
From: Eileen Naughton <enaughton@google.com> on behalf of Eileen Naughton
Sent: Monday, May 19, 2008 9:32 PM
To: tim@google.com; penry@google.com; Mark Evans; Joan Braddi;
kimscott@google.com; Scott Sheffer
Subject: Fwd: Latest version of presentation for Product GPS

forwarding you the final AdExchange deck that Neal Mohan and Scott Spencer presented at the GPS Friday afternoon. Larry and Susan attended.

Larry gave a cautionary green light to proceed on developing the business case. He did not 100% agree to a fully open network -- suggested Google set some baseline controls about which exchanges to let in, competitors to restrict, and operating policy. But in the end it was a green light to develop the business case.

----- Forwarded message -----

From: Michael Rubenstein <mrubenstein@google.com>
Date: Fri, May 16, 2008 at 5:52 PM
Subject: Fwd: Latest version of presentation for Product GPS
To: Eileen Naughton <enaughton@google.com>

—
Eileen Naughton | Google | Director, Media Platforms | 212-565-4124 O | 917-648-9884 M |
enaughton@google.com

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Google Ad Exchange Vision

Market Opportunity

Google Ad Exchange Business Practices

Meeting Goal:

Agreement that we should move forward on developing
the Google Ad Exchange

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Google Ad Exchange Vision

Why Exchanges Now?

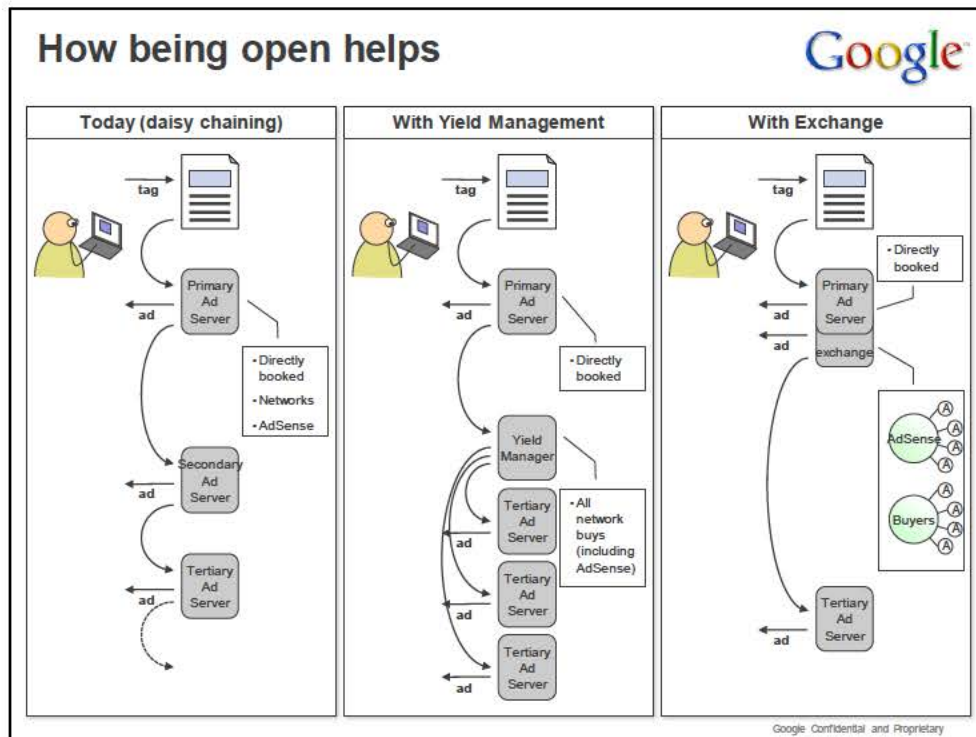


What is happening in the display market that's different?

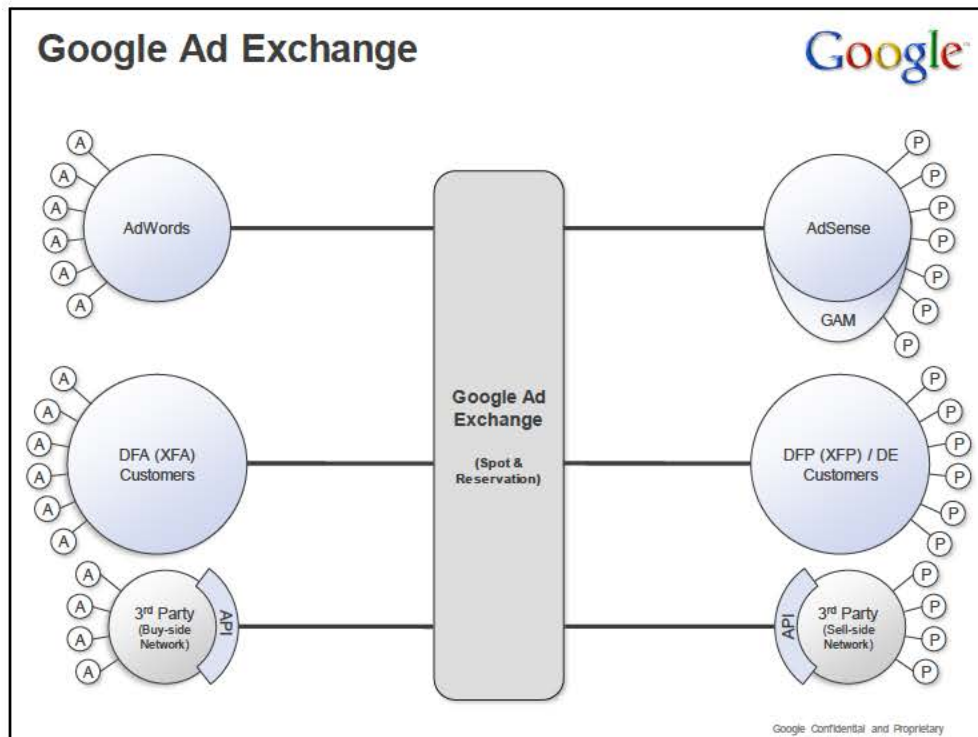
- Inventory is fragmented, no one has a lock on sufficient liquidity
- Buyers & sellers benefit from aggregated inventory
- Competitors are trying to aggregate liquidity because of the financial and strategic benefit of being the scale marketplace

Opening AdWords / AdSense to all buyers and sellers enables Google to become the scale marketplace

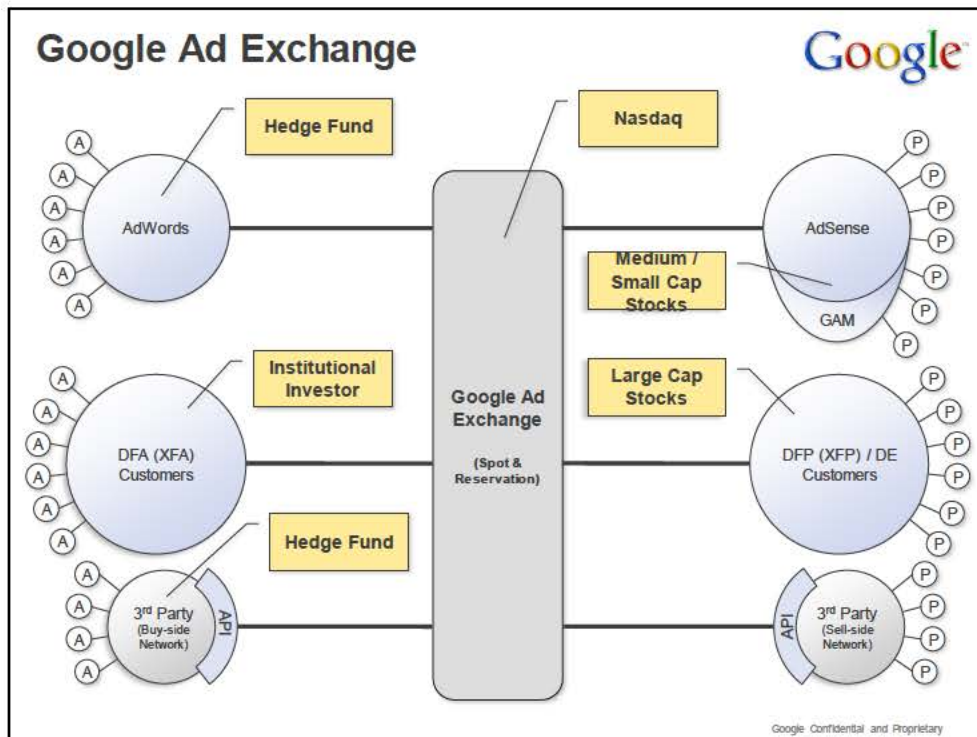
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- AdX is a critical answer to a strategic issue we've been struggling with over the last 6 months
- yield mgmt solutions replacing adsense tags with their own and controlling the allocation of ads between adsense and other ad networks
- Problem since these solutions allocate based on averages and adsense has much higher CPMs on highly focused pages (e.g. \$10) vs. navigation pages (\$0.50) – suboptimal for users, advertisers, publishers and google
- Instead, the vision is to create a compelling offering for ad networks to go through our system, where we take a 20% rev share in return for scale (AdSense + DFP) and optimal backfill (aka dynamic allocation), for GFP publishers – this dynamic allocation resulted in 20% more adsense revenue!
- How is AdX different from AdWords/AdSense? AdX ~ NY Stock exchange, AdWords/AdSense ~ hedge fund (secret sauce like contextual)
- Risk, opening up the pool of inventory to the Ad.com's of the world which AdWords/AdSense will have to compete (which means we need to get into the interest based targeting game)



Threat to adsense



Threat to adsense

Sequencing Being Open for Buyers



Open before AdWords is competitive

Open the exchange to any buyer even though AdWords may not be the best monetization solution

Benefits:

- Opens up Google to additional buyers
- Allows buyers to select their tools and inventory independently
- Increased competition increases publisher's RPMs

Risks:

- Other tools may prove superior to Google's suite of solutions
- Media spend shifts from AdWords to competing solutions

Wait until AdWords is competitive

Wait until AdWords is competitive with other monetization tools before opening the inventory

Benefits:

- Protects AdWords revenue
- Once open, AdWords can monetize more of the inventory

Risks:

- Others dis-intermediate AdSense from publishers before AdWords is at parity
- Competitors aggregate sufficient inventory to force AdWords into participating in a 4th party exchange
- AdWords never reaches parity

Need further analysis to estimate the financial risk to AdWords vs. strategic risk of disintermediation

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Sequencing Being Open for Sellers













| Open before AdSense is at Scale | Wait until AdSense is at Scale |
|--|---|
| Open the exchange to any seller even before AdSense (or DFP / GAM) have hit market saturation | Wait until AdSense, GAM, and DFP have had the opportunity to attract publishers |
| Benefits: <ul style="list-style-type: none"> • Opens up Google to additional inventory • Allows sellers to select their tools independently of the buying community • Increased inventory increase attractiveness for buyers | Benefits: <ul style="list-style-type: none"> • Potential to attract more sellers to Google products |
| Risks: <ul style="list-style-type: none"> • Other tools may prove superior to Google's suite of solutions • Over supply of inventory decreases RPMs | Risks: <ul style="list-style-type: none"> • Sellers become entrenched with other providers • Competitors aggregate sufficient inventory to force AdWords into participating in a 4th party exchange |
| Need further analysis to estimate the opportunity to attract sellers to Google's sell-side platforms | |

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Market Opportunity & Competitors

We are behind, but well positioned



| | |
|---|--|
|   | <ul style="list-style-type: none"> • Largest operating marketplace • 200 buyers and sellers representing 4000 advertisers / sites and growing • 1.4b in gross media spend (10b impressions per day) |
|    | <ul style="list-style-type: none"> • Moving into the exchange space • Launched AdMarket in August '07 • Network Control Panel competes with Rubicon and PubMatic |
|    | <ul style="list-style-type: none"> • AOL currently operates a system for futures auction • Ad.com is largest performance network which can act as an anchor tenant • Ad.com's monthly volume is between 40b and 80b • Launched PubAccess, a small publisher solution on April 9, '08 |
|  | <ul style="list-style-type: none"> • Positioned as a "network yield maximizer" • 3,000 publishers signed for beta • Also offer ad serving • Risk of dis-intermediating AdSense |
|  | <ul style="list-style-type: none"> • OpenX is a popular, free, open source ad server • 30,000 OpenX publishers in 100 countries • ~50,000 AdSense partner accounts |

All logos and narrative are directly from the respective web-sites.

