
Protecting Mobile Privacy in a Hyper-local World

Introduction:

Mobile devices have transformed the Internet experience, in the U.S., EU, and globally. Consumers increasingly rely on their mobile phones and tablets to help them make decisions about goods and services—including financial, health, and other highly personal products. So-called “smart” phones and other “mobile Web” devices provide access to the Internet while consumers are “on the go,” including providing real-time location information. Leading online marketing companies, along with major banks, pharmaceutical companies, and retail establishments, have established mobile sites specifically formatted for the small screen.¹ More than 17 billion downloads of applications (“apps”)—developed for mobile phones and for larger screen devices—occurred last year.² Smart phones are now undergoing an additional transformation, becoming a key payment medium in their new role as “mobile wallets”.

However, the convenience and utility of mobile phone communications raise key privacy concerns. Locational, transaction, Web browsing, and communications data are collected by network operators and online service providers (including digital marketers, social networks, and app developers, for example). Mobile commercial apps have also been purposely structured to capture information from consumers, including practices involving Online Behavioural Advertising (OBA)³. Today, a consumer can be continually tracked throughout their daily journey, as data on their location, mobile web use and connections to their social networks is continually compiled and monitored.

Recommendations:

TACD resolves that EU and U.S. governments should:

1. Ensure that data protection legislation addresses the privacy of mobile Web consumers, and that limits how data can be collected and used, including the
2. principles of transparency, data minimization, purpose limitation, limitation of data retention periods and data security.
3. Initiate formal reviews by the appropriate consumer protection authorities to ensure that commercial mobile services, including apps, are treating consumers fairly.

¹ GoMo by Google, <http://www.howtogomo.com/en/d/#homepage> (viewed 12 May 2012).

² “Gartner Says Worldwide Mobile Application Store Revenue Forecast to Surpass \$15 Billion in 2011,” 26 Jan. 2011, <http://www.gartner.com/it/page.jsp?id=1529214> (viewed 12 May 2012).

³ “Microsoft Announces Behavioral Targeting for mobile display inventory,” 16 September 2009. <http://www.mobilemarketer.com/cms/news/advertising/4187.html>. “Mobilizing beyond the cookie: Mobile platforms lurch towards RTB efficiencies,,” 18 May 2012. <http://www.mediapost.com/publications/article/175052/mobilizing-beyond-the-cookie-mobile-platforms-lur.html> (viewed 21 May 2012).

4. Ensure meaningful participation by independent NGO representatives on key mobile standards bodies and committees that determine how consumers are treated.
5. Ensure that consumers aren't unfairly encouraged to provide data to mobile marketers.
6. Assess the impact of industry consolidation on the privacy of consumers, especially as leading online marketing firms (such as Google) develop alliances with major financial institutions and telecommunications carriers.
7. Ensure that targeting is transparent and not used to discriminate based on such issues as income, race, or ethnicity.
8. Promote the highest standards in consumer protection for the emerging mobile payment system, including so-called "mobile wallets".
9. See that consumers and community organizations can participate in and approve the design and use of micro-locational targeting mobile services, such as Geo-Fences.
10. Encourage the design of mobile services that provide consumers with transparent control of how data is collected and used by operators, ad networks, and application developers. E.g., mobile devices should provide privacy by default to minimize the collected data to the necessary.
11. Ensure that mobile consumers have meaningful and specific opt-in control of their mobile data, including how location and other sensor data are used.
12. Ensure that consumers are provided with prior meaningful information how data is collected and used by operators, ad networks, and application developers.
13. Ensure that consumers are provided with contact information of the responsible parties, their contact persons and the data protection authorities for cases of data mishap.
14. Ensure that user's individual security settings maintain after software updates.
15. Investigate and address the role of real-time ad exchanges that track, target and sell access to mobile device consumers without their consent.
16. Ensure that controllers of geolocation infrastructure, providers of geolocation applications and services and developers of operating systems of smart mobile devices comply with data protection and privacy laws when processing personal data.

