%	29.0x	30.0x	28.1x
Aimia	AIM-T	1.2x	1.1x	1.0x	7.5x	6.6x	6.0x	12.6x	10.5x	9.6x	0.5x	0.1x	0.1x	0.1x	1.7x	1.7x	1.6x
Axiom	ACXM-US	1.0x	1.2x	1.1x	4.5x	6.1x	5.4x	21.3x	21.9x	16.4x	-6.4x	6.9%	4.6%	6.1%	1.8x	1.7x	1.5x
Harte-Hanks	HHS-US	0.7x	0.7x	0.7x	6.2x	5.7x	5.2x	12.2x	12.3x	11.5x	-14.9x	10.9%	10.6%	10.6%	1.2x	1.2x	1.1x
Valassis	VCI-US	0.6x	0.6x	0.6x	4.3x	4.2x	3.9x	7.5x	6.7x	6.2x	0.5x	19.8%	19.2%	19.8%	2.0x	1.7x	1.5x
<b>Direct and Database Marketing</b>	<b>Mean</b>	<b>2.2x</b>	<b>1.9x</b>	<b>1.7x</b>	<b>9.0x</b>	<b>8.2x</b>	<b>7.1x</b>	<b>16.1x</b>	<b>15.4x</b>	<b>13.1x</b>	<b>-2.6x</b>	<b>10.4%</b>	<b>10.2%</b>	<b>11.0%</b>	<b>5.5x</b>	<b>5.5x</b>	<b>5.5x</b>
	<b>Median</b>	<b>1.9x</b>	<b>1.7x</b>	<b>1.7x</b>	<b>7.9x</b>	<b>6.8x</b>	<b>6.2x</b>	<b>14.7x</b>	<b>13.5x</b>	<b>12.3x</b>	<b>0.5x</b>	<b>9.2%</b>	<b>9.3%</b>	<b>10.6%</b>	<b>1.9x</b>	<b>1.7x</b>	<b>1.6x</b>
Google	GOOG-US	5.2x	3.3x	2.7x	9.5x	7.6x	6.9x	16.1x	13.5x	11.6x	0.6x	5.9%	7.8%	8.8%	9.4x	8.1x	8.1x
Amazon	AMZN-US	1.8x	1.5x	1.1x	45.5x	38.2x	22.0x	158.9x	176.5x	84.4x	-8.4x	3.9%	3.8%	5.0%	12.8x	12.3x	10.1x
Facebook	FB-US	16.8x	10.8x	8.3x	27.2x	19.6x	14.9x	62.3x	49.4x	41.1x	1.6x	nm	2.2%	3.3%	219.2x	6.4x	6.0x
eBay	EBAY-US	4.2x	3.4x	2.8x	12.7x	10.5x	8.8x	20.2x	17.4x	15.2x	0.9x	6.1%	7.1%	8.4%	2.9x	2.6x	2.2x
Yahoo!	YHOO-US	1.0x	0.6x	0.7x	2.9x	1.9x	1.9x	18.4x	16.2x	13.7x	1.0x	4.8%	5.1%	7.0%	1.5x	1.0x	1.0x
Groupm	GRPN-US	3.6x	2.3x	1.6x	nm	14.7x	6.8x	nm	57.8x	15.3x	0.1x	4.9%	8.1%	16.3%	14.6x	10.3x	7.4x
LinkedIn	LNKD-US	19.9x	10.6x	6.7x	105.1x	54.7x	28.3x	267.4x	139.7x	79.1x	0.9x	0.1%	0.0%	0.9%	17.1x	7.6x	4.7x
IAC	IACI-US	1.4x	1.0x	0.8x	7.8x	5.3x	4.2x	20.2x	16.7x	13.5x	0.6x	8.6%	7.8%	11.1%	1.8x	2.0x	1.8x
Aol	AOL-US	1.0x	1.0x	0.9x	7.2x	6.1x	5.6x	nm	37.0x	32.2x	0.1x	9.5%	12.7%	11.2%	1.2x	1.1x	1.1x
ExactTarget	ET-US	6.7x	4.7x	3.9x	nm	301.1x	87.6x	nm	nm	nm	nm	nm	0.8%	0.9%	5.2x	5.1x	6.9x
ValueClick	VCLK-US	2.7x	1.9x	1.6x	8.5x	6.2x	5.1x	17.4x	15.5x	13.8x	1.1x	9.6%	11.0%	11.7%	2.5x	2.1x	1.8x
Millennial Media	MM-US	8.6x	4.9x	3.1x	495.8x	nm	55.7x	nm	nm	105.2x	nm	nm	nm	nm	3.4x	6.5x	6.3x
Demand Media	DMD-US	2.2x	1.9x	1.4x	8.0x	6.7x	5.1x	37.0x	27.2x	21.9x	0.6x	10.4%	11.7%	15.1%	1.8x	1.7x	1.6x
QuinStreet	QNST-US	0.9x	1.0x	0.9x	3.9x	5.0x	4.3x	8.3x	10.0x	9.8x	-0.6x	18.6%	15.6%	18.5%	1.1x	1.3x	1.2x
Infospace	INSP-US	0.9x	0.5x	nm	7.2x	2.7x	2.3x	26.0x	18.1x	12.9x	0.3x	nm	nm	nm	1.4x	1.3x	1.3x
Constant Contact	CTCT-US	2.9x	2.1x	1.7x	17.0x	12.0x	9.2x	29.9x	24.3x	18.4x	0.8x	2.8%	3.5%	4.4%	3.5x	3.2x	2.9x
Marchex	MCHX-US	0.8x	0.9x	0.7x	4.9x	6.6x	5.1x	11.9x	13.5x	10.5x	-0.9x	11.3%	10.2%	13.7%	1.0x	1.0x	1.0x
<b>Interactive Advertising and Marketing Services</b>	<b>Mean</b>	<b>4.7x</b>	<b>3.1x</b>	<b>2.4x</b>	<b>50.9x</b>	<b>31.2x</b>	<b>16.1x</b>	<b>53.4x</b>	<b>42.2x</b>	<b>31.2x</b>	<b>-0.1x</b>	<b>7.4%</b>	<b>7.3%</b>	<b>9.1%</b>	<b>17.7x</b>	<b>4.3x</b>	<b>3.9x</b>
	<b>Median</b>	<b>2.7x</b>	<b>1.9x</b>	<b>1.6x</b>	<b>8.5x</b>	<b>7.2x</b>	<b>6.8x</b>	<b>20.2x</b>	<b>18.1x</b>	<b>15.2x</b>	<b>0.6x</b>	<b>6.1%</b>	<b>7.8%</b>	<b>8.8%</b>	<b>2.9x</b>	<b>2.6x</b>	<b>2.2x</b>
Microsoft	MSFT-US	2.9x	2.6x	2.3x	6.9x	6.3x	5.3x	10.9x	10.9x	9.6x	32.3x	10.7%	11.5%	12.3%	4.3x	3.4x	2.8x
IBM	IBM-US	2.2x	2.2x	nm	9.9x	9.3x	nm	14.5x	12.9x	nm	nm	6.5%	7.4%	7.3%	7.8x	7.8x	7.8x
Adobe	ADBE-US	3.4x	3.2x	2.7x	8.2x	7.9x	6.5x	13.5x	13.0x	11.8x	3.1x	9.7%	9.5%	10.6%	2.7x	2.4x	2.0x
Akamai	AKAM-US	3.4x	3.2x	2.6x	7.5x	7.6x	6.1x	19.1x	17.8x	15.6x	2.2x	8.3%	8.1%	9.5%	2.5x	2.3x	2.2x
Teradata	TDC-US	4.7x	4.0x	3.4x	16.9x	14.4x	12.0x	29.8x	25.5x	21.9x	1.3x	4.3%	5.2%	6.0%	8.1x	6.1x	4.9x
SDL	SDL-LN	1.9x	1.7x	1.5x	10.2x	10.1x	8.4x	16.9x	15.6x	13.8x	1.6x	6.4%	7.2%	6.9%	2.3x	2.2x	2.0x
Responsys	MKTG-US	3.1x	2.4x	1.9x	16.3x	15.2x	10.8x	50.3x	48.0x	34.3x	7.2x	nm	nm	nm	nm	nm	nm
DG	DGIT-US	1.5x	1.7x	1.4x	4.0x	4.8x	3.9x	13.8x	17.4x	13.0x	-0.6x	nm	nm	nm	0.6x	0.6x	0.6x
Velti	VELT-US	2.2x	1.4x	1.0x	7.8x	4.9x	3.5x	14.0x	9.5x	7.0x	0.2x	nm	nm	nm	0.6x	0.6x	0.6x
Augme	AUGT-U	nm	15.9x	5.9x	nm	nm	152.0x	nm	nm	nm	nm	-5.0%	-8.5%	-8.5%	18.3x	18.3x	18.3x
