

The Rise of Ad Networks

An In-Depth Look at Ad Networks

In this report, we explore the ad network industry and future trends we expect in its development. Furthermore, we look specifically at AOL, Google, MSN, and Yahoo! to analyze their growing participation in operating ad networks.

- **Audience is fragmenting.** While portals were once dominant, Yahoo!, AOL, and Microsoft only accounted for ~29% of minutes spent online in August 2007, down from 42% in August 2002. We believe portals which embrace fragmentation will succeed, while others will find display advertising increasingly challenging.
- **We think many page views are meaningless unless user information is gathered and ads are targeted.** Google's targeted search ads have commanded ~2x the RPQ of Yahoo!'s more generalized ads and we believe a similar pattern will occur in the display ad space. Thus, networks capable of targeting, with a broad publisher base to collect behavioral information, and high levels of audience overlap should stand out from competitors.
- **The ad network market is \$2B+ and growing.** The total global graphical advertising market is expected to grow 23% to \$16.9B in 2007. The top 20 ad networks alone are expected to earn ~\$2B in F'07 revenues (~13% of display ad market) with growth rates well above the general graphical advertising market. In August, the total growth rate in page views of the top ad networks was 77%. We expect ad networks to be 18% of the total display ad market by 2010.
- **Consolidation makes sense.** Ad networks will likely consolidate to grow their user base and leverage user information across a larger publisher base. Additionally, pricing is expected to be competitive. As such, consolidation makes sense. We also think that buyers will consolidate to source all of their advertising needs from fewer agencies from an ease of use standpoint.
- **We believe it is a positive move for GOOG, AOL, MSN, and YHOO to increase focus on this business.** AOL's advertising.com is the largest ad network with almost 3x the page views of the next competitor. Yahoo! is a clear fit in the space with a wealth of user information (ComScore's top visited site), its media partnerships, and its Blue Lithium and Right Media acquisitions. MSN has made significant inroads with its aQuantive and AdECN exchange acquisitions, and with its Facebook and Digg partnerships. Google, while a late entrant to display ad networks, has a solid foundation with its extensive search network. Its acquisition of DoubleClick has made it a significant player in the space very quickly.

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Table of Contents

Ad Networks on the Rise	3
A High Growth, \$2 Billion Plus Industry	3
Dominant Portals Role in the Growing Ad Network Market..	7
AOL.....	9
Google	11
MSN	12
Yahoo!	13

Ad Networks on the Rise

Audience Fragmentation Limits Publisher Scale

As the web has grown to include ever increasing sources of news and information, audience fragmentation has naturally occurred, with once dominant portals now accounting for just under 30% of minutes online, down from 42% five years ago, according to August comScore data. We believe that large portals will turn to ad networks to aggregate the user base. Recently, we have seen large cap companies enter this space with AOL's acquisition of advertising.com (2004), WPP's acquisition of 24/7 Real Media (2007), Microsoft's aQuantive acquisition (2007), and Yahoo!'s acquisition of Blue Lithium (2007).

Advertisers Are Focused on ROI

While increasing user reach is half the battle, we recognize that many page views are meaningless to advertisers unless user information can be gathered and ads are targeted. We note that Google's targeted search ads have commanded approximately twice the RPQ of Yahoo!'s more generalized ads, and we believe a similar pattern will occur in the display ad space. Hence, we believe that we will see industry consolidation among both large and small cap companies. We believe that consolidation makes sense strategically as it is easier for both advertisers and publishers to fulfill all of their needs on fewer platforms while a consolidated network yields greater leverage of technology and advertiser/publisher relationships.

Large Cap Internet Leaders Are Entering the Space

In this paper, we explore the ad network industry and future trends we expect in its development. Furthermore, we look specifically at AOL, Google, MSN, and Yahoo! to analyze their growing participation in operating ad networks and who will likely emerge as leaders.

A High Growth, \$2 Billion Plus Industry

What Are Ad Networks?

We see ad networks defined by the following:

- transact, serve, track and report the distribution of advertiser ads to publisher pages.
- enable marketers to advertise on multiple publisher sites through one central location
- publishers enjoy the benefit of advertising revenue without investing in a sales force or as a source to sell remnant inventory
- vary in the ability to target a specific audience and in methods of payment (CPM, CPC, and CPA)
- revenues are determined by revenue share agreements

Reaching the user is half the battle; as such, targeting is key.

Lead generation is more vertical specific and performance oriented than ad networks.

The definition of ad networks is fuzzy with lead generation sometimes included. However, we are differentiating between the ad network and lead generation space. We are defining lead generation as much more targeted and deep into specific verticals. As a result, we believe that this commands much higher CPM's, in the \$100-\$150 range. While we believe that this is also an interesting ad model, we feel it deserves a more detailed consideration and will thus save it for a later note.

