

The State of Competition in Mobile Advertising: A Look Back at Google’s Acquisition of AdMob

Two years ago, in November 2009, Google announced its intent to acquire AdMob. At the time, AdMob was one of the world’s leading mobile ad networks, accounting for 21 percent of all mobile advertising—second, in fact, only to Google, which accounted for 51 percent of mobile advertising.ⁱ Six months later, despite broad industry concerns that the deal would enable Google to monopolise the market for mobile advertising networks and eliminate a key potential competitor to its existing search monopoly, the Federal Trade Commission announced its decision not to block it.ⁱⁱ Although conceding that the decision was a “difficult one”ⁱⁱⁱ and that the deal “raised serious antitrust issues,”^{iv} the Commission held that Apple’s acquisition of AdMob competitor Quattro Wireless in December 2009 and its subsequent launch of its own mobile ad network, among other factors, left the Commission with insufficient grounds to challenge the deal. The Commission assured, however, that it would “continue to monitor the mobile marketplace to ensure a competitive environment.”^v

This paper takes a fresh look at Google’s acquisition of AdMob and the state of competition in mobile advertising today. It reviews concerns raised at the time and explores whether the Commission’s prediction—that other mobile advertising networks would be “well-positioned to compete vigorously” against Google despite the deal—proved accurate.^{vi} Because Google now controls a staggering 96 percent of mobile search advertising in the United States^{vii} and growing shares of other mobile advertising, the paper concludes that the Commission should follow up on its commitment to monitor competition in mobile advertising and should investigate whether Google has unlawfully acquired or maintained a monopoly in any part of the mobile sector. It also contends that antitrust enforcers, when reviewing future deals by Google—such as its proposed €9.1 billion acquisition of Motorola Mobility—should take care not to underestimate Google’s ability to leverage its existing search and advertising monopolies into new areas and to throttle competition in new markets.

I. Contemporaneous Concerns Over Google-AdMob

Already in 2009, technology experts recognised that mobile represented the next frontier for online innovation and commerce. Although both Apple’s iPhone and competing smartphones powered by Google’s Android mobile operating system (OS) were still relatively new to the market, there already were over 330,000 smart phone applications available to mobile users, the vast majority of which, as today, were inexpensive or even free to consumers and generated revenue through advertising.^{viii} Online publishers, advertisers, application developers, device manufacturers and network operators all recognised that consumer uptake of mobile devices was exploding and that mobile advertising would be the economic engine that propelled investment and innovation across the mobile ecosystem. They also recognised that for this innovation to continue, it was essential that competition between the platforms used to deliver advertising to mobile devices, applications, and web pages remained robust.

When Google announced its intent to acquire AdMob, it had already succeeded in wholly dominating mobile search, accounting for over 96 percent of mobile searches both in the United States and

globally.^{ix} It was able to acquire this dominance in large part by extending the monopoly power it already had acquired in PC-based search and search advertising into the mobile space. To this end, Google entered into a series of exclusive search agreements with the biggest players in mobile. While Google's CEO sat on Apple's board of directors, Google paid Apple to make Google the default search engine on Apple's popular iPhone, guaranteeing that no competing search engine would have access to this important source of searches and mobile advertisers. Google also compelled device manufacturers and network operators wishing to use the Android OS to use Google as the default search engine on those phones as well. These steps helped illuminate what is now widely acknowledged—that Google is first and foremost an advertising company and that search is merely a vehicle for Google to deliver advertising space and user data to advertisers.

Despite these efforts, Google faced a potential threat to its search and advertising dominance from ads that were being served to users directly within their mobile applications, or “apps.” These “in-app” ads were a threat to Google's dominance because consumers increasingly were using specialised mobile apps—such as apps for entertainment or sporting events, local retailers or products, news-on-the-go, and the like—instead of general search engines to navigate to specific information, products, and services on their mobile devices. Also, people using a mobile device tend to be more inclined than when on a PC to take immediate, real-world decisions, such as to visit a store or to try out a restaurant, which made ads shown within these apps of particularly high value to advertisers. At the time of the deal, Google's share of such in-app advertising was only around 22 percent.^x

By far the leading network for serving in-app mobile ads at the time was AdMob. AdMob accounted for over half of mobile in-app advertising, making it, in AdMob's words, “the world's largest mobile advertising marketplace.”^{xi} Although AdMob supported all major forms of mobile advertising, its primary business was in in-app ads. AdMob had a particularly strong position with developers of applications for Apple's iPhone, which competed directly with smart phones running Google's Android OS. Indeed, one industry executive claimed that Google offered a substantial premium for AdMob just to keep it out of Apple's hands (Apple was in negotiations at the time to purchase AdMob).^{xii} Google's AdWords/AdSense platform was the second-leading platform for delivering non-search ads to mobile devices and was widely viewed as AdMob's key competitor in this space.