<b>Advertising Technology</b>	<b>Mean</b>	<b>2.8x</b>	<b>3.8x</b>	<b>2.5x</b>	<b>9.7x</b>	<b>8.9x</b>	<b>23.2x</b>	<b>20.3x</b>	<b>19.0x</b>	<b>15.9x</b>	<b>5.9x</b>	<b>5.8%</b>	<b>5.8%</b>	<b>6.3%</b>	<b>5.2x</b>	<b>4.9x</b>	<b>4.6x</b>
	<b>Median</b>	<b>2.9x</b>	<b>2.5x</b>	<b>2.3x</b>	<b>8.2x</b>	<b>7.9x</b>	<b>6.5x</b>	<b>14.5x</b>	<b>15.6x</b>	<b>13.4x</b>	<b>1.9x</b>	<b>6.5%</b>	<b>7.4%</b>	<b>7.3%</b>	<b>2.7x</b>	<b>2.4x</b>	<b>2.2x</b>
<b>Marketing Information Services</b>																	
Nielson	NLSN-US	3.0x	2.7x	2.4x	10.6x	9.8x	8.4x	17.1x	15.3x	13.4x	1.2x	6.5%	9.7%	11.4%	2.1x	2.0x	1.7x
Neustar	NSR-US	2.9x	2.2x	2.0x	7.0x	4.9x	4.2x	14.7x	11.5x	10.2x	0.4x	9.8%	11.5%	nm	nm	nm	nm
CoreLogic	CLGX-US	1.9x	1.6x	1.5x	8.4x	6.6x	5.7x	23.2x	15.8x	14.0x	0.3x	9.5%	11.8%	12.8%	1.4x	1.4x	1.2x
GfK	GFK-XE	1.2x	1.1x	1.0x	7.2x	6.9x	5.9x	11.1x	12.4x	10.9x	-1.1x	11.9%	12.2%	13.8%	1.9x	1.7x	1.5x
Ipsos	IPS-FR	1.0x	0.7x	0.7x	7.9x	6.7x	5.4x	11.2x	11.3x	9.1x	-10.8x	10.6%	10.8%	15.0%	1.3x	1.2x	1.1x
Arbitron	ARB-US	2.1x	2.0x	1.8x	7.2x	6.7x	6.0x	16.5x	15.4x	13.5x	1.9x	10.9%	10.8%	nm	7.4x	6.9x	6.0x
comScore	SCOR-US	2.6x	2.1x	1.6x	12.7x	9.8x	7.6x	nm	nm	nm	nm	4.6%	6.4%	10.2%	3.2x	3.0x	2.8x
Rentrak	RENT-US	1.9x	1.8x	1.5x	22.3x	35.5x	24.6x	36.8x	nm	205.6x	nm	5.5%	4.4%	4.9%	3.2x	3.3x	3.1x
<b>Marketing Information Services and Research</b>	<b>Mean</b>	<b>1.9x</b>	<b>1.7x</b>	<b>1.4x</b>	<b>10.4x</b>	<b>11.0x</b>	<b>8.5x</b>	<b>18.9x</b>	<b>13.3x</b>	<b>43.9x</b>	<b>-1.9x</b>	<b>9.0%</b>	<b>9.7%</b>	<b>11.3%</b>	<b>3.1x</b>	<b>2.9x</b>	<b>2.6x</b>
	<b>Median</b>	<b>1.9x</b>	<b>1.8x</b>	<b>1.5x</b>	<b>7.9x</b>	<b>6.7x</b>	<b>5.9x</b>	<b>15.6x</b>	<b>12.4x</b>	<b>12.2x</b>	<b>0</b>						

### Exhibit 93. Advertising and Marketing Services Estimates

Company	Ticker	Revenue			EBITDA			Net Income			EPS			Free Cash Flow			
		2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011
<b>Communications Holding Companies (aka "Advertising Agencies")</b>																	
Omnicom Group	OMC-US	\$13,873	\$14,443	\$15,161	\$1,945	\$2,123	\$2,299	\$933	\$1,043	\$1,184	\$3.25	\$3.70	\$4.20	\$1,071	\$1,187	\$1,309	\$3.77
WPP plc	WPP-LN	£10,022	£10,549	£10,951	£1,543	£1,695	£1,767	£734	£769	£849	£0.57	£0.59	£0.65	£843	£946	£1,025	£0.63
Interpublic Group	IPG-US	\$7,015	\$7,229	\$7,591	\$838	\$904	\$1,005	\$394	\$387	\$461	\$0.73	\$0.83	\$0.99	\$493	\$475	\$609	\$0.91
Publicis Groupe	PUB-FR	€ 5,816	€ 6,278	€ 6,566	€ 1,034	€ 1,133	€ 1,207	€ 600	€ 653	€ 707	€ 2.64	€ 3.08	€ 3.37	€ 591	€ 674	€ 726	€ 2.49
Dentsu	4324-TO	¥1,893,055	¥343,986	¥350,620	¥66,228	¥74,090	¥78,062	¥21,635	¥34,864	¥36,906	¥119	¥137	¥150	¥48,930	¥55,101	¥57,844	¥176
Havas	HAV-FR	€ 1,645	€ 1,747	€ 1,806	€ 235	€ 276	€ 292	€ 120	€ 149	€ 161	€ 0.28	€ 0.37	€ 0.41	€ 190	€ 211	€ 229	€ 0.44
Aegis	AGS-LN	£1,135	£1,274	£1,355	£225	£259	£278	£134	£148	£163	£0.10	£0.12	£0.13	£145	£181	£191	£0.12
Sapient	SAPE-US	1,062	1,196	1,412	154	177	219	81	87	119	0.57	0.60	0.81	106	109	143	0.75
MDC Partners	MDC-AUS	\$943	\$1,088	\$1,193	\$91	\$115	\$132	(\$42)	(\$21)	\$5	(\$1.46)	(\$0.69)	\$0.15	\$18	\$43	\$70	\$0.60
<b>Direct and Database Marketing Services</b>																	
Experian	EXPN-LN	£4,239	£4,768	£4,898	£1,334	£1,521	£1,656	£701	£786	£863	£0.70	£0.78	£0.86	£1,197	£1,416	£1,436	£1.17
Alliance Data Systems	ADS-US	3,173	3,514	3,780	1,009	1,167	1,277	441	539	592	7.64	8.50	9.55	484	601	672	8.37
Equifax	EFX-US	1,960	2,137	2,298	638	709	764	312	348	381	2.52	2.91	3.22	406	nm	nm	3.37
Multiplex	MPLU3-BR	BRL 1,247	BRL 1,475	BRL 1,775	BRL 315	BRL 317	BRL 386	BRL 274	BRL 250	BRL 308	BRL 1.69	BRL 1.57	BRL 1.98	BRL 603	BRL 343	BRL 372	BRL 3.74
Aimia	AIM-T	CS 2,116	CS 2,345	CS 2,476	CS 342	CS 380	CS 402	CS 198	CS 215	CS 247	CS 1.04	CS 1.25	CS 1.36	232	279	268	CS 1.35
Acxiom	ACXM-US	1,131	1,121	1,165	251	220	244	60	49	65	0.65	0.63	0.85	128	123	148	0.96
Harte-Hanks	HHS-US	851	833	836	102	104	109	45	44	47	0.70	0.70	0.75	59	58	57	0.93
Valassis	VCI-US	2,236	2,142	2,101	323	312	308	134	132	135	2.75	3.08	3.35	200	170	165	4.10
<b>Interactive Advertising and Marketing Services</b>																	
