The Opportunity in Hyper-Local Mobile Advertising for Publishers and Developers

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Introduction

While serving a wide range of audiences and employing diverse strategies, mobile publishers and developers pursue similar objectives and wrestle with a familiar set of challenges:

Key Objectives and Challenges – Mobile Publishers and Developers	
Reach Users	How do we reach and attract new users?
Satisfy Users	How do we deliver compelling experiences that satisfy users?
Engage Users	How do we engage users and build up a loyal base of repeat customers?
Monetize Assets	How do we monetize our assets, including audiences and advertisers?

Source: Adapted from Appcelerator - IDC

While publishers and developers continually experiment with various strategies, for most their primary monetization strategy remains display advertising. In most instances, national advertisers have been and remain the predominant source for mobile ads. To date, only a small percentage of mobile ads have been location-based, e.g., served to users based on location.

Seismic shifts are underway, however – led by SMBs, "local advertising" is projected to increase at an extraordinary rate, accounting for as much as 70% of mobile ad spend in 2015, according to BIA/Kelsey. In parallel, a growing proportion of mobile advertising will be based on increasingly accurate determinations of users' location. This combination of "local-local" mobile advertising, led by local businesses, may be referred to as Hyperlocal Mobile (or HyLoMo) Advertising.

Contributing to the rapid growth of HyLoMo advertising are local ad networks, such as AT&T Interactive, xAd and others – these networks are (i) helping SMBs integrate mobile advertising into their strategies and (ii) expanding the inventory of local ads available to publishers and developers. By integrating HyLoMo ads into their mobile websites and apps, publishers and developers are achieving a "win-win-win" – more relevant ads (and therefore better user experience), significantly higher CTRs and users engaging with advertisers, and higher eCPMs. However, some publishers and developers have not yet seized the HyLoMo advertising opportunity.

This report examines the HyLoMo Advertising opportunity for publishers and developers, discussing:

- Factors fueling the growth of HyLoMo advertising

- Projected growth of HyLoMo and results publishers are achieving

- Local mobile ad networks – their roles and criteria for evaluating

- Ways to make location an integral part of mobile websites and apps

Why HyLoMo advertising is taking off

For years analysts have predicted that location-based advertising is "on the verge" of taking off – unfortunately, results have fallen short of projections and expectations. While a recent Chief Marketer survey found that one in three companies employ mobile display ads, only one in six are delivering ads based on location. In a survey by STRATA (July 2011), only 7% of ad agencies say they are creating location-based mobile ads for their clients; in an earlier survey (April 2011) two-thirds of agencies said location-based advertising was "not in their plans for 2011." Advertising budgets paint an even more dismal picture – according to Forrester, mobile accounted for less than 1% of total ad spend in 2011. As of mid-2011 location-based advertising is a tiny fraction of advertisers' budgets.

Among leading analysts, however, the consensus view is that 2011 was an inflection point for mobile advertising. Forrester, for instance, projects that mobile marketing spend will grow by nearly 40% year-over-year, with the total increasing by 5x between 2011-2016. BIA/Kelsey and Borrell Associates – both leading analysts who track local media closely – predict that mobile ad spending will increase by more than 5x between 2011 and 2015. While forecasting is fraught with uncertainty, mounting evidence suggests that (i) mobile advertising is taking off and (ii) location-based advertising, especially by local businesses, will fuel much of the growth. The most significant reasons, summarized in the chart below, are explained in the next sections.

Driving the Growth in Hyper-local Mobile Advertising
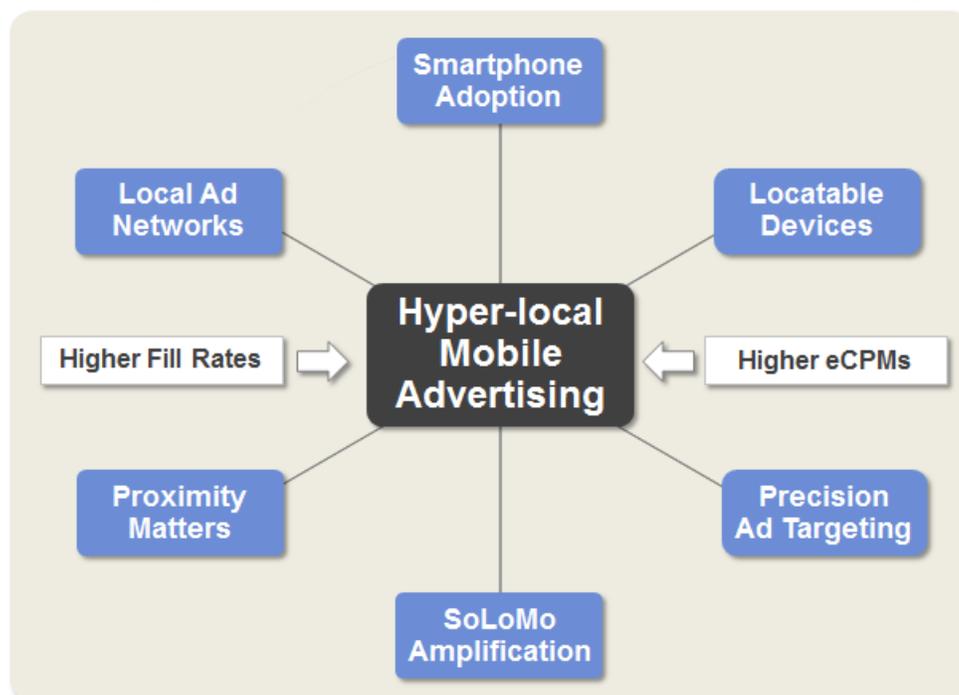
Smartphone Ownership, Use Growing at a Remarkable Rate