While stakeholders across the mobile ecosystem raised numerous concerns about Google's attempt to acquire AdMob, the key concerns were the following:

- ***Google's acquisition of AdMob would reduce competition in the supply of mobile advertising platforms and allow Google to extend its dominance of mobile advertising.*** Observers noted that allowing Google to purchase AdMob would combine the top two competitors in mobile advertising platforms, thereby allowing Google to purchase its way into dominance of mobile advertising—instead of requiring it to acquire market share through competition on the merits. By eliminating Google's main competition in mobile advertising, experts feared the deal would raise prices for mobile advertisers, diminish the revenues available for mobile publishers, application developers, wireless carriers, and device manufacturers to develop new products, content and services, and limit choice and innovation for consumers while effectively raising the prices they paid for online goods and services.
- ***The deal would eliminate one of the most promising competitors to Google's monopoly in both mobile and PC-based search and search advertising.*** Then as now, Google dominated both mobile and PC-based search and search advertising. The U.S. Department of Justice had found a year earlier (in November 2008) that Google already was “by far the largest provider” of search

advertising “with shares of more than 70 percent.”^{xiii} Although Google at the time also controlled over 90% of mobile search advertising, it faced a potential competitive threat from the in-app advertising in which AdMob specialised. As already noted, there were signs that mobile users were starting to ignore Google.com in favor of specialised mobile apps that helped them locate specific products and services more easily than they could with a general-purpose search engine like Google. These apps posed an important, albeit nascent, competitive challenge to Google’s search dominance. As the world’s top mobile ad platform, AdMob represented the most promising challenger to Google’s search monopoly at the time. Allowing Google to acquire AdMob would eliminate this competition and allow Google to seize control over one of the few remaining potential constraints on its monopoly power.

- ***The deal would further entrench Google’s dominance over all major forms of online advertising.*** Google’s AdWords/AdSense platform was already the leading supplier of advertising to both PC-based and mobile web sites and services (as it remains today). Stakeholders feared that the acquisition would allow Google to combine AdMob’s mobile ad platform—including all of the mobile applications, publishers, and advertisers that used that platform—directly into AdWords. This would enable Google to extend its dominance over PC-based and mobile search advertising into other forms of mobile advertising—and mobile in-app advertising in particular. Observers pointed out that Google a year earlier had already strengthened its market power in online advertising by acquiring DoubleClick, the dominant supplier of ad-serving tools used by web sites to sell display advertising inventory on their sites. Locking up AdMob’s mobile inventory would not only give Google scale similar to that it already had in search advertising, but would foreclose competing platforms from the ability to acquire the scale they needed to compete effectively. This, in turn, would give Google the ability and incentive to keep more revenue from online advertising for itself and share less with mobile application developers and online publishers.

II. The FTC’s Decision in Google-AdMob

Although the Federal Trade Commission issued a “second request” for information on the Google-AdMob acquisition, thus confirming that it had concerns about the deal’s potential anticompetitive effects, it ultimately determined that it lacked the basis to block it. In a decision issued on May 21, 2010, the Commission noted that its investigation had revealed a marketplace that was, as critics of the acquisition had noted, highly important to companies across the mobile ecosystem yet increasingly dominated by two companies—namely, Google and AdMob:

Google and AdMob today are the leading competitors among mobile ad networks, which drive the availability of free or low-cost applications and content for smartphones and other mobile devices. Mobile ad networks “monetize” mobile publishers’ content by selling publishers’ advertising space; advertising revenues, in turn, fuel the development of mobile applications and Internet content. Mobile application developers and other publishers rely on mobile ad networks to sell advertising space that they cannot effectively sell on their own.

