

13 January 2009

Complaint and Request)
for Inquiry and Injunctive Relief)
Concerning Unfair)
and Deceptive)
Mobile Marketing Practices)

Donald S. Clark
Secretary
Federal Trade Commission
Room H-135 (Annex N)
600 Pennsylvania Avenue NW
Washington, DC 20580

Dear Secretary Clark:

The Center for Digital Democracy and the U.S. Public Interest Research Group respectfully amend our November 2006 petition to the Federal Trade Commission requesting an investigation into and relief from tracking and targeting practices in online advertising.¹ We now ask that the FTC also act to protect consumers from a growing number of deceptive and unfair marketing practices and the resultant threats to consumer privacy that are a part of the rapidly growing U.S. mobile advertising landscape. The commission cannot continue to sit idly by and wait—as it has done with the concerns over privacy raised by online advertising in the past—until market practices are so well ingrained that it is all but impossible to address them.

This amended complaint grows out of our frustration with the commission’s Town Hall meeting, *Beyond Voice: Mapping the Mobile Marketplace*, which, as this document reflects, ignored the serious threats to consumer welfare and privacy from numerous mobile marketing practices.² Right before the commission’s eyes, many of the same consumer data collection, profiling, and behavioral targeting techniques that raise concern in the more “traditional” online world have been purposefully brought into the mobile marketplace. The mobile industry has already developed extensive plans and

¹ http://democraticmedia.org/news_room/press_release/FTC_online_adv2006; The original complaint, which focuses on invasive online advertising, was amended in November 2007 to highlight new developments in user tracking and behavioral targeting. A copy of the amended report can be found at http://democraticmedia.org/news_room/press_release/FTCSupplementalFiling (both viewed 5 Dec. 2008).

² <http://www.ftc.gov/bcp/workshops/mobilemarket/index.shtml> (viewed 5 Dec. 2008).

techniques to help determine what it calls the “user journey” through the “mobile Internet.”³ Many mobile marketers are eager to exploit what they correctly perceive as a unique opportunity to target consumers by taking advantage of our highly personal relationships with these extremely pervasive devices to provoke an immediate consumer response. The FTC, thus far, has failed to address the unique threats to privacy and consumer welfare—including the targeting of children, adolescents, and multicultural communities—reflected in what the industry calls its “mobile marketing ecosystem.”⁴

Perhaps Google Mobile Product Manager Sumit Agarwal put it best when he called the mobile phone “the ultimate ad vehicle. It’s the first one ever in the history of the planet that people go to bed with. It’s ubiquitous across the world, across demographics, across age groups. People are giving these things to ever-younger children for safety and communication.” Nor is Google unaware of the privacy implications of this most personal of electronic gadgets: “We have to be very respectful of privacy and give users lots of control,” Agarwal observes, “but it can know where you’ve been, where you’ve lingered, what store you stopped in, what car dealership you visited. It goes beyond any traditional advertising....”⁵

While mobile marketers and operators may claim they have respect for privacy and user control, they are well aware of the tremendous advantage they enjoy in their dealings with their subscribers. As a recent Mobile Advertising Alliance (UK) white paper makes clear,

... Mobile Operators have some very unique assets including control over multiple communications channels and access to valuable real-time context, demographic and behavioural data. Through advanced subscriber profiling, Operators can offer more personalised advertising to their Advertiser partners. As ads become more individualised, the distinction diminishes between what is purely advertising and what is considered by the subscriber to be a valuable service.... The mobile phone presents some unique characteristics, most importantly the fact that it is a personal device, nearly always specific to one subscriber, but also that it provides access to real time context (e.g. location, presence, device capabilities) and that it combines multiple communication capabilities (voice, SMS, email, browsing) which can be effectively used to deliver a more interactive advertising campaign.... From a mobile advertising perspective, the Operator has a unique advantage in all three areas, and it is essential that a mobile advertising platform exploits these advantages.... The Operator has exclusive access to detailed information on subscriber behaviour and characteristics, including spending patterns, location,

³ As mobile marketer Amobee describes its various non-voice related applications and service offerings (including Web browsing, online games, and SMS and MMS messaging) to mobile operators, “Our unified solution allows the operator to manage user journeys across all these services in real time....” <http://www.amobee.com/main/operators.htm> (viewed 5 Dec. 2008).

⁴ http://www.mmaglobal.com/modules/article/view_article.php/1155 (viewed 8 Dec. 2008).