In June of this year smartphones reached a significant milestone in the U.S. – for the first time the number of smartphones purchased exceeded the number of feature phones purchased. With the share of smartphones purchased growing at such a fast clip – 35% over the last 12 months – it's just a matter of time before a majority of consumers are carrying smartphones. In fact, Horace Dedeiu's "countdown clock" estimates that in the U.S. smartphone owners will reach a majority by next summer. eMarketer estimates that the number of smartphone owners will grow by 8-10 million per year between 2011 and 2016, with the total number reaching 110M by 2015.
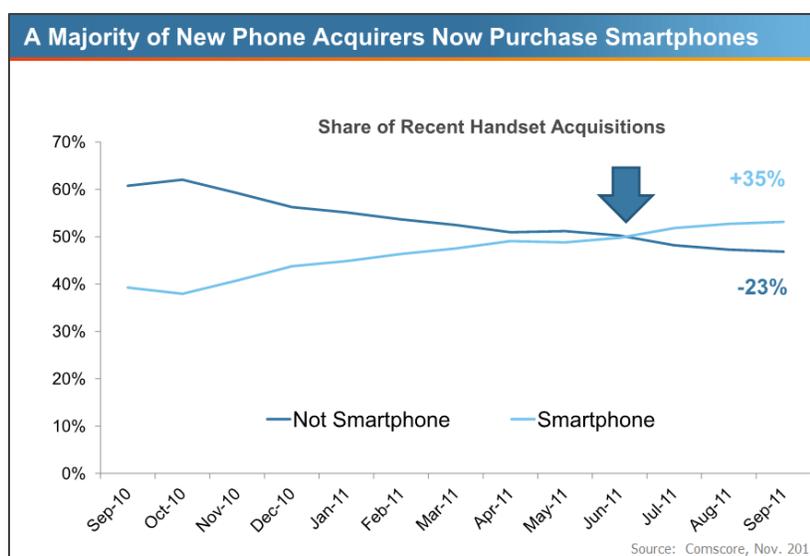
Even more important for advertisers is the impact of smartphones on consumers' media use. When consumers are "out and about," they are using smartphones and apps to stay connected, informed, entertained and for many other purposes. As the futurist Paul Saffo remarked, "Before the iPhone, cyberspace was something you went to your desk to visit... now **cyberspace is something you carry in your pocket.**"

A recent Pew Research survey showed that, in a typical day, two-thirds of smart phone owners use their smartphone to go online; for a significant number – one in four – the smart phone is their primary means of accessing the internet. During some parts of the day, smartphones are relied on to an even greater degree – in the news category, for instance, Comscore data show that before 8am and after 6pm smartphones account for more page traffic than either PCs or tablets.

More granular data from Zokem (now part of Arbitron) shows what consumers are doing on smartphones throughout the day. Before 8am and after 6pm non-voice and non-messaging uses account for more than half of total smartphone usage. As Hannu Verkasalo, CEO of Zokem, observed, "[Mobile] apps and browsing the web seem to be the key areas for advertisers and marketers to engage with mobile audiences, and they are **definitely the sweetspots for targeting**."