Google	GOOG-US	29,096	44,565	58,798	16,067	19,538	22,742	14,216	17,159	19,894	36.06	43.00	50.00	11,195	14,955	17,044	34.21
Amazon	AMZN-US	48,077	63,355	81,462	1,945	2,418	3,911	631	553	1,207	1.37	1.23	2.58	3,816	3,730	4,910	8.47
Facebook	FB-US	3,711	4,959	6,480	2,296	2,733	3,588	1,002	1,357	1,845	0.43	0.54	0.65	nm	1,376	2,052	nm
eBay	EBAY-US	11,652	14,007	16,083	3,846	4,516	5,167	2,667	3,076	3,545	2.03	2.36	2.69	3,215	3,741	4,419	2.49
Yahoo!	YHOO-US	4,381	4,511	4,687	1,473	1,461	1,636	1,069	1,150	1,285	0.83	0.95	1.12	940	950	1,241	0.73
Groupm	GRPN-US	1,625	2,400	3,095	(111)	372	735	(262)	121	447	-0.72	0.18	0.70	335	553	1,118	0.52
LinkedIn	LNKD-US	522	904	1,300	99	176	308	36	77	145	0.35	0.67	1.18	0	(0)	1	0.12
IAC	IACI-US	2,059	2,669	2,962	3,65	494	577	221	261	320	2.26	2.74	3.39	300	271	386	3.95
Aol	AOL-US	2,202	2,117	2,087	299	346	354	13	76	81	0.12	0.24	0.85	242	326	288	2.59
ExactTarget	ET-US	207	272	329	(0)	4	15	(35)	(15)	(11)	(0.67)	-0.28	-0.16	nm	11	13	nm
ValueClick	VCLK-US	560	692	752	175	216	237	82	93	104	1.00	1.12	1.26	136	157	168	1.67
Millennial Media	MM-US	104	175	280	2	(3)	16	(0)	(5)	13	0.00	-0.06	0.12	nm	nm	nm	nm
Demand Media	DMD-US	312	349	399	86	97	113	22	29	37	0.25	0.34	0.42	81	91	117	0.96
QuinStreet	QNST-US	403	365	366	90	73	73	50	41	40	1.03	0.86	0.87	70	59	70	1.59
Infospace	INSP-US	229	367	nm	28	73	87	14	15	nm	0.48	0.69	0.97	nm	nm	nm	nm
Constant Contact	CTCT-US	214	254	299	36	45	54	0	5	9	0.70	0.86	1.14	(22)	(25)	(25)	0.59
Marchex	MCHX-US	147	143	159	23	19	23	12	11	14	0.30	0.26	0.34	14	12	16	0.40
<b>Advertising Technology</b>																	
Microsoft	MSFT-US	69,943	74,032	80,726	29,927	30,881	34,164	23,150	22,871	25,536	2.69	2.70	3.06	26,379	28,420	30,327	3.14
IBM	IBM-US	107,087	107,807	110,730	24,377	25,776	27,179	15,674	16,292	16,918	13.39	15.02	16.67	14,557	16,553	16,253	12.62
Adobe	ADBE-US	4,216	4,497	4,863	1,753	1,821	2,048	1,183	1,223	1,348	2.35	2.44	2.68	1,518	1,488	1,660	3.06
Akamai	AKAM-US	1,159	1,349	1,529	525	573	658	285	295	340	1.52	1.63	1.86	432	423	491	2.41
Teradata	TDC-US	2,362	2,716	3,035	659	747	855	399	459	540	2.32	2.71	3.15	503	604	699	2.98
SDL	SDL-LN	£229	£274	£294	£42	£47	£53	£30	£30	£34	£0.37	£0.40	£0.45	£32	£36	£35	£0.40
Responsys	MKTG-US	135	164	195	25	26	34	11	12	17	0.21	0.22	0.31	nm	nm	nm	nm
DG	DGIT-US	324	420	440	119	147	158	24	19	26	0.88	0.70	0.93	nm	nm	nm	nm
Velti	VELT-US	189	291	392	53	84	115	29	49	72	0.50	0.73	1.00	nm	nm	nm	nm
Augme	AUGT-U	3	12	32	(5)	(10)	1	(6)	(33)	(28)	(0.09)	(0.41)	(0.29)	(9)	(16)	(16)	-0.10
<b>Marketing Information Services</b>																	
Nielson	NLSN-US	5,532	5,764	6,083	1,546	1,615	1,753	590	675	760	1.61	1.80	2.06	646	959	1,127	1.79
Neustar	NSR	620	824	898	255	380	418	161	186	211	2.16	2.77	3.13	208	243	nm	3.11
CoreLogic	CLGX-US	1,391	1,424	1,467	310	353	375	78	109	125	0.71	1.04	1.18	167	208	226	1.56
GfK	GFK-XE	€ 1,374	€ 1,492	€ 1,575	€ 235	€ 243	€ 268	€ 124	€ 105	€ 121	€ 3.40	€ 3.06	€ 3.48	€ 162	€ 167	€ 188	€ 4.51
Ipso	IPS-FR	€ 1,362	€ 1,838	€ 1,927	€ 178	€ 206	€ 238	€ 86	€ 96	€ 122	€ 2.25	€ 2.23	€ 2.76	€ 86	€ 88	€ 122	€ 2.66
Arbitron	ARB-US	422	446	469	125	132	141	57	61	69	2.10	2.25	2.56	nm	nm	nm	3.78
comScore	SCOR-US	232	278	325	47	59	69	(11)	3	12	-0.33	0.10	0.31	29	41	65	0.83
Rentrak	RENT-US	91	98	112	8	5	7	11	(2)	1	0.43	-0.19	0.08	10	8	9	0.87

Source: BMO Capital Markets and company reports

### Exhibit 94. Advertising and Marketing Services Growth Rates

Company	Ticker	Revenue			EBITDA			Net Income			EPS			FCF			FCF/share	
		2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012
Omnicom Group	OMC-US	10.6%	4.1%	5.0%	13.5%	9.2%	8.3%	12.7%	11.8%	13.6%	20.3%	13.8%	13.5%	16.4%	10.9%	10.3%	24.5%	13.4%
WPP plc	WPP-LN	7.4%	5.3%	3.8%	16.0%	9.8%	4.3%	23.2%	4.8%	10.4%	21.5%	4.8%	10.1%	9.3%	12.3%	8.4%	9.0%	12.3%
Interpublic Group	IPG-US	7.6%	3.1%	5.0%	20.2%	7.9%	11.1%	60.7%	-1.9%	19.0%	61.1%	13.5%	19.2%	31.6%	-3.6%	28.3%	32.0%	11.6%
Publicis Groupe	PUB-FR	7.3%	7.9%	4.6%	6.9%	9.6%	6.5%	14.0%	8.9%	8.3%	12.6%	16.4%	9.5%	0.8%	14.1%	7.7%	0.1%	22.4%