Market and participant estimates are based on internal Google estimates and publically stated figures.

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Business Practices

Business Practices – what's required to play



| Key Questions | Recommendation |
|---|--|
| Who can buy? | Allow any advertiser, agency or network to purchase inventory on the exchange so long as they adhere to the exchange guidelines, (subject to sequencing decision). |
| Who can sell? | Allow any publisher, site or network to sell inventory on the exchange so long as they adhere to the exchange guidelines, (subject to sequencing decision). |
| What is allowed to transact? | Allow buyers and sellers to elect what they want to buy or sell– provide transparency and choice Identify and ban unacceptable behaviors (e.g., malware, viruses, deceptive creatives, pop-ups/unders) |
| How are creatives, sites, advertisers and sellers classified? | Create Exchange specific version of Google advertising guidelines Buyers and Sellers are responsible & liable for declarations Create 3 rd party audit standards for sites and advertisers Google validates participant entered declarations |

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Examples of what's allowed / restricted



| | Activity or Use Case | Risks and Restrictions |
|----------|--|--|
| Buyers | ✓ 3 rd party (3PAS) | Extend the 3PAS terms to the exchange |
| | ✓ 4 th party (networks) | Allow ad networks to buy on the exchange and re-direct to participating buyers using a 3 rd party ad server |
| Creative | ✗ Pop-up / under | Not allowed |
| | ✓ Gambling | require buyers to classify; not allowed to target US users |
| | ✗ Emulates a PC Window | |
| | ✓ Partial nudity / sexually suggestive | require buyers to classify |
| Seller | ✓ 4 th party (networks) | User-list targeting or re-targeting based on user behavior where the data is provided by the 3 rd party |
| Sites | ✓ Crass humor | Hard to define; require sellers to classify |
| | ✓ Partial nudity / sexually suggestive | Requires sellers to classify |
| | ✗ Site generates pop-ups | Not allowed |
| | ✗ | |

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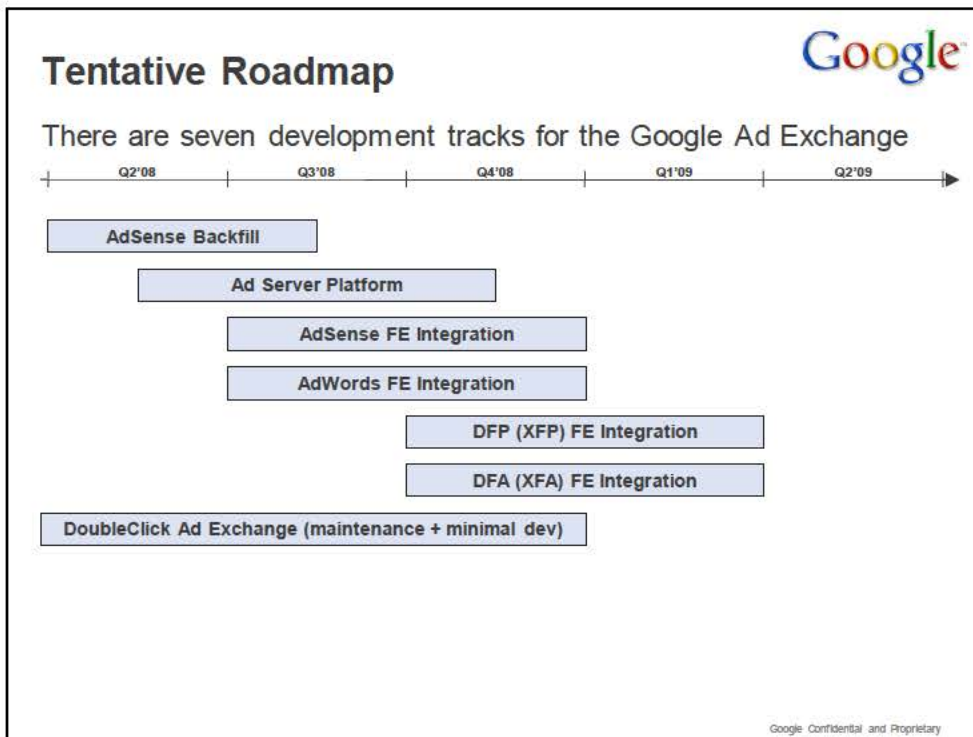
Short list of controversial elements



| | Activity or Use Case | Risks and Restrictions |
|----------|--|---|
| Buyers | Data collection | Allow buyers to cookie users for re-targeting (requires opt-in from seller) Example: ad targeting user that saw another ad from that advertiser Requires notification on each participating site |
| | Data resale (jumpstart use case) | Allow buyers to cookie users for re-sale of the data (requires opt-in from seller & seller may set a different minimum CPM). Example: JumpStart network's creation of auto buyers |
| | Match-coded user-targeting / re-targeting | User-list targeting or re-targeting based on user behavior where the data was collected independently and then linked up to the exchange |
| Sellers | Data collection and resale on the exchange | Requires notification to users on the site |
| Creative | Nudity / Pornography | require buyers to classify |
| | Alcohol / Tobacco | require buyers to classify |
| | Auto-play | require buyers to classify |
| Sites | Nudity / Pornography | Requires sellers to classify |

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Moving Forward



No detailed planning so far

Next Steps



With agreement from Product GPS, next steps include:

1. Charter team for development and commercialization
2. Create business plan to lock down open business questions
 - Sequencing
 - Business issues
3. Commence development

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Appendix

Relative Revenue Share Sensitivity



Effective revenue share given expected growth and split between AdWords / AdSense and AdX

| | | % AdWords / AdSense vs AdX | | | | | | | |
|---------------|------|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| | | 100% | 90% | 80% | 70% | 60% | 50% | 40% | 30% |
| Volume Growth | 100% | 32.0% | 30.8% | 29.6% | 28.4% | 27.2% | 26.0% | 24.8% | 23.6% |
| | 105% | 33.6% | 32.3% | 31.1% | 29.8% | 28.6% | 27.3% | 26.0% | 24.8% |
| | 110% | 35.2% | 33.9% | 32.6% | 31.2% | 29.9% | 28.6% | 27.3% | 26.0% |
| | 115% | 36.8% | 35.4% | 34.0% | 32.7% | 31.3% | 29.9% | 28.5% | 27.1% |
| | 120% | 38.4% | 37.0% | 35.5% | 34.1% | 32.6% | 31.2% | 29.8% | 28.3% |
| | 125% | 40.0% | 38.5% | 37.0% | 35.5% | 34.0% | 32.5% | 31.0% | 29.5% |
| | 130% | 41.6% | 40.0% | 38.5% | 36.9% | 35.4% | 33.8% | 32.2% | 30.7% |

- At 32% revenue share for AdWords / AdSense and 20% for the exchange:
 • every 10% shift of volume from AdWords / AdSense to the exchange requires a 5% increase in aggregate volume to be revenue neutral

Effective revenue share given expected growth and split between AdWords / AdSense and AdX

| | | % AdWords / AdSense vs AdX | | | | | | | |
|---------------|------|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| | | 100% | 90% | 80% | 70% | 60% | 50% | 40% | 30% |
| Volume Growth | 100% | 32.0% | 29.3% | 26.6% | 23.9% | 21.2% | 18.5% | 15.8% | 13.1% |
| | 105% | 33.6% | 30.8% | 27.9% | 25.1% | 22.3% | 19.4% | 16.6% | 13.8% |
| | 110% | 35.2% | 32.2% | 29.3% | 26.3% | 23.3% | 20.4% | 17.4% | 14.4% |
| | 115% | 36.8% | 33.7% | 30.6% | 27.5% | 24.4% | 21.3% | 18.2% | 15.1% |
| | 120% | 38.4% | 35.2% | 31.9% | 28.7% | 25.4% | 22.2% | 19.0% | 15.7% |
| | 125% | 40.0% | 36.6% | 33.3% | 29.9% | 26.5% | 23.1% | 19.8% | 16.4% |
| | 130% | 41.6% | 38.1% | 34.6% | 31.1% | 27.6% | 24.1% | 20.5% | 17.0% |

- At 32% revenue share for AdWords / AdSense and 5% for the exchange:
 • every 10% shift of volume from AdWords / AdSense to the exchange requires a 22.5% increase in aggregate volume to be revenue neutral