⁵ Quoted in Abbey Klassen, “Why Google Sees Cellphones as the 'Ultimate Ad Vehicle,’” *AdvertisingAge*, 8 Sept. 2008, http://adage.com/mobilemarketingguide08/article?article_id=130697 (viewed 8 Dec. 2008).

availability, interests (through browsing habits), social status (implied from device) as well as demographic data (at least for post-paid subscribers). This information is available across a range of disparate systems, but should be consolidated by an effective mobile advertising platform....⁶

Mobile marketers in the U.S. are already deploying a dizzying array of targeted marketing applications, involving so-called rich media, mobile video, branded portals, integrated avatars that offer “viral marketing” opportunities, interactive and “personalized wallpapers,” “direct-response” micro-sites, and a variety of social media tracking and data analysis tools. Technologies have also matured to the point where they now permit “the targeted and device-optimized insertion of any type of advertising (images, videos, logos, watermarks) on any type of mobile media consumer application (mobile TV, web browsing, MMS).”⁷ While the mobile industry points to its strict “opt-in” and even “double opt-in” procedures before operators or advertisers are given access to any personal data, SMS advertising company ChaCha’s more covert approach—“There’s no complicated opt-in process—users are part of ChaCha when they ask their first question, and your valuable message or offer is integrated naturally into the answers they receive”—is all too typical.⁸ Nor is it likely that many users fully understand the privacy implications of every discount coupon, free download, or ringtone offer that comes their way. Velti, a mobile marketer, employs just these tactics, along with what we believe are manipulative “loyalty campaigns,” in its efforts to persuade users to click away their privacy rights. “One of the key benefits of mobile marketing is that it works at a very personal level,” the Velti website explains,

allowing brands to develop an on going dialogue with their customers to build brand loyalty. Velti’s mobile marketing campaigns are all opt-in activities, inviting users to actively participate in competitions, sweep stakes, alerts etc. Through campaign participation, Velti can help you build a very detailed profile of your customer base which can be used to develop further campaigns but more importantly to create mobile communities and loyalty clubs. Mobile communities allow brands to provide customers with additional benefits and privileges such as free music or game downloads, branded promotional gifts, mobile coupons that they can redeem in shops, m-ticketing via smart codes for shows and events and user alerts for new product information.⁹

Velti’s so-called loyalty campaigns are similarly designed as data collection devices:

⁶ Mobile Advertising Alliance, “Implementing Multi-Channel Mobile Advertising Platform,” Feb. 2008, <http://www.mobileadvertisingalliance.com/downloads/MAA%20White%20Paper.pdf> (viewed 8 Dec. 2008).

⁷ See, for example, “Mobile Rich Media Campaigns—A Quick Guideline, <http://www.itsmy.biz/social>; “Vantrix Ad Booster,” <http://www.vantrix.com/products/Vantrix-Ad-Booster/> (both viewed 15 Sept. 2008).

⁸ ChaCha Media Kit, Nov. 2008, p. 1, http://akhost.chacha.com/siteimages/new_chacha/share/pdfs/ad_mediaKit.pdf (viewed 9 Dec. 2008).

⁹ http://www.velt.com/index.cfm/Mobile_CRM/index.cfm?page=1245 (viewed 6 Dec. 2008).

Utilising our data insight and our Personalisation Engine we are able to understand your customer profile, in terms of their value, activity, demographics and historical behaviours. We can then use this to develop mobile loyalty campaigns that secure their loyalty, grow revenue and therefore increases the lifetime value of your customer base. Through our campaigns, managed by our Mobile Communities Manager, users are prompted to opt-in and provide profiling info for better targeting. Successful submission is rewarded with free content, ringtones, java games, coupons, discounts and gifts.¹⁰

Mobile, as Sharma, Herzog, and Melfi note, plays a powerful role in the emerging “engagement” paradigm that underlies much of contemporary digital marketing techniques. The FTC has not seriously analyzed the implications of the engagement “metric” on consumer welfare, especially its relationship to what we believe are fundamentally unfair and deceptive practices. As Sharma et al explain, “In the field of digital media, engagement definitions must take into account not only the quality of the visitor. It should take into account the time spent during the visit as well [as] actions and reactions.... Because *every interaction* can be measured in mobile, this media could become the driving force in overall engagement metrics and standardization.”¹¹ The authors also illustrate what we believe are fundamental flaws in the current concept of opt-in and permission-based marketing. Here too, the FTC must engage in a more serious analysis of how the so-called opt-in process is structured, including understanding how the various components that underlie the process—including rich media, free offers, personalization capabilities, and discounts—play a role in undermining the ability of consumers to make an informed decision. As Sharma et al note, “In mobile, permissions enable taking engagement to a new level. With permissions, the consumer is asking to get more information and to participate in the campaign. Subsequently, they will allow and enable marketing from various channels, including SMS, MMS, and WAP....”¹²