Dentsu	4324-TO	487.3%	-81.8%	1.9%	-0.3%	11.9%	5.4%	-30.5%	61.1%	5.9%	36.7%	15.7%	8.9%	18.1%	12.6%	5.0%	18.1%	12.6%
Havas	HAV-FR	5.6%	6.2%	3.4%	-2.5%	17.5%	5.9%	9.1%	24.5%	7.8%	7.7%	31.1%	10.4%	16.5%	11.2%	8.6%	16.5%	11.2%
Aegis	AGS-LN	-22.2%	12.2%	6.4%	-10.0%	15.1%	7.5%	6.9%	10.5%	10.1%	-10.0%	22.2%	9.4%	-24.6%	25.0%	5.3%	-24.6%	25.0%
Sapient	SAPE-US	23.0%	12.6%	18.0%	48.6%	14.8%	23.5%	83.0%	7.0%	37.0%	78.3%	4.6%	35.0%	28.5%	2.0%	31.7%	31.4%	-0.2%
MDC Partners	MDCA-US	36.9%	15.3%	9.7%	6.4%	26.8%	14.8%	nm	nm	nm	nm	nm	121.2%	-39.1%	145.4%	62.7%	-41.1%	139.0%
Agency Holding Companies	Mean	62.6%	-1.7%	6.4%	11.0%	13.6%	9.7%	22.4%	15.8%	14.0%	28.5%	15.3%	26.4%	6.4%	25.5%	18.7%	7.3%	27.5%
	Median	7.6%	6.2%	5.0%	6.9%	11.9%	7.5%	13.4%	9.7%	10.3%	20.9%	14.7%	10.4%	16.4%	12.3%	8.6%	16.5%	12.6%
Experian (Local)	EXPN-LN	9.3%	12.5%	2.7%	20.2%	14.0%	8.8%	16.8%	12.1%	9.7%	5.9%	11.4%	10.8%	11.1%	18.3%	1.4%	11.1%	18.3%
Alliance Data Systems	ADS-US	13.7%	10.7%	7.6%	22.7%	15.6%	9.4%	125.6%	22.1%	9.9%	30.1%	11.3%	12.4%	67.4%	24.1%	11.9%	nm	nm
Equifax	EFX-US	5.4%	9.1%	7.5%	7.8%	11.0%	7.8%	4.5%	11.7%	9.3%	6.8%	15.6%	10.4%	20.8%	nm	nm	nm	nm
Multitriples	MPLU3-BR	165.4%	18.3%	20.4%	8.7%	0.4%	21.9%	131.7%	-9.0%	23.4%	125.3%	-7.3%	26.1%	217.7%	-43.2%	8.5%	217.7%	-43.2%
Aimia	AIM-T	1.9%	10.8%	5.6%	-69.2%	11.0%	5.9%	-67.0%	8.5%	14.7%	100.0%	20.0%	8.8%	-2.2%	20.1%	-4.1%	nm	nm
Axiom	ACMK-US	1.5%	-0.9%	4.0%	-2.0%	-12.1%	11.0%	10.3%	-18.3%	32.5%	-10.8%	-2.5%	33.8%	0.1%	-3.9%	20.0%	nm	nm
Harte-Hanks	HHS-US	-1.1%	-2.1%	0.3%	-14.2%	2.7%	4.2%	-16.8%	-1.2%	7.3%	-16.1%	-0.8%	7.3%	-20.2%	-2.8%	-0.7%	-19.4%	-2.4%
Valassis	VCI-US	-4.2%	-4.2%	-1.9%	0.4%	-3.6%	-1.2%	29.3%	-1.7%	2.0%	37.7%	12.0%	8.9%	17.1%	-14.8%	-3.4%	24.8%	-3.0%
Direct and Database Marketing	Mean	24.0%	6.8%	5.8%	-3.2%	4.9%	8.5%	29.3%	3.0%	13.6%	34.9%	7.5%	14.8%	39.0%	-0.3%	4.8%	58.5%	-7.6%
	Median	3.7%	9.9%	4.8%	4.1%	6.8%	8.3%	13.6%	3.6%	9.8%	18.4%	11.4%	10.6%	14.1%	-2.8%	1.4%	18.0%	-2.7%
Google	GOOG-US	32.3%	53.2%	31.9%	22.1%	21.6%	16.4%	20.9%	20.7%	15.9%	21.8%	19.3%	16.3%	50.6%	33.6%	14.0%	48.8%	31.8%
Amazon	AMZN-US	40.6%	31.8%	28.6%	-1.5%	24.3%	61.8%	-45.2%	-12.4%	118.4%	-45.8%	-10.0%	109.2%	101.7%	-2.2%	31.6%	101.7%	-2.2%
Facebook	FB-US	nm	33.6%	30.7%	nm	19.0%	31.3%	nm	35.5%	35.9%	nm	26.3%	20.1%	nm	nm	49.2%	nm	nm
eBay	EBAY-US	27.3%	20.2%	14.8%	19.0%	17.4%	14.4%	16.0%	15.3%	15.2%	17.3%	16.1%	14.3%	149.0%	16.3%	18.1%	149.0%	16.3%
Yahoo!	YHOO-US	-4.5%	3.0%	3.9%	0.5%	-0.8%	12.0%	-11.8%	7.6%	11.7%	-6.4%	14.0%	17.9%	18.1%	1.0%	30.7%	11.5%	7.0%
Groupm	GRPN-US	47.7%	28.9%	nm	43.6%	97.7%	nm	146.2%	269.3%	nm	125.6%	278.8%	nm	65.4%	102.0%	nm	65.4%	nm
LinkedIn	LNKD-US	114.8%	73.1%	43.8%	79.4%	78.2%	75.1%	66.8%	110.8%	88.9%	46.6%	91.4%	76.5%	-19.7%	-115.2%	446.05%	-19.7%	-115.2%
IAC	IACI-US	25.8%	29.6%	11.0%	45.7%	35.4%	16.7%	137.1%	18.4%	22.4%	172.3%	21.2%	23.7%	30.3%	-9.7%	42.8%	30.3%	-9.7%
Aol	AOL-US	-8.9%	-3.8%	-1.4%	-55.6%	15.9%	2.3%	-95.9%	477.4%	7.0%	-96.0%	517.5%	14.8%	-53.5%	34.6%	-11.6%	-53.5%	34.6%
ExactTarget	ET-US	31.0%	21.2%	nm	nm	248.2%	nm	56.3%	25.9%	nm	58.2%	42.9%	nm	nm	17.6%	nm	nm	nm
ValueClick	VCLK-US	30.0%	23.5%	8.7%	35.1%	23.7%	9.6%	41.7%	13.4%	12.1%	43.2%	12.2%	12.0%	32.5%	15.6%	6.7%	33.8%	14.3%
Millennial Media	MM-US	68.9%	59.6%	nm	-260.8%	638.0%	nm	nm	349.0%	nm	nm	290.6%	nm	nm	nm	nm	nm	nm
Demand Media	DMD-US	11.8%	14.1%	nm	13.3%	15.8%	nm	34.8%	27.1%	nm	36.0%	24.1%	nm	12.5%	29.6%	nm	12.5%	nm
QuinStreet	QNST-US	20.4%	-9.4%	0.4%	26.5%	-19.1%	-0.1%	87.2%	-19.2%	-1.7%	9.6%	-16.8%	1.8%	17.8%	-16.4%	18.8%	17.8%	-16.4%
Infospace	INSP-US	-7.3%	60.3%	nm	42.3%	166.3%	18.6%	nm	13.8%	nm	nm	43.8%	40.6%	nm	nm	nm	nm	nm
Constant Contact	CTCT-US	23.1%	18.4%	17.7%	57.0%	25.5%	19.5%	-100.0%	nm	82.0%	84.6%	23.2%	31.7%	-246.5%	-13.8%	0.0%	nm	nm
Marchex	MCHX-US	50.4%	-2.4%	11.0%	nm	-16.9%	20.4%	nm	-7.3%	25.4%	nm	-12.0%	28.8%	nm	-14.3%	34.8%	nm	-10.1%
Interactive Advertising and Marketing Services	Mean	28.7%	28.9%	20.3%	24.6%	36.0%	76.3%	11.7%	60.8%	69.1%	24.7%	60.4%	61.4%	8.0%	0.6%	323.0%	35.5%	2.4%