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Relative Revenue Share Sensitivity



| Effective revenue share given expected growth and split between AdWords (32%) / AdSense and AdX (5%) | | | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|--|--|
| Media through AdWords (vs AdX) | | | | | | | | | | |
| | 100% | 90% | 80% | 70% | 60% | 50% | 40% | 30% | | |
| 100% | 32.0% | 29.3% | 26.6% | 23.9% | 21.2% | 18.5% | 15.8% | 13.1% | | |
| 105% | 33.6% | 30.8% | 27.9% | 25.1% | 22.3% | 19.4% | 16.6% | 13.8% | | |
| 110% | 35.2% | 32.2% | 29.3% | 26.3% | 23.3% | 20.4% | 17.4% | 14.4% | | |
| 115% | 36.8% | 33.7% | 30.6% | 27.5% | 24.4% | 21.3% | 18.2% | 15.1% | | |
| 120% | 38.4% | 35.2% | 31.9% | 28.7% | 25.4% | 22.2% | 19.0% | 15.7% | | |
| 125% | 40.0% | 36.6% | 33.3% | 29.9% | 26.5% | 23.1% | 19.8% | 16.4% | | |
| 130% | 41.6% | 38.1% | 34.6% | 31.1% | 27.6% | 24.1% | 20.5% | 17.0% | | |
| 135% | 43.2% | 39.6% | 35.9% | 32.3% | 28.6% | 25.0% | 21.3% | 17.7% | | |
| 140% | 44.8% | 41.0% | 37.2% | 33.5% | 29.7% | 25.9% | 22.1% | 18.3% | | |
| 145% | 46.4% | 42.5% | 38.6% | 34.7% | 30.7% | 26.8% | 22.9% | 19.0% | | |
| 150% | 48.0% | 44.0% | 39.9% | 35.9% | 31.8% | 27.8% | 23.7% | 19.7% | | |
| 155% | 49.6% | 45.4% | 41.2% | 37.0% | 32.9% | 28.7% | 24.5% | 20.3% | | |
| 160% | 51.2% | 46.9% | 42.6% | 38.2% | 33.9% | 29.6% | 25.3% | 21.0% | | |
| 165% | 52.8% | 48.3% | 43.9% | 39.4% | 35.0% | 30.5% | 26.1% | 21.6% | | |
| 170% | 54.4% | 49.8% | 45.2% | 40.6% | 36.0% | 31.5% | 26.9% | 22.3% | | |
| 175% | 56.0% | 51.3% | 46.6% | 41.8% | 37.1% | 32.4% | 27.7% | 22.9% | | |

| Effective revenue share given expected growth and split between AdWords (32%) / AdSense and AdX (20%) | | | | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|--|--|
| Media through AdWords (vs AdX) | | | | | | | | | | |
| | 100% | 90% | 80% | 70% | 60% | 50% | 40% | 30% | | |
| 100% | 32.0% | 30.8% | 29.6% | 28.4% | 27.2% | 26.0% | 24.8% | 23.6% | | |
| 105% | 33.6% | 32.3% | 31.1% | 29.8% | 28.6% | 27.3% | 26.0% | 24.8% | | |
| 110% | 35.2% | 33.9% | 32.6% | 31.2% | 29.9% | 28.6% | 27.3% | 26.0% | | |
| 115% | 36.8% | 35.4% | 34.0% | 32.7% | 31.3% | 29.9% | 28.5% | 27.1% | | |
| 120% | 38.4% | 37.0% | 35.5% | 34.1% | 32.6% | 31.2% | 29.8% | 28.3% | | |
| 125% | 40.0% | 38.5% | 37.0% | 35.5% | 34.0% | 32.5% | 31.0% | 29.5% | | |
| 130% | 41.6% | 40.0% | 38.5% | 36.9% | 35.4% | 33.8% | 32.2% | 30.7% | | |
| 135% | 43.2% | 41.6% | 40.0% | 38.3% | 36.7% | 35.1% | 33.5% | 31.9% | | |
| 140% | 44.8% | 43.1% | 41.4% | 39.8% | 38.1% | 36.4% | 34.7% | 33.0% | | |
| 145% | 46.4% | 44.7% | 42.9% | 41.2% | 39.4% | 37.7% | 36.0% | 34.2% | | |
| 150% | 48.0% | 46.2% | 44.4% | 42.6% | 40.8% | 39.0% | 37.2% | 35.4% | | |
| 155% | 49.6% | 47.7% | 45.9% | 44.0% | 42.2% | 40.3% | 38.4% | 36.6% | | |
| 160% | 51.2% | 49.3% | 47.4% | 45.4% | 43.5% | 41.6% | 39.7% | 37.8% | | |
| 165% | 52.8% | 50.8% | 48.8% | 46.9% | 44.9% | 42.9% | 40.9% | 38.9% | | |
| 170% | 54.4% | 52.4% | 50.3% | 48.3% | 46.2% | 44.2% | 42.2% | 40.1% | | |
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| 165% | 35.3% | 32.6% | 29.9% | 27.2% | 24.5% | 21.8% | 19.1% | 16.4% | | |
| 170% | 35.5% | 32.8% | 30.1% | 27.4% | 24.7% | 22.0% | 19.3% | 16.6% | | |
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| 170% | 46.0% | 44.8% | 43.6% | 42.4% | 41.2% | 40.0% | 38.8% | 37.6% | | |
| 175% | 47.0% | 45.8% | 44.6% | 43.4% | 42.2% | 41.0% | 39.8% | 38.6% | | |

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Market Opportunity for non-premium display is \$2.6b to \$3.1b



Bottom Up

Exchanges have the potential of \$2.6b annually

Market Sizing for Google Ad Exchange

| Exchange | Avg. CPM | Volume per month (thousands) | Media Spend per month |
|-------------|----------|------------------------------|--------------------------------------|
| Right Media | \$ 0.40 | 280,000,000 | \$ 112,000,000 |
| AdX | \$ 1.10 | 600,000 | \$ 660,000 |
| ADSDAQ | \$ 1.00 | 500,000 | \$ 500,000 |
| AdBrite | | | \$ - |
| Other DFPs | \$ 1.00 | 100,000,000 | \$ 100,000,000 |
| | | | \$ 213,160,000 |
| | | | Annual Media Spend: \$ 2,557,920,000 |

Notes: Does not take into account non-DFPs not working with an existing exchange

Top Down

Exchanges have the potential of \$3.1b annually

Market Sizing for Google Ad Exchange

| | | |
|---------------|--------|---|
| Think Equity: | \$ 3.1 | Non-premium display is \$3.1 |
| IAB | \$ 4.9 | Total is \$4.9 per quarter (display + search) |
| TNS Media | \$ 1.4 | Total for display is \$2.7 |
| Average: | \$ 3.1 | |

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Business Practices – what's required to play



| Key Questions | Recommendation |
|---|--|
| Is the revenue share disclosed? | Make the revenue share on the exchange transparent to sellers Maintain obfuscation on the revenue share of AdWords |
| How do we address Ad.com with the Exchange? | The exchange creates three different means for competing with Ad.com: 1) liquidity of the exchange, 2) optimization through AdWords and 3) Usability through AdSense |

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ISP Based Ad Networks (Update)

NebuAd announced partnership with Charter Communications

- 4th largest MSO with 3M internet subs
- Tests in four markets – proactive email communication
- Speculation that could reduce content protections for Charter

Phorm has 80% ISP coverage in UK (BT is conducting tests)

- No inventory or advertisers (no liquidity on their "exchange")
- Differ from other like players (NebuAd) in that they aren't trying to arbitrage inventory
- Have signals (keywords, category buckets) to map to users, but no algorithmic matching based on performance
- Benefit to users is primarily anti-phishing

→ Building BT profiles without paying the pubs for their involvement

Specific Media – potential partnership



- Proposal to allow ad network into AFC as a trial
- Proposing 3PAS T's & C's + contract with exceptions:
 - 4th party calls, multiple advertisers per tag, tags only run Google-certified vendors, etc
- Structure of Test:
 - \$100K limit, 10 advertisers, exclusion list enforced
- Notable Call Outs:
 - No approval bin
 - Push for audit rights?
 - Want to wrap a tag around data, but unable now

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To the normal terms & conditions + contract (note this is an "onerous" list and may be too much for SM - therefore, what do we consider absolutely non-negotiable?):

Use existing t's and c's for 3PAS except:

4th party calls clause

only single advertiser represented in a tag clause

cross-advertiser retargeting restrictions

creative substitution / modification clause

the data agreement is between Google and Specific

add amendment so that SM can share data with clients (successor)

Tags can only run Google-certified vendors (e.g. just DFA)

Contract Terms, same except:

No discrepancy language

Add to data clause that they can share with their clients

Any successors / clients must have a privacy policy

As a general term, SM would need to block any advertisers who are in violation of any of this, otherwise we will block all of Specific Media

Structure of test:

Limit to \$100,000 lifetime of test

Limit to 10 advertisers (subject to pub exclusion below), so we can vet against existing block lists

We will look at pubs who have blocked any of those adv. Those pubs will have to be part of an exclusion list. 2nd piece to protect pubs: all ARC pubs will have the ability to deny all Specific Media tags. At any point, a pub can block Specific Media as a domain, and no further SM tags will show up

In the L&S session:

Give a summary of the above, i.e. contract changes & standard 3PAS terms of audit, liability, SLAs.

Other:

Call out that there will be no approval bin process

Determine - Should we push for rights to audit for Specific, or not?
(push for no cap)

It is the plan to wrap a tag to learn from their data, but we may not be able to do so in the short-term

Questions from Sales



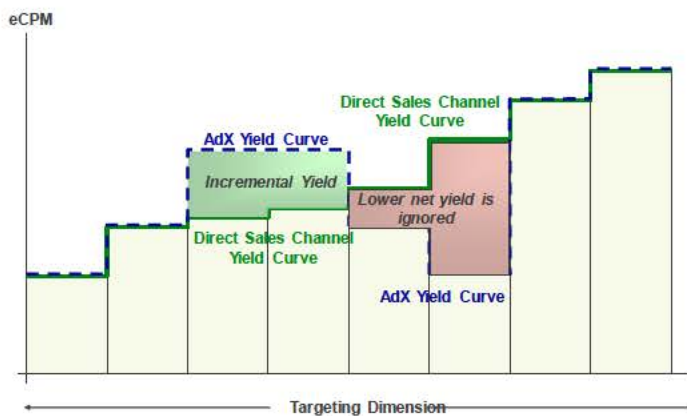
| Question | Response |
|---|---|
| What sort of publishers and advertisers are we targeting with the exchange. Is it the exclusive kind-of network that we have now with the DoubleClick exchange, or are we thinking something much more open, including long tail publishers and advertisers and open access to other ad networks? | The exchange will span across both large and small buyers and sellers, including all AdWords advertisers and AdSense sellers. Inventory will be segmented by various means including, but not limited to, participating in the Google Content Network and buying via AdPlanner or 3 rd party metrics. |
| What sort of margin structure do we expect for the exchange? Levels anywhere from 5%-20% have been discussed. | The revenue share for the exchange is still under discussion and will be reassessed based on elasticity analysis and market forces. |
| When and how do we allow 3rd party sell-side networks into the exchange based on future moves with MSFT/YHOO? | The exchange will be open to any 3 rd party sell-side network. 3 rd party sellers would join to get access to the buyers available through the exchange. Buyers would have less incentive to seek alternate options if all inventory is available through the exchange. |
| What are the lessons learned (positive and negative) from the DoubleClick exchange and how are they informing the direction of the Google Ad Exchange? | The previous DoubleClick Ad Exchange team is working to develop the new Google Ad Exchange and leverage the learnings from its operations. |
| How do we think the direction of the Ad Exchange should influence development of AdSense (e.g., targeting and optimization technologies to ensure we win our fair share of the auctions)? | AdWords and DFA will both need to provide buyers with sufficient value to justify their costs. The exchange de-couples these products from the inventory available to them. |

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Dynamic Allocation



Dynamic Allocation allows the automatic selection of the highest bid between direct (in DFP/DE) and indirect (DoubleClick Ad Exchange) channels



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20% increase.