In light of this super-charged mobile environment—“Imagine the advertising potential to reach ... consumers every day, virtually 24 hours a day via the mobile phone,” exclaims mobile marketer Cellfire—it will be a test of the commission’s commitment to consumer protection in the digital age to see how quickly and thoroughly it responds to the threats outlined in this amended complaint.¹³

The New Mobile World Order

With an estimated \$1 billion in advertising dollars being spent in North America in 2008—a figure that is expected to increase to \$3 billion by 2011—companies are rushing headlong to develop new capabilities to target more effectively the growing number of mobile device users, an audience now numbering over 267 million in the U.S. alone (up

¹⁰ http://www.velti.com/index.cfm/Mobile_CRM/index.cfm?page=1242 (viewed 6 Dec. 2008).

¹¹ Chetan Sharma, Joe Herzog, and Victor Melfi, “A Five-Points Measurement Framework for Mobile Advertising,” *International Journal of Mobile Advertising* 3.1: 7, emphasis in the original.

¹² Sharma, et al, “A Five-Points Measurement Framework for Mobile Advertising,” 6.

¹³ <http://info.cellfire.com/node/6> (viewed 6 Dec. 2008).

from 251 million in Q4 of 2007).¹⁴ According to a recent study, “[m]ore people in the United States (and indeed globally) have a mobile phone than an Internet-connected PC. Consumers are quickly emigrating away from pay-per-use mobile services and are heading toward free-to-end-user services that are supported by advertising....”¹⁵ In the process, these consumers are becoming increasingly familiar with mobile advertising: “...In Q3 of 2008, 39% of mobile phone users (104 million) remembered advertising of some format on their phone. This was the first time the number of Americans aware of mobile advertising has exceeded 100 million in a 3-month period.”¹⁶

The popularity of the iPhone and the recent introduction of mobile phones powered by Google’s Android system illustrate how rapidly the market for mobile communications is growing. Industry insiders understand how these and other recent developments are contributing to a critical moment for mobile marketing in the U.S. “Mobile can deliver spot relevance—the ability to deliver the right marketing content, to the right person, at the right time, in the right location,” declares Acuity Mobile President Alan Sultan. “... User data includes inputting the identified interests (what they like) and activities (what they do) of the target group as obtained from prior market research activities. The location can be determined using technology such as GPS. Business data such as organizational goals and historical transactions are also important to include.... All of this information is entered into or captured by an intelligent preference engine which uses sophisticated statistical techniques and predictive algorithms to determine the optimal content or offer on an individualized basis.”¹⁷

While we support the growth of mobile communications and marketing in the U.S., and firmly believe in its critical role as a medium for democratic expression, we are also convinced that meaningful consumer safeguards are required at this crucial period. As this amended complaint will discuss, such safeguards should include appropriate protection for children, teens, minorities, and other groups specifically targeted by mobile marketers.

Gautam Sabharwal of the mobile marketer Tanla Mobile proclaimed that “2008 will see the emergence of *the new mobile world-order*, namely the influence of ‘traditional’ Internet brands as new and powerful entrants to the mobile sector. They will bring with

¹⁴ Action Engine Corporation, “The Emerging On-Device Portal Opportunity,” p. 5, http://www.actionengine.com/Docs/ODPBrief_ActionEngine.pdf; Courtney Acuff, “Mobile Marketers Should Show by Example,” ClickZ Network, 7 Feb. 2008, <http://www.clickz.com/showPage.html?page=3628344>; “U.S. Mobile User Numbers, Ad Recall Climbing Steadily,” *MediaBuyerPlanner*, 22 Aug. 2008, <http://www.mediabuyerplanner.com/2008/08/22/us-mobile-user-numbers-ad-recall-climbing-steadily/>; Mobile Marketing Association, “Mobile Advertising Report (US) 3rd Quarter 2008,” 19 Nov. 2008, <http://www.mmaglobal.com/research/mobile-advertising-report-us-3rd-quarter-2008> (all viewed 9 Dec. 2008).

¹⁵ Mobile Marketing Association, “Mobile Advertising Report (US) 3rd Quarter 2008.”

¹⁶ Mobile Marketing Association, “Mobile Advertising Report (US) 3rd Quarter 2008.”