A Significant Market Opportunity

We estimate that the global graphical advertising market as a whole will grow over 20% through 2008. The sector should benefit from 1) increased online viewership as more people turn to the internet as a source of content and 2) increased RPMs as audience targeting improves.

Table 1: Global Graphical Advertising Forecast

\$ in millions

<u>Global</u>	<u>2005</u>	<u>2006</u>	<u>2007E</u>	<u>2008E</u>	<u>2009E</u>	<u>2010E</u>	<u>06-'10 CAGR</u>
Internet Population (M)	924	1,020	1,113	1,205	1,295	1,380	7.8%
Pages Viewed / User / Day	37	38	39	40	41	42	2.4%
Total Pages Viewed (B)	12,607	14,275	15,986	17,768	19,544	21,248	10.5%
RPM (per 1,000 pages)	\$0.87	\$0.97	\$1.06	\$1.15	\$1.23	\$1.30	7.6%
Global Graphical Forecast (\$M)	10,984	13,829	16,938	20,427	24,066	27,611	18.9%
Y/Y Growth	27.1%	25.9%	22.5%	20.6%	17.8%	14.7%	

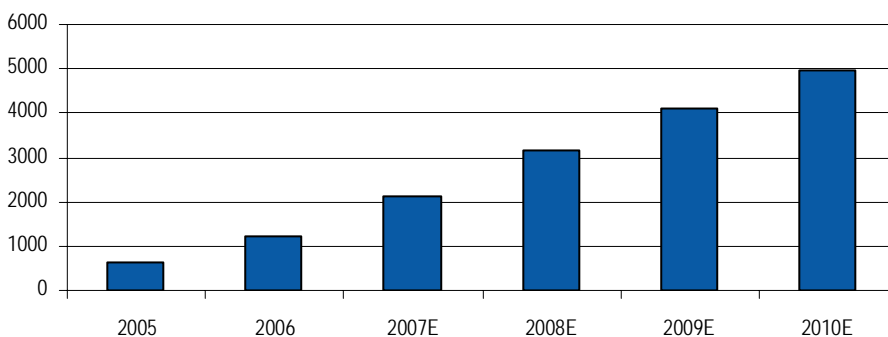
Source: JPMorgan Estimates, Company Reports, ComScore, Nielsen Net Ratings, IDC, IWS, IAB

Int'l Ad Network penetration is so small that it is not yet tracked by comScore. We expect that it is ~3-5 yrs developmentally behind the US and will be a significant future growth driver.

Additionally, increasing keyword prices and the ability of networks to provide response advertising in addition to branding campaigns will likely drive more marketers to ad networks. On the publisher side, as the long tail of information is increasing, more publishers are looking to monetize their content. We estimate that the top 20 ad networks will earn approximately \$2B+ in revenue in 2007 (~13% of the display ad market) and are growing much faster than the general graphical advertising industry. We estimate ad networks to contribute ~18% of the total display ad market in 2010 (25% F'08-F'10 CAGR).

Figure 1: Global Ad Network Market Forecast

\$ in millions



Source: ComScore data, Company reports, and JPMorgan estimates

Table 2: Ad Networks by Page Views

millions	August Page Views (M)	August Y/Y Growth
Advertising.com	72,598.6	56%
AdBrite	28,529.9	901%
Traffic Marketplace	25,629.0	321%
ValueClick	22,732.2	64%
24/7 Real Media	13,532.5	104%
Tribal Fusion	10,829.5	-4%
CPX Interactive	9,764.1	N/A
Casale Media Network	9,575.9	-59%
Blue Lithium	5,450.2	211%
Specific Media	5,407.0	N/A
Vibrant Media	5,096.6	168%
ContextWeb	5,065.6	122%
PrecisionClick	4,497.8	-52%
Burst Media	3,746.3	26%
DRIVEpm	2,993.1	140%
Interclick	1,992.1	N/A
Kontera	1,894.7	N/A
adconion media group	943.6	N/A
AdDynamix.com	918.3	264%
Undertone Networks	441.2	734%
Indieclick	175.8	N/A
Rydium Network	27.3	-52%
Total	231,841.3	77%