What actions should we allow for Buyers?

| | Activity or Use Case | Risks and Restrictions |
|---|---|---|
| ✓ | 3 rd party (3PAS) | Extend the 3PAS terms to the exchange |
| ✓ | User-targeting / re-targeting | User-list targeting or re-targeting based on user behavior where the data is provided by the 3 rd party but collected on DoubleClick domain |
| ✓ | 4 th party (networks) | Allow ad networks to buy on the exchange and re-direct to participating buyers using a 3 rd party ad server |
| | Data collection | Allow buyers to cookie users for re-targeting (requires opt-in from seller) Example: ad targeting user that saw another ad from that advertiser Requires notification on each participating site |
| | Data resale (jumpstart use case) | Allow buyers to cookie users for re-sale of the data (requires opt-in from seller & seller may set a different minimum CPM). Example: JumpStart network's creation of auto buyers |
| | Match-coded user-targeting / re-targeting | User-list targeting or re-targeting based on user behavior where the data was collected independently and then linked up to the exchange |

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What actions should we allow for Sellers?

| | Activity or Use Case | Risks and Restrictions |
|---|--|--|
| ✓ | 4 th party (networks) | User-list targeting or re-targeting based on user behavior where the data is provided by the 3 rd party |
| | Data collection and resale on the exchange | Requires notification to users on the site |

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What creative types / content?



| | Creative type or content | Risks and Restrictions |
|---|---|--|
| ✓ | Annoying | Hard to define; require buyers to classify |
| ✗ | Pop-up / under | Not allowed |
| ✓ | Click-to-play | require buyers to classify |
| ✓ | Gambling | require buyers to classify; not allowed to target US users |
| ✓ | File size up to 100k (with polite download) | require buyers to classify; sellers may set lower restrictions |
| ✗ | Emulates a PC Window | |
| ✗ | Deceptive | |
| ✓ | Crass humor | Hard to define; require buyers to classify |
| ✓ | Partial nudity / sexually suggestive | require buyers to classify |
| ✗ | Spy-ware / Mal-ware | Not allowed |
| | Nudity / Pornography | require buyers to classify |
| | Alcohol / Tobacco | require buyers to classify |
| | Auto-play | require buyers to classify |

AdX will auto classify and validate content where possible

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Which sites / site content?



| | Site or site contents | Risks and Restrictions |
|---|--------------------------------------|---|
| ✓ | Low quality | Hard to define; require sellers to classify |
| ✓ | Inventory is within emails | Requires sellers to classify |
| ✓ | Inventory is within an application | Requires sellers to classify |
| ✓ | Crass humor | Hard to define; require sellers to classify |
| ✓ | Partial nudity / sexually suggestive | Requires sellers to classify |
| ✗ | Site generates pop-ups | Not allowed |
| ✗ | Spy-ware / Mal-ware | Not allowed |
| | Nudity / Pornography | Requires sellers to classify |

AdX will auto classify and validate content where possible

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Open vs. Closed



| Open | Closed |
|---|---|
| Any buyer and any seller, regardless of their preferred ad serving solution can participate in the exchange | Only buyers on AdWords or Sellers from AdSense (with new 3PAS exception) can buy or sell |
| Benefits: <ul style="list-style-type: none">• Opens up Google to additional inventory and buyers• Allows buyers and sellers to select their tools and inventory independently• Increased competition increases publisher's RPMs | Benefits: <ul style="list-style-type: none">• Google controls more aspects of the consumer experience |
| Risks: <ul style="list-style-type: none">• Other tools may prove superior to Google's suite of solutions• Media spend shifts from AdWords to competing solutions | Risks: <ul style="list-style-type: none">• Others offer an open solution and dis-intermediate AdSense from publishers• Competitors aggregate sufficient inventory to force AdWords into participating in a 4th party exchange |
| Recommendation is that the Google Ad Exchange be an open platform for buyers and sellers | |

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Issues and Safeguards

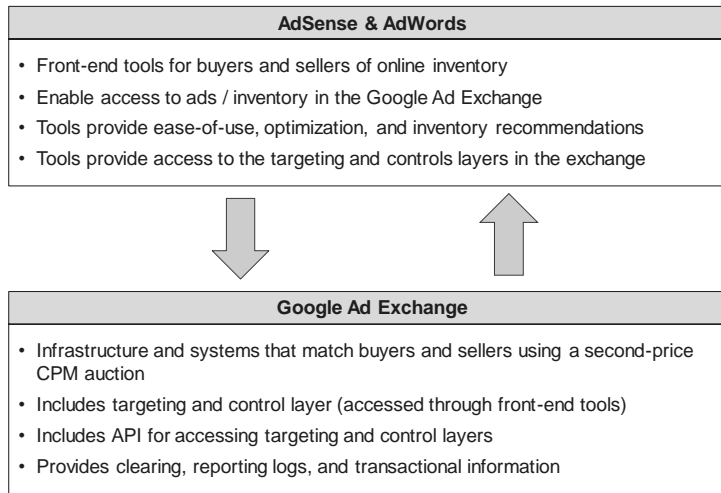


| Issue/Concern | Safeguard/Comments |
|--------------------------------------|--|
| Creepiness | <ul style="list-style-type: none"> Frequency Capping Minimum cookie ids on a Boom List Set higher threshold min eCPM Creative Review Ads Quality Scoring |
| User Privacy | <ul style="list-style-type: none"> Privacy Center Single Opt-Out/More Transparency Publisher Notice Requirement in T&C's (AFC & Boomerang) Revamp targeting for social networking properties Terms to advertisers to prevent usage in sensitive categories (e.g. under 13, health-related, etc.) Vet sensitive categories against contextual crawl for data collection (longer term) |
| Performance | <ul style="list-style-type: none"> No browser re-directs (common serving platform) |
| Cookie-blocking | <ul style="list-style-type: none"> Address through industry outreach (browsers) |
| Data Ownership | <ul style="list-style-type: none"> Manage through opt-in process for conversions for Advertiser data Could be residual DCLK legal issues |
| Disintermediation | <ul style="list-style-type: none"> Same 3pas restrictions (no sub-syndication & no networks) |
| Multiple Conversion Tracking Systems | <ul style="list-style-type: none"> Unified conversion tracking for those willing to share data AWCT could be supported by Floodlight (de-dupe conversions) |

\$5-8 eCPM

>Draw out cookie blocking and ad blocking
(working with Mozilla etc.)

Create an open, transparent inventory exchange (spot and futures-market) through which buyer and sellers can transact regardless of their preferred interface



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Google Ad Exchange

Product GPS Review Meeting
May 16th, 2008

Google Ad Exchange Vision

Market Opportunity

Google Ad Exchange Business Practices

Meeting Goal:

Agreement that we should move forward on developing the Google Ad Exchange

Google Ad Exchange Vision

Why Exchanges Now?

What is happening in the display market that's different?

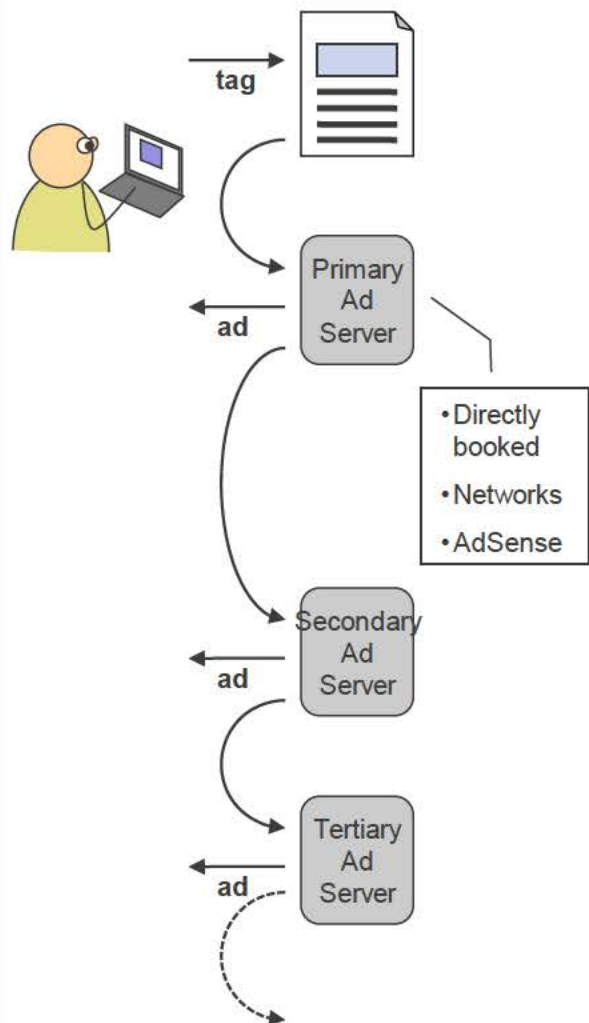
- Inventory is fragmented, no one has a lock on sufficient liquidity
- Buyers & sellers benefit from aggregated inventory
- Competitors are trying to aggregate liquidity because of the financial and strategic benefit of being the scale marketplace

Opening AdWords / AdSense to all buyers and sellers enables Google to become the scale marketplace

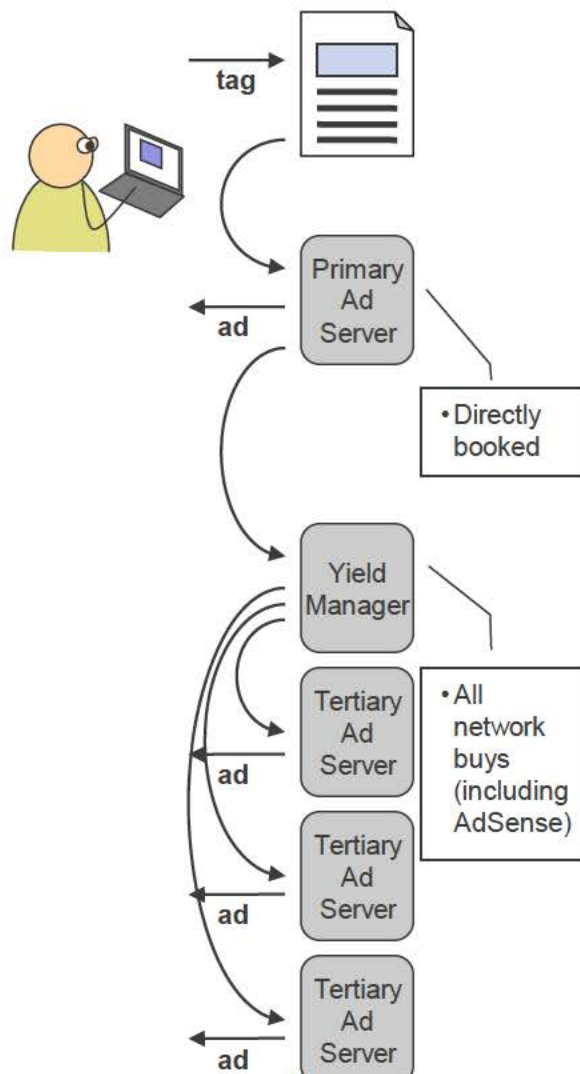
How being open helps



Today (daisy chaining)

