Message	
From:	Brad Bender [bradbender@google.com]
Sent:	1/29/2009 5:36:56 PM
То:	display-gcn-eng-leads@google.com
CC:	display-gcn-pm@google.com
Subject:	David Rosenblatt's Overview of Google's Display Strategy
Attachments:	GOOG_01.23.09_C.pdf; Display Internal Broad-2-1.ppt

Ahead of our GCN Vision meeting next week, I thought you would find David Rosenblatt's overview and presentation of the Display strategy for Google interesting. Its a long read, but when you have a chance it is worthwhile to get his perspective.

I have also attached a recent analyst report to give an external perspective on Google's opportunities.

David Rosenblatt's Overview of Google's Display Strategy (as presented to the EMEA GCN Display / YouTube sales teams in London; notes taken by Clay Bavor)

[Clay notes: I've had to edit lightly where my typing didn't keep up, so this is not word for word what David is said, but it's close. I added the headings for readability.]

Introduction

I come from DoubleClick, and am now based in New York. I get sort of bored giving the same PowerPoint over and over, and I can't really compete with YouTube PowerPoints, since direct response is less sexy than videos. So I'm going to talk.

Context: Industry Consolidation

I thought I'd explain what happened in the industry over the past two years, what is our strategy relative to the other major players, and then in the second part talk about the roadmap and concrete things we're doing to help drive our business.

For years, DoubleClick toiled away in its corner of the industry, focused on the plumbing and advertising technology that everyone used, but most people don't really think about. Eventually we came almost ubiquitous, delivering 15B display ads a day. We touched almost every display ad in some form on the internet. Not many people knew who we were outside of our clients, and we didn't sell advertising, so revenue wasn't as big as physical presence.

Shortly after, we decided to look for a media partner, and ended up being bought by Google. And right after, something like \$12B of M&A took place in the part of the sector we were in. Overnight, the sector went from a relatively small, not-really-thought-about backwater which was dominated by small, independent tech vendors, to one run by a few big companies. So what happened and what are the implications?

Inefficiencies for Publishers and Advertisers

Let me start with the customer point of view and then talk about why these companies were compelled to integrate.

Let's start with publishers. In the network business, you have to understand that while the advertisers account for the revenue, the business depends on relationships with publishers. If you don't have access to inventory, you have nothing to say to advertisers.

PTX1814 1:23-cv-00108 GOOG-AT-MDL-B-004389742 Now, put yourself in the position of an publisher. If you're a publisher, this is how you think about your business: there's always some small percent -- small in unit volume -- that the publisher sells directly. It's good inventory with high brand value. It's expensive to make and to sell. You have to buy tech specific to sell the inventory, have the three martini lunches with agencies, and so on. It looks a lot like traditional media has looked.

Then you have this other stuff called remnant inventory that you just don't know what to do with. Historically, what publishers did is they made a decision in advance that these parts of my site are going to be hard to sell, so that's remnant. And I'm going to hire someone who will call up a couple of ad networks, and say, what can you do for me? They'll make a couple of deals, let them compete with each other, and that's it. Typically what happened is, there'd be a couple players (in US: Ad.com, ValueClick, and one other), and maybe someone in your company had a personal relationship with them. That's how they ran their business.

The problem with this is that it's inherently suboptimal for two reasons. One is there are hundreds of networks out there, and maybe none of the small number of networks you work with can give you the most for a given piece of inventory. It's too hard to do 100 deals. It's not worth the time to manage individual contracts, relationships, and so on, so you end up exposing your inventory to a very small part of the market.

The second reason is you're making this inventory allocation decision in advance, without really knowing where the demand is. You're saying, my homepage is premium. Some other part of the site, I'm calling premium. But my stock quotes page, I'll call that remnant. But maybe there's someone in the market willing to pay 10x more for the stock quotes page than the networks can get you.

So, again, since first you're limiting the universe of who can sell your inventory, and second, since you're not making the decision about what the sales force sells and what goes to the networks on an impression by impression basis, you're almost guaranteeing that you'll leave a lot of money on the table. These are the two problems that as a publisher you have to solve.

>From an advertiser point of view, the market is similarly inefficient. It's too complicated, too expensive to execute ad buys. With third party ad serving, we think of it as just that, there's a third party and that's it. But if you really map out how it actually works, in a given ad transaction, you could have as many as 7-8 vendors, each with own server, accounting methodology, billing practices, involved. And this all in an industry where there are literally hundreds of thousands of publishers.

So the industry has all the characteristics of one that's inefficient, immature, and really isn't working relative to its potential. That's the industry landscape.

The solution for publishers

What is the solution to that and how do the big players plan to participate in that solution?

Let me walk through, from a publisher point of view, what really fixes this problem; that will make the strategy more understandable. Going back to an individual publisher, what they do is, they go out and buy technology from DoubleClick or Atlas, and they use the DoubleClick technology used for serving premium inventory. But it's too expensive to use it for Networks / remnant. [cwb: because the serving fees for DoubleClick serving are too large a percentage of what the networks give them for their remnant inventory.] How to solve this is, you have a technology that looks across every piece of sellable inventory, and then you introduce a layer so that every network in the world can compete for your inventory. So instead of applying your DoubleClick ad server to your premium stuff only, you run all of your inventory through it.

And instead of doing the deals with networks, you just say, go to www.adexchange.com, and bid for my

inventory there. If you win the auction, you get it, and if you don't, you don't. So now since you're working on one platform, you can expose all of your premium inventory to the networks. And now instead of three networks competing, you have hundreds of networks. The end result is you guarantee yourself the highest yield for each impression. And in addition, your costs are lower, since you can reduce the size of your direct sales force. They can focus on selling only the most premium.

* Question: You said that it wasn't economical to put all your inventory on DCLK because it was too expensive. Why does an ad exchange change that cost layer?

* David: once this platform is owned by the people who operate the exchanges, they're making money on ads monetized through their exchange. So you the platform will be cheaper – you can use the AdX to pay for some of the platform costs. And as publisher, by implementing this system, you get more yield.