¹⁷ Alan Sultan, “Mobile Commerce: Leveraging the Targeted Impulse Purchase Opportunity,” *Mobile Marketer’s Classic Guide to Mobile Commerce*, 25 Nov. 2008, p. 7, <http://www.mobilemarketer.com/cms/lib/2585.pdf> (viewed 12 Dec. 2008)

them established models and approaches to marketing and advertising, amongst other things, that *will change the landscape and consumer mobile experience for ever.*¹⁸ It is time that the FTC, precisely as a new Administration takes office with a pending change of leadership at the commission, show that there will be a concomitant “new order” for privacy and online marketing consumer protection. There is still time for the FTC to act—with some 40 percent of mobile Web users logging in fewer than four times a week.¹⁹ Nevertheless, as *Brandweek* recently concluded, the “Mobile Internet has reached a critical mass in the U.S. As of May 2008, there were 40 million active users of the mobile Internet in the U.S., with individual sites that attract millions of unique users. This provides scalable marketing potential with demographic breadth.”²⁰ Unfortunately, while industry standards for the delivery of mobile advertising have emerged, they have been developed without the meaningful participation of either consumers or such mandated consumer protection agencies as the FTC.²¹

So, too, with the technological breakthroughs that are being introduced in the mobile marketplace, and which are being deployed without the understanding or even the awareness of consumers and regulators alike. Despite the enormity of these developments and the effect they will have on mobile consumers and mobile commerce, policies governing consumer privacy on the mobile Web have failed to keep pace with new marketing practices. Most critically, as the user’s location has become part of the data collection and targeting process, the “mobile marketing ecosystem” poses serious new threats to the consumer.²² “While mobile might have an impact on retail store prices,” observes Laurie Sullivan of *Online Media Daily*, “the impulse shopper, the one who needs the television or the sweater at the moment they see it on the shelf, won’t go away. These are the consumers marketers will target based on their location and demographics through cell tower and triangulation technologies built into browser like Google Chrome and the next versions of FireFox and Microsoft Windows 7.”²³ And as Greg Sterling, founder of Sterling Market Intelligence and contributing editor at Search Engine Land, points out, “When technology can tell where I live and shop online, advertisers will target me using location as a proxy for demographics because all the data about income and household demographics is available to the public. . . . It can be layered into the backend of search marketing platforms and people can start using select cities to target. It makes search into a different animal tied to location.”²⁴

¹⁸ Quoted in “Tanla Mobile Marketing and Advertising Guide,” 2008: 10, emphasis added.

¹⁹ Third Screen Media data.

²⁰ “MMA Mobile Marketing Guide,” *Brandweek* special supplement, 17 Nov. 2008.

²¹ See, for example, MAG Mobile Advertising Task Force, dotMobi Advisory Group, “Mobile Advertising in a .mobi World,” Nov. 2007, <http://www.advisorygroup.mobi/mobileadvertising/whitepaper.pdf> (viewed 15 Sept. 2008).

²² http://www.mmaglobal.com/modules/article/view_article.php/1155 (viewed 10 Dec. 2008).

²³ Laurie Sullivan, “Search is the Killer App,” *Online Media Daily*, 12 Dec. 2008, http://www.mediapost.com/publications/index.cfm?fa=Articles.showArticle&art_aid=96566 (viewed 12 Dec. 2008).

²⁴ Quoted in Sullivan, “Search is the Killer App.”

Typical of how the industry views the mobile marketing opportunity is Millennial Media's message to potential advertising clients, promising that

sophisticated targeting technologies ensure your campaigns reach the audience you need. Targeting options include content channel, demographic, time-of-day, handset, carrier, geography and behavior. Choose from multiple predetermined content channels or let us know what you're looking for and we'll build a custom channel just for you. Advanced reporting tools measure the effectiveness of your campaigns—and the resulting insight allows us to make any necessary changes in order to maximize your return on investment.²⁵

The characterization of mobile technology as a “liberating technology,” giving consumers new flexibility in their personal communications, personalized services, and the freedom both to compute and to communicate without the strictures of geography, has already become a cliché in the rhetoric of technology enthusiasts. These people would have mobile users believe that their handheld devices represent a certain independence, allowing them to explore and benefit from the mobile Web wherever and whenever it is convenient. But this freedom, in fact, happily peddled by the mobile marketing industry, is a false one. Despite the glowing words about customization and personalized service, what marketers and advertisers are increasingly offering consumers is merely the *illusion* of free choice. Mobile operators offer their various options and services, not on an individual basis, but preconfigured according to segmented demographic profiles. In other instances, as with Azuki's ClickZoom technology, the personalization of content is rooted in the desire to stimulate response to targeted advertising. “At the heart of the platform,” Azuki explains, “the media mashup engine harnesses contextual user intelligence and content metadata to enable the dynamic creation of personalized content services (video, audio, photo, news/stories) with targeted advertising. Azuki's innovative ClickZoom™ technology automatically ingests and deconstructs desktop media into smaller, more ‘snackable’ forms of content to ease discovery, navigation and user interactivity around the media.”²⁶ The cultural implications of such “snackable” media are unclear, but one thing is certain: while users nibble on small portions of customized content, marketers will be feasting on huge helpings of personal data unwittingly surrendered by consumers.