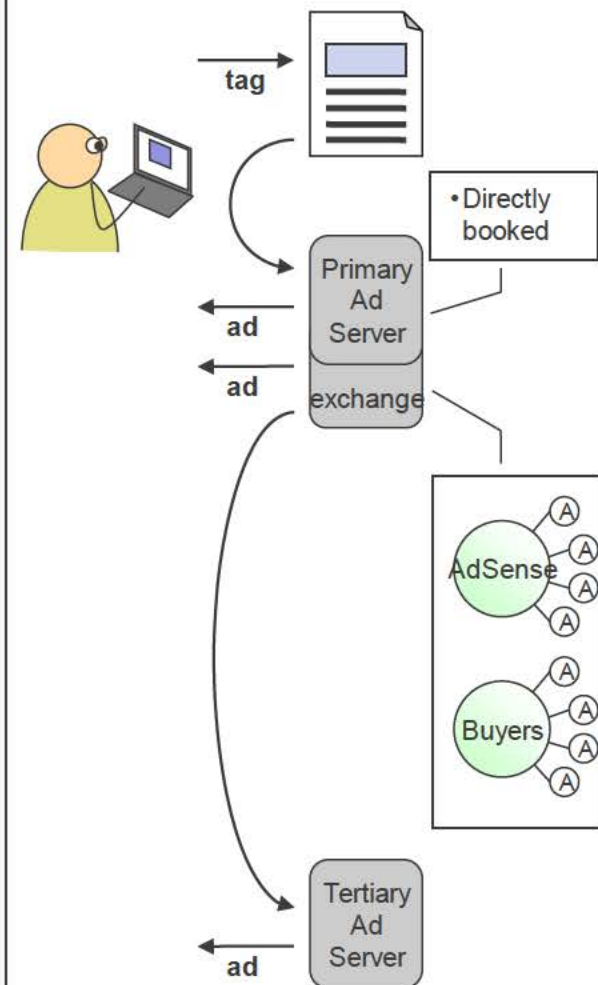


With Yield Management

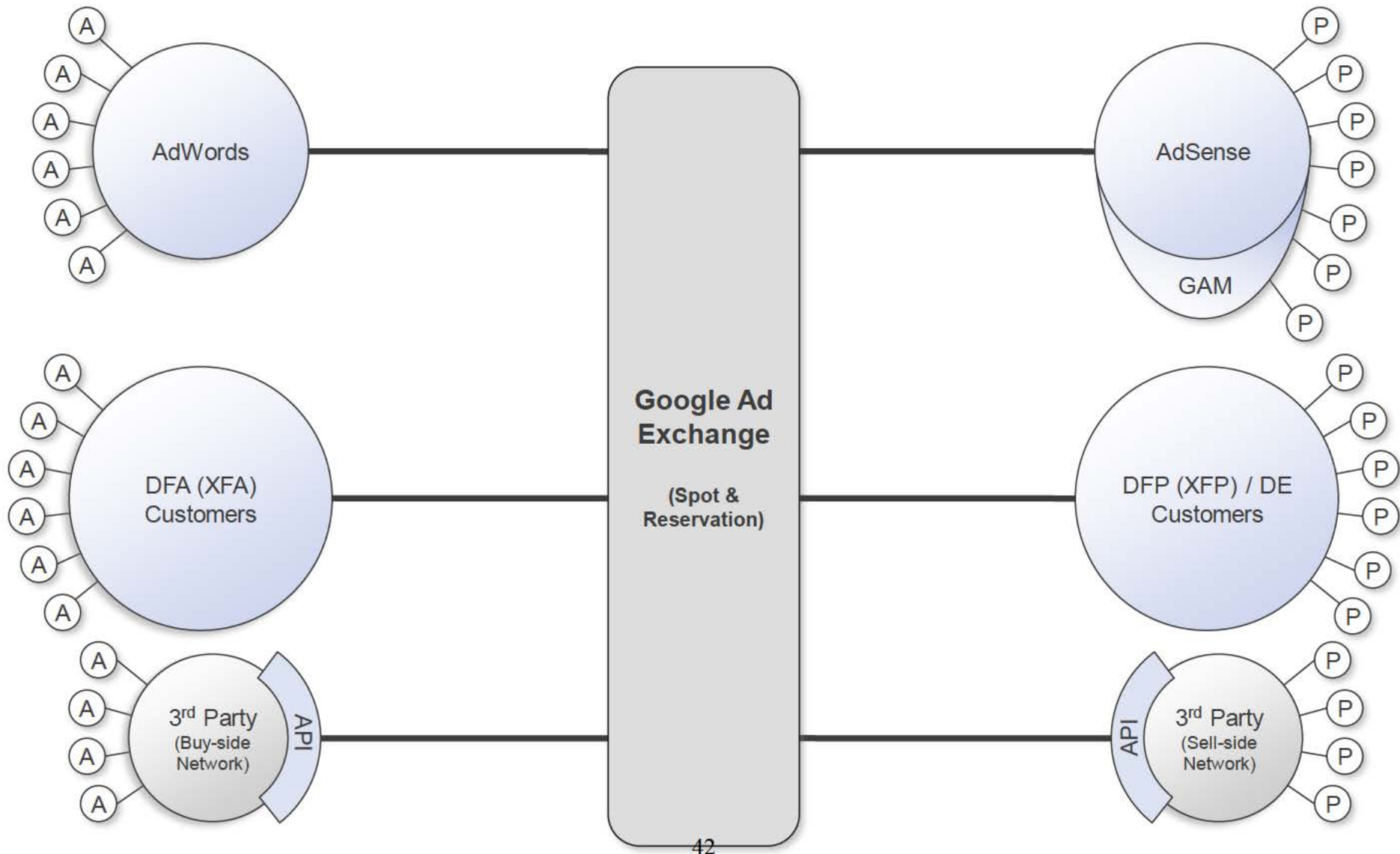


41

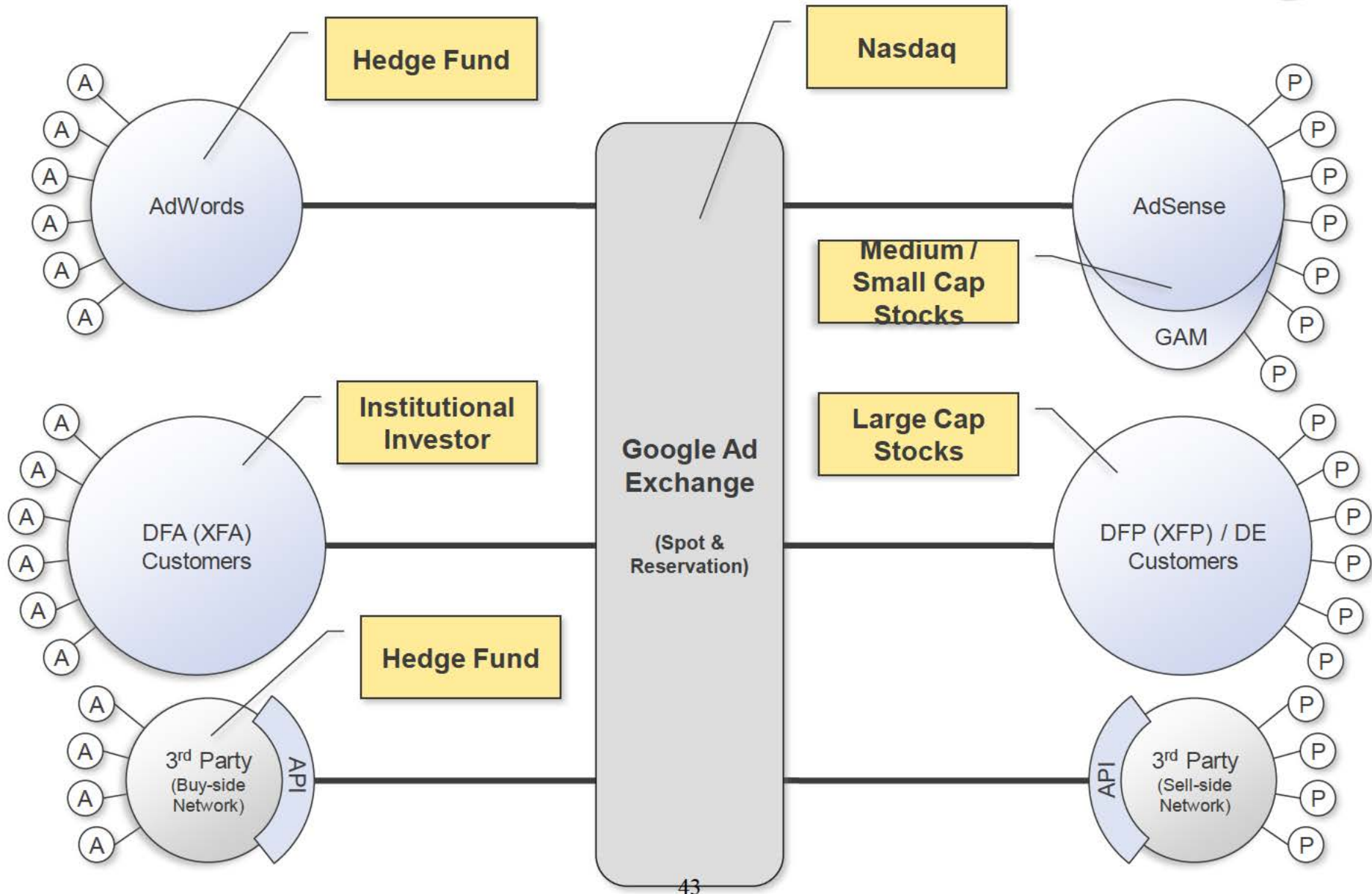
With Exchange



Google Ad Exchange



Google Ad Exchange



Sequencing Being Open for Buyers



Open before AdWords is competitive

Open the exchange to any buyer even though AdWords may not be the best monetization solution

Benefits:

- Opens up Google to additional buyers
- Allows buyers to select their tools and inventory independently
- Increased competition increases publisher's RPMs

Risks:

- Other tools may prove superior to Google's suite of solutions
- Media spend shifts from AdWords to competing solutions

Wait until AdWords is competitive

Wait until AdWords is competitive with other monetization tools before opening the inventory

Benefits:

- Protects AdWords revenue
- Once open, AdWords can monetize more of the inventory

Risks:

- Others dis-intermediate AdSense from publishers before AdWords is at parity
- Competitors aggregate sufficient inventory to force AdWords into participating in a 4th party exchange
- AdWords never reaches parity

Need further analysis to estimate the financial risk to AdWords vs. strategic risk of disintermediation

Sequencing Being Open for Sellers



Open before AdSense is at Scale

Open the exchange to any seller even before AdSense (or DFP / GAM) have hit market saturation

Benefits:

- Opens up Google to additional inventory
- Allows sellers to select their tools independently of the buying community
- Increased inventory increase attractiveness for buyers

Risks:

- Other tools may prove superior to Google's suite of solutions
- Over supply of inventory decreases RPMs

Wait until AdSense is at Scale

Wait until AdSense, GAM, and DFP have had the opportunity to attract publishers

Benefits:

- Potential to attract more sellers to Google products

Risks:











- Sellers become entrenched with other providers
- Competitors aggregate sufficient inventory to force AdWords into participating in a 4th party exchange

Need further analysis to estimate the opportunity to attract sellers to Google's sell-side platforms

Market Opportunity & Competitors

We are behind, but well positioned



| | |
|--|--|
|   | <ul style="list-style-type: none"> • Largest operating marketplace • 200 buyers and sellers representing 4000 advertisers / sites and growing • 1.4b in gross media spend (10b impressions per day) |
|    | <ul style="list-style-type: none"> • Moving into the exchange space • Launched AdMarket in August '07 • Network Control Panel competes with Rubicon and Pubmatic |
|    | <ul style="list-style-type: none"> • AOL currently operates a system for futures auction • Ad.com is largest performance network which can act as an anchor tenant • Ad.com's monthly volume is between 40b and 80b • Launched PubAccess, a small publisher solution on April 9, '08 |
|  | <ul style="list-style-type: none"> • Positioned as a "network yield maximizer" • 3,000 publishers signed for beta • Also offer ad serving • Risk of dis-intermediating AdSense |
|  | <ul style="list-style-type: none"> • OpenX is a popular, free, open source ad server • 30,000 OpenX publishers in 100 countries • ~50,000 AdSense partner accounts |

All logos and narrative are directly from the respective web-sites.