Google’s proposed \$750 million acquisition of AdMob necessitated close scrutiny because the transaction appeared likely to lead to a substantial lessening of competition in violation of Section 7 of the Clayton Act. Those companies generate the most revenue among mobile advertising networks The Commission’s six-month investigation yielded evidence that each of the merging parties viewed the other as its

primary competitor, and that each firm made business decisions in direct response to this perceived competitive threat.^{xiv}

In light of these facts, it is not surprising that the Commission described the case as “a difficult one” and that it found that combining Google and AdMob inevitably would result in “the loss of head-to-head competition between them.”^{xv}

More surprising was the Commission’s decision, despite this evidence, not to block the deal. In defending its actions, the Commission explained that it had reached this decision “based on important developments in the mobile advertising marketplace, particularly actions by Apple that should mitigate the anticompetitive effects of Google’s AdMob acquisition.”^{xvi} It explained:

During the investigation, Apple acquired the third largest mobile ad network, Quattro Wireless, in December 2009 and then introduced its own mobile advertising network, iAd, as part of its iPhone applications package. The Commission has reason to believe that Apple quickly will become a strong mobile advertising network competitor. Apple not only has extensive relationships with application developers and users, but also is able to offer targeted ads (heretofore a strength of AdMob) by leveraging proprietary user data gleaned from users of Apple mobile devices. Furthermore, Apple’s ownership of the iPhone software development tools, and its control over the developers’ license agreement, gives Apple the unique ability to define how competition among ad networks on the iPhone will occur and evolve.

As a result of Apple’s entry, AdMob’s success to date on the iPhone platform is unlikely to be an accurate predictor of AdMob’s competitive significance going forward, whether AdMob is owned by Google or not. This is particularly important given that AdMob’s revenue and market share are derived largely from the iPhone platform.^{xvii}

Many observers, however, took a different view of Apple’s decision to acquire Quattro. They saw the purchase as primarily a defensive move, one that Apple felt compelled to make in response to the Google-AdMob deal (indeed, Apple was widely rumored to have been in acquisition talks with AdMob when Google swooped in and purchased the company out from under it). They pointed out that the combination of Apple with Quattro, which had only an 8% share of all mobile advertising and an even smaller share of in-app advertising, would do little if anything to constrain a dominant Google-AdMob, particularly given the tight linkage between scale and ability to compete in the markets in which these companies were operating. Moreover, Apple had no experience operating an advertising network, particularly one like Quattro with the significant scale disadvantage it would face if Google acquired AdMob. In short, the Apple-Quattro deal, far from indicating vibrant competition, served for many instead to highlight the deep competition concerns raised by the proposed Google-AdMob deal.

Perhaps in recognition of these concerns, the Commission concluded its decision by stating, “[t]hough we have determined not to take action today, the Commission will continue to monitor the mobile marketplace to ensure a competitive environment and to protect the interests of consumers.”^{xviii} Given this assurance, it is worth examining whether competition in mobile advertising has developed the way in which the Commission predicted.

III. The State of Competition in Mobile Advertising Today

As expected, mobile usage has continued to skyrocket in the months since the Google-AdMob deal was approved. Forecasts predict that sales of mobile devices will outnumber PCs in 2011,^{xx} and that annual global smartphone sales will exceed 1 billion in the same year. According to a recent study published by Cisco, annual growth in mobile data traffic in the next 4-5 years will exceed 90 percent.^{xx}

Not surprisingly, this explosive growth in mobile usage has led to correspondingly massive growth in online advertising. In light of the Commission's decision in Google-AdMob, one might wonder how Google has fared in this environment. Has competition in mobile advertising increased? Has Apple, as the Commission predicted, placed significant competitive constraints on Google's market power in mobile search advertising, in-app advertising, and other key forms of mobile advertising?

In mobile search advertising, the evidence is clear. All available market data indicate that Google has not merely maintained but has in fact tightened its monopoly grip over mobile search and mobile search advertising. According to recent data, **Google today controls over 95 percent of searches conducted globally on mobile devices.**^{xxi} No other search engine accounts for more than 1.5 percent of the remaining share. **Google also accounts for over 96 percent of mobile search advertising revenues.**^{xxii}

In summary, advertisers who wish to reach mobile search users effectively have no alternative today but to deal with Google and pay whatever prices Google charges. Google's ability to maintain and even increase its super-dominant shares of mobile search and search advertising since the AdMob deal was approved indicates that at least one of the fears raised by opponents of the Google-AdMob deal has been realised—namely, that in purchasing AdMob, Google would eliminate the only significant remaining competitor to the company's monopoly in mobile search and mobile search advertising.

The data also indicate that Google's acquisition of AdMob has significantly strengthened its control over mobile in-app advertising. According to press reports, the number of mobile application developers and mobile publishers using Google's AdMob network to monetise their content and applications jumped from an already high 50,000 in January 2011 to 80,000 by May 2011—a **60 percent growth rate in just five months.**^{xxiii} Recent data also suggest that over half of all in-app advertising revenues flow through Google's mobile advertising network. Google's proposed acquisition of Motorola's mobile phone business and vast portfolio of patents would undoubtedly strengthen Google's ability to dominate mobile advertising. These facts underscore, as opponents of the Google-AdMob deal predicted, that combining the number one and number two leaders in in-app mobile advertising would give Google a tremendous and possibly insurmountable market advantage.