Source: Zokem, June 2011
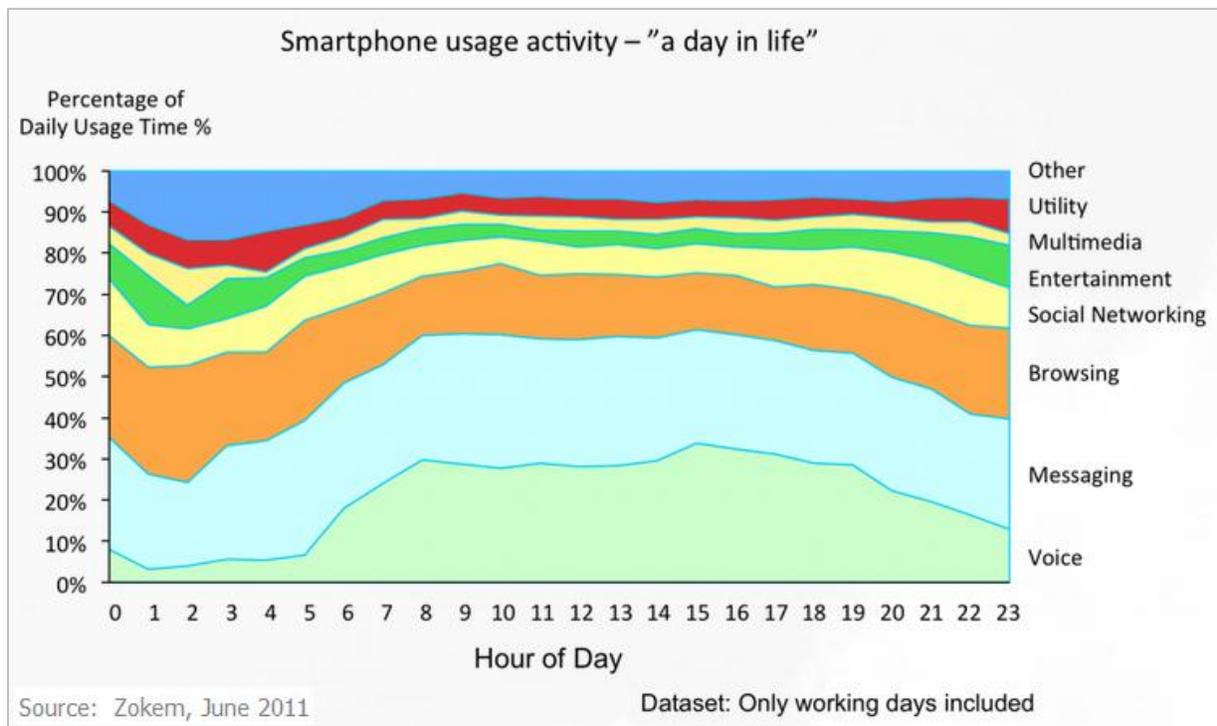
Given the rapid growth in adoption and reliance on smartphones, mobile has emerged as a crucial, not-to-be-missed medium for advertisers – local businesses in particular are rapidly embracing mobile to reach new customers. As one of the primary engines enabling HyLoMo advertising, smartphones are creating a significant, largely untapped opportunity for publishers and developers.

Smartphones that can be located, anywhere

In addition to cellular connectivity, GPS and Wi-fi are now standard features on smartphones. With these technologies, smartphones can be "located" in a number of ways, including (i) GPS; (ii) Wi-fi triangulation; and (iii) cell tower triangulation, as well as combinations such as A-GPS. These methods of location determination (LD) differ in terms of where they work (indoors vs. outdoors), accuracy, drain on device batteries, and other aspects (for a summary, see Hendrix 2009).

New technologies being incorporated into smartphones are also improving location determination:

- SiRFusion just announced "intelligent chips" that will take advantage of other smartphone sensors (accelerometers and gyroscopes) to improve positioning and minimize battery drain. These new chipsets can (i) determine the degree of precision required by an app, e.g., whether exact or approximate location is "good enough," and (ii) determine location with the "appropriate precision" using whichever sensor(s) require the least power.

- Overcoming a limitation of existing LD solutions, a number of companies, including SiRFusion and startups like SenseWhere, are developing solutions that can pinpoint the location of devices inside stores, malls and other buildings. Speaking at the Le Web Conference in Paris, Google's location head, Marisa Meyer, described how the indoor mapping features of Google Maps for Mobile 6.0 will trigger even more hyper-local apps and services.

- Given support by Google, handset OEMs and others betting on mobile payments, NFC is poised to take off. When consumers tap their NFC-equipped smartphone to pay or for other purposes, their exact location is registered, e.g., at the point-of-sale, at the bus stop, in front of a movie poster, in the dairy aisle of the grocery store, etc. As the technology is deployed more widely, NFC will generate the equivalent of clickstream data by exact location.

Taken together, these developments are making "locatable smartphones" more ubiquitous and location determination even more precise. Of course, just because smartphones can be located doesn't mean that a publisher or developer can obtain and use that information. Apple permits apps to access a device's location only if positioning is required by the app – obtaining a user's location for advertising or other purposes is strictly prohibited. While Android does not have this restriction, CTIA and MMA (Mobile Marketing Association) guidelines stipulate that developers and publishers must secure users' permission to obtain and use location information. Naturally, without a compelling rationale developers and publishers are wary of asking users to disclose their location.

As more consumers disclose locations – for example, to "check-in," share plans, photos, content, etc. – many – but not all – are becoming increasingly comfortable sharing their locations with trusted partners, provided there is a compelling value proposition. In a later section, we discuss several strategies publishers and developers can use to incent users to share location. Of course, the handling of location data requires proper disclosure, transparency and users' full cooperation.