How to grow your revenues at the same rate as the Internet

So let's take a step back and think about why Yahoo! and MSFT were bidding for us. It has implications.

Yahoo towards the end of 2006 reached a basic conclusion that applies to all internet publications which is, if you look at traditional media, the way they think about their business is very simple: it's only in terms of their audience, relative to the market audience. If you're the person running CBS, all you care about, the only thing that matters, is making sure that your share of total audience -- this is ratings -- grows at a rate equal to or greater than the overall market. And, roughly, your share of the market translates into your share of ad revenues. If you grow share, you get promoted; if you lose you get fired. And it works like this for TV and print.

Yahoo had applied this model to their own business for years. But the conclusion they reached, which I think is right, is that that it is flawed for the internet, because the cost to entry for a new publisher is so low: they'll never be able to grow their audience at the same rate as the internet. You can have some 21 year old kid come and make a web site and get huge share. Look at Facebook. Yahoo's share of audience is significantly diluted. The audience gets diluted. So how do you fix this problem and grow your revenues at the same rate as the internet? It's simple: by selling other peoples' inventory.

It turns out that you don't need to own Facebook or LinkedIn to sell their inventory and benefit monetarily. So Yahoo switched from a model in which is was an O&O destination business to one in which it was a network with a strong anchor of O&O. They planned for the majority of their revenues to come from off-property inventory, not from O&O. The belief, which again I think makes a lot of sense, is that they could out-compete other players because they have better data. They had behavioral data. They knew when 43M people were in the market for a car or wanted to buy tickets. Those sorts of things. If you can aggregate that data and apply it across this broad reach of your network, you could out-compete other networks and promise a higher yield, because you know more about users than other networks.

Value of the Platform

The problem is, how do you execute that strategy and get those contracts to rep other publishers? If you don't have access to that inventory, nothing else matters. It turns out that the most efficient way to access that inventory is by owning the primary ad server that premium and non-premium publishers use to manage their inventory. It allows you as a network the so called "first look" at each impression.

* Comment: There's a huge switching cost.* David: Yes, exactly right.

As Yahoo looked across the market and Yahoo identified DoubleClick as the right partner. The origin of Google's interest was Google was way ahead intellectually, but was having trouble building its own primary ad

server. And they had even more of a problem convincing customers to switch to it. So Google, like Yahoo, viewed owning this platform as a way of acquiring inventory to monetize on its network, the GCN. The motivating factor for Microsoft was that Google was interested. They thought, let's just do it and figure it out later. They didn't really have a strategy.

That was the context, and so each of these three customers is now very focused on creating these super networks. The strategies on paper all look very similar. Each has platform technology. Each has an exchange. And each has a network. When you think about competitive strength: we're way ahead in the platform strategy, way behind in the exchange, and way behind on the network as well. Yahoo is nowhere on the platform, way ahead on exchange and network. And Microsoft is nowhere on the exchange, nowhere on the platform, and in the middle on the network.

* Question: why do you say we're behind on the network?

* David: Yahoo has a couple thousand sales people, their O&O, and a few billion in revenue. It's not just Blue Lithium.

* Question: Is it sustainable to be ahead on the exchange if you don't have the platform?

* David: My view is nothing really matters but the platform. Nothing has such high switching costs. If there's a better network or exchange, you can just switch to it. Switching platforms is a nightmare. Takes an act of God to do it.

* Question: What are the other platform competitors?

* David: Atlas from Microsoft; AdTech is strong in Germany. Yahoo has built their own.

Our competitive standing

So that is the competitive landscape we're in right now. Again, we have a very strong platform, but it isn't right for Google's customer base. It's too big, too hard to operate, too hard to manage, for Google's sweet spot which is middle and long tail. So we have an engineering effort focused on replacing GAM and DFP. [cwb: this is XFP] But we are serving 18B ads per day.

Here's another way of thinking about the value of the platform. Let's say DoubleClick and Google Ad Manager serves 18B impressions per day. Let's say once we have a much more competitive GCN and a viable exchange, we're able to peel off even 10% of that inventory to monetize somehow. And I think the number should be higher. So that's 1.8B impressions per day. If we monetize that at a dollar CPM and multiply that by 365, you get how valuable the platform is worth.

* Comment: So it's induced revenues rather than direct revenues.

* David: Yes, we can sell 10% of the inventory, but in order to do that, we need to out-monetize everyone else. So that's why we're so focused on making the network so good.

* Question: With premium and remnant getting fused into one, won't that put downward pressure on price since there were artificial barriers keeping prices high?

* David: My guess is that the percentage of revenue sold directly is going to shrink a lot. Think about how immature this industry is. Yahoo, MSFT, and Google account for 70% or higher of the global industry. So the % of directly sold inventory goes down; but prices will go up. Inventory will get better with more measurability. Then a large, large majority of the industry will be monetized through exchanges. The average value of that will go up. So I think both will go up, but the proportion sold by networks will go up.

Implications for networks

On a related point: what happens to most networks. Today there are a few hundred globally, and if you read the press, most people will say, there are too many networks. With a recession and less money, there will be a shakeout of networks. I think that may be true in 6-9 months, but 2 years from now, I think exactly the opposite will happen. There will be thousands of pubs selling a small part of their inventory through small sales forces. Everything else will be dumped into two exchanges: the Google exchange, and probably the Yahoo exchange. Those two exchanges will end up controlling or managing probably 90% of display inventory on the web. Once that happens, one way to think about this is the financial context. We'll have created what's comparable to the NYSE or the London stock exchange; in other words, we'll do to display what Google did to search: make it very easy to buy, standardize the metrics and definitions so you're not reinventing the wheel each time, and the process becomes automated as opposed to faxing IOs back and forth. So what happen to networks: you have a proliferation of networks which on average are smaller than today, and compete on the basis of better technology and more importantly, better data.