Source: ComScore and JPMorgan estimates

The Future of Ad Networks

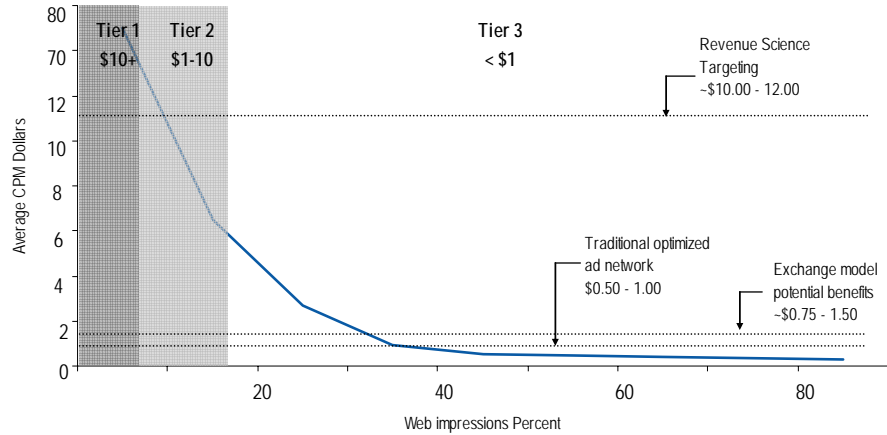
The ad network space is becoming increasingly competitive as new ventures are launched and as Google, Yahoo!, AOL, and Microsoft enter the space through acquisitions. We believe that differentiation will be key to success. Following are capabilities that we see important to market leadership.

Behavioral Targeting

We believe that advertisers used to pay for audiences on websites but will now start to pay for specific users. Marketers appear to value targeted advertising as evidenced by Google's well targeted search ads generating RPQs of more than double Yahoo!'s. We expect that this same principal will apply to graphical advertising and note that Revenue Science estimates a 15x CPM premium for behaviorally targeted ads.

Behavioral targeting should increase CPMs and drive volume.

Figure 2: Behavioral Targeting Effects on CPM



Source: Revenue Science Presentation

We believe that the development of a non-intrusive video ad delivery system with contextual advertising capabilities will be valued by the ad network space.

Success in mobile ads will be dependent on targeting, non-intrusiveness, and ability to load on slow-loading platforms.

We see payment structures shifting with objectives to include CPA models in addition to CPMs.

Marketers will turn to targeted email distribution given its high usage and push vs. pull ad model.

Video Capabilities

Google's \$1.65B acquisition of video sharing site YouTube gives insight into the value placed on video property. Traditional media companies have also moved onto the internet by offering TV episodes online and with internet designed webisodes. However, monetization of internet videos has trailed its growth. Various companies have experimented with pre-roll, post-roll and in-video ads. Google most recently has experimented with in-video ads on select YouTube videos in which the ad is overlaid on the bottom 20% of the video soon after it is launched. If the user does not click on it, it simply disappears.

Mobile Ads

An even younger industry is mobile phone advertising. The development of the iPhone and speculation of Google phone devices or services have placed a growing interest in the field.

Performance-Based Advertising

While many graphical ads were originally used for branding purposes with less of a focus on conversion, the developments in behavioral and contextual advertising have put more pressure on ad networks to deliver conversions.

Email Marketing

Ad networks have entered the realm of email marketing by placing advertisements in emails sent by other companies to their customers. As in the other categories, ROI is enhanced by careful pairing of the ad with a related company or email content. Email marketing is a preferred method of advertising with its easy trackability and ROI calculation. Furthermore, unlike other advertisements, email is pushed to targeted customers rather than assuming that specific websites will pull these customers to the ad.

Ultimately, successful ad networks are going to need to be able to provide a diversity of advertising platforms to its marketers with clear targeting capabilities.

Dominant Portals Role in the Growing Ad Network Market

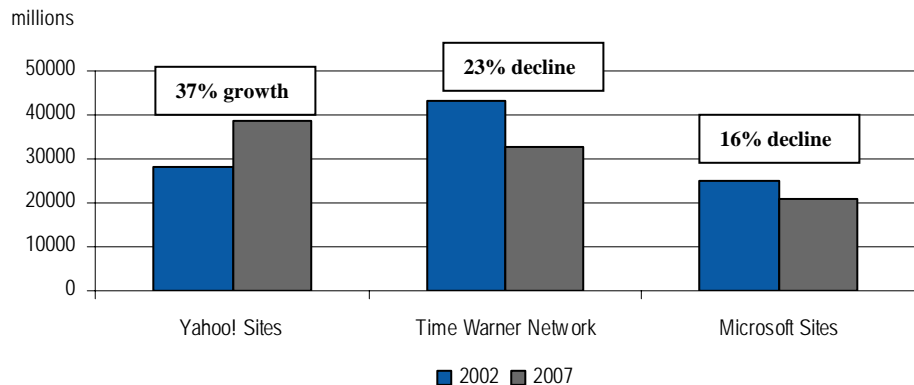
In our view, consolidation in the ad network space is strategically feasible. We believe that consolidation will occur throughout the industry as ad networks grow their user base and leverage user information through behavioral targeting across a larger audience base. We believe large portals are well positioned as it is easier for both advertisers and publishers to fulfill all of their needs on fewer platforms while a consolidated network yields greater leverage of technology and advertiser/publisher relationships.