Audience Profile + Location ➲ Precise Ad Targeting

The audiences for various categories of mobile apps and content have distinctive profiles, both in terms of demographics and users' interests. Since mobile apps and content consumed reveal a great deal about users' interests, audience profiles are useful to select and target ads most relevant for developers' and publishers' audiences – ad networks allow publishers to manage the types of ads available, while algorithms are used to optimize ads presented to specific users at any point-in-time.

In two very important ways location enhances the effectiveness of ad targeting:

- A user's location – whether lat/long, address or zip code – provides the link to an abundance of contextual information – for example, the geodemographic profile of individuals living and working in the area; weather; traffic; and much more. PlaceIQ is dividing areas into plots roughly the size of city blocks and compiling data that describe each plot – over the course of a day or week aspects of a location can change dramatically, so PlaceIQ profiles the plots by time of day and day of week. Location provides the key to unlock "contextual profiles."

- Local mobile ad networks – especially those working with local businesses – are also tracking how users in a location respond to various ads, again by time and day of week. Compiled over time, these data reveal which ads are most effective for users in specific locations at various times. In a sense, location is an effective surrogate for individuals' interests and their propensity to respond as they are in and move across place and time.

When combined with audience data, these measures of "responsiveness" and context by location can be used to improve the relevance and effectiveness of mobile ads. While relevance matters for both national and local advertisers, the proximity of local businesses also allows consumers to "act" on an ad, e.g., call, visit, purchase, etc. As discussed below, more relevant ads combined with the opportunity to act are yielding CTRs 4-6x higher compared to ads without geotargeting.
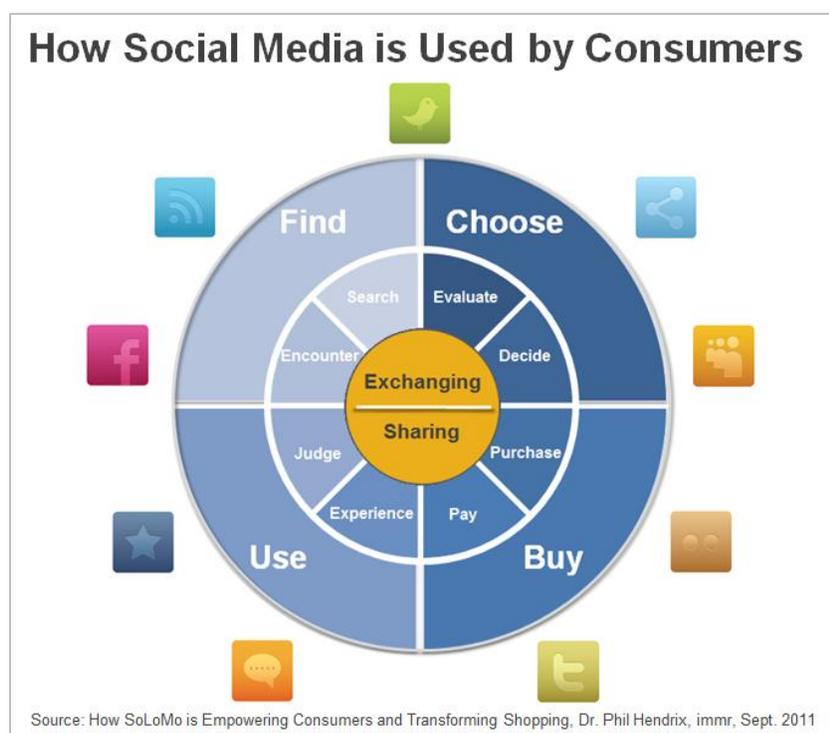

Ads Amplified by SoLoMo (Social + Location + Mobile)

Without question one of the most important developments over the last decade has been consumers' adoption of social media. For mobile publishers and developers, even more significant is the use of social media on mobile devices, particularly in combination with location, or SoLoMo as VC John Doerr referred to it.

Flurry and Comscore track the amount of time consumers are spending on Mobile Apps and the web. Of the time spent on Mobile Apps, about a third is spent on Social Networking apps. A recent immr report examined in detail the impact of SoLoMo on consumers' shopping – particularly relevant findings and conclusions include:

- In Facebook posts and Tweets, consumers frequently share updates and express opinions – both good and bad – about their experiences with businesses (restaurants, merchants, service providers, etc.) as well as brands and products.

- This phenomenon is surprisingly large – Brian Solis reports that nearly half of all Twitter users share opinions about a product or brand more than once a day, while one in three share a link about a product or brand multiple times a day.

- Individuals also rely on social media as they shop and make purchases – for example, to learn about new products, merchants, upcoming events; etc.; to review previous customers' experiences when debating whether to patronize a particular business; and even getting others' opinions in real-time before deciding whether to buy a particular product.