	Median	26.5%	29.6%	16.3%	26.5%	20.3%	18.6%	18.5%	18.4%	25.6%	19.6%	22.2%	24.1%	24.2%	1.0%	29.6%	30.3%	9.8%
Microsoft	MSFT-US	11.9%	5.8%	9.0%	11.8%	3.2%	10.6%	23.4%	-1.2%	11.7%	28.1%	0.3%	13.3%	16.3%	7.7%	6.7%	16.3%	7.7%
IBM	IBM-US	7.2%	0.7%	nm	6.1%	5.7%	nm	5.7%	3.9%	nm	14.7%	12.2%	nm	0.9%	13.7%	nm	0.9%	13.7%
Adobe	ADBE-US	11.0%	6.7%	8.1%	13.6%	3.9%	12.5%	16.5%	3.4%	10.2%	21.8%	3.9%	9.8%	44.3%	-2.0%	11.5%	44.3%	-2.0%
Akamai	AKAM-US	13.2%	16.5%	13.3%	10.9%	9.1%	14.8%	4.7%	3.6%	15.2%	6.3%	7.2%	13.9%	14.2%	-2.1%	16.1%	14.2%	-2.1%
Teradata	TDC-US	22.0%	15.0%	11.7%	31.5%	13.3%	14.5%	25.6%	15.1%	17.6%	24.7%	16.6%	16.3%	23.1%	20.2%	15.7%	23.1%	20.2%
SDL	SDL-LN	12.5%	19.8%	7.1%	12.6%	11.6%	12.1%	11.6%	-1.3%	13.6%	10.6%	8.6%	12.7%	19.3%	12.2%	-3.2%	19.3%	12.2%
Responsys	MKTG-US	21.6%	18.7%	nm	2.6%	31.6%	nm	7.1%	43.9%	nm	4.8%	40.0%	nm	nm	nm	nm	nm	nm
DG	DGIT-US	31.0%	29.5%	4.8%	7.2%	23.1%	7.3%	-47.4%	-24.2%	40.7%	-47.3%	-20.9%	34.2%	nm	nm	nm	nm	nm
Velti	VELT-US	54.1%	34.4%	nm	57.4%	37.8%	nm	68.1%	47.6%	nm	46.6%	36.0%	nm	nm	nm	nm	nm	nm
Augme	AUGT-U	nm	nm	nm	nm	nm	nm	nm	nm	14.3%	nm	nm	nm	nm	nm	nm	nm	nm
Advertising Technology	Mean	15.5%	18.8%	13.4%	13.4%	14.4%	17.6%	5.7%	8.3%	23.9%	8.4%	8.8%	22.0%	19.7%	8.3%	9.4%	19.7%	8.3%
	Median	12.5%	16.5%	10.4%	11.8%	9.1%	13.5%	11.6%	3.6%	15.2%	14.7%	7.2%	15.1%	17.8%	10.0%	11.5%	17.8%	10.0%
Nielsen	NLSN-US	7.9%	4.2%	5.5%	9.6%	4.5%	8.5%	nm	14.4%	12.6%	69.5%	11.5%	14.7%	nm	48.5%	17.6%	nm	48.5%
Neustar	NSR-US	17.8%	32.8%	9.1%	10.9%	49.0%	9.8%	40.2%	15.8%	13.5%	43.0%	28.1%	12.9%	63.7%	17.0%	nm	63.7%	17.0%
CoreLogic	CLGX-US	49.3%	2.4%	3.0%	-17.6%	13.9%	6.2%	-37.4%	40.7%	14.6%	-30.4%	46.6%	13.0%	-15.2%	24.9%	8.5%	-15.2%	24.9%
GfK	GFK-XE	6.2%	8.6%	5.6%	-3.9%	3.4%	10.2%	3.3%	-14.9%	14.9%	1.8%	-10.0%	13.7%	-5.6%	2.9%	13.1%	-5.6%	2.9%
Ipsos	IPS-FR	19.4%	35.0%	4.8%	29.1%	15.9%	15.4%	0.0%	12.1%	26.9%	-4.3%	-0.8%	23.6%	4.3%	1.8%	39.0%	4.3%	1.8%
Arbitron	ARB-US	6.8%	5.6%	5.2%	24.4%	6.0%	7.0%	27.3%	7.8%	12.8%	28.0%	7.0%	14.0%	nm	nm	nm	nm	nm
comScore	SCOR-US	32.8%	19.6%	16.7%	nm	24.3%	18.5%	nm	nm	nm	nm	nm	nm	-3.4%	39.8%	58.6%	-3.4%	39.8%
Reentrak	RENT-US	-6.6%	8.1%	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	93.8%	-20.1%	12.2%	93.8%	-20.1%
Marketing Information Services	Mean	3.9%	16.0%	7.4%	8.6%	18.8%	11.2%	6.7%	12.3%	16.5%	7.6%	14.2%	15.5%	22.9%	11.0%	26.3%	22.9%	11.0%
	Median	6.8%	8.6%	5.4%	10.9%	14.9%	10.0%	3.3%	12.1%	14.6%	1.8%	7.0%	13.7%	0.4%	10.0%	13.1%	0.4%	10.0%
Advertising and Marketing Services Universe	Mean	28.2%	16.0%	12.2%	12.0%	20.1%	34.1%	15.9%	26.4%	35.3%	23.6%	27.9%	34.7%	18.1%	9.5%	124.8%	25.7%	10.8%
	Median	11.4%	12.2%	7.8%	10.9%	13.3%	12.0%	13.4%	11.1%	14.8%	20.3%	13.5%	14.7%	16.5%	11.7%	13.5%	17.1%	12.2%

Source: BMO Capital Markets and company reports

## Exhibit 95. Advertising and Marketing Services Balance Sheet Data

Company	Ticker	Adj'd Ent. Value			Net (Debt)/Cash			Book Value			Total Capital		
		2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013
<b>Communications Holding Companies (aka "Advertising Agencies")</b>													
Omnicom Group	OMC-US	\$14,497	\$13,515	\$12,634	(\$1,387)	(\$406)	\$475	\$3,980	\$4,554	\$5,410	\$5,367	\$4,960	\$4,934
WPP Group (Local)	WPP-LN	£12,535	£13,093	£12,604	-(£2,465)	-(£3,023)	-(£2,534)	£6,663	£7,432	£8,281	\$9,128	\$10,455	\$10,815
Interpublic Group	IPG-US	\$4,479	\$4,368	\$4,197	\$515	\$626	\$797	\$2,519	\$2,422	\$2,410	\$2,005	\$1,795	\$1,613
Publicis Groupe (Local)	PUB-FR	€ 7,146	€ 7,792	€ 6,972	€ 1,199	€ 553	€ 1,373	€ 3,898	€ 3,470	€ 3,871	€ 2,699	€ 2,917	€ 2,498
Dentsu	4324-TO	¥584,470	¥523,530	¥499,946	¥29,760	¥90,700	¥114,284	¥550,368	¥598,780	¥612,287	¥520,608	¥508,080	¥498,003
Havas (Local)	HAV-FR	€ 1,782	€ 1,812	€ 1,722	(€ 37)	(€ 67)	€ 24	€ 1,308	€ 1,395	€ 1,541	€ 1,345	€ 1,462	€ 1,517
Aegis (Local)	AGS-LN	£2,019	£1,976	£1,950	-(£128)	-(£85)	-(£59)	£590	£509	£601	£718	£594	£660
Sapient	SAPE-US	1,399	1,415	1,386	212	197	225	479	590	716	267	393	491
MDC Partners	MDC-A-US	\$671	\$662	\$663	(\$377)	(\$368)	(\$369)	(\$13)	(\$18)	(\$30)	\$364	\$350	\$339
<b>Direct and Database Marketing Services</b>													