Minutes spent on portals have declined over the last 5 years despite 37% growth in total minutes spent on the internet.

Creating Ad Networks Could Be the Answer to an Ever-Fragmenting Audience

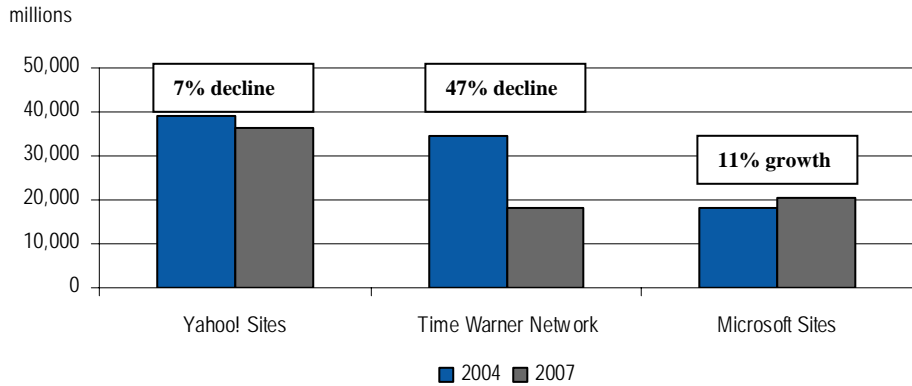
While portals were once the dominant source of news and information, Yahoo!, AOL, and Microsoft only accounted for ~29% of total minutes spent online in August 2007 vs. 42% in 2002. A similar trend can be seen in page views as August page views on the top 3 portals declined 18% from August 2004 vs. 21% total internet growth in page views. We note that some of these losses can be attributed to losses in dial-up subs. We believe portals will become more significant players in ad networks as they turn to networks to grow their user reach, leverage user information through behavioral targeting, and leverage their existing capabilities to sell, place, and analyze display ads.

Figure 3: Total Minutes Spent on Portal in August 2002 and 2007



Source: ComScore data and JPMorgan.

Figure 4: Total Page Views for Leading Portals, August 2004 and 2007



Source: comScore data and JPMorgan estimates

If a company had demographic, search query, and web navigation data on a user, we believe the company could provide advertising that was more user relevant and could tailor the ads to the user as he/she navigates the web.

User Information Will Lead to Dominance

Accurate and rich user information is among an internet company’s most valuable assets. Additionally, the ability to leverage accurate user information to deliver relevant content to users is the key to increasing conversion rates. We think large cap companies are particularly well suited to running ad networks as they can lever their user information with that of the publisher network to provide well targeted advertising. This should increase user conversion and monetization capabilities. A combination between any of the search players, a large publisher network, and a company with behavioral targeting capabilities would make sense to us.

One Platform for Multiple Advertising Products=Higher Ad Dollar Allocation

From the standpoint of an advertiser, advertising campaign management would be easier with a single ad firm offering multiple products (search, graphical, cost-per-lead, cost-per-action, in-game advertising, mobile advertising, video). Publishers would benefit from the scale of various advertisers across verticals and the higher CPMs accompanying better targeted ads.

Figure 5: Online Advertising Services by Company

Service	AOL	GOOG	MSN	YHOO
Search	✓	✓	✓	✓
Ad Network	✓	✓	✓	✓
Ad Serving***		✓	✓	✓
Traffic Exchange***		✓	✓	✓
Targeting	✓		✓	✓
Lead Generation	✓			
Affiliate Marketing***	✓	✓		
Rich Media	✓	✓	✓	✓
Mobile	✓	✓	✓	✓
Email	✓	✓	✓	✓

Source: JPMorgan estimates, Company data.

***Assumes DoubleClick/Performics acquisition

Cost Synergies

Entering the ad network space would allow large cap internet companies to lever their existing sales force, technology, and publisher relationships in expanding their product offering. The sales team could expand its offering of graphical advertising to include properties on the ad network. Technology used to place graphical ads on owned and operated properties and for behavioral targeting could be extended for use on network sites. Finally, search network relationships could be leveraged in building the ad network.

Scale Is Critical to Build a Market-Leading Product

While we have established that the goal of ad networks should be to increase their exposure to an overlapping user base across a variety of properties for targeting, such an undertaking requires scale.