The reason that's true is it's easy to buy people [cwb: i.e., ad impressions served to a specific person]. The whole business of being a network is about knowing a little bit more about users. For example, let's say you know who's in the market for a surfboard. Today, if you're a surfboard manufacturer, it's really hard to buy advertising. You either buy people searching for it, or you buy a small number of sites about surfboards. So now as a network, if you can figure out across the entire world, who's in the market for surfboards, you can aggregate, and then buy only those people out of these exchanges and resell them to the surfboard manufacturers. You can imagine networks buying at low price in the exchange, and turning around and selling that back to the advertiser for a lot more.

* Question: Won't economies of scale apply to the networks?

* David: The problem is that because the audience is so fragmented, you need some mechanism to roll them up into one single large pool. It's just not economical to do a thousand buys. For the same reason that in finance, there are many hedge funds who compete against Goldman Sachs, there are always going to be niches where it's possible to know a lot about one specialty. It's like why there are vertical search engines, like travel sites. You know more about users; you can offer more. It's depth vs. breadth.

Mechanically, the way the surfboard network will do this is they go out and they do deals with all the different surfboard related publishers, and they create cookie lists, and then buy those cookie lists out of the exchange. The networks' value is data.

* Question: Do you see the exchange adding more and more data and allowing them to get it there? * David: So how much intelligence to we put in the Exchange. That's an important question. DFP and GAM are platform products that'll be succeeded by XFP. It will probably take 2 years to fully roll out. On the advertiser side, we have a comparable product, DFA, and that's also valuable but less directly relevant to our monetization strategy than the publisher side technology. On the exchange side, we have a DoubleClick exchange linked to DFP. But we're not investing in a standalone product. We're going to merge what is today AdSense with what is today the AdExchange. From a publisher's point of view, you'll be able to let the market compete for your inventory via AdSense.

* Question: What incents a publisher to give different information into different networks? * David: You wouldn't. Let's look at YouTube. They use DFP. You've got your homepage units, and maybe some other very high value units elsewhere. That's the stuff that our direct sales force will sell. Everything else, you would dump into our exchange, and you'd let the entire world go to a single URL and bid for that inventory. And if you're a purist about this, and more and more publishers are, you'd also let the market compete not just for the remnant stuff, but also for your premium inventory so if the market produces a higher bid than your sales force, it gets it. So YouTube wins even if its sales force doesn't. So the surfboard network comes in. It builds its own database of users. They have a view into the YouTube audience via the exchange, so they'll buy people

[cwb: impressions] at a low price, and turn around and sell them to an advertiser.

The reason I went through all this stuff is that a major major focus of this company is to make sure we maintain our position with the platform and to have the biggest and most liquid exchange. If we don't do that, Microsoft and Yahoo will provide those products and divert inventory to their own networks.

How the Google Content Network will out-compete other networks

So let's switch gears to our Network and how we make sure we'll out-compete everyone else. One way is by *not* putting all the same targeting technology we use for the GCN into the exchange. We need to be focused on liquidity in the exchange. That's a different effort than developing targeting technologies.

* Comment: If you go to financial world, we can do Goldman, I can trade for you, I tell you why this is good or bad for your portfolio. [cwb: Didn't hear all of this question.]

* David: So we're both Goldman and NYSE. Goldman is GCN. This isn't a perfect analogy. As a company, we're hedged a bit: if it turns out that another network is better, we still make money through the exchange. We also have better intelligence because we know how other networks are competing against us.

* Question: If I'm selling GCN, I'm a sales force for a lot of sites, ultimately we could sell not only our network, but buy inventory on the exchange to bundle with our own network. So we could become the main sales force for this industry by getting inventory from publishers or buying it off the exchange.
* David: Yes.

* Question: How do you see large agency networks playing in this game?

* David: The problem with this industry is, it's complicated. Large agencies, most famously Publicis, are becoming networks themselves. To make it even more complicated, they're using our ad exchange technology to do that. And it makes sense: it starts with, they have the same problems as everyone else. There's tremendous fragmentation and too many intermediaries. Too much of the sales process is paper-based. So VivaKi is trying to automate as much as possible. They're trying to do this by creating their own network where they go out and they buy inventory or have an ability to buy inventory. They do upfront buys like they always have. That doesn't change. For everything else, they go out and create a network of all major publishers on the web. They say, you join the Google Ad Exchange and make your inventory available forever. And on a spot basis, wherever we want to, we're going to reach in and buy inventory. You'll never know until after it's done. Or they

could say, we have an extra \$20M, let's by X per month.

To do that, they'll use our technology. So they'll be an advertiser customer, but the way they're going to buy is they'll look like an arbitrage network like Advertising.com. So they buy 10% of impressions and then resell to advertisers. Or they may buy on a spot basis.

This isn't limited to Publicis; all the networks are doing this. They may say, we have \$500M to spend, and we're going to go out, spend all of that on these 500 sites, and then I will create my own network, and over time, allocate that to my clients, and charge those clients as they use the media. It's a huge arbitrage game. The problem of course is, if that demand goes away, they're stuck with what they own and can't sell it. That's why other alternative is to use this AdExchange facility to buy on a spot basis, but to do it without the participation of the publisher. Their theory is that they know more about the value of a publisher's inventory than the publisher does. It's the surfboard thing: if they aggregate data and build a customer database across all clients, they'll be better able to know the value of a publisher's inventory than the publisher. And they'll do this in an automated way, with no IOs, fewer people involved, more efficient, get people in China to make the ads. The ultimate end state is there are very few people involved in the process. It's automated.

[Switches to slides.]

Competitive Landscape... [slide]

Every single major player is going through a major integration job.

The End-to-End Advertiser Platform [slide]

On the advertiser side, step #1 is we have the platform that's essentially an operating system for most major online agencies in the world. We want to keep making it better, have better tools for building campaigns, and then ultimately to link that to our network and exchange so agencies can programmatically buy via DFA on not just our customers but all customers.