Experian	EXPN-LN	£10,905	£10,647	£10,644	-(£1,501)	-(£1,242)	-(£1,240)	£2,713	£3,068	£3,387	£4,214	£4,310	£4,626
Alliance Data Systems	ADS-US	10,267	8,734	8,859	(2,330)	(798)	(923)	4,441	5,014	4,446	6,771	5,811	5,368
Equifax	EFX-US	6,348	6,109	5,811	(886)	(646)	(348)	1,713	1,936	2,212	2,599	2,583	2,560
Multiplex	MPLUS-BR	BRL 6,632	BRL 6,318	BRL 5,940	BRL 890	BRL 1,204	BRL 1,582	BRL 259	BRL 251	BRL 268	(BRL 631)	(BRL 953)	(BRL 1,314)
Aimia	AIM-T	CS2,577	CS2,502	CS2,417	CS-326	CS-251	CS-166	CS1,293	CS1,328	CS1,418	CS1,620	CS1,579	CS1,583
Acxiom	ACXM-US	1,125	1,339	1,319	(49)	(263)	(243)	612	633	698	660	896	942
Harte-Hanks	HHS-US	635	595	565	(93)	(52)	(23)	446	469	495	539	521	517
Valassis	VCI-US	1,382	1,307	1,186	(496)	(420)	(300)	450	527	611	945	947	911
<b>Interactive Advertising and Marketing Services</b>													
Google	GOOG-US	\$152,116	\$148,677	\$157,987	\$40,422	\$43,861	\$34,551	\$20,540	\$23,709	\$23,709	(\$19,882)	(\$20,152)	(\$10,842)
Amazon	AMZN-US	88,471	92,307	85,966	9,576	5,741	12,082	7,681	7,996	9,667	(1,895)	2,255	(2,414)
Facebook	FB-US	62,437	53,613	53,613	84	8,908	8,908	285	9,818	10,377	201	910	1,469
eBay	EBAY-US	49,023	47,599	45,543	3,840	5,264	7,320	18,000	20,665	23,855	14,160	15,401	16,536
Yahoo!	YHOO-US	4,257	2,760	3,149	14,332	15,829	15,440	12,581	18,720	18,884	(1,751)	2,890	3,443
Groupm	GRPN-US	5,777	5,478	5,004	1,062	1,361	1,835	470	661	930	(592)	(700)	(906)
LinkedIn	LNKD-US	10,371	9,628	8,714	339	1,082	1,996	625	1,401	2,273	286	319	277
IAC	IACI-US	2,861	2,621	2,425	608	848	1,045	1,937	1,727	1,899	1,328	879	855
Aol	AOL-US	2,155	2,109	1,975	408	453	587	2,154	2,241	2,407	1,747	1,788	1,820
ExactTarget	ET-US	1,386	1,284	1,301	84	186	169	285	289	214	201	103	45
ValueClick	VCLK-US	1,485	1,346	1,213	(51)	88	221	563	677	780	614	588	559
Millennial Media	MM-US	892	862	867	84	115	109	285	151	155	201	36	46
Demand Media	DMD-US	691	655	571	86	122	206	442	456	485	356	335	279
QuinStreet	QNST-US	351	368	316	26	9	61	331	301	325	305	292	264
Infospace	INSP-US	198	198	198	302	302	302	355	371	371	53	69	69
Constant Contact	CTCT-US	613	546	501	50	117	161	190	209	226	141	93	65
Marchex	MCHX-US	114	127	118	37	24	34	159	155	148	122	131	115
<b>Advertising Technology</b>													
Microsoft	MSFT-US	205,714	194,150	182,341	40,851	52,415	64,225	57,294	72,264	89,091	16,443	19,849	24,867
IBM	IBM-US	240,738	240,738	240,738	(16,973)	(16,973)	(16,973)	28,624	28,624	28,624	45,597	45,597	45,597
Adobe	ADBE-US	14,317	14,376	13,370	1,407	1,347	2,354	5,840	6,688	7,774	4,433	5,341	5,421
Akamai	AKAM-US	3,965	4,329	4,031	1,230	866	1,163	2,107	2,212	2,372	877	1,346	1,209
Teradata	TDC-US	11,165	10,748	10,295	482	900	1,352	1,442	1,914	2,397	960	1,015	1,045
SDL	SDL-LN	£432	£478	£449	£70	£25	£54	£220	£231	£253	£150	£206	£199
Responsys	MKTG-US	414	396	369	95	112	139	144	155	173	50	43	34
DG	DGIT-US	480	710	617	(146)	(376)	(283)	527	527	527	673	903	810
Velti	VELT-US	412	407	407	27	32	32	718	718	718	692	687	687
Augme	AUGT-U	190	190	190	0	0	0	10	10	10	10	10	10
<b>Marketing Information Services</b>													
Nielson	NLSN-US	16,372	15,799	14,758	(6,444)	(5,870)	(4,829)	4,647	4,991	5,764	11,091	10,862	10,593
Neustar	NSR-US	1,778	1,848	1,756	345	275	367	486	635	833	140	361	465
CoreLogic	CLGX-US	2,616	2,317	2,155	(854)	(555)	(394)	1,245	1,243	1,478	2,100	1,798	1,872
GfK	GFK-XE	€ 1,692	€ 1,677	€ 1,589	(€ 331)	(€ 316)	(€ 229)	€ 727	€ 796	€ 891	€ 1,058	€ 1,113	€ 1,119
Ipsos	IPSG-FR	€ 1,403	€ 1,372	€ 1,292	(€ 586)	(€ 555)	(€ 476)	€ 631	€ 697	€ 764	€ 1,217	€ 1,253	€ 1,240
Arbitron	ARB-US	895	880	851	20	35	64	123	132	153	103	97	89
comScore	SCOR-US	600	576	529	38	62	109	198	210	228	160	148	120
Rentrak	RENT-US	171	174	173	4	1	1	55	53	57	52	52	56

Source: BMO Capital Markets and company reports

### Exhibit 96. Advertising and Marketing Services Balance Sheet Ratios

Company	Ticker	Interest Coverage			Debt as % of Capital			Leverage			ROE			EBITDA/Capital		
		2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013
Omnicom Group	OMC-US	13.4x	14.6x	15.8x	25.8%	8.2%	-9.6%	0.7x	0.2x	-0.2x	23.4%	22.9%	21.9%	36.2%	42.8%	46.6%