Background:

The phenomenal growth of mobile devices—with 1.545 billion handsets sold worldwide in 2011—is ushering in a new era for consumers, businesses, and government. EU and U.S. consumers are relying on their mobile devices to engage in all forms of services.⁴ Mobile-based payments are predicted to reach \$670 billion in 2015, more than triple current levels.⁵ Advertising expenditures for mobile devices are also growing at an impressive rate, with EU spending doubling from 2009-2010 to €710 million. In the US, mobile ad revenues were \$1.45 billion last year.⁶

Today, mobile phones are poised to become leading personal payments systems, potentially supplanting credit and banking cards. Consumers search on their mobile phones to make key decisions—about travel, banking, entertainment and shopping. However, few consumers are aware—or can the control—how their information is collected and used by marketers and other commercial entities who are part of the “mobile marketing ecosystem,” as they call it.⁷

Increasingly, consumers confront a largely invisible geographic landscape that has been purposefully configured both to collect data and to target them while they use mobile devices. A consumer’s neighborhood or shopping district may be digitally carved up into so-called “Geo-Fences.” These are discrete micro-neighborhoods that permit marketers to target mobile users with distinct offers based on their specific location.⁸ Marketers have developed a new approach to targeting consumers wherever they are, relying especially on mobile phones to encourage the repeated buying of products—the so-called the “Path to Purchase.” As consumers use mobile devices to search for products download coupons, or check the price of an item, they can become part of a perpetual marketing campaign that encourages further expenditures and product loyalty.⁹

The growth of near-field communications, a technology that makes possible “Google Wallet” and similar mobile phone-based payment systems, illustrates the changes now underway as a consequence of mobile devices.¹⁰ Consumers will be able to have their phones serve as the mediums for transactions such as retail and bill payments, fund transfers, and even paying taxes or tolls. Consumers will use some \$43 billion in mobile

⁴ “Global Mobile Statistics 2012: All Quality Mobile Marketing Research, Mobile Web Stats, Subscribers, Ad Revenue, Usage, Trends...,” mobiThinking, Feb. 2012, <http://mobithinking.com/mobile-marketing-tools/latest-mobile-stats#phone-shipments>; comScore, “Mobile Usage Behaviours and Trends,” Jan. 2012, <http://www.slideshare.net/tessierv/comscore-mobile-marketing> (both viewed 12 May 2012).

⁵ “Press Release: Mobile Payments Market to Almost Triple in value by 2015 reaching \$670bn, according to new Juniper report,” 5 July 2011, <http://juniperresearch.com/viewpressrelease.php?pr=250> (viewed 12 May 2012).

⁶ IAB Europe, “Mobile Media: Consumer Insights Across Europe,” Mar. 2011, <http://www.iabeurope.eu/media/48466/mobile%20consumer%20insights%20march%2011.pdf>; John Rampton, “U.S. Mobile Ad Spending Forecast to Exceed \$2.6 Billion in 2012,” Search Engine Watch, 31 Jan. 2012, <http://searchenginewatch.com/article/2142758/U.S.-Mobile-Ad-Spending-Forecast-to-Exceed-2.6-Billion-in-2012> (both viewed 12 May 2012).

⁷ Mobile Marketing Association, “Mobile Marketing Ecosystem,” <http://www.mmaglobal.com/resources/mobile-marketing-ecosystem> (viewed 12 May 2012).

⁸ “Geo-Fence Marketing in the UK,” Placecast Blog, 18 Jan. 2011, <http://blog.placecast.net/post/2813022771/geo-fence-marketing-in-the-uk>; Placecast, “Solutions: For Payments,” <http://placecast.net/shopalerts/payments.html> (both viewed 12 May 2012).

⁹ Trish Maglio, “For Retailers, This Should Pique Your Pinterest...,” Path to Purchase, 22 Feb. 2012, <http://www.pathtopurchase.com> (viewed 12 May 2012).

¹⁰ Google, “Google Wallet,” <http://www.google.com/wallet/> (viewed 12 May 2012).

coupons worldwide in 2016, according to industry estimates.¹¹ Mobile banking is also growing in importance, as consumers increasingly rely on their devices for transactions that previously were conducted in-person or through a personal computer.¹² Banks and other financial institutions are taking advantage of this trend by allowing third parties to target their customers with marketing for other products and services.¹³