Google Content Network [slide]

Our network is just not like every other network. It means that for one particular ad product, for contextually targeted text links, it's the best in the world. We do \$2B, next player does \$150M. For everything else, our product doesn't really work. Don't do basic things: frequency capping, reservations, etc.

Most customers if you ask them, believe we have all this stuff. They sort of can't believe that we don't do frequency capping. So I usually don't tell them we don't do it. But we have to get there. Otherwise we just can't participate in most media plans, let alone this new world.

2009 GCN Roadmap [slide]

Blue part: all the things we just need to get into the game. Two quarters ago, this would have had third party ad serving, for example.

In my mind, some of these are must haves, but don't add that much value. The thing that will truly truly juice this business is interest-based advertising. This is something that Google has always resisted, and for the first time ever, I think we're going to be able to do it. The reason why it's so powerful is the obvious reason: if you go back to this world where you have huge amounts of undifferentiated inventory, meaning people think about how well it converts, the single most predictive targeting criteria is interest-based targeting in general, and specifically past purchase behavior, which is the best predictor of future purchase behavior.

There are a couple different applications: retargeting, so if I am GM, and you can create a list of all the people who have been to your site and browsed, if you can buy those people back, that's worth a lot. Response rates are something like 5x higher. That's the initial incarnation of our targeting business.

The really exciting one which will take a bit longer is where we begin to create a cooperative where publishers and merchants contribute their data, and then other advertisers can buy it back. Every publisher knows a little bit about their customers, like they might know they like surfing, but nothing else. We can be the entity that aggregates that information and sells it via the GCN. That's the ultimate promise of direct response internet advertising. By the way, we don't have approval to do it yet. At Yahoo, this is a \$400M product line, and we have 10x the traffic.

The holy grail would be search retargeting. But that probably won't happen. By the way Yahoo! does it today, they just don't have enough search data to make it broadly applicable.

* Question: What makes the difference in the accuracy of this type of targeting?

* David: It's everything. To make the numbers meaningful, you need access to a huge amount of inventory. If there are a million surfers in the world, if there's one company that can put them together, that's huge. If you

only have access to 25% of the inventory, that's less interesting.

So that's the first part: getting to parity. That's a huge priority.

[David gives a bunch of dates of product launches.]

So, the short of it is, by mid-Q2, the goal is to have closed the gap with every other major network.

The second part is beginning to create new products that fundamentally differentiate us. Contextual creatives, where the creative itself varies on context: the site where it's running, the product, etc. eBay can change pricing on a minute by minute basis.

Audience Amplification: says ok, here are the people who responded to an ad, let's find similar people.

* Question: On targeting, in the past, other companies have been prepared to go further than we have in terms of intrusiveness.

* David: We'll be better. The whole issue with targeting is scale. We'll have the scale. Even if you have great technology, it doesn't matter if you only see a small part of the market.

GCN 2009 Roadmap: Not Just Display [slide]

Text is still a \$2B business.

[Flips through slides quickly.]

Wrapping up

I really believe that if we can execute on this stuff, we'll be able to crush the other networks, and that's our goal.

Questions

* Question: If we become bigger and better and there are only a few players, and the aggregated purchases become bigger, agencies will want preferential pricing. Will we be building tools that allow that preferential nature?
* David: We have no control over pricing because it's auctions. In Q2 we can do what we're talking about with reservations.

* Question: is there a risk if we develop Exchange product before our Network?

* David: Yes.

* Question: Are exchanges less developed in EMEA?

* David: Yes, because Yahoo is so immature in Europe.

* Question: how long do we have to execute?

* David: It depends on how well Yahoo executes. In the near term, they are the competitor. If they execute well, we don't have that long. If they don't, we have longer. in the longer run, msft becomes a competitor. It's less a competitive thing, though, than that we want to generate revenue. This business should be a \$3B business. Today it's \$0.5B. We want to get there as quickly as possible.

Brad Bender | Product Management Director | Google Inc. | 212.381.5430 PLEASE NOTE MY NEW EMAIL ADDRESS: <u>bradbender@google.com</u>

CONFIDENTIAL



Company Focus

23 January 2009 | 11 pages

Google Inc (GOOG)

Estimate change 🗹

A Fundamentally Solid Q4...Reit Buy

- GOOG Reported A Cleanly Positive Q4 \$4.22B in net revenue & \$5.10 in non-GAAP EPS vs. our/Street estimates of \$4.15B/\$4.12B and \$5.03/\$4.96, respectively. Q/Q revenue growth of 4% came in ahead of 1%-2% expectations.
- Positive Fundamental Trends FX-Neutral Y/Y net revenue growth of approximately 30% was in-line with Q3's 30% growth. \$2.15B in non-GAAP op. income beat our \$2.04B est and increased 27% Y/Y. Op. margin of 51% (vs. our 49% est.) was UP 110 bps Y/Y – GOOG's biggest expansion ever.
- Positive Paid Click, CPCs & UK Market Trends Paid click growth of 18% Y/Y compared with Q3's growth of 18% and Q2's growth of 19% and vs. our 17% Y/Y expectation. FX-Adjusted CPCs were up approx 3% Y/Y vs. up 5% in Q2. Finally, UK revenue of \$685MM declined 1% Y/Y (but rose approx 28% on FX-Neutral basis vs. 25% in Q3 a positive development).
- Nudging Estimates & Maintaining PT '09 Net Rev goes from \$17.5B to \$17.3B, and Non-GAAP EPS from \$21.18 to \$21.45. Our PT remains \$450 as we shift to a '10 valuation framework – 21X '10 GAAP EPS of \$21.73.
- Reiterate Buy 1) Tho not immune, GOOG is more resilient to macro headwinds than other companies; 2) GOOG gaining Search share; 3) GOOG has significant option value – Mobile (greenfield), YouTube (greenfield), Display (huge share gain opportunity); and 4) GOOG has arguably reached op margin tipping point.