Market and participant estimates are based on internal Google estimates and publicly stated figures.

Business Practices

Business Practices – what’s required to play

| Key Questions | Recommendation |
|---|--|
| Who can buy? | Allow any advertiser, agency or network to purchase inventory on the exchange so long as they adhere to the exchange guidelines, (subject to sequencing decision). |
| Who can sell? | Allow any publisher, site or network to sell inventory on the exchange so long as they adhere to the exchange guidelines, (subject to sequencing decision). |
| What is allowed to transact? | <p>Allow buyers and sellers to elect what they want to buy or sell – provide transparency and choice</p> <p>Identify and ban unacceptable behaviors (e.g., malware, viruses, deceptive creatives, pop-ups/unders)</p> |
| How are creatives, sites, advertisers and sellers classified? | <p>Create Exchange specific version of Google advertising guidelines</p> <p>Buyers and Sellers are responsible & liable for declarations</p> <p>Create 3rd party audit standards for sites and advertisers</p> <p>Google validates participant entered declarations</p> |

Examples of what's allowed / restricted



| | | Activity or Use Case | Risks and Restrictions |
|----------|---|--------------------------------------|--|
| Buyers | ✓ | 3 rd party (3PAS) | Extend the 3PAS terms to the exchange |
| | ✓ | 4 th party (networks) | Allow ad networks to buy on the exchange and re-direct to participating buyers using a 3 rd party ad server |
| Creative | ✗ | Pop-up / under | Not allowed |
| | ✓ | Gambling | require buyers to classify; not allowed to target US users |
| | ✗ | Emulates a PC Window | |
| | ✓ | Partial nudity / sexually suggestive | require buyers to classify |
| Seller | ✓ | 4 th party (networks) | User-list targeting or re-targeting based on user behavior where the data is provided by the 3 rd party |
| Sites | ✓ | Crass humor | Hard to define; require sellers to classify |
| | ✓ | Partial nudity / sexually suggestive | Requires sellers to classify |
| | ✗ | Site generates pop-ups | Not allowed |
| | ✗ | Spy-ware / Mal-ware | Not allowed |

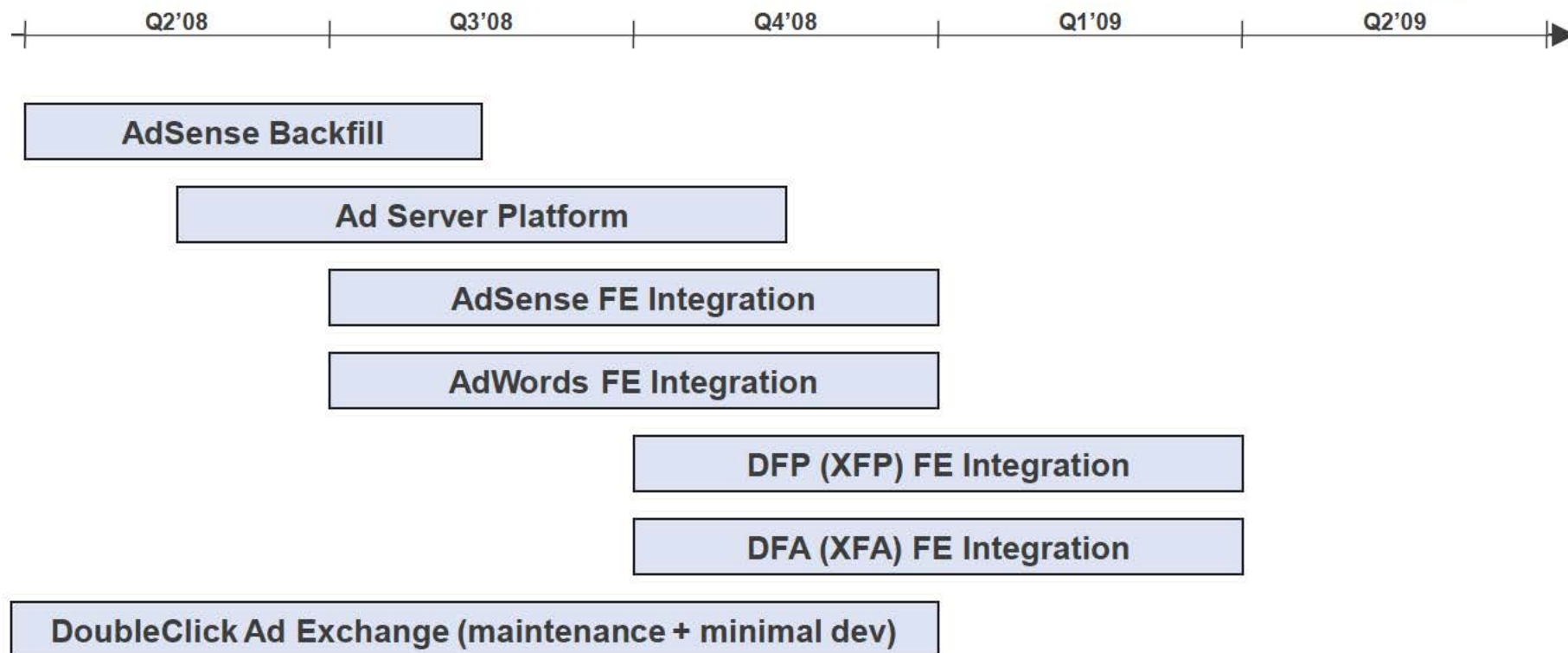
Short list of controversial elements

| | Activity or Use Case | Risks and Restrictions |
|----------|--|---|
| Buyers | Data collection | Allow buyers to cookie users for re-targeting (requires opt-in from seller) Example: ad targeting user that saw another ad from that advertiser Requires notification on each participating site |
| | Data resale (jumpstart use case) | Allow buyers to cookie users for re-sale of the data (requires opt-in from seller & seller may set a different minimum CPM). Example: JumpStart network's creation of auto buyers |
| | Match-coded user-targeting / re-targeting | User-list targeting or re-targeting based on user behavior where the data was collected independently and then linked up to the exchange |
| Sellers | Data collection and resale on the exchange | Requires notification to users on the site |
| Creative | Nudity / Pornography | require buyers to classify |
| | Alcohol / Tobacco | require buyers to classify |
| | Auto-play | require buyers to classify |
| Sites | Nudity / Pornography | Requires sellers to classify |

Moving Forward

Tentative Roadmap

There are seven development tracks for the Google Ad Exchange



Next Steps

With agreement from Product GPS, next steps include:

1. Charter team for development and commercialization
2. Create business plan to lock down open business questions
 - Sequencing
 - Business issues
3. Commence development

Appendix

Relative Revenue Share Sensitivity

Effective revenue share given expected growth and split between AdWords / AdSense and AdX

| | | % AdWords / AdSense vs AdX | | | | | | | |
|---------------|------|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| | | 100% | 90% | 80% | 70% | 60% | 50% | 40% | 30% |
| Volume Growth | 100% | 32.0% | 30.8% | 29.6% | 28.4% | 27.2% | 26.0% | 24.8% | 23.6% |
| | 105% | 33.6% | 32.3% | 31.1% | 29.8% | 28.6% | 27.3% | 26.0% | 24.8% |
| | 110% | 35.2% | 33.9% | 32.6% | 31.2% | 29.9% | 28.6% | 27.3% | 26.0% |
| | 115% | 36.8% | 35.4% | 34.0% | 32.7% | 31.3% | 29.9% | 28.5% | 27.1% |
| | 120% | 38.4% | 37.0% | 35.5% | 34.1% | 32.6% | 31.2% | 29.8% | 28.3% |
| | 125% | 40.0% | 38.5% | 37.0% | 35.5% | 34.0% | 32.5% | 31.0% | 29.5% |
| | 130% | 41.6% | 40.0% | 38.5% | 36.9% | 35.4% | 33.8% | 32.2% | 30.7% |

- At 32% revenue share for AdWords / AdSense and 20% for the exchange:
 - every 10% shift of volume from AdWords / AdSense to the exchange requires a 5% increase in aggregate volume to be revenue neutral

Effective revenue share given expected growth and split between AdWords / AdSense and AdX

| | | % AdWords / AdSense vs AdX | | | | | | | |
|---------------|------|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| | | 100% | 90% | 80% | 70% | 60% | 50% | 40% | 30% |
| Volume Growth | 100% | 32.0% | 29.3% | 26.6% | 23.9% | 21.2% | 18.5% | 15.8% | 13.1% |
| | 105% | 33.6% | 30.8% | 27.9% | 25.1% | 22.3% | 19.4% | 16.6% | 13.8% |
| | 110% | 35.2% | 32.2% | 29.3% | 26.3% | 23.3% | 20.4% | 17.4% | 14.4% |
| | 115% | 36.8% | 33.7% | 30.6% | 27.5% | 24.4% | 21.3% | 18.2% | 15.1% |
| | 120% | 38.4% | 35.2% | 31.9% | 28.7% | 25.4% | 22.2% | 19.0% | 15.7% |
| | 125% | 40.0% | 36.6% | 33.3% | 29.9% | 26.5% | 23.1% | 19.8% | 16.4% |
| | 130% | 41.6% | 38.1% | 34.6% | 31.1% | 27.6% | 24.1% | 20.5% | 17.0% |

- At 32% revenue share for AdWords / AdSense and 5% for the exchange:
 - every 10% shift of volume from AdWords / AdSense to the exchange requires a 22.5% increase in aggregate volume to be revenue neutral