Mobile advertising and marketing enables “anytime/anywhere” targeting of individual consumers. Hundreds of billions of mobile ad impressions are already delivered to phones and tablets.¹⁴ Industry studies show that consumers consider smart phones to be an “integral part” of their daily lives, and an “indispensable shopping tool.”¹⁵ But few consumers understand that mobile devices contain unique identifiers (i.e., device identification numbers), that enable mobile carriers to track how subscribers use their phones. Carriers also use other technologies to monitor mobile phone use by a consumer, in order to analyze their browsing and app behaviors.¹⁶ Mobile marketers have created a set of practices designed to further drive data collection, through the development of Web formats that can trigger various forms of opt-ins.¹⁷ Mobile advertising also uses techniques associated with OBA.¹⁸ Consumers may be unaware that the layout of webpages and advertisements on the mobile phone screen has been purposefully designed to attract attention to the ads and the data collection process. Manufacturers use A/B testing, eye-tracking, and specialized interactive ad formats to determine where is the best place to place an ad, so that it will grab attention and, trigger

¹¹ Todd Haselton, “Mobile Coupon Industry Will be Worth \$46 Billion by 2016, Analysts Say,” BGR, 2 Nov. 2011, <http://www.bgr.com/2011/11/02/mobile-coupon-industry-will-be-worth-46-billion-by-2016-analysts-say/> (viewed 12 May 2012).

¹² comScore, “Europe Sees 40 Percent Growth in Mobile Banking Through Smartphones,” 27 May 2011, http://www.comscore.com/Press_Events/Press_Releases/2011/5/Europe_Sees_40_Percent_Growth_in_Mobile_Banking_Through_Smartphones; “Juniper Projects Mobile Banking to Reach Half a Billion Users by 2013,” Mobile Marketing Watch, 17 Jan. 2012, <http://www.mobilemarketingwatch.com/juniper-projects-mobile-banking-to-reach-half-a-billion-users-by-2013-20488/> (both viewed 12 May 2012).

¹³ Ylan Q. Mui, “Banks Tucking Targeted Ads onto Online Debit Statements,” *Washington Post*, 17 Jan. 2011, <http://www.washingtonpost.com/wp-dyn/content/article/2011/01/16/AR2011011604437.html>; “Coupons in Your Bank Statement? Transaction-driven Marketers Know How and Where You Spend Your Money,” *Consumer Reports*, Dec. 2011, <http://www.consumerreports.org/cro/money/credit-loan/coupons-in-your-bank-statement/overview/index.htm> (both viewed 12 May 2012).

¹⁴ “MMA Makes Mobile Ads Simpler,” Digital Market Asia, 14 Feb. 2012, <http://www.digitalmarket.asia/2012/02/mma-makes-mobile-ads-simpler/> (viewed 12 May 2012).

¹⁵ Dai Pham, “Smartphone User Study Shows Mobile Movement Under Way,” Google Mobile Ads Blog, 26 Apr. 2011, <http://googlemobileads.blogspot.com/2011/04/smartphone-user-study-shows-mobile.html> (viewed 12 May 2012).

¹⁶ Wes Biggs, “UDIDs Are On the Way Out, but Don’t Panic!” Adfonic Blog, 30 Mar. 2012, <http://blog.adfonic.com/?p=1228>; “Carrier IQ Launches Application Analytics Module for Global Mobile Operators and Device Manufacturers—Providing Critical Application Performance and Usage Data,” *Business Wire*, 8 June 2011, <http://www.businesswire.com/news/home/20110608005362/en/Carrier-IQ-Launches-Application-Analytics-Module-Global> (both viewed 12 May 2012).

¹⁷ Chhavi Upadhyay, “A Social Twist to Mobile Ads: Leveraging the Fastest Growing Content Category on Mobile Apps and Browsers,” Mobile Marketing Association, <http://www.mmaglobal.com/articles/social-twist-mobile-ads-leveraging-fastest-growing-content-category-mobile-apps-and-browser>; Mobile Marketing Association, “Mobile Advertising Guidelines,” <http://www.mmaglobal.com/policies/global-mobile-advertising-guidelines> (both viewed 12 May 2012).

¹⁸ Mobile Marketing Association, “Mobile Advertising Guidelines”; Ron Weber, “What’s New in Behavioral Targeting for Mobile Advertising,” ClickZ, 28 July 2011, <http://www.clickz.com/clickz/column/2097411/whats-behavioral-targeting-mobile-advertising> (viewed 12 May 2012).