WPP plc	WPP-LN	6.1x	6.7x	7.0x	27.0%	28.9%	23.4%	1.6x	1.8x	1.4x	11.0%	10.3%	10.3%	16.9%	16.2%	16.3%
Interpublic Group	IPG-US	6.1x	6.6x	7.3x	nm	nm	nm	-0.6x	-0.7x	-0.8x	15.7%	16.0%	19.1%	nm	nm	nm
Publicis Groupe	PUB-FR	11.6x	12.7x	13.6x	-44.4%	-19.0%	-55.0%	-1.2x	-0.5x	-1.1x	15.4%	18.8%	18.3%	38.3%	38.8%	48.3%
Dentsu	4324-TO	34.3x	38.4x	40.5x	-5.7%	-17.9%	-22.9%	-0.4x	-1.2x	-1.5x	3.9%	5.8%	6.0%	12.7%	14.6%	15.7%
Havas	HAV-FR	5.6x	6.6x	7.0x	2.8%	4.6%	-1.6%	0.2x	0.2x	-0.1x	9.2%	10.7%	10.5%	17.5%	18.9%	19.3%
Aegis	AGS-LN	nm	nm	nm	17.9%	14.3%	9.0%	0.6x	0.3x	0.2x	22.7%	29.1%	27.1%	31.3%	43.6%	42.2%
Sapient	SAPE-US	nm	nm	nm	-79.6%	-50.2%	-45.8%	-1.4x	-1.1x	-1.0x	16.9%	14.7%	16.6%	57.9%	45.2%	44.6%
MDC Partners	MDCA-US	2.1x	2.7x	3.1x	103.6%	105.1%	108.8%	4.2x	3.2x	2.8x	nm	nm	nm	24.9%	32.8%	39.0%
<b>Agency Holding Companies</b>	<b>Mean</b>	<b>11.3x</b>	<b>12.6x</b>	<b>13.5x</b>	<b>5.9%</b>	<b>9.3%</b>	<b>0.8%</b>	<b>0.4x</b>	<b>0.2x</b>	<b>0.0x</b>	<b>14.8%</b>	<b>16.0%</b>	<b>12.7%</b>	<b>29.5%</b>	<b>31.6%</b>	<b>34.0%</b>
	<b>Median</b>	<b>6.1x</b>	<b>6.7x</b>	<b>7.3x</b>	<b>10.3%</b>	<b>6.4%</b>	<b>-5.6%</b>	<b>0.2x</b>	<b>0.2x</b>	<b>-0.2x</b>	<b>15.5%</b>	<b>15.3%</b>	<b>16.6%</b>	<b>28.1%</b>	<b>35.8%</b>	<b>40.6%</b>
Experian	EXPN-LN	21.8x	24.8x	27.0x	35.6%	28.8%	26.8%	1.1x	0.8x	0.7x	25.8%	25.6%	25.5%	31.7%	35.3%	35.8%
Alliance Data Systems	ADS-US	4.3x	4.9x	5.4x	34.4%	13.7%	17.2%	2.3x	0.7x	0.7x	9.9%	10.7%	13.3%	14.9%	20.1%	23.8%
Equifax	EFX-US	11.6x	12.9x	13.9x	34.1%	25.0%	13.6%	1.4x	0.9x	0.5x	18.2%	18.0%	nm	24.6%	27.5%	29.9%
Multiplex	MPLU3-BR	nm	nm	nm	nm	nm	nm	-2.8x	-3.8x	-4.1x	105.8%	99.5%	115.1%	-50.0%	-33.2%	-29.3%
Aimia	AIM-T	nm	nm	nm	20.1%	15.9%	10.5%	1.0x	0.7x	0.4x	15.3%	16.2%	17.4%	21.1%	24.0%	25.4%
Acxiom	ACXM-US	14.4x	12.6x	14.0x	7.4%	29.4%	25.8%	0.2x	1.2x	1.0x	9.8%	7.8%	9.3%	38.0%	24.6%	26.0%
Harte-Hanks	HHS-US	28.5x	29.2x	30.5x	17.2%	10.1%	4.4%	0.9x	0.5x	0.2x	10.0%	9.4%	9.5%	18.9%	20.0%	21.0%
Valassis	VCI-US	11.1x	10.7x	10.6x	52.4%	44.4%	32.9%	1.5x	1.3x	1.0x	29.8%	25.0%	22.0%	34.2%	32.9%	33.8%
<b>Direct and Database</b>	<b>Mean</b>	<b>15.3x</b>	<b>15.9x</b>	<b>16.9x</b>	<b>28.7%</b>	<b>23.9%</b>	<b>18.7%</b>	<b>0.7x</b>	<b>0.3x</b>	<b>0.1x</b>	<b>28.1%</b>	<b>26.5%</b>	<b>30.3%</b>	<b>16.7%</b>	<b>18.9%</b>	<b>20.8%</b>
<b>Marketing</b>	<b>Median</b>	<b>13.0x</b>	<b>12.7x</b>	<b>13.9x</b>	<b>34.1%</b>	<b>25.0%</b>	<b>17.2%</b>	<b>1.0x</b>	<b>0.8x</b>	<b>0.6x</b>	<b>16.8%</b>	<b>17.1%</b>	<b>17.4%</b>	<b>22.8%</b>	<b>24.3%</b>	<b>25.7%</b>
Google	GOOG-US	nm	nm	nm	nm	nm	nm	-2.5x	-2.2x	-1.5x	69.2%	72.4%	83.9%	-80.8%	-97.0%	-209.8%
Amazon	AMZN-US	26.6x	33.1x	53.6x	nm	-254.6%	nm	-4.9x	-2.4x	-3.1x	8.2%	6.9%	12.5%	nm	nm	nm
Facebook	FB-US	nm	nm	nm	-41.6%	-979.2%	-606.2%	0.0x	-3.3x	-2.5x	nm	13.8%	17.8%	1139.8%	300.4%	244.2%
eBay	EBAY-US	nm	nm	nm	nm	nm	nm	-1.0x	-1.2x	-1.4x	14.8%	14.9%	14.9%	27.2%	29.3%	31.2%
Yahoo!	YHOO-US	nm	nm	nm	nm	nm	nm	-9.7x	-10.8x	-9.4x	8.5%	6.1%	6.8%	nm	nm	nm
Groupon	GRPN-US	nm	nm	nm	nm	nm	nm	nm	-3.7x	-2.5x	nm	18.3%	48.1%	nm	-53.1%	-81.2%
LinkedIn	LNKD	nm	nm	nm	nm	nm	nm	-3.4x	-6.2x	-6.5x	5.8%	5.5%	6.4%	nm	nm	nm
IAC	IACI-US	nm	nm	nm	-45.8%	-96.6%	-122.3%	-1.7x	-1.7x	-1.8x	11.4%	15.1%	16.8%	27.5%	56.3%	67.5%
Aol	AOL-US	nm	nm	nm	-23.3%	-25.3%	-32.3%	-1.4x	-1.3x	-1.7x	0.6%	3.4%	3.4%	17.1%	19.4%	19.5%
ExactTarget	ET-US	nm	nm	nm	-41.6%	-180.7%	-373.4%	nm	-43.6x	-11.4x	nm	nm	nm	nm	4.1%	32.8%
ValueClick	VCLK-US	nm	nm	nm	8.3%	-15.0%	-39.6%	0.3x	-0.4x	-0.9x	14.5%	13.7%	13.3%	28.5%	36.7%	42.4%
Millennial Media	MM-US	nm	nm	nm	-41.6%	-317.9%	-236.9%	-46.5x	nm	-7.0x	nm	8.3%	8.3%	0.9%	nm	33.8%
Demand Media	DMD-US	102.8x	116.5x	134.9x	-24.2%	-36.5%	-73.8%	-1.0x	-1.3x	-1.8x	4.9%	6.5%	7.7%	24.1%	29.1%	40.4%
QuinStreet	QNST-US	nm	nm	nm	-8.6%	-3.1%	-23.1%	-0.3x	-0.1x	-0.8x	15.2%	13.5%	12.3%	29.6%	25.0%	27.7%
Infospace	INSP-US	nm	nm	nm	nm	nm	nm	-10.9x	-4.1x	-3.5x	3.8%	4.2%	nm	52.2%	106.1%	nm
Constant Contact	CTCT-US	nm	nm	nm	-35.2%	-125.4%	-249.1%	-1.4x	-2.6x	-3.0x	nm	2.3%	4.0%	nm	nm	nm