The emerging system for mobile advertising is clearly an extension of the current interactive targeting apparatus that has raised so many concerns over privacy and consumer protection. However, if the FTC can take a proactive and responsible position now, the commission can avoid repeating the mistake it made by failing to establish adequate safeguards for online marketing back in the 1990s.

Current self-regulatory privacy and marketing policies in the mobile arena are inadequate, including those in the area of disclosure, which utterly fail to inform users *what* data are

²⁵ http://www.millennialmedia.com/advertisers/advertisers_mbrand.html (viewed 8 Dec. 2008).

²⁶ http://www.azukisystems.com/index.php?/pages/cat/azuki_mashmedia_platform/ (viewed 10 Dec. 2008).

being collected and *how* they will be used. As history has shown, attempts by business interests at self-regulation have failed to protect consumers in the absence of adequate public policies. It is therefore incumbent upon the Federal Trade Commission to protect consumers from unfair and deceptive practices by using its authority under Section 5 of the FTC Act to address this issue on a variety of fronts:

- launching an immediate investigation into the impact of interactive, targeted advertising on the mobile marketplace;
- identifying specific mobile marketing practices that compromise user privacy and threaten consumer welfare;
- examining opt-in procedures in the mobile marketing arena, ensuring that consumers receive full disclosure of the nature and use of any data collected;
- conducting a special investigation into mobile marketing privacy threats and inappropriate practices targeting children, adolescents, and multicultural consumers;
- issuing the necessary policies and actions to halt current practices that abuse consumer rights; and
- recommending federal legislation, and whatever new enforcement measures deemed necessary by the commission, to prevent such abuses in the future.

The Center for Digital Democracy and the U.S. Public Interest Research Group, two of the leading public-interest advocacy groups working on behalf of a more diverse, privacy-protected, consumer appropriate and competitive online environment, call on the FTC to expand its current inquiry into broadband-based interactive marketing. It must undertake an immediate, formal investigation of mobile online advertising practices, focusing on the following five areas of concern:

- Behavioral Targeting
- Location-based Targeting
- User Tracking/Mobile Analytics
- Audience Segmentation
- Data Mining

A. Behavioral Targeting

“The black gold of the 21st century”
—Xtract press release on Community Marketing Intelligence²⁷

Despite all of the concerns it has raised in the personal computer and broadband markets, behavioral targeting is swiftly migrating to the mobile world. Mobile devices, which know our location and other intimate details of our lives, are being turned into portable behavioral tracking and targeting tools that consumers unwittingly take with them wherever they go. As the commission reviews this part of the complaint, it should ask

²⁷ <http://www.xtract.com/press/coverage/the-black-gold-of-the-21st-century/> (viewed 10 Dec. 2008).

itself whether any mobile user is even *aware* that behavioral profiling is occurring, let alone cognizant of the many data collection and analysis techniques we describe here.

Xtract, for example, a self-proclaimed “innovator in social advertising intelligence,” views its behavioral targeting capabilities as “the black gold of the 21st century.” The company has developed “a unique and patented set of products that based upon social interactions, behaviour data and other dataflow can create accurate and dynamic real-time customer profiles.”²⁸ In a statement to marketers, Xtract proclaims that “with highly accurate, three-dimensional profiling, based on customers’ social, behavioural and demographic information, Xtract SAI (Social Advertising Intelligence) will revolutionize your marketing and multiply the results from your advertising campaigns.” One of these products is Xtract SAI is described as “a powerful solution for advertisers and marketers to target and manage personalized and automated advertising campaigns.” According to the company’s website, “Xtract SAI is a complete solution that enables the automated application of analytical modules to harness the vast amount of customer information.” These modules permit “the processing of huge amounts of data as well as automating analytical tasks,” “a data repository, capable of handling billions of transactions” and “input output packages that enable data input from a wide array of data sources.”²⁹

Xtract’s mobile marketing effort illustrates how the new medium is harnessing even more consumer data, including personal information gleaned from various forms of social media. Calling it “social marketing intelligence,” the company explains that “the solutions that Xtract has developed can revolutionize your marketing with new customer profiles that are self-learning through multi-dimensional analytics of real operator customer data... harnessing the long tail of commerce.” “Consumer analytics data” can be warehoused, and data can be transformed into “actionable business parameters, such as predictions, profiles, scores.”³⁰ In September 2008, Xtract announced a new service for the U.S.:

By analyzing the social networks within large scale mobile communication networks [Social Links] identifies the underlying social network structures within the subscriber base and the most influential people in the network, which Xtract calls Alpha Users. The result is a completely new layer of customer insight and a tangible tool for increasing the efficiency of targeted marketing and advertising. The add-on modules combine social network with demographic and behavioral information, providing a Three Dimensional (3D) view of the customers.... To help mobile operators create more effective and relevant marketing and advertising campaigns, Xtract has developed a new Customer Insight Module for Xtract Social Links that can predict the customers’ demographics and behavior based on a known customer sample. In addition, the Customer Insight Module

²⁸ <http://www.xtract.com/about-us/> (viewed 10 Dec. 2008).