Buy/High Risk	1H
Price (22 Jan 09)	US\$306.50
Target price	US\$450.00
Expected share price return	46.8%
Expected dividend yield	0.0%
Expected total return	46.8%
Market Cap	US\$73,417M





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EPS	Q1	Q2	Q3	Q4	FY	FC Cons	Mark S. Mahaney
2008A	4.85A	4.63A	4.92A	12.01A	19.50A	19.49A	+1-415-951-1744
2009E	4.88E	4.99E	5.38E	6.19E	21.45E	21.00E	mark.mahaney@citi.com
Previous	5.13E	5.18E	5.29E	5.58E	21.18E	na	Neil A Doshi
2010E	na	na	na	na	25.33E	24.76E	neil.doshi@citi.com
Previous	па	па	na	па	24.82E	па	James Samford
2011E	na	na	na	na	28.85E	27.88E	james.samford@citi.com
Previous	па	na	na	na	27.88E	na	

Source: Company Reports and dataCentral, CIR, FC Cons: First Call Consensus.

See Appendix A-1 for Analyst Certification and important disclosures.

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Citigroup Global Markets



Google Inc (GOOG) 23 January 2009

	Fiscal year end 31-Dec	2007	2008	2009E	2010E	2011
	Valuation Ratios		******	****	****	
	P/E adjusted (x)	19.7	15.7	14.3	12.1	10.6
	EV/EBITDA adjusted (x)	8.8	6.2	5.3	4.0	3.(
	P/BV (x)	4.3	3.4	2.9	2.4	2.0
	Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
	Per Share Data (US\$)					
	EPS adjusted	15.59	19.50	21.45	25.33	28.8
	EPS reported	13.29	16.94	18.33	21.73	24.8
	BVPS	71.76	88.94	106.75	127.16	150.4
	DPS	0.00	0.00	0.00	0.00	0.0
	Profit & Loss (US\$M)		*******	******		******
	Net sales	16,594	21,796	23,167	27,109	30,41
	Operating expenses	-11,510	-15,068	-15,838	-18,392	-20,42
	EBIT	5,084	6,727	7,329	8,717	9,98
	Net interest expense	590	316	375	529	72
	Non-operating/exceptionals	0	0	0	0	
	Pre-tax profit	5,674	7,043	7,704	9,246	10,70
	Tax	-1,470	-1,666	-1,849	-2,219	-2,56
	Extraord./Min.Int./Pref.div.	0	0	0	0	0.10
	Reported net income	4,204	5,378 6 102	5,855	7,027	8,13
	Adjusted earnings	4,929	6,193	6,850	8,192	9,44
	Adjusted EBITDA	6,921	9,347	10,316	12,088	13,73
	Growth Rates (%) Sales	56.5	31.3	6.3	17.0	12
	EBIT adjusted	75.6	32.3	8.9	17.0	12. 14.
	EBITDA adjusted	74.8	35.1	10.4	17.2	14.
	EPS adjusted	47.2	25.1	10.0	18.1	13.
	Cash Flow (US\$M)					
	Operating cash flow	5,775	8,949	8,085	9,537	11,09
	Depreciation/amortization	968	1,500	1,742	1,915	2,11
	Net working capital	319	233	-564	-635	-53
	Investing cash flow	-3,682	-5,319	-2,548	-2,982	-3,34
	Capital expenditure	-2,403	-2,358	-2,548	-2,982	-3,34
	Acquisitions/disposals	-907	-3,319	0	0	
	Financing cash flow	24	-72	0	0	
	Borrowings Dividende seid	0	0	0	0	
	Dividends paid Change in cash	0 2 150	0 3,511	U 5 520	U 6 555	7 75
	Change in cash	2,158	0,J11	5,536	6,555	7,75
	Balance Sheet (US\$M)	15 220	21 700	20.200	49 670	E0 00
	Total assets	25,336	31,768	39,299	48,678	58,88 26,77
	Cash & cash equivalent	14,219 2,163	15,846 2,642	21,563 3,112	28,775	36,77 4,08
	Accounts receivable Net fixed assets	4,039	5,234	6,328	3,642 7,684	4,08 9,20
	Total liabilities	2,646	3,529	5,206	7,558	9,62
	Accounts payable	282	178	210	245	27
further data queries on Citi's full coverage universe	Total Debt	0	0	0	0	21
ase contact CIR Data Services Americas at RDataServicesAmericas@citi.com or +1-212-816-5336	Shareholders' funds	22,690	28,239	34,094	41,120	49,25
	Profitability/Solvency Ratios (%)	******	******	****	**********	
	EBITDA margin adjusted	41.7	42.9	44.5	44.6	45.
10 -010	ROE adjusted	24.8	24.3	22.0	21.8	20.
	ROIC adjusted	48.2	44.6	37.9	39.9	40.
Area Roweved by:	Net debt to equity	-62.7	-56.1	-63.2	-70.0	-74.
Jaka Mandenne I		06.1	0.3.1			

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A Fundamentally Solid Q4...Reit Buy

Our summary Long Thesis on GOOG is:

1) GOOG remains one the best plays off the secular growth in Internet advertising – While severe recessionary conditions will have an impact, GOOG's organic '08 U.S. advertising growth exceeded 20% vs. a Y/Y decline for overall U.S. advertising. What Google may be benefiting from is increased search/comparison shopping activity in a "choosier" economic environment;

2) GOOG is the market share leader – and is gaining share – in arguably the most dynamic part of Internet advertising – Search;

3) Significant option value -- As we've detailed in reports over the past year, we believe Google has a large opportunity to diversify and grow revenue through: A) Mobile Internet Advertising (a completely greenfield revenue opportunity that Chrome, Android, and brand strength should well position Google for); B) YouTube (another greenfield revenue opportunity that has seen significant new monetization techniques applied in the past few months); and C) Display Advertising (an \$8B market opportunity largely untapped by Google and with severely weakening leading competitors).