Marchex	MCHX-US	nm	nm	nm	-30.8%	-18.4%	-29.4%	-1.6x	-1.3x	-1.5x	7.6%	7.2%	9.5%	19.0%	14.6%	20.2%
<b>Interactive Advertising and Marketing Services</b>	<b>Mean</b>	<b>64.7x</b>	<b>74.8x</b>	<b>94.2x</b>	<b>-28.4%</b>	<b>-186.6%</b>	<b>-178.6%</b>	<b>-5.7x</b>	<b>-5.4x</b>	<b>-3.5x</b>	<b>13.7%</b>	<b>13.6%</b>	<b>17.7%</b>	<b>116.8%</b>	<b>39.2%</b>	<b>22.4%</b>
	<b>Median</b>	<b>64.7x</b>	<b>74.8x</b>	<b>94.2x</b>	<b>-33.0%</b>	<b>-96.6%</b>	<b>-98.0%</b>	<b>-1.6x</b>	<b>-2.3x</b>	<b>-2.5x</b>	<b>8.4%</b>	<b>7.2%</b>	<b>12.3%</b>	<b>27.2%</b>	<b>27.1%</b>	<b>32.0%</b>
Microsoft	MSFT-US	nm	nm	nm	nm	nm	nm	-1.4x	-1.7x	-1.9x	40.4%	31.6%	28.7%	nm	nm	nm
IBM	IBM-US	54.2x	57.3x	60.4x	37.2%	37.2%	37.2%	0.7x	0.7x	0.6x	54.8%	56.9%	59.1%	53.5%	56.5%	59.6%
Adobe	ADBE-US	26.3x	27.3x	30.7x	-31.7%	-25.2%	-43.4%	-0.8x	-0.7x	-1.1x	20.3%	18.3%	17.3%	39.6%	34.1%	37.8%
Akamai	AKAM-US	nm	nm	nm	-140.2%	-64.3%	-96.2%	-2.3x	-1.5x	-1.8x	13.5%	13.3%	14.3%	59.9%	42.6%	54.5%
Teradata	TDC-US	nm	nm	nm	-50.2%	-88.6%	-129.4%	-0.7x	-1.2x	-1.6x	27.7%	24.0%	22.5%	68.6%	73.6%	81.8%
SDL	SDL-LN	217.9x	243.1x	272.6x	-47.1%	-12.0%	-27.1%	-1.7x	-0.5x	-1.0x	13.7%	12.9%	13.3%	28.4%	23.0%	26.7%
Responsys	MKTG-US	122.5x	125.6x	165.2x	-191.4%	-261.3%	-413.8%	-3.7x	-4.3x	-4.1x	7.6%	7.6%	9.8%	51.2%	60.7%	101.5%
DG	DGIT-US	5.1x	6.3x	6.7x	21.7%	nm	nm	1.2x	2.6x	1.8x	4.6%	nm	nm	17.7%	nm	nm
Velti	VELT-US	18.4x	28.9x	39.8x	-3.8%	-4.6%	nm	-0.5x	-0.4x	-0.3x	nm	nm	nm	7.7%	12.2%	nm
Augme	AUGT-U	nm	nm	nm	nm	nm	nm	nm	nm	0.0x	nm	nm	nm	nm	nm	nm
<b>Advertising Technology</b>	<b>Mean</b>	<b>74.0x</b>	<b>81.4x</b>	<b>95.9x</b>	<b>-50.7%</b>	<b>-59.8%</b>	<b>-112.1%</b>	<b>-1.0x</b>	<b>-0.8x</b>	<b>-1.0x</b>	<b>22.8%</b>	<b>23.5%</b>	<b>23.6%</b>	<b>40.8%</b>	<b>43.2%</b>	<b>60.3%</b>
	<b>Median</b>	<b>40.2x</b>	<b>43.1x</b>	<b>50.1x</b>	<b>-39.4%</b>	<b>-25.2%</b>	<b>-69.8%</b>	<b>-0.8x</b>	<b>-0.7x</b>	<b>-1.1x</b>	<b>17.0%</b>	<b>18.3%</b>	<b>17.3%</b>	<b>45.4%</b>	<b>42.6%</b>	<b>57.0%</b>
Nielson	NLSN-US	nm	nm	nm	58.1%	54.0%	45.6%	4.2x	3.6x	2.8x	12.7%	13.5%	13.2%	13.9%	14.9%	16.5%
Neustar	NSR-US	nm	nm	nm	-246.2%	-76.1%	-78.9%	-1.4x	-0.7x	-0.9x	33.1%	29.3%	25.4%	182.0%	105.4%	89.7%
CoreLogic	CLGX-US	nm	nm	nm	40.7%	30.9%	21.0%	2.8x	1.6x	1.0x	6.2%	8.8%	8.5%	14.8%	19.7%	20.1%
GfK	GFK@GR	nm	nm	nm	31.3%	28.4%	20.4%	1.4x	1.3x	0.9x	17.0%	13.2%	13.6%	22.2%	21.9%	24.0%
Ipsos	IPSO@FP	8.5x	9.8x	11.3x	48.2%	44.3%	38.4%	3.3x	2.7x	2.0x	13.6%	13.8%	16.0%	14.6%	16.4%	19.2%
Arbitron	ARB-US	235.8x	250.0x	267.3x	-19.1%	-35.8%	-71.5%	-0.2x	-0.3x	-0.5x	nm	nm	nm	nm	nm	nm
comScore	SCOR-US	nm	nm	nm	-23.8%	nm	nm	-0.8x	-1.1x	-1.6x	nm	1.3%	5.5%	29.5%	39.7%	58.0%
Rentrak	RENT-US	nm	nm	nm	-7.4%	-1.7%	-2.6%	-0.5x	-0.2x	-0.2x	19.4%	nm	2.1%	nm	nm	nm
<b>Marketing Information Services</b>	<b>Mean</b>	<b>122.1x</b>	<b>129.9x</b>	<b>139.3x</b>	<b>-25.2%</b>	<b>-1.7%</b>	<b>-12.2%</b>	<b>0.7x</b>	<b>0.5x</b>	<b>0.1x</b>	<b>17.9%</b>	<b>13.3%</b>	<b>11.8%</b>	<b>52.6%</b>	<b>40.6%</b>	<b>42.2%</b>
	<b>Median</b>	<b>122.1x</b>	<b>129.9x</b>	<b>139.3x</b>	<b>-7.4%</b>	<b>13.4%</b>	<b>8.9%</b>	<b>-0.2x</b>	<b>-0.2x</b>	<b>-0.2x</b>	<b>17.0%</b>	<b>13.2%</b>	<b>11.0%</b>	<b>22.2%</b>	<b>21.9%</b>	<b>24.0%</b>
<b>Advertising and Marketing</b>	<b>Mean</b>	<b>43.0x</b>	<b>47.0x</b>	<b>53.8x</b>	<b>-15.4%</b>	<b>-57.4%</b>	<b>-64.7%</b>	<b>-1.7x</b>	<b>-1.7x</b>	<b>-1.4x</b>	<b>19.0%</b>	<b>18.0%</b>	<b>18.8%</b>	<b>56.1%</b>	<b>34.5%</b>	<b>32.8%</b>
	<b>Median</b>	<b>14.4x</b>	<b>14.6x</b>	<b>15.8x</b>	<b>-6.6%</b>	<b>-12.0%</b>	<b>-23.1%</b>	<b>-0.6x</b>	<b>-0.7x</b>	<b>-1.0x</b>	<b>14.5%</b>	<b>13.7%</b>	<b>13.5%</b>	<b>27.3%</b>	<b>28.3%</b>	<b>32.8%</b>

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Rating Category	BMO Rating	BMOCM US Universe*	BMOCM US IB Clients**	BMOCM US IB Clients***	BMOCM Universe****	BMOCM IB Clients*****	Starmine Universe
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Hold	Market Perform	60.0%	7.0%	47.9%	57.6%	51.0%	40.1%
Sell	Underperform	2.4%	0.0%	0.0%	3.2%	0.7%	5.3%

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