- **Small Companies** must choose between generalization across a variety of publishers or going deep into a few verticals. Both options carry risk, as generalization limits targeting capabilities while focusing on limited verticals exposes companies to industry risk (for example, the current mortgage industry weakness).
- **Large Cap Companies**, however, have the resources to be both broad and deep, offering targeting capabilities while maintaining diversification of risk.

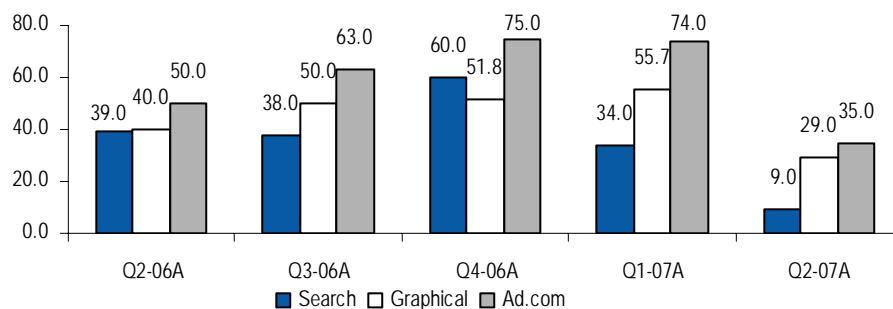
AOL

Advertising.com Revenue Growth Is Not Dependent on AOL Usage Trends

Advertising.com has been a major contributor to advertising revenue growth in the past 12 months, driving 43% of ad revenue increase at AOL while accounting for 27% of total advertising revenue. Because its revenue is derived from placing third party advertising on third party sites, advertising.com grew mainly through acquisition of new customers rather than through improved monetization of AOL traffic.

Figure 6: Advertising.com has contributed the largest portion of Y/Y advertising revenue increases

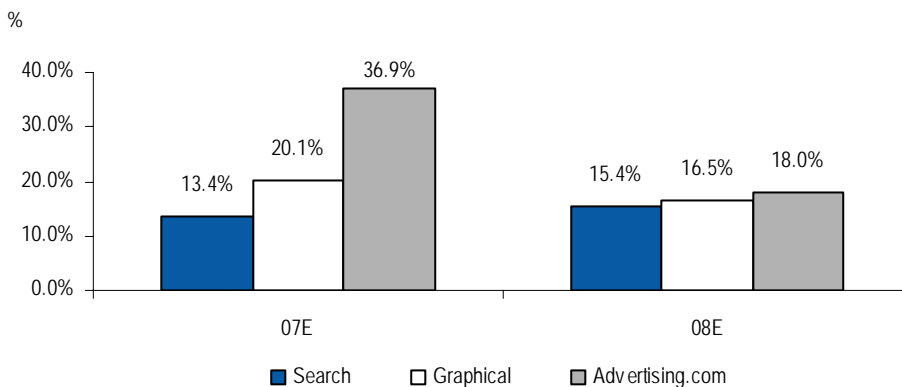
\$ in millions



Source: Company reports and JPMorgan.

We think that advertising.com will continue to grow faster than AOL's search and graphical revenue streams, helped by industry-wide shift to more targeted advertising, increased CPM due to behavioral targeting added through the acquisition of TACODA, as well as overall Internet advertising market growth.

Figure 7: We Expect Advertising.com Revenue to Continue Growing Faster than Search and Graphical



Source: Company reports and JPMorgan estimates.

Acquisition of TACODA Adds Behavioral Targeting Capability

We believe that the acquisition of TACODA, a behavioral targeting network, completed by AOL on September 6, 2007, makes sense strategically:

- The deal's logic is consistent with our view that improved monetization of non-premium inventory will continue to gain importance as premium inventory pricing growth is slowing industry-wide.
- We expect TACODA technology to improve targeting at advertising.com, thus driving CPM and helping maintain revenue growth rates.
- Bringing behavioral targeting function in-house is a prudent defensive move given recent consolidation.

Recent M&A Activity Intensifies the Competitive Environment

As discussed above, we see the acquisition of TACODA as a positive strategic development which should help offset potential impact from the recent changes in the competitive landscape, two deals in particular:

- **Acquisition of Blue Lithium by Yahoo!** We believe that Yahoo! used advertising.com as well as other networks to monetize its non-premium inventory, relationships that may be scaled down following the acquisition of Blue Lithium. Furthermore, we expect Yahoo! to combine Blue Lithium with recently acquired ad exchange Right Media and pursue third party business, thus competing with advertising.com.
- **Acquisition of Aptimus by The Apollo Group (University of Phoenix Online).** The Apollo Group has been the single largest contributor to advertising.com growth. We estimate that it accounted for 73%, 60% and 62% of Y/Y revenue increase in Q3 '06, Q4 '06 and Q1 '07, respectively. Although it's possible that The Apollo Group will re-direct some of the inventory from ad.com to Aptimus,

we expect the gains from the integration of TACODA to at least offset any potential impact.