4) GOOG arguably at an opex leverage tipping point – Q4's Y/Y op margin improvement was GOOG's biggest as a public company. With personnel adds and capex depreciation now less robust and significant efforts being made to target discretionary costs, this operating margin expansion should be sustainable.

5) Q4 Results Shows The Stickiness of Google's Fundamentals – With Q4 revenue growth decel being immaterial, and Y/Y op margin expansion for the first time in years, despite an obviously difficult recessionary environment, we believe Google is, on the margin, a defensive play in the online advertising market. As the company gains more traction with opportunities such as Display (DoubleClick), Video (YouTube) and Mobile, we believe the company could be positioned for strong growth when the economy rebounds.

Positives From The Quarter

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1. Beat Quarter On Revenue and EPS. GOOG reported \$4.22B in net revenue & \$5.10 in non-GAAP EPS vs. our/Street estimates of \$4.15B/\$4.12B and \$5.03/\$4.96, respectively. Q/Q revenue growth of 4% came in ahead of 1%-2% expectations.

2. In Short, Key Fundamentals Improved, With No Major Decel in Rev Growth and Op. Margins Expanding. In part, this was a matter of easier comps. After three tough quarters, GOOG's revenue comps now become easier – leaving aside FX and that Recession thing...

3. Strong Google Sites Revenue. GOOG reported \$3.81B in Gross Google Sites revenue, \$29MM or 1% above our estimate, and up 22% Y/Y. With \$190MM in TAC, Net Google Sites revenue was \$3.62B, up 21% Y/Y. Growth was attributable to strong query growth in Q4 (according to comScore, Google's U.S. queries grew 35% Y/Y, relatively flat with Q3, and Q4 share grew 60 bps from Q3 to 63%), and increased comparison shopping by consumers who were looking for online deals for gifts.

4. Paid Clicks Growth Remains Stable and CPCs Better Than Expected. GOOG reported Q4 Paid Click growth of 18% Y/Y, which was better than our estimate of 17%, and flat with Q3 Y/Y Paid Click growth. For context, Q2 and Q4:07 Paid Click Y/Y growth was 19% and 30%, respectively.

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Based on our estimates, GOOG's Cost Per Click (CPCs) declined 2% Y/Y vs. our estimate of a decline of 1% Y/Y. However, on an FX-neutral basis, CPCs grew 3% Y/Y vs. our estimate of 2% Y/Y growth.

Figure 1. GOOG Paid Clicks and CPCs

	9/07A	12/07A	3/08A	6/08A	9/08A	12/08A
Total Search Rev - Gross (\$MM)	4,189	4,757	5,087	5,185	5,352	5,505
Y/Y Growth	57%	50%	40%	35%	28%	16%
FX Impact Y/Y (\$MM)	121	195	202	249	168	(266)
Total Ad Rev - Gross (FX Adj)	4,068	4,562	4,885	4,936	5,184	5,771
Total Ad Rev (Gross) Y/Y FX Adj.	53%	44%	35%	29%	24%	21%
Paid Clicks (MM)	9,466	10,354	10,800	10,754	11,170	12,218
Paid Click Growth Y/Y	45%	30%	20%	19%	18%	18%
Paid Click Growth Q/Q	5%	9%	4%	0%	4%	9%
Cost Per Click	\$0.44	\$0.46	\$0.47	\$0.48	\$0.48	\$0.45
CPC Growth Y/Y	8.5%	15.3%	16.9%	13.5%	8.3%	-1.9%
CPC Growth Y/Y FX Adjusted	5.4%	10.5%	12.2%	8.1%	4.9%	2.8%
CPC Growth Q/Q	4.2%	3.8%	2.5%	2.4%	-0.6%	-6.0%

We note that Barry Diller commented in early January that he expects CPCs to decline 5-10% Y/Y in 2009, which could be possible if the current macro recession continues and consumers are being more cautious with their spending, thus resulting in poor conversion rates for advertisers, who in turn will bid lower on key words. As such, we are modeling Y/Y CPC declines of 7% and 4% in Q1:09 and 2009, respectively.

5. International Revenue Growth Actually Accelerated. GOOG reported Q4 international revenue of \$2.85B, (50% of total gross revenue), growing 23% Y/Y vs. 39% Y/Y growth in Q3 and 64% Y/Y growth in Q4:07. After taking into account \$266MM in FX adjustments, International revenue growth actually accelerated to 35% Y/Y, vs. 31% Y/Y growth in Q3. UK revenue in Q4 was \$685MM, down 1% Y/Y, vs. 17% Y/Y growth in Q3 and 44% Y/Y growth in Q4. On an FX-adjusted basis, however, UK revenue growth in Q4 actually accelerated to 28% Y/Y vs. 25% in Q3.

Figure 2. GOOG Reported & FX-Adjusted Int'l Revenue Analysis

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(in 000s)	12/07A	3/08A	6/08A	9/08A	12/08A
Total Gross Revenue	4,826,679	5,186,043	5,367,212	5,541,391	5,700,904
International Revenue	2,316,806	2,644,882	2,790,950	2,826,109	2,850,452
Y/Y Change	64%	54%	50%	39%	23%
Q/Q Change	14%	14%	6%	1%	1%
% of Total Revenue - Gross	48%	51%	52%	51%	50%
Y/Y FX Impact	195,000	202,000	249,000	168,000	(266,000)
Estimated Int'l Net Revenue	1,625,695	1,886,826	2,024,481	2,063,554	2,108,761
% of Total Net Revenue	48%	51%	52%	51%	50%
FX-Neutral Int'l Revenue	2,121,806	2,442,882	2,541,950	2,658,109	3,116,452
Y/Y FX-Neutral Change	50%	42%	37%	31%	35%
Source: Citi Investment Resea	irch, Company R	eports			

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6. Network TAC Dropped To Lowest Level In Two Years. GOOG's Q4 Traffic Acquisition Costs (TAC) on the network side was 76.4%, down 300 bps vs. Q3 and 270 bps vs. Q4:07, due to a mix shift in traffic and FX. We note that this is the lowest TAC rate we've seen since Q4:06, when TAC was at 76.4% as well.