Relative Revenue Share Sensitivity

Effective revenue share given expected growth and split between AdWords (32%) / AdSense and AdX (5%)

| Volume Growth (if split across exchange and AdWords) | Media through AdWords (vs AdX) | | | | | | | |
|--|--------------------------------|-------|-------|-------|-------|-------|-------|-------|
| | 100% | 90% | 80% | 70% | 60% | 50% | 40% | 30% |
| 100% | 32.0% | 29.3% | 26.6% | 23.9% | 21.2% | 18.5% | 15.8% | 13.1% |
| 105% | 33.6% | 30.8% | 27.9% | 25.1% | 22.3% | 19.4% | 16.6% | 13.8% |
| 110% | 35.2% | 32.2% | 29.3% | 26.3% | 23.3% | 20.4% | 17.4% | 14.4% |
| 115% | 36.8% | 33.7% | 30.6% | 27.5% | 24.4% | 21.3% | 18.2% | 15.1% |
| 120% | 38.4% | 35.2% | 31.9% | 28.7% | 25.4% | 22.2% | 19.0% | 15.7% |
| 125% | 40.0% | 36.6% | 33.3% | 29.9% | 26.5% | 23.1% | 19.8% | 16.4% |
| 130% | 41.6% | 38.1% | 34.6% | 31.1% | 27.6% | 24.1% | 20.5% | 17.0% |
| 135% | 43.2% | 39.6% | 35.9% | 32.3% | 28.6% | 25.0% | 21.3% | 17.7% |
| 140% | 44.8% | 41.0% | 37.2% | 33.5% | 29.7% | 25.9% | 22.1% | 18.3% |
| 145% | 46.4% | 42.5% | 38.6% | 34.7% | 30.7% | 26.8% | 22.9% | 19.0% |
| 150% | 48.0% | 44.0% | 39.9% | 35.9% | 31.8% | 27.8% | 23.7% | 19.7% |
| 155% | 49.6% | 45.4% | 41.2% | 37.0% | 32.9% | 28.7% | 24.5% | 20.3% |
| 160% | 51.2% | 46.9% | 42.6% | 38.2% | 33.9% | 29.6% | 25.3% | 21.0% |
| 165% | 52.8% | 48.3% | 43.9% | 39.4% | 35.0% | 30.5% | 26.1% | 21.6% |
| 170% | 54.4% | 49.8% | 45.2% | 40.6% | 36.0% | 31.5% | 26.9% | 22.3% |
| 175% | 56.0% | 51.3% | 46.6% | 41.8% | 37.1% | 32.4% | 27.7% | 22.9% |

Effective revenue share given expected growth and split between AdWords (32%) / AdSense and AdX (5%)

| Volume Growth (if all from exchange) | Media through AdWords (vs AdX) | | | | | | | |
|--------------------------------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|
| | 100% | 90% | 80% | 70% | 60% | 50% | 40% | 30% |
| 100% | 32.0% | 29.3% | 26.6% | 23.9% | 21.2% | 18.5% | 15.8% | 13.1% |
| 105% | 32.3% | 29.6% | 26.9% | 24.2% | 21.5% | 18.8% | 16.1% | 13.4% |
| 110% | 32.5% | 29.8% | 27.1% | 24.4% | 21.7% | 19.0% | 16.3% | 13.6% |
| 115% | 32.8% | 30.1% | 27.4% | 24.7% | 22.0% | 19.3% | 16.6% | 13.9% |
| 120% | 33.0% | 30.3% | 27.6% | 24.9% | 22.2% | 19.5% | 16.8% | 14.1% |
| 125% | 33.3% | 30.6% | 27.9% | 25.2% | 22.5% | 19.8% | 17.1% | 14.4% |
| 130% | 33.5% | 30.8% | 28.1% | 25.4% | 22.7% | 20.0% | 17.3% | 14.6% |
| 135% | 33.8% | 31.1% | 28.4% | 25.7% | 23.0% | 20.3% | 17.6% | 14.9% |
| 140% | 34.0% | 31.3% | 28.6% | 25.9% | 23.2% | 20.5% | 17.8% | 15.1% |
| 145% | 34.3% | 31.6% | 28.9% | 26.2% | 23.5% | 20.8% | 18.1% | 15.4% |
| 150% | 34.5% | 31.8% | 29.1% | 26.4% | 23.7% | 21.0% | 18.3% | 15.6% |
| 155% | 34.8% | 32.1% | 29.4% | 26.7% | 24.0% | 21.3% | 18.6% | 15.9% |
| 160% | 35.0% | 32.3% | 29.6% | 26.9% | 24.2% | 21.5% | 18.8% | 16.1% |
| 165% | 35.3% | 32.6% | 29.9% | 27.2% | 24.5% | 21.8% | 19.1% | 16.4% |
| 170% | 35.5% | 32.8% | 30.1% | 27.4% | 24.7% | 22.0% | 19.3% | 16.6% |
| 175% | 35.8% | 33.1% | 30.4% | 27.7% | 25.0% | 22.3% | 19.6% | 16.9% |

Effective revenue share given expected growth and split between AdWords (32%) / AdSense and AdX (20%)

| Volume Growth (if split across exchange and AdWords) | Media through AdWords (vs AdX) | | | | | | | |
|--|--------------------------------|-------|-------|-------|-------|-------|-------|-------|
| | 100% | 90% | 80% | 70% | 60% | 50% | 40% | 30% |
| 100% | 32.0% | 30.8% | 29.6% | 28.4% | 27.2% | 26.0% | 24.8% | 23.6% |
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| 110% | 35.2% | 33.9% | 32.6% | 31.2% | 29.9% | 28.6% | 27.3% | 26.0% |
| 115% | 36.8% | 35.4% | 34.0% | 32.7% | 31.3% | 29.9% | 28.5% | 27.1% |
| 120% | 38.4% | 37.0% | 35.5% | 34.1% | 32.6% | 31.2% | 29.8% | 28.3% |
| 125% | 40.0% | 38.5% | 37.0% | 35.5% | 34.0% | 32.5% | 31.0% | 29.5% |
| 130% | 41.6% | 40.0% | 38.5% | 36.9% | 35.4% | 33.8% | 32.2% | 30.7% |
| 135% | 43.2% | 41.6% | 40.0% | 38.3% | 36.7% | 35.1% | 33.5% | 31.9% |
| 140% | 44.8% | 43.1% | 41.4% | 39.8% | 38.1% | 36.4% | 34.7% | 33.0% |
| 145% | 46.4% | 44.7% | 42.9% | 41.2% | 39.4% | 37.7% | 36.0% | 34.2% |
| 150% | 48.0% | 46.2% | 44.4% | 42.6% | 40.8% | 39.0% | 37.2% | 35.4% |
| 155% | 49.6% | 47.7% | 45.9% | 44.0% | 42.2% | 40.3% | 38.4% | 36.6% |
| 160% | 51.2% | 49.3% | 47.4% | 45.4% | 43.5% | 41.6% | 39.7% | 37.8% |
| 165% | 52.8% | 50.8% | 48.8% | 46.9% | 44.9% | 42.9% | 40.9% | 38.9% |
| 170% | 54.4% | 52.4% | 50.3% | 48.3% | 46.2% | 44.2% | 42.2% | 40.1% |
| 175% | 56.0% | 53.9% | 51.8% | 49.7% | 47.6% | 45.5% | 43.4% | 41.3% |

Effective revenue share given expected growth and split between AdWords (32%) / AdSense and AdX (20%)

| Volume Growth (if all from exchange) | Media through AdWords (vs AdX) | | | | | | | |
|--------------------------------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|
| | 100% | 90% | 80% | 70% | 60% | 50% | 40% | 30% |
| 100% | 32.0% | 30.8% | 29.6% | 28.4% | 27.2% | 26.0% | 24.8% | 23.6% |
| 105% | 33.0% | 31.8% | 30.6% | 29.4% | 28.2% | 27.0% | 25.8% | 24.6% |
| 110% | 34.0% | 32.8% | 31.6% | 30.4% | 29.2% | 28.0% | 26.8% | 25.6% |
| 115% | 35.0% | 33.8% | 32.6% | 31.4% | 30.2% | 29.0% | 27.8% | 26.6% |
| 120% | 36.0% | 34.8% | 33.6% | 32.4% | 31.2% | 30.0% | 28.8% | 27.6% |
| 125% | 37.0% | 35.8% | 34.6% | 33.4% | 32.2% | 31.0% | 29.8% | 28.6% |
| 130% | 38.0% | 36.8% | 35.6% | 34.4% | 33.2% | 32.0% | 30.8% | 29.6% |
| 135% | 39.0% | 37.8% | 36.6% | 35.4% | 34.2% | 33.0% | 31.8% | 30.6% |
| 140% | 40.0% | 38.8% | 37.6% | 36.4% | 35.2% | 34.0% | 32.8% | 31.6% |
| 145% | 41.0% | 39.8% | 38.6% | 37.4% | 36.2% | 35.0% | 33.8% | 32.6% |
| 150% | 42.0% | 40.8% | 39.6% | 38.4% | 37.2% | 36.0% | 34.8% | 33.6% |
| 155% | 43.0% | 41.8% | 40.6% | 39.4% | 38.2% | 37.0% | 35.8% | 34.6% |
| 160% | 44.0% | 42.8% | 41.6% | 40.4% | 39.2% | 38.0% | 36.8% | 35.6% |
| 165% | 45.0% | 43.8% | 42.6% | 41.4% | 40.2% | 39.0% | 37.8% | 36.6% |
| 170% | 46.0% | 44.8% | 43.6% | 42.4% | 41.2% | 40.0% | 38.8% | 37.6% |
| 175% | 47.0% | 45.8% | 44.6% | 43.4% | 42.2% | 41.0% | 39.8% | 38.6% |

Market Opportunity for non-premium display is \$2.6b to \$3.1b



Bottom Up

Exchanges have the potential of \$2.6b annually

Market Sizing for Google Ad Exchange

| Exchange | Avg. CPM | Volume per month (thousands) | Media Spend per month |
|-------------|----------|------------------------------|-----------------------|
| Right Media | \$ 0.40 | 280,000,000 | \$ 112,000,000 |
| AdX | \$ 1.10 | 600,000 | \$ 660,000 |
| ADSDAQ | \$ 1.00 | 500,000 | \$ 500,000 |
| AdBrite | | | \$ - |
| Other DFPs | \$ 1.00 | 100,000,000 | \$ 100,000,000 |
| | | | |
| | | | \$ 213,160,000 |
| | | Annual Media Spend: | \$2,557,920,000 |

Notes: Does not take into account non-DFPs not working with an existing exchange

Top Down

Exchanges have the potential of \$3.1b annually

Market Sizing for Google Ad Exchange

| | | |
|---------------|--------|---|
| Think Equity: | \$ 3.1 | Non-premium display is \$3.1 |
| IAB | \$ 4.9 | Total is \$4.9 per quarter (display + search) |
| TNS Media | \$ 1.4 | Total for display is \$2.7 |
| | | |
| Average: | \$ 3.1 | |

Business Practices – what's required to play

| Key Questions | Recommendation |
|---|---|
| Is the revenue share disclosed? | <p>Make the revenue share on the exchange transparent to sellers</p> <p>Maintain obfuscation on the revenue share of AdWords</p> |
| How do we address Ad.com with the Exchange? | <p>The exchange creates three different means for competing with Ad.com: 1) liquidity of the exchange, 2) optimization through AdWords and 3) Usability through AdSense</p> |

ISP Based Ad Networks (Update)

NebuAd announced partnership with Charter Communications

- 4th largest MSO with 3M internet subs
- Tests in four markets – proactive email communication
- Speculation that could reduce content protections for Charter

Phorm has 80% ISP coverage in UK (BT is conducting tests)