And what of Apple's purchase of Quattro Wireless and its launch of the iAd platform, market developments upon which the Commission relied heavily in declining to block the Google-AdMob deal? Initially, at least, Apple appeared to be making some headway in attracting mobile application developers, web sites, and advertisers to use its iAd platform to deliver ads on the iPhone and other mobile devices from Apple. Recently, however, there is evidence that Apple is struggling to remain competitive against the combined strength of Google and AdMob.

For instance, a March 2011 article entitled *Apple Struggles to Sell iAds* reported that "iAd's lack of momentum is making it tough for Apple to hold onto talent, as insiders doubt its commitment to the media business."^{xxiv} Four months later, in July 2011, Apple was reported to be having difficulty providing application developers with sufficient ads to fill the ad inventory that their applications were

generating with users. One article, citing a recent study by mobile advertising firm Mobclix, found that “iPhone application developers are only filling 5 to 15 percent of their inventory with iAds.”^{xxv}

In summary, the available data indicate that Apple’s iAd mobile advertising network is not imposing the competitive constraint on Google’s market power that the Commission predicted it would. On the contrary, the data indicate that Google, in acquiring AdMob, has succeeded in: (1) eliminating a key potential threat to Google’s mobile search advertising business and extending its dominance of that market; (2) substantially strengthening its market power in mobile in-app advertising, despite Apple’s efforts to compete in that market with its iAd service; and (3) is well on the way to extending its market power to mobile display advertising—and thereby on a path to consolidating its market power over mobile advertising generally.

IV. Implications for Antitrust Enforcers

Market developments in the wake of the Google-AdMob deal have important implications for antitrust enforcers. First, that Google has been able not only to maintain but to expand its monopoly in over mobile search advertising, while simultaneously expanding its dominance of in-app and mobile display advertising, show that competition in mobile advertising today is not nearly as robust as the Commission expected it would become when it issued its decision in Google-AdMob. Accordingly, the Commission should follow up on its assurance in the Google-AdMob decision—that it would “continue to monitor the mobile marketplace to ensure a competitive environment”^{xxvi}—and launch an in-depth investigation into whether Google has engaged in any conduct to unlawfully acquire or maintain dominance in any segment of mobile advertising. Also, if the Commission determines that Google’s acquisition of AdMob substantially lessened competition in mobile search advertising or any other relevant market, it should impose all appropriate remedies necessary to restore competition in these markets, including divestiture of AdMob’s assets by Google.

The Google-AdMob deal also highlights the risk of underestimating the degree to which Google has the ability to exploit dominance that it has achieved in one market (*e.g.*, search advertising) to obtain dominance over or foreclose competition in related markets. Concerns over Google’s ability to do so are at the heart of many of the unilateral conduct claims currently under investigation by the European Commission, the Federal Trade Commission, several state attorneys general, and other competition authorities. But they are equally applicable to Google’s acquisition strategy. Google recently said it will continue to be “aggressive” in acquiring other companies.^{xxvii} Its failed attempt to control Yahoo!’s search advertising business and its recent €9.1 billion proposed acquisition of Motorola’s mobile phone business and patents demonstrate that Google will not hesitate to seize strategic assets even if doing so raises competition concerns.

As antitrust enforcers review these acquisitions, they should bear in mind the experience of Google-AdMob and evaluate with appropriate skepticism any assurances that Google will not use its dominance of markets across the online advertising industry to foreclose competition in additional markets as well. They should also consider the relative merits of structural versus behavioral remedies and ensure that any remedies will be truly effective in preserving competition in the relevant markets.