7. CapEx At Lowest Level Since Q1:06. Q4 CapEx was \$368MM, declining 46% Y/Y vs. a 19% Y/Y decline in Q3 and 36% Y/Y growth in Q4:07. We note that CapEx as a percent of Net Revenue was only 9%, the lowest ever, and that the dollar spend in CapEx was the lowest since Q1:06. While we believe Google will be prudent with CapEx spend while the economy is in a recession, the company will continue to invest heavily in CapEx as it continues to build out its display business, improve search speed, and improve user experience on YouTube, in our opinion.

8. Lowest Headcount Adds In Years. GOOG added only 100 new hires in Q4 vs. 520 in Q3 and 890 in Q4:07. We note that this is the smallest number of new hires at the company in several years.

Negatives From The Quarter

1. Stock Option Exchange Program – Management noted that the company plans to engage in a stock option exchange program where employees can exchange their underwater stock options for newly issued options in a 1:1 transaction at a strike price of around \$300. The company expects to record a modification charge of about \$460MM which should be recognized over the life of the new options. The small offset here is that new options will face an additional 12 month vesting period. This move is good for GOOG employees and bad for GOOG investors. We wish we could re-price our stock...

2. Steep Decel in Gross Network Revenue Growth. Gross Network revenue in Q4 was \$1.69MM, up 4% Y/Y vs. 15% Y/Y growth in Q3 and 37% Y/Y growth in Q4:07. While AdSense for content showed strong growth, revenue was impacted as Google actively dropped search arbitrageurs from the network. We believe Google is making a more concerted effort to ensure quality on the

AdSense for Search network, which could result in additional pressure on Network revenue.

3. Licensing & Other Revenue lower-than-expected – GOOG reported Licensing & Other revenue of \$196MM, \$4MM or 2% below our estimate of \$201MM. We believe some of the weakness may have come from weaker revenue from DoubleClick, which might have been affected as advertisers have been pulling back on display marketing budgets. On the earnings call, management did note that there are now over 1MM enterprises and 3MM college students who use Google Apps. We'd guess that those college students aren't forking over a bundle for those Apps...

4. FX Headwinds Are And Will Be Severe – We estimate approximately \$1B in '09 FX headwinds...



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Key Quarter Questions

Did GOOG's Fundamentals Improve? Yes. FX-Neutral Y/Y net revenue growth of 30% was flat with Q3 growth. Also, \$2.15B in non-GAAP op. income came in ahead of our \$2.04B estimate and increased 27% Y/Y. Op. margin of 50.9% (vs. our 49.1% est.) was up approximately 110 bps Y/Y – the biggest increase ever for GOOG.

Were Fundamentals Better Than The Street Expected? Yes. The company reported Total Net Revenue of \$4.22B, above Street estimates of \$4.12B, and Non-GAAP EPS of \$5.10 vs. Street estimates of \$4.96. We note that the upside came from strong Google sites revenue and continued costs discipline through lower than expected sales & marketing and G&A expenses, both of which contributed to higher operating margins.

Changes To Estimates

Based on the December quarter results and potential concerns about macro headwinds in Q1 and 2009, we have updated our Q1:09, FY09 and FY10 estimates as follows:

Figure 3. Changes To Estimates

	200	2009E		
	Old	New	Old	New
Net Revenue (\$MM)	17,464	17,286	19,752	20,305
PF Op. Income (\$ MM)	8,575	8,574	9,856	10,173
PF EPS	\$21.18	\$21.45	\$24.82	\$25.33
GAAP EPS	\$18.04	\$18.33	\$21.35	\$21.73

Google Inc

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Company description

Google Inc (GOOG) is a global technology company focused on improving the way people connect with information. It is a leading global Internet brand and one of the most trafficked Internet destinations worldwide. Google maintains the world's largest online index of Websites and other content, and makes this information freely available to anyone with an Internet connection. Google generates revenue by delivering relevant, cost-effective online advertising. Businesses use Google's AdWords program to promote their products and services with targeted advertising. In addition, thousands of third-party Websites that comprise the Google Network use the Google AdSense program to deliver relevant ads that generate revenue and enhance the user experience.

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Investment strategy

We rate the shares of Google Inc Buy/ High Risk (1H). Our long-term thesis includes 1) strong secular growth in online advertising; 2) direct exposure to search, the most robust online ad segment; 3) clear market leadership; 4) underappreciated potential for expansion beyond traditional search; and 5) the strongest outlook fundamentals in the sector. In addition, we refocused on long-term risks such as 1) competition from Microsoft, Yahoo, and others; 2) a limited execution record; and 3) headline risk around aggressive industry online ad practices.

Valuation

We derive our \$450 target price for Google based on GAAP P/E analysis. We apply a 21x multiple to our 2010 GAAP EPS estimate of \$21.73 to reach our \$450 target price. Our target multiple is largely driven off of growth assumptions, but we also usually consider historical multiple ranges, relative sector multiples, and intangibles, such as management's execution track record. Since the beginning of 2007, Google has traded at a forward GAAP P/E multiple between 14x and 40x, with an average of 30x. For context, GOOG currently trades at 17X our '09 GAAP EPS of \$18.33. Given the growth profile of the company and its market leader position in search advertising, we believe multiple expansion in 2010 is warranted.

Risks

We rate Google High Risk, reflective of the highly competitive landscape the company faces, and the intrinsically-high valuation multiples of growth stocks, especially in the Internet sector. These risks are somewhat offset by the company's strong balance sheet (\$8 billion-plus in cash) and by the liquidity of its shares. Note that the investment risks laid out below may impede the stock from reaching our target price. Specific risks include 1) very significant competition from Internet-related companies like Yahool and Microsoft; 2) a limited track record and limited visibility; 3) execution risk with YouTube and DoubleClick (after pending approval) and 4) potential exposure to concerns over aggressive industry online advertising practices; and 4) potential slowdown in online advertising due to macro economic conditions.