Google

Becoming More than Just a Search Engine and Search Network

A latecomer to the display advertising field, Google has made recent strides to enter it and would be a likely candidate for building its AdSense network to include display advertising. As the leader in search market share, Google has much information about user preferences for hosting behaviorally targeted ads.

Table 3: Search Market Share, August 2007

millions

Core Search	Searches Aug-07	Search Market Share
Google Sites	5,545	56%
Yahoo! Sites	2,290	23%
Microsoft Sites	1,106	11%
Ask Network	438	4%
Time Warner Network	441	4%

Source: ComScore.

Strategic Acquisitions Provide Fast Paced Industry Entrance

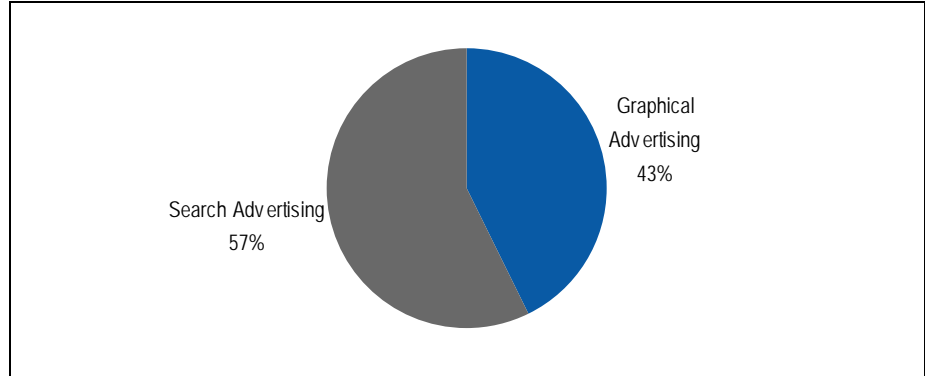
Recent acquisitions have positioned Google well to quickly gain market share. With the pending acquisition of DoubleClick, Google gains ownership of two key technologies:

- **the DART suite:** a comprehensive set of technologies that enable advertisers to effectively manage their online advertising campaigns while providing publishers with the ability to dynamically place ads on their sites.
- **the DoubleClick Advertising Exchange:** a platform for buyers to gain immediate access to inventory with goal-based bid rules, defined budgets, targeting, and frequency caps on inventory purchases, while sellers increase overall yield by reducing unsold and undervalued inventory

DoubleClick has relationships with both publishers and advertisers which enable it to serve hundreds of billions of ad impressions per year. In 2004 (the most recent full-year data available), DoubleClick served over 800 billion online ad impressions (we expect it will serve ~2 trillion impressions in F'07). Beginning with display advertising tests within the AdSense for Content environment, Google has been exploring the serving of graphical advertisements for a couple of years. But the acquisition of DoubleClick emphasizes the importance that Google places on entering the ad network market.

Figure 8: Graphical Ad Market Will Represent 43% of Total in 2010E

% of industry revenues



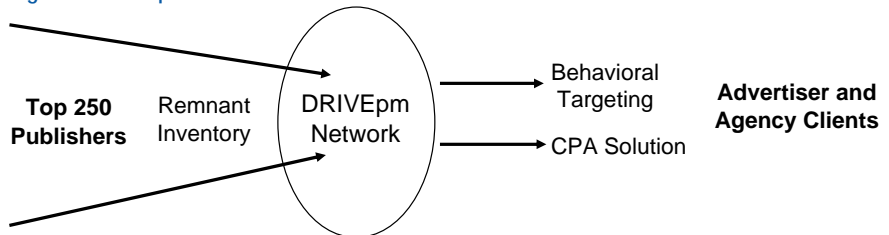
Source: JPMorgan estimates, Company Reports, ComScore, Nielsen/NetRatings, IDC, IWS, IAB

MSN

Rich Targeting and Performance-Based Advertising Capabilities

With the acquisition of aQuantive, Microsoft obtained the DRIVE performance media platform which provides premium advertising solutions to aQuantive advertisers and agencies. With a selective inventory from only the top 250 publishers, DRIVEpm offers brand protection to its advertisers. The collection of visitor data over several years and CPA payment options allows for behavioral targeting and performance-based capabilities. While the selectivity of the publisher network will likely limit its scale, this premium network will offer a point of differentiation from competitive networks. We believe this will be instrumental in monetizing inventory from the Facebook and Digg partnerships.