How Social Media is Used by Consumers

Source: How SoLoMo is Empowering Consumers and Transforming Shopping, Dr. Phil Hendrix, immr, Sept. 2011

Of particular importance for mobile publishers and developers, as consumers respond to HyLoMo ads and shop with nearby businesses, they are apt to share their experiences, good and bad, via social media, amplifying the impact of the initial ad. As discussed in a recent immr report, businesses can capture and leverage these "Digital Signals" – for example, by enabling users to post, view and comment on others' experiences, publishers and developers can add value and build community

among users and members. As consumers use social media to share their experiences, the "audience reached" grows – in effect, "earned (social) media" amplifies the effects of paid media. As Paul Adams (formerly with Google and now at Facebook) observed, "the world of advertising will fundamentally change because of the emergence of the social web." This is especially true for HyLoMo advertising.

Proximity Matters

Most individuals tend to live, shop, and spend much of their time in a narrowly defined area near their home, work and points in-between. We are generally most interested in content "near our vicinity" – e.g., getting updates on approaching weather; learning about news and events that are close by; and of course dining in restaurants and shopping with merchants that are near or between work and home. Friends with whom we interact on a regular basis, coordinate plans, and share content, also tend to be nearby. Thus, much of our behavior is "local."

As discussed above, consumers are increasingly using smartphones and mobile apps to decide what to do, where to dine, which stores to visit, and even where to meet up with friends. As a practical matter, businesses that are "nearby" are more likely to be considered, and vice versa. Businesses, of course, recognize this – while the trading area served by businesses varies, the size is usually described by the 80/20 rule – "80% of business comes from individuals within a relatively short walking or driving distance." For mobile users, especially, proximity matters.
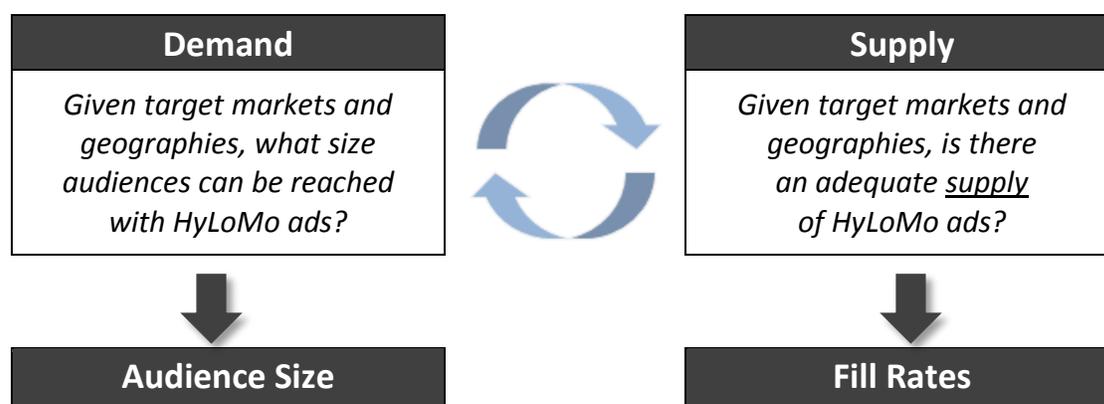
Given these considerations, it's no surprise that consumers use mobile devices for purposes that are predominantly "local" in nature. For example, both Google and Microsoft report that nearly half of all searches on mobile devices reflect "local intent." Mobile devices now account for more than one in four visits to restaurants' websites.

Since smartphones are used when consumers are "out and about," making plans, deciding what to do and where to go next, individuals are more apt to notice and respond to ads from local merchants and service providers vs. national advertisers. While HyLoMo improves ad targeting for both national and local advertisers, proximity and immediacy translate into even greater advantages for local businesses.

Given the increasing popularity, it's worth noting that tablet are used differently than smartphones. First, consumers are using tablets primarily at home and, to a lesser degree, work and school – tablets are not used as much "on the go." Secondly, tablet uses tend to fall somewhere between those of PCs and smarthphones. While some analysts are lumping tablet and smartphone usage together, based on these differences we recommend treating them separately. In particular, we expect the boost in ad response achieved with HyLoMo to be much greater on smartphones than with tablets.

Local Ad Networks Expanding the Supply of HyLoMo ads

Historically, a "chicken and egg" dilemma has slowed the adoption of HyLoMo advertising. The two primary issues involve advertisers concerns' about audience size and publishers' and developers' concerns about ad supply and fill rates:

Demand	Supply
Given target markets and geographies, what size audiences can be reached with HyLoMo ads?	*Given target markets and geographies, is there an adequate supply of HyLoMo ads?*

Audience Size	Fill Rates

As suggested in previous sections, the steady growth and adoption of "location-aware" smartphones are alleviating the first concern – audiences for HyLoMo ads are growing day-by-day. With respect to supply, as noted earlier, national advertisers and their agencies have been slow to embrace location-based advertising – until recently, weighing the pros and cons most have opted to "go slow" and not devote significant portions of their budgets to HyLoMo advertising. Historically national advertisers have been the predominant source of mobile ads, so their reluctance has limited the supply and therefore fill rates of HyLoMo ads.