- No inventory or advertisers (no liquidity on their "exchange")
- Differ from other like players (NebuAd) in that they aren't trying to arbitrage inventory
- Have signals (keywords, category buckets) to map to users, but no algorithmic matching based on performance
- Benefit to users is primarily anti-phishing

→ Building BT profiles without paying the pubs for their involvement

Specific Media – potential partnership



- Proposal to allow ad network into AFC as a trial
- Proposing 3PAS T's & C's + contract with exceptions:
 - 4th party calls, multiple advertisers per tag, tags only run Google-certified vendors, etc
- Structure of Test:
 - \$100K limit, 10 advertisers, exclusion list enforced
- Notable Call Outs:
 - No approval bin
 - Push for audit rights?
 - Want to wrap a tag around data, but unable now

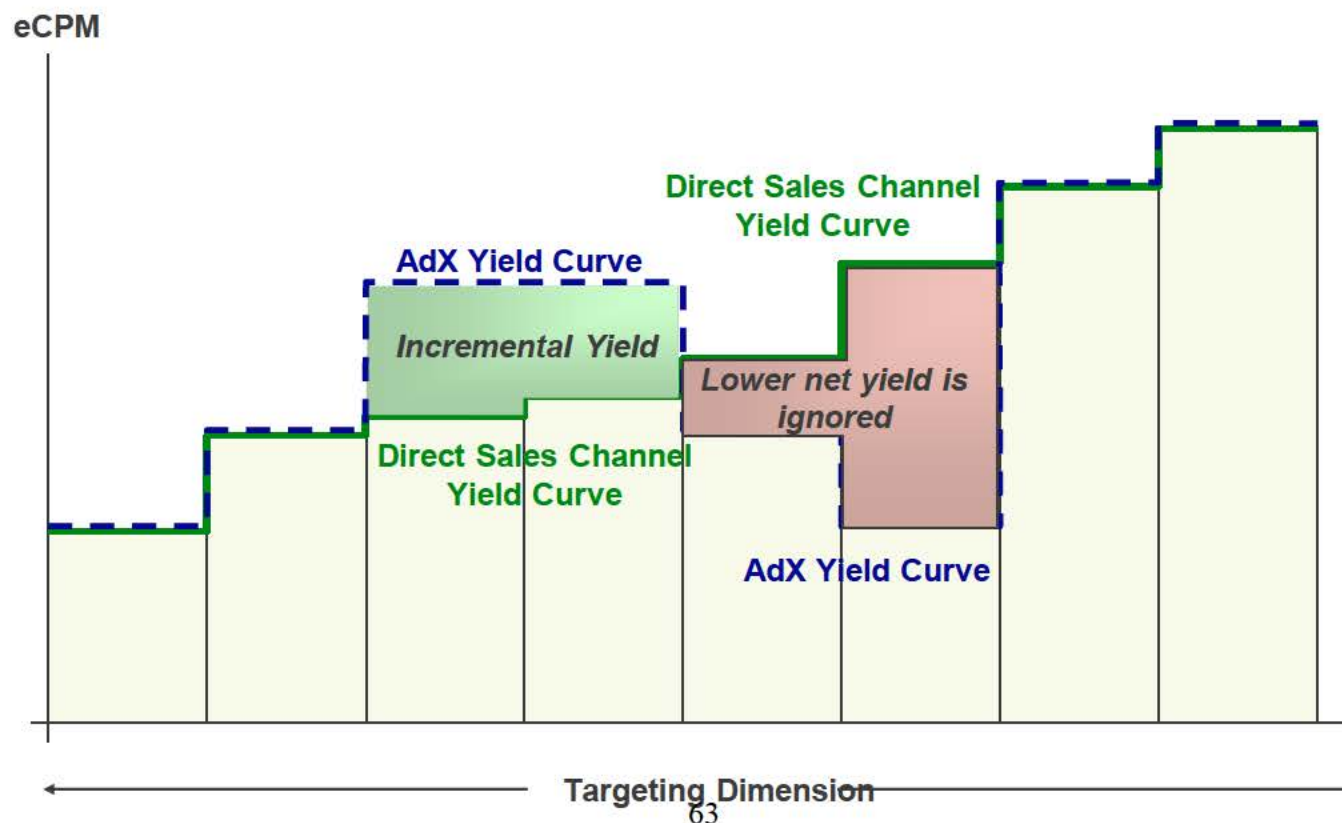
Questions from Sales



| Question | Response |
|---|---|
| What sort of publishers and advertisers are we targeting with the exchange. Is it the exclusive kind-of network that we have now with the DoubleClick exchange, or are we thinking something much more open, including long tail publishers and advertisers and open access to other ad networks? | The exchange will span across both large and small buyers and sellers, including all AdWords advertisers and AdSense sellers. Inventory will be segmented by various means including, but not limited to, participating in the Google Content Network and buying via AdPlanner or 3 rd party metrics. |
| What sort of margin structure do we expect for the exchange? Levels anywhere from 5%-20% have been discussed. | The revenue share for the exchange is still under discussion and will be reassessed based on elasticity analysis and market forces. |
| When and how do we allow 3rd party sell-side networks into the exchange based on future moves with MSFT/YHOO? | The exchange will be open to any 3 rd party sell-side network. 3 rd party sellers would join to get access to the buyers available through the exchange. Buyers would have less incentive to seek alternate options if all inventory is available through the exchange. |
| What are the lessons learned (positive and negative) from the DoubleClick exchange and how are they informing the direction of the Google Ad Exchange? | The previous DoubleClick Ad Exchange team is working to develop the new Google Ad Exchange and leverage the learnings from its operations. |
| How do we think the direction of the Ad Exchange should influence development of AdSense (e.g., targeting and optimization technologies to ensure we win our fair share of the auctions)? | AdWords and DFA will both need to provide buyers with sufficient value to justify their costs. The exchange de-couples these products from the inventory available to them. |

Dynamic Allocation

Dynamic Allocation allows the automatic selection of the highest bid between direct (in DFP/DE) and indirect (DoubleClick Ad Exchange) channels



What actions should we allow for Buyers?

| | Activity or Use Case | Risks and Restrictions |
|---|---|---|
| ✓ | 3 rd party (3PAS) | Extend the 3PAS terms to the exchange |
| ✓ | User-targeting / re-targeting | User-list targeting or re-targeting based on user behavior where the data is provided by the 3 rd party but collected on DoubleClick domain |
| ✓ | 4 th party (networks) | Allow ad networks to buy on the exchange and re-direct to participating buyers using a 3 rd party ad server |
| | Data collection | Allow buyers to cookie users for re-targeting (requires opt-in from seller) Example: ad targeting user that saw another ad from that advertiser Requires notification on each participating site |
| | Data resale (jumpstart use case) | Allow buyers to cookie users for re-sale of the data (requires opt-in from seller & seller may set a different minimum CPM). Example: JumpStart network's creation of auto buyers |
| | Match-coded user-targeting / re-targeting | User-list targeting or re-targeting based on user behavior where the data was collected independently and then linked up to the exchange |

What actions should we allow for Sellers?

| | Activity or Use Case | Risks and Restrictions |
|---|--|--|
| ✓ | 4 th party (networks) | User-list targeting or re-targeting based on user behavior where the data is provided by the 3 rd party |
| | Data collection and resale on the exchange | Requires notification to users on the site |

What creative types / content?

| | Creative type or content | Risks and Restrictions |
|---|---|--|
| ✓ | Annoying | Hard to define; require buyers to classify |
| ✗ | Pop-up / under | Not allowed |
| ✓ | Click-to-play | require buyers to classify |
| ✓ | Gambling | require buyers to classify; not allowed to target US users |
| ✓ | File size up to 100k (with polite download) | require buyers to classify; sellers may set lower restrictions |
| ✗ | Emulates a PC Window | |
| ✗ | Deceptive | |
| ✓ | Crass humor | Hard to define; require buyers to classify |
| ✓ | Partial nudity / sexually suggestive | require buyers to classify |
| ✗ | Spy-ware / Mal-ware | Not allowed |
| | Nudity / Pornography | require buyers to classify |
| | Alcohol / Tobacco | require buyers to classify |
| | Auto-play | require buyers to classify |

Which sites / site content?

| | Site or site contents | Risks and Restrictions |
|---|--------------------------------------|---|
| ✓ | Low quality | Hard to define; require sellers to classify |
| ✓ | Inventory is within emails | Requires sellers to classify |
| ✓ | Inventory is within an application | Requires sellers to classify |
| ✓ | Crass humor | Hard to define; require sellers to classify |
| ✓ | Partial nudity / sexually suggestive | Requires sellers to classify |
| ✗ | Site generates pop-ups | Not allowed |
| ✗ | Spy-ware / Mal-ware | Not allowed |
| | Nudity / Pornography | Requires sellers to classify |

Open vs. Closed



| Open | Closed |
|---|---|
| Any buyer and any seller, regardless of their preferred ad serving solution can participate in the exchange | Only buyers on AdWords or Sellers from AdSense (with new 3PAS exception) can buy or sell |
| Benefits: <ul style="list-style-type: none">• Opens up Google to additional inventory and buyers• Allows buyers and sellers to select their tools and inventory independently• Increased competition increases publisher's RPMs | Benefits: <ul style="list-style-type: none">• Google controls more aspects of the consumer experience |
| Risks: <ul style="list-style-type: none">• Other tools may prove superior to Google's suite of solutions• Media spend shifts from AdWords to competing solutions | Risks: <ul style="list-style-type: none">• Others offer an open solution and dis-intermediate AdSense from publishers• Competitors aggregate sufficient inventory to force AdWords into participating in a 4th party exchange |

Recommendation is that the Google Ad Exchange be an open platform for buyers and sellers

Issues and Safeguards



| Issue/Concern | Safeguard/Comments |
|--------------------------------------|--|
| Creepiness | <ul style="list-style-type: none"> • Frequency Capping • Minimum cookie ids on a Boom List • Set higher threshold min eCPM • Creative Review • Ads Quality Scoring |
| User Privacy | <ul style="list-style-type: none"> • Privacy Center • Single Opt-Out/More Transparency • Publisher Notice Requirement in T&C's (AFC & Boomerang) • Revamp targeting for social networking properties • Terms to advertisers to prevent usage in sensitive categories (e.g. under 13, health-related, etc.) • Vet sensitive categories against contextual crawl for data collection (longer term) |
| Performance | <ul style="list-style-type: none"> • No browser re-directs (common serving platform) |
| Cookie-blocking | <ul style="list-style-type: none"> • Address through industry outreach (browsers) |
| Data Ownership | <ul style="list-style-type: none"> • Manage through opt-in process for conversions for Advertiser data • Could be residual DCLK legal issues |
| Disintermediation | <ul style="list-style-type: none"> • Same 3pas restrictions (no sub-syndication & no networks) |
| Multiple Conversion Tracking Systems | <ul style="list-style-type: none"> • Unified conversion tracking for those willing to share data • AWCT could be supported by Floodlight (de-dupe conversions) |

Create an open, transparent inventory exchange (spot and futures-market) through which buyer and sellers can transact regardless of their preferred interface