Figure 9: DRIVEpm Ad Network



Source: aQuantive reports and JPMorgan estimates

AdECN Should Improve Monetization

In July, Microsoft announced its intention to acquire AdECN in 1H08. AdECN serves as a hub for ad networks to buy and sell display advertising in a real-time auction marketplace. Advertisers will get more access to inventory enable better matching to their requirements and increasing ROI. Publishers will be able to increase their yield through increased volume of available inventory. With both parties benefiting, AdECN should provide better monetization through higher CPMs for Microsoft remnant and non-premium inventory. We believe this will be instrumental in monetizing remnant inventory.

Partnerships Are Growing MSN’s Display Reach Outside Its O&O Properties

Agreements to provide advertising on Facebook and Digg have expanded MSN's advertising network beyond its owned and operated properties and have allowed MSN to capitalize on the growing social networking trend. Facebook and Digg are two of the fastest growing social networks with Y/Y page view growth well in excess of 100%. The challenge that Microsoft will face will be providing targeting capabilities sufficient to monetize such a diverse user and content base.

Table 4: Partner Page View Growth, August 2007

millions	Aug-2006	Aug-2007	Y/Y Growth
Total Internet	501,260	474,003	-5%
FACEBOOK.COM	6,463	15,260	136%
DIGG.COM	4	24	496%

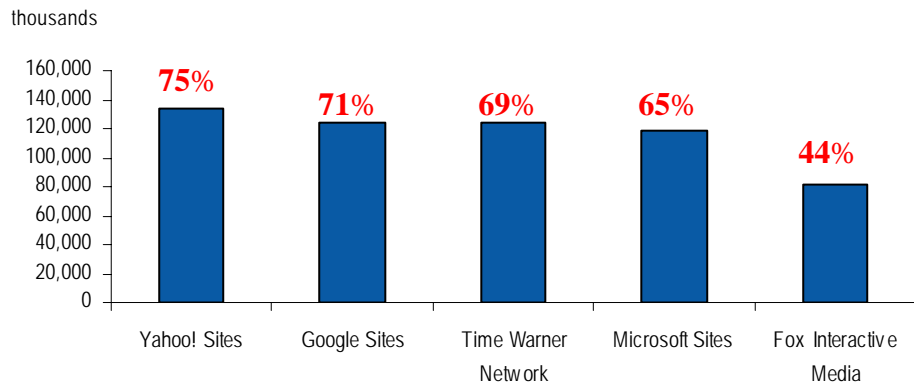
Source: comScore data and JPMorgan estimates

Yahoo!

A Clear Fit in the Ad Network Space

Yahoo! is particularly well positioned to provide targeted advertising to a network. As the top ranked website by unique visitors (according to comScore), Yahoo! has a wealth of information about visitor habits and preferences.

Figure 10: Top Sites by Unique Visitors and % Reach, July 2007



Source: ComScore data

Yahoo! has made strategic acquisitions to build off its existing assets and to gain dominance in this space.

- Its acquisition of Right Media, in addition to its owned and operated pages, has made it a destination for the buying and selling of inventory.
- The acquisition of Blue Lithium has provided Yahoo! with behavioral targeting technology, visitor information off its owned and operated sites, advanced analytic reporting, and a sales force more accustomed to direct response sales.

These additions should have a smooth integration as Yahoo! already possesses a sales force accustomed to selling display and contextual advertising, has experience with behavioral targeting with SmartAds, and has entered the ad network arena with newspaper partnerships and agreements with eBay and Comcast. The acquisition of Blue Lithium builds on these earlier efforts and has now made Yahoo a significant player in the ad network space.

Ad Network Growth Yields F'08E Revenue Upside

Yahoo! has made significant progress in developing its own display advertising partnerships. Most recently Yahoo! announced an agreement to collaborate with Bebo on display and video advertising on the company's U.K. and Ireland sites. Using a \$1.00 CPM, 80% TAC and 50% Y/Y page view growth rate, we estimate Yahoo!'s net take should be ~\$16M. Given the high growth rate and the potential that this partnership could expand to other geographic regions, we think this agreement will yield additional long-term benefits.