²⁹ <http://www.xtract.com/products/xsai/> (viewed 10 Dec. 2008).

³⁰ <http://www.xtract.com/solutions/mobile/> (viewed 10 Dec. 2008).

brings customers' demographic information to the marketers' fingertips through an easy to use network visualisation tool.³¹

On the company's blog, Christoffer Langenskiöld, Xtract's User Experience Designer, notes that his research focuses on how to "recognise personality traits using mobile phone usage, communication behavior, mobile Internet behavior and social networks characteristics." By recording how much time consumers spend personalizing their mobile phones and searching the mobile Internet, how many contacts they have or if they speak with or without a headset while driving, Langenskiöld hopes to determine a user's mood and personality and utilize this information to further Xtract's ability to conduct behavioral targeting.³²

Commenting on the enormous marketing opportunities of the mobile market, Amobee's website states that

mobile phones are the most widely held media device in the world. With nearly 2.5 billion subscribers, the mobile phone dwarfs every other media platform. The reach is greater than TV, the effectiveness is stronger than print and the targeting is more precise than the Web. The mobile phone is a personal, interactive device that is always on and engaged throughout the day.³³

Amobee has developed an ad-serving platform that enables mobile operators to insert mobile advertising into a wide range of content, including music, video and games, and claims to offer "precise contextual and behavioral targeting across all users on all handsets for all non-voice related applications and services."³⁴ In addition, using the Amobee Campaign Server, the company's "sophisticated targeting capabilities allow advertisers to segment audiences far more deeply and accurately than ever before to deliver highly targeted campaigns. The system provides advanced reporting on all campaign metrics."³⁵

Like Xtract and Amobee, Enpocket, a leader in "intelligent mobile marketing" that was recently purchased by Nokia, provides a sobering example of the potential of this medium for behavioral targeting. Enpocket has developed a "Personalization Engine," which it described as

a system of analytical models that scores mobile users based on their past behavior. It enables us to predict which products and services a customer might

³¹ <http://www.xtract.com/uncategorized/2008/09/10/xtract-social-links%e2%84%a2-now-available-in-usa-adds-demographic-prediction/> (viewed 10 Dec. 2008).

³² <http://www.xtract.com/blog/>, entry written by Christoffer Langenskiöld, 6 June 2008 (viewed 10 Dec. 2008).

³³ <http://www.amobee.com/main/agencies.htm> (viewed 10 Dec. 2008).

³⁴ <http://www.amobee.com/main/operators.htm> (viewed 10 Dec. 2008).

³⁵ <http://www.amobee.com/main/agencies.htm> (viewed 10 Dec. 2008).

purchase next. That way, we can provide the right message, advertisement or promotion to the right person at the right time. It can also forecast events, such as customer churn and will recommend effective customer engagements to preempt attrition. When integrated with the Marketing Engine, the result is highly relevant marketing messages, personalized recommendations, less churn, and higher sales of mobile consumables.³⁶

Bango's Sarah Keefe notes how online marketers will be able to update profile-based mobile targeting in real time:

Marketers can...compile an accurate and rich understanding of their target consumer's profile. With this data jackpot, marketers can target messages to the right audience in the right geographic location. Also, real time data allows campaigns to be tweaked and refined to ensure success and optimize the marketing investment.... It's a brave new mobile marketing world out there and the wealth of data and analytics capabilities that are part of the new landscape eliminate the risk of jumping right in. Why wait?³⁷

Mobixell also sees the possibilities that behavioral targeting on mobile devices offer. As the company reveals in its product literature, "the opportunity to reach a large captive audience" through mobile advertising is "extremely enticing," because "the mobile phone offers focused demographic, behavioral and contextual targeting and immediate engagement." Using these capabilities, its Mobixel Ad-It service provides the tools for mobile network operators to "gather, quantify and analyze" a wide range of information about subscribers, including "demographic details, service profiles, behavioral patterns, as well as the real-time context of services, location and device and network capabilities.... It then uses this information, in real time, to make complex targeting decisions" on behalf of advertisers.³⁸ Mobixell Ad-It's ad delivery is extremely comprehensive and touches upon virtually every aspect of the mobile experience. The service can run display advertising in text messages, facilitate mobile video advertising, serve banner and interstitial ads on mobile browsers and even enable voice advertisements targeted to callers. Mobile browser company Skyfire, similarly (which "makes browsing on your phone exactly like browsing on your PC"), touts its potential for "uber-targeted behavioral advertising."³⁹