If the impact on the company from any of these factors proves to be greater/less than we anticipate, it may prevent the stock from achieving our target price or could cause our target price to be materially outperformed.



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Appendix A-1

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Content / Display = Several Revenue Streams

Google

d_uble click AdSense for Content – Text, Display, Video, Games

Google Ad Exchange

DoubleClick Publisher and Advertiser Platform

You her

YouTube and Other O&O Properties

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The Challenge

The macroeconomic environment is challenging - In the US, home foreclosures are up nearly 30% Y/Y in August, unemployment rose to 6.1% in September (the fastest year-on-year rise in 25 years), and stock markets plummeted in the past couple of weeks.

In regard to our industry....

53% of advertisers surveyed by the ANA expect that ad budgets will be reduced in the next 6 months

Buyers will increase focus on ROI

Sellers will need to further tighten efficiencies

The Opportunity (revise)

Online advertising continues to grow as a percent of total media advertising spend, composing 10% of spend next year and over 15% by 2012.

Online spending will still rise, although not as fast as projected - Barclays projects total 2008 U.S. online advertising of \$24.79 billion (+16.9%), below their previous forecast of \$26.17 billion (+23.4%)

According to Forrester Research, consumers increased their time spent with the Internet +119% since 2004 vs. +2% for TV, -6% for magazines, - 17% for newspapers, -14% for radio

Gap between amt of time consumer spends online and how much advertisers spend will begin to narrow, particularly with the growth of in-stream video advertising and ad network growth.



Y!, MSN, AOL control a significant portion of total market Remainder of market is highly fragmented GCN inventory primarily in the 2nd tier / long tail Google has relationships with most major display advertisers already We must grow from our position of strength in direct response text ads to direct display and eventually to brand ads

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The online audience is growing rapidly and everyday there are more websites, more channels (banners, video, mobile, etc.) and more data for targeting

This results in media, channel and data fragmentation in the display ad process

Advertisers and agencies strike deals directly with numerous publishers, portals and networks

Publishers sell directly to advertisers and agencies and indirectly monetize their unsold (remnant) inventory through ad networks

......

There is still a lot of friction in the buying process - it is extremely manual and non-transparent

The online audiences continues to grow but online advertising is still sub-scale because: A lot of inventory exists within the long-tail away from premium publishers Publishers lack efficiency for monetizing unsold audiences – there is an artificial separation of sales channels Advertisers have trouble reaching targeted audiences at scale across so many sites despite large amounts of data New inventory types and channels lack measurement and workflow standards Overall the industry isn't prepared to handle growth operationally = increasing cost of sales, discrepancies Lack of end to end integration of data throughout the organization Planning, trafficking, and analysis are still very manual, there is a lot of data re-entry

Framentation Online advertising is still sub-scale because:

Fragmentation is increasing among media properties every day (a lot of inventory exists within the long-tail away from premium publishers) Any artificial separation of sales channels would creates sub-optimal revenue monetization

New inventory types and channels lack measurement and workflow standards Advertisers have data but cannot leverage it across broad reach Operational friction and workflow inefficiency is still one of the biggest concerns among clients

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Over time, all online spend appears to be subject to increased "performance" metrics, which vary by campaign objective. GMS team states that all dollars have some sort of metric associated to them.

Direct Brand = Brand Response in DCLK parlance

Pure brand (DCLK) = GM , all I'm looking for is this demographic, reach and frequency, not so much engagement goals

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We believe there are specific elements that make a content network advertising campaign successful, so we thought we'd begin by looking at each and how they work together.

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Maximize Yield - across all sales channels and properties

Differentiate and Extend Audience - new formats and features, add more valuable inventory through vertical networks, syndication, emerging formats

Scale operations – improved workflow, automation, end-to-end integration to reduce discrepancies

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DoubleClick's addition of new components Simplification to tow channels

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Without the neutrality, we don't get access to the inventory

Access to buyers globally: Competition among networks and buyers you don't already have relationships put more money in your pocket.

Profit optimization Yield management across networks puts more money in your pocket.

Complete control: Eliminate the possibility of brand-inappropriate ads appearing on your site(s) and the potential for channel conflict

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Streamlined sales & management: Integration with primary ad server eliminates discrepancies and simplifies reporting; centralized clearing and billing eliminates the need to manage direct relationships on low-margin, resource-intensive remnant sales.



GCN – expanded formats include – expandable video and in-stream video formats

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The End-to-End Advertiser Platform

A unified system that covers the entire workflow



Advertiser Core

- Redesigned workflow, reporting based on Google Analytics
- Integrated media planning and buying

Rich Media Solutions

- DoubleClick Rich Media Studio
- Dynamic Ad Creation
- Video SDK and VAST adoption

Cross-Search Display

 Measure the impact of display campaigns on search clicks and conversions and vice-versa

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Tighter integration for all digital media, especially search and display Unique and accountable solutions for creative execution Measurement tools that guide you through analysis and decision-making Optimization solutions to achieve more effective, more relevant advertising

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EMEA priorities: Freq capping: q1 Audience targeting: q2 Campaign insights: available now for the UK (what is it?) Reservations: beta Q1 Conversion optimizer: q2/explorer (what is this?) View through reporting Definitions: Explorer: Opt as a function of adv goals. Audience amplification: modeled lists Internal tools: forecasting

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Text link business Emea priorities: - Freq capping:

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The transition to the next slide is "The challenge with targeting and optimization is that you need massive amounts of inventory to create meaningful, statistically significant results for advertisers."

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Combined with Placement Performance Reports, Conversion Tracking is a simple, but powerful tool for tracking the actions that matter to your marketing objective -- and that doesn't have to just mean sales. An even more robust option is Google Analytics, a full fledged site analytics tool that plugs directly into your Google campaign. Use Google Analytics to understand how the users who click on your ads then interact with your site. Do some ads perform better than others? These tools make it easy to know.

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