The emergence of mobile local ad networks is changing the status quo. While local ad networks have been around for some time (see this review from 2007), the emergence of local mobile ad networks is a relatively recent phenomenon, led by large companies like AT&T Interactive as well as newer entrants like Chalkboard. Combined with the extraordinary growth of HyLoMo advertising by local businesses, local mobile ad networks are alleviating the constraints on inventory. In addition, as more HyLoMo ad response data become available, mobile ad networks are also getting better at defining the "trading areas" for various local businesses by time of day and day of week, allowing local advertisers to cast a wider net at times and still achieve reasonable results.

Local mobile ad networks are working with local merchants and businesses to help them capitalize on HyLoMo, taking much of the "guesswork" and effort out of the process, which is a critical requirement for SMBs. With solutions from companies such as PaperG – which make the process of creating mockups of ads for a business much easier – ad consultants and representatives are also helping local businesses develop much more effective ads. Of course, not all local mobile ad networks are equal, so in a later section we list criteria publishers and developers can use to evaluate and choose partner(s).

What should Publishers expect from HyLoMo Ads?

Recent results indicate that HyLoMo advertising can generate a "win-win-win" for advertisers, consumers and publishers and developers. Given the relevance and actionability, as described above, consumers are responding to HyLoMo ads at much higher rates compared to display ads that are not geo-targeted. While results will vary, here is a sampling of results reported by several different local mobile ad networks:

- Two cases from AT&T Interactive (ATTi) suggest the potential for publishers and mobile apps. After implementing in-app local ads from ATTi's Local Ad network, Skout, a leading mobile social network for meeting new people, increased average eCPMs by 44% and fill rates by 37%, doubling ad revenue in three months. Topix, an ATTi client ranked among the Top 10 online newspaper destinations by ComScore, saw a 50 percent increase in eCPMS in their in-app ads.

- Nexage, a real-time bidding exchange, reports that location-enabled impressions are yielding a 3.8x premium for publishers. In an interview with GigaOm, CEO and President Ernie Cormier said "it's not really theory anymore, it's a fact; you will see an uplift in revenue."

- Another local mobile ad network, xAd, recently reported results for the "local-search" category, which includes business directories, classifieds, maps, movie and restaurant information, news, real-estate listings, traffic reports and weather. Local search represents a more targeted, responsive audience, of course, compared to general audiences. Within local mobile search, xAd reports CTRs averaging 6.5 percent; CTRs for apps were slightly higher, at 8% vs. 5% for ads appearing in the browser.

Of course, results can vary widely, depending on audience, ad quality, and other considerations outlined in the next section. However, working with local mobile ad networks, publishers can expect to achieve higher levels of engagement among users, higher fill rates and higher eCPMs, all critically important to their success.

Fortunately, developers and publishers can verify the potential by introducing HyLoMo ads, conducting controlled experiments and comparing results to what they are accustomed to seeing. Over time, as more data are compiled, efforts can be tweaked and optimized even further, which should boost results even further. Given the many variables that influence results, we recommend that publishers and developers experiment, run pilots and determine for themselves what kinds of results can be achieved with their audiences.

The Outlook for HyLoMo Advertising

Based on the emergence of local mobile ad networks and the forces described above, leading analysts project significant growth in HyLoMo advertising as well as a dramatic shift in the sources of mobile ad inventory. BIA/Kelsey, for example, estimates that mobile ad spend will increase from $1b in 2011 to almost $5B in 2015. They also project that nearly 70% of that total will consist of local mobile ads – one of the primary reasons for the disproportionate growth in local is HyLoMo advertising by local businesses.

Mobile Advertising Spend – 2010 – 2015 (est.)
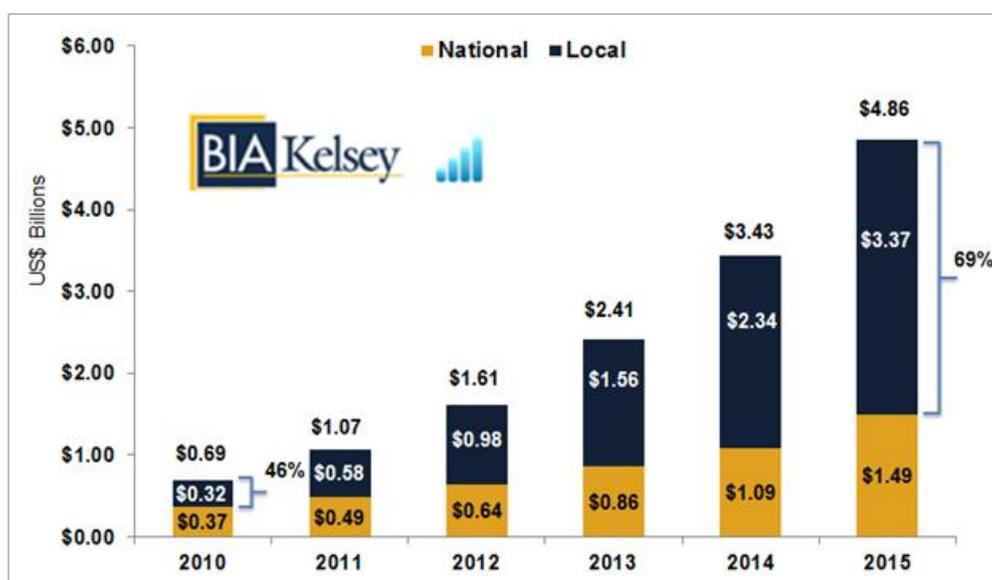
Source: BIA/Kelsey Forecast of Mobile Ad Spend, Dec. 2011