According to company documents, AdInfuse's "adInMotion solution enables advertisers to send personalized messages to mobile customers around the world, via multiple

³⁶ <http://www.enpocket.com/solutions/enpocket%20platform/advanced-profiling-and-targeting> (viewed 1 July 2008).

³⁷ Sarah Keefe, "Mobile: A Brave New World for Advertisers," in *Mobile Marketer's Classic Guide to Mobile Advertising*, Aug. 2008, <http://www.scribd.com/doc/8640034/A-Guide-to-Mobile-Advetising2008> (viewed 8 Dec. 2008).

³⁸ "Mobixell Ad-It: Rich Media Multi-Channel Mobile Advertising Solution," Feb. 2008, p. 2, [http://www.mobixell.com/data/uploads/Ad-It%20Brochure%20\(Feb%2008\).pdf](http://www.mobixell.com/data/uploads/Ad-It%20Brochure%20(Feb%2008).pdf) (viewed 8 Dec. 2008).

³⁹ <http://www.skyfire.com/about/business-development> (viewed 3 July 2008).

content formats,” including video clip downloads, mobile games, streaming video and mobile Web sites.⁴⁰ This precision targeting comes at the expense of the privacy of user data, as adInMotion’s “advanced matching algorithms are powered by data on a customers [sic] age, geography, mobile subscription type, ‘media usage patterns’ and even the incorporation of ‘external customer intelligence sources.’”⁴¹

Mobile marketers are even attempting to target users when they *aren’t* using their mobile devices. AdiTon is a mobile advertising platform that allows advertisers to push targeted information, entertainment, advertising, and promotions to their customers via the idle screen on a mobile device. AdiTon shows advertisements and contents on a phone’s idle screen while a “carousel of content cycles through each ad or content piece.... As the consumer chooses content, the selections are recorded, forming a personal profile and allowing a more accurate personalization of the content for the consumer. The advertisements the consumer receives are targeted by their interest groups, recorded calls to action and other details such as age and gender.”⁴²

In addition to this advanced targeting, AdiTon also offers other capabilities that raise real concerns about consumer privacy. According to its website, some of these include “search and data mining,” which “works as advertisement and content search tool” and “uniquely links consumer interests and demographics with advertisement targeting” as well as “extensive reporting” that provides “the richest of reporting in mobile advertisement,” tracking advertisement “deliveries, impressions, click-throughs and calls-to-action through basic and custom-made reports.”⁴³

Reaching the Right People, at the Right Time, in the Right Places

The practice of parsing and profiling users’ past behavior to target hyper-personalized campaigns to consumers is not an obscure practice performed only on the fringes of the mobile universe. With over 100 million monthly visitors in 120 countries, Nokia.mobi is one of the largest mobile portals in the industry. Through its affiliation with Nokia’s globe-spanning Nokia Media Network, the mobile portal “allows businesses to deliver targeted campaigns to specific groups of mobile device users worldwide. Individual messages can be tailored to consumer tastes so that the right ad reaches the right person at the right time.” In describing its “enhanced consumer targeting” capabilities, Nokia boasts that “we know how to put your brand in front of the right people, at the right time, in the right places thanks to our special understanding of users’ relationships with their mobile devices.” Nokia.mobi also offers marketers “real-time performance monitoring and reporting,” enabling them to “plan, manage and analyze the performance of campaigns.”⁴⁴

⁴⁰ “Ad Infuse to Demonstrate Technology in Wireless Building at CTIA Conference,” Mar. 2007, http://findarticles.com/p/articles/mi_pwwi/is_200703/ai_n18754454 (viewed 10 Dec. 2008)

⁴¹ http://www.adinfuse.com/assets/adInMotion_SolutionDescription.pdf (viewed 8 Dec. 2008).

⁴² <http://www.aditon.com/ourBusiness.html> (viewed 8 Dec. 2008).

⁴³ <http://www.aditon.com/ourBusiness.html> (viewed 8 Dec. 2008).

⁴⁴ <http://www.pixelmedia-asia.com/foradvertisers/ournetworks.aspx?country=7> (viewed 8 Dec. 2008).