Table 5: F'08E Partnership Revenue

\$ in millions

Company	Category	Partnership Date	Ave. Monthly Unique Users (TTM)	PV (last 12 Months through Apr.)	Estimated Incremental YHOO Revenue
Comcast	Cable	4/30/2007	17.8	31,690	25.4
The McClatchy Company	Newspapers	4/16/2007	6.2	1,586	1.3
Calkins Media, Inc.	Newspapers	4/16/2007	NA	NA	NA
Media General, Inc.	Newspapers	4/16/2007	1.9	288	0.2
Morris Communications	Newspapers	4/16/2007	NA	NA	NA
Paddock Publications, Inc.	Newspapers	4/16/2007	NA	NA	NA
Belo Corp	Newspapers	11/20/2006	4.0	1,242	1.0
Cox Newspapers	Newspapers	11/20/2006	3.4	1,089	0.9
The E.W. Scripps Co	Newspapers	11/20/2006	16.1	4,778	3.8
Hearst Newspapers	Newspapers	11/20/2006	7.2	119	0.1
Journal Register Company	Newspapers	11/20/2006	NA	NA	NA
Lee Enterprises	Newspapers	11/20/2006	4.6	1,099	0.9
MediaNews Group, Inc.	Newspapers	11/20/2006	2.4	442	0.4
eBay	Online auctions	5/25/2006	79.8	129,421	59.6
Bebo	Social Network	9/12/2007	11.9	84,012	16.4
Total					109.8

Source: ComScore, Company Reports, JPMorgan estimates

We now believe that partnerships will generate a total of ~\$110M in F'08 rev, the rivals.com and Right Media acquisitions will contribute ~\$88M, and Blue Lithium will earn ~\$160M in F'08. With an F'08 graphical ad rev. estimate of \$1.99B, this implies a 2% Y/Y decline in organic growth on F'07 estimates for 16% Y/Y growth. We believe Yahoo! is poised to beat this estimate.

Companies Recommended in This Report (all prices in this report as of market close on 09 October 2007)

Google (GOOG/\$615.18/Overweight), Microsoft (MSFT/\$30.10/Overweight), Time Warner (TWX/\$19.12/Neutral), Yahoo Inc (YHOO/\$28.37/Overweight)

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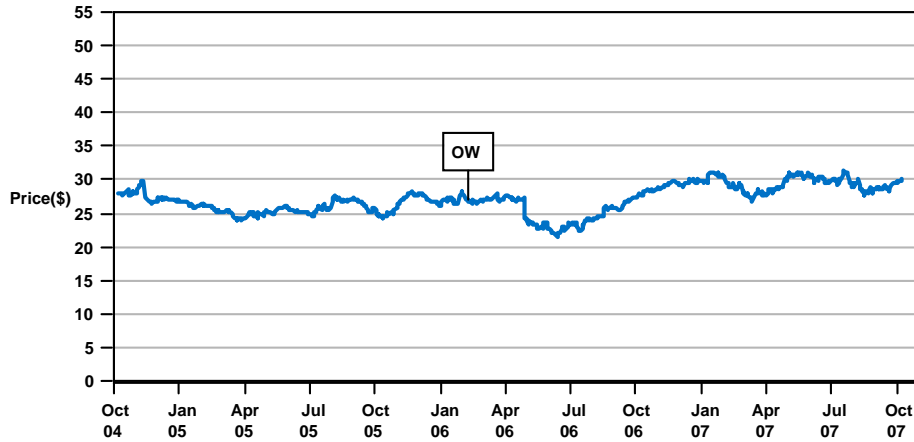
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Google (GOOG) Price Chart



Source: Reuters and JPMorgan; price data adjusted for stock splits and dividends.
This chart shows JPMorgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.
JPMorgan ratings: OW = Overweight, N = Neutral, UW = Underweight.

Microsoft (MSFT) Price Chart



Date	Rating	Share Price (\$)	Price Target (\$)
09-Feb-06	OW	26.91	--

Source: Reuters and JPMorgan; price data adjusted for stock splits and dividends.
 Break in coverage Feb 11, 2003 - Dec 19, 2003. This chart shows JPMorgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.
 JPMorgan ratings: OW = Overweight, N = Neutral, UW = Underweight.

Time Warner (TWX) Price Chart



Date	Rating	Share Price (\$)	Price Target (\$)
28-Sep-06	N	18.59	-

Source: Reuters and JPMorgan; price data adjusted for stock splits and dividends.
 This chart shows JPMorgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.
 JPMorgan ratings: OW = Overweight, N = Neutral, UW = Underweight.

Yahoo Inc (YHOO) Price Chart



Date	Rating	Share Price (\$)	Price Target (\$)
08-Nov-04	OW	37.14	50.00
09-Jan-06	OW	43.21	--
19-Jul-06	N	32.24	--
31-May-07	OW	28.38	--

Source: Reuters and JPMorgan; price data adjusted for stock splits and dividends.
Break in coverage Dec 30, 2001 - Apr 09, 2003, and Apr 30, 2004 - Jun 07, 2004. This chart shows JPMorgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.
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