Both of these developments are very positive – with effective HyLoMo ads yielding superior response rates and attractive eCPMs, local mobile ad networks represent an important new asset to publishers and developers in monetizing their audiences. Brief descriptions of the leading local mobile ad networks in the U.S. are provided in the Appendix – the next section outlines key criteria that distinguish networks. As developers and publishers do their due diligence, they should request "proof of performance" and evaluate the suitability of various local mobile ad networks on these criteria.

Evaluating Local Mobile Ad Networks – Key Criteria

Some criteria useful in evaluating and selecting local network partners are common to "general" mobile ad networks as well as local mobile ad networks. Common criteria include latency, ease of doing business, speed of payment, and so on. In addition, there are a number of additional criteria on which local mobile ad networks should be evaluated, as summarized in the Table below. A blank checklist with these criteria is available upon request.

Criteria in Evaluating Local Mobile Ad Networks	
Footprint across Markets	In the U.S. the footprints of LocoMo Ad Networks vary, with some networks – like AT&T Interactive – covering the entire country, while others cover regions or in some cases selected markets within regions.
Coverage within Markets	Within footprint, the coverage or percentage of businesses participating in the ad network can vary widely. Partly a function of specialization, coverage also depends on advertisers' previous experience and success with the network – startups and more recent entrants generally have less extensive coverage.
Specialization	Some networks (tend) to specialize in selected verticals, such as entertainment, restaurants, etc. while others serve a broader cross-section of local advertisers.
Originators vs. Aggregators	Some ad networks, which we call "originators," work directly with advertisers, while "aggregators" source much of their ad inventory from originators.
Advertiser Support/ Ad Quality	The amount and types of support provided to advertisers vary – "full-service" networks offer a range of services, including advice, ad design and creation, etc. while others provide limited, and in some cases, no support. While difficult to judge, ad quality also varies across networks.
Support for Publishers and Developers	Similarly, in terms of support provided to publishers and developers some ad networks employ largely "self-serve" models, while others offer account reps, tools and other services valued by publishers.
Fill Rate	To realize the benefits of HyLoMo advertising, adequate inventory is key. Therefore, the fill rate (percentage of a publisher's ad requests that a network can fulfill) is an especially important consideration.
Contextual Data by Location	As discussed above, contextual data adds to the richness of location-based audience profiles and enhances the precision of targeting.
Analytics	With extensive historical data by location, analytics and algorithms allow ad networks to serve HyLoMo ads that yield optimal results.
eCPM	HyLoMo eCPMs (effective CPMs) usually fall somewhere between premium and remnants, although the actuals realized can vary widely.

Will Users Disclose Location to Mobile Publishers?

To present HyLoMo ads requires that users disclose their location – for local search, weather, maps, navigation and the like, location is a prerequisite and users will readily disclose their location in return for geo-targeted content and experiences. For more general purpose sites, where location is not an absolute requirement, publishers have a number of options.

- In many cases, publishers can enhance users' experience by integrating features that make use of location. For example, mobile news properties can tailor content based on the user's location; games can allow users to compete with and compare their results to others "nearby" (e.g., city, neighborhood, etc.); in the entertainment category, publishers can enable sharing and viewing of recommendations from others "in the area;" and so on.

- Another option is to offer maps as an interface for information presented to users. A music app, for instance, could show upcoming performances within a city, with artists, dates, and venues shown on a map. To access this information, users would need to disclose their location.

- Daily and flash deals have become enormously popular, of course. Integrating "nearby offers" into mobile apps and sites, where appropriate, provides another mechanism for eliciting location.

- Finally, both social networking and gamification can provide a rationale for users to disclose their location. Users, for example, may want to share what they are doing and where they're located with peers; in some ways, this is analogous to adding "check-ins" to an app or mobile site. Similarly, users may wish to compare and even compete with others who are nearby.