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- ⁱ See Google blog post, *Investing in a mobile future with AdMob* (Nov. 9, 2009), at <http://googleblog.blogspot.com/2009/11/investing-in-mobile-future-with-admob.html>. Market share figures were derived by Keystone Strategy from various sources, including: Elkin Noah, *Mobile Advertising and Marketing: Change is in the Air*, eMarketer (Sept. 2009); AdMob, *October 2009 Mobile Metrics Report* (Nov. 23, 2009), at <http://metrics.admob.com/>; Erick Schonfeld, *AdMob Is "Approaching A \$100 Million" Revenue Run-Rate. Google Thinks It Can Be Billions*, TechCrunch (Nov. 9, 2009), at <http://www.techcrunch.com/2009/11/09/admob-is-approaching-100-million-in-revenues-google-thinks-it-can-make-it-billions/>; Nielsen, *Mobile Internet Search, Q1 2009*.
- ⁱⁱ See FTC, *Statement of the Commission Concerning Google/AdMob*, FTC File No. 101-0031 (May 21, 2010), at <http://ftc.gov/os/closings/100521google-admobstmt.pdf>.
- ⁱⁱⁱ *Id.*
- ^{iv} FTC, *FTC Closes its Investigation of Google AdMob Deal* (May 21, 2010), at <http://ftc.gov/opa/2010/05/ggladmobshtm>.
- ^v FTC, *supra* n. ii. The FTC issued a similar statement at the conclusion of its decision not to block Google's acquisition of DoubleClick in 2007: "We want to be clear, however, that we will closely watch these markets and, should Google engage in unlawful tying or other anticompetitive conduct, the Commission intends to act quickly." FTC, *Statement of Federal Trade Commission Concerning Google/DoubleClick*, FTC File No. 071-0710, at 13 (Dec. 29, 2007), at <http://www.ftc.gov/os/caselist/0710170/071220statement.pdf>.
- ^{vi} FTC, *supra* n. ii, at 13.
- ^{vii} See Efficient Frontier and Macquarie Equities Research, *US Internet Mobile Search Scaling Fast; Google Dominating* (Mar. 2011), access available at <http://www.efrontier.com/research/whitepapers/mobile-search-scaling-fast-google-dominating>.
- ^{viii} See, ABI Research *Mobile Devices Annual Market Overview 4Q 2009 Table 3-3* (Attachment F).
- ^{ix} See StatCounter Global Stats, at <http://gs.statcounter.com>.
- ^x See sources for market share figures cited in n. 1.
- ^{xi} *AdMob Adds New Publisher Partners and Advertisers, Cements Position as Largest Mobile Advertising Network*, Business Wire (Feb. 17, 2009), at <http://www.businesswire.com/news/home/20090216005169/en>; see also sources for market share figures cited in n. 1.
- ^{xii} See Brad Stone and Miguel Helft, *Apple's Spat With Google Is Getting Personal*, NEW YORK TIMES (Mar. 13, 2010) ("One executive familiar with Google's acquisitions strategy said the company was willing to pay a large premium for AdMob simply to keep the company out of Apple's arms. 'There is no way AdMob would have gotten \$750 million if he wasn't worried that it would end up in the hands of Steve,' the executive said.").
- ^{xiii} See U.S. Department of Justice, *Yahoo! Inc. and Google Inc. Abandon Their Advertising Agreement* (Nov. 5, 2008), at <http://www.justice.gov/opa/pr/2008/November/08-at-981.html>.
- ^{xiv} See FTC, *supra* n. ii.
- ^{xv} *Id.*
- ^{xvi} *Id.*
- ^{xvii} *Id.* The Commission also found that competition between the iPhone and Android phones as an attractive platform for mobile app developers, and press reports that other companies were developing their own smartphone platforms, seemed likely to diminish Google's incentive to exercise on the Android platform any market power it might obtain from the deal. *Id.*
- ^{xviii} *Id.*
- ^{xix} Deloitte, *Smartphones and tablets: more than half of all computers aren't computers anymore* (18 Jan. 2011).
- ^{xx} See Cisco *Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2010-2015* (1 Feb. 2011).
- ^{xxi} See StatCounter Global Stats, at <http://gs.statcounter.com>.
- ^{xxii} See Efficient Frontier and Macquarie Equities Research, *supra* n. vii (figures for U.S. only).
- ^{xxiii} See Megan Garber, *Google Plans to Grow Display Advertising Into A \$200 Billion Market*, Business Insider (29 June 2011), at <http://www.businessinsider.com/google-plans-to-grow-display-advertising-into-a-200-billion-market-2011-6>.
- ^{xxiv} Mike Shields, *Apple Struggles to Sell iAds*, AdWeek (24 Mar. 2011), at <http://www.adweek.com/news/technology/apple-struggles-sell-iads-126080>.

^{xxv} Anthony Ha, *Is Apple Struggling With Mobile Advertising? Big Cuts Reported to iAd Pricing*, AdWeek (7 July 2011), at <http://www.adweek.com/news/technology/apple-struggling-mobile-advertising-133249>.

^{xxvi} *FTC*, *supra* n. ii.

^{xxvii} See Amir Efrati, *Google Cranks Up M&A Machine*, WALL STREET JOURNAL (Mar. 5, 2011) (“Coming off a record 48 acquisitions last year, Google is ‘going to continue to be aggressive,’ said David Lawee, Google's vice president of corporate development.”).