The above are provided as illustrations, of course – each publisher will need to devise and test options for integrating location that "fit," add value and feel "natural" to users. Research by AT&T and others have shown that users are willing to disclose their location, provided that (i) they stand to gain something in return; and (ii) they are confident that the information will be kept secure and confidential.

Finally, particularly for mobile apps offered through the App Store, developers and publishers will need to comply with Apple's policy that prohibits the collection of location information unless it's an integral part of the app.

Conclusion

Hyper-local mobile advertising represents an enormous opportunity for publishers and developers. With location-aware smartphones reaching a tipping point and local advertisers capitalizing on the phenomenon, growth in mobile display advertising is expected to be significant. In parallel, local mobile ad networks are enabling advertisers and dramatically increasing the supply of HyLoMo ad inventory available to publishers and developers. With the trifecta of superior consumer engagement, fill rates and eCPMs, HyLoMo advertising has achieved a momentum that can no longer be ignored.

With the emergence of a number of local mobile ad networks – and more likely to appear – publishers and developers will need to evaluate and choose the partner(s) that can best help them (i) confirm the value, (ii) deploy solutions, and (iii) integrate HyLoMo advertising into their strategies. Working with the right partner, publishers can implement pilots and quantify results in as little as 6-8 weeks.

As HyLoMo advertising evolves, publishers will also want to choose a partner who can grow with them, refining and applying advanced capabilities – such as contextual data and algorithms – that cost effectively deliver even better results over time.

Dr. Phil Hendrix, immr and GigaOm Pro Analyst

Appendix – Local Mobile Ad Networks

AT&T Interactive	AT&T Interactive's Local Ad Network serves search and display ads across online and mobile, enabling over 300 publishers to monetize their properties. The Network's advanced ad technology uses local search trends that may be seasonal or event-based to better connect consumers with local businesses that are most relevant to them. ATTi's local media sales force helps ensure that more than 16 million local listings are up-to-date across 4,600 different consumer search categories.
Chalkboard	Chalkboard enables local businesses to send real-time updates and offers to nearby consumers via mobile and the web. Founded just over a year ago, more than 4,300 businesses have adopted Chalkboard to share real-time updates and offers with people that are near their business locations. Chalkboard currently reaches over 4.8 million active monthly users through third-party applications and websites. Entered the U.S. market in June 2011.
CITYGRID MEDIA	CityGrid Media is a leading media company that connects web and mobile publishers with local advertising organizations by linking them through CityGrid®, its local content and advertising network. CityGrid Media also owns and operates premier local consumer properties including Citysearch, Insider Pages and Urbanspoon. CityGrid Media is an operating business of IAC (Nasdaq: IACI).
jiwire engaging mobile audiences	With a goal of engaging users however they connect to the Internet while on the go, JiWire provides a cross-channel solution that extends location-based targeting to multiple devices, from laptops to smartphones, across content channels from Wi-Fi to the Internet to mobile. JiWire's platform enables advertisers to identify and deliver ads to audience segments based on a person's physical location while taking the venue type and brand into account.
Verve	Verve helps hundreds of local and national advertisers reach a valuable, premium audience where they live, work, and play. Over 1,300 publishers use the Verve platform to manage their mobile advertising business. Ranking as a top 5 mobile ad network as measured by Nielsen*, Verve reaches more than 73% of the active mobile user base in the U.S.
where	More than 120,000 retailers, brands and small merchants use WHERE daily to reach new audiences and deliver real-time foot traffic to their doorstep. In April 2011 WHERE was acquired by eBay and reports into the company's PayPal business unit. WHERE is focused on enhancing eBay's and PayPal's position in local and mobile commerce by deepening their ability to connect retailers with consumers.
xAd Local Relevance. Mobile Performance.	Established in 2009, xAd is the largest mobile-local advertising network in the U.S. offering both targeted search and display. Across its network, xAd aggregates and manages nearly half a billion location-specific ad requests per month, billions of business listings, and over one million national and local advertisers.

About the Author

Dr. Phil Hendrix is the founder and Director of immr, a research and consulting firm that helps clients bring innovative new products and services to market. Phil helps clients uncover customer needs, optimize product/service features, achieve competitive differentiation and accelerate market acceptance. He is also an analyst in GigaOm Pro, focusing on mobile, location and m-commerce, in particular. Recent reports include Tuning into Consumers Digital Signals (Oct. 2011), SoLoMo – Empowering Consumers and Transforming Shopping (Sept. 2011), The Market Outlook for Tablets (April 2011) and Location - the Epicenter of Mobile Innovation (Feb. 2010). Before founding immr, Phil was a partner with DiamondCluster (now PwC Advisory) and a principal with Mercer Management Consulting (now Oliver Wyman). Previously, he was a professor at Emory University and the University of Michigan, where he taught courses in research, buyer behavior and marketing strategy. Phil received his PhD in Marketing from the Graduate School of Business, University of Michigan.

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