Via its Nokia Interactive unit, the company provides “marketers with a standardized, global approach to mobile advertising and marketing.” This unit has a large number of blue chip clients, including N, MTV Networks’ nighttime network for teens, for which it was contracted to drive N’s largely teenage audience to the mobile website for a new series, “About A Girl,” where they could sign up for text alerts. To achieve this end, Nokia Interactive designed a comprehensive campaign of “targeted mobile advertising,” led by a mobile website that “...includes a number of interactive mechanics, including a station finder, a mobile ‘love matchmaker,’ character biographies, a contest to win a \$3,000 bedroom makeover and show text alerts that were coupled with weekly giveaways to discourage alert opt-outs. One of the most popular and innovative facets of the site allows visitors to make their own mobile wallpaper with pictures of the program’s stars.”⁴⁵

Still a work in progress, behavioral targeting via mobile devices is rapidly maturing. Clearly, “Mobile phone operators have a much better understanding of their customers’ consumption patterns than traditional media owners,” as China Mobile’s Li Xinze has observed. “They can even identify the personal hobbies and character traits of subscribers through their use of content-rich data services.”⁴⁶ The next step will involve integrating mobile communications into a much wider range of online and offline transactions, further sharpening the accuracy of aggregated personal profiles, a process that companies such as MoPhap (now Ringleader Digital) have already begun to explore:

The challenge with behavioral targeting lies in reaching the same customer across different media. With MoPhap’s mobile server-side cookie, we’re able to target by creating a comprehensive profile based upon a user’s browsing history over time. The technology derives contextual meaning from each page that the user visits. This combines to create a psychographic user profile. We’re also able to identify the specific mobile device.... Here’s a simple example of bringing digital mediums together: A consumer clicks on a mobile Web banner, opts in for an SMS auto response, and later receives a text message that includes a coupon code that must be redeemed online. With the mobile cookie, we’re now able to tie the subscribers together online and in mobile.... [M]obile advertisers can plug into the auditing, tracking, and reporting solutions they’ve used online to track consumer behavior. Agencies can use their interactive systems such as Atlas Media Console and Dart to manage online and mobile campaigns. They can also integrate data from online and mobile campaigns into their back-end systems, which allows media buyers to view results and make mobile buying decisions in the same way they’d been doing so for online buys.⁴⁷

⁴⁵ http://mmaglobal.com/modules/article/view_article.php/1937 (viewed 8 Dec. 2008).

⁴⁶ Li Xinze, “Taking Digital Marketing Mobile,” *Telecom Asia*, 10 Nov. 2008, http://www.telecomasia.net/article.php?id_article=11183 (viewed 9 Dec. 2008).

⁴⁷ Phil Leggiere, “Targeting Multi-Modally,” *Behavioral Insider*, 26 Sept. 2007, http://www.mediapost.com/blogs/behavioral_insider/?p=194 (viewed 8 Dec. 2008).

Mobile marketers are also able to leverage advances in machine learning and artificial intelligence to perfect the tracking and targeting of consumers. For example, Personifi's "uniquely powerful ad optimization solution observes all available behavioral, contextual, demographic and other data to determine the most effective ad for each impression," according to the company website. "Unlike many optimization solutions, Personifi's optimization incorporates predictive capabilities which leverage learning from earlier campaigns, eliminating the need to waste impressions at the outset of a campaign. By observing all available data (including behavioral, demographic, contextual, transactional, and more if available), Personifi allows mobile providers to gain a more complete understanding of users' characteristics and behavior patterns."⁴⁸

The merging of offline and online data sources to target the mobile consumer is also a serious privacy threat. For example, in May 2007, Acuity Mobile and Acxiom Corporation announced that they had partnered to create "a powerful new mobile marketing solution that integrates world-class consumer data and behavioral analytics with the industry's leading real-time mobile content delivery platform." The new mobile marketing solution married "Acxiom's data and analytical capabilities with Acuity Mobile's location-based technology and Spot Relevance offering—the ability to deliver mobile content to the right user based on time, context, location and user preferences."

By incorporating customer information data from Acxiom into Acuity's targeting engine, "the technology platform will facilitate relevant content delivery to a specific person based on preferences, time, context and location," ensuring "real-time, location-aware, user-targeted mobile marketing"⁴⁹ In addition to the information gleaned from the mobile device itself, Acuity's eMAP (Embedded Mobile Advertising Platform) Preference Engine "can mine multiple data sources to access any consumer information available," ensuring that all available data, even from "third party databases of consumer data" are utilized.⁵⁰ In a press release describing the joint venture, Alan Sultan, president of Acuity Mobile, declared that "we welcome the opportunity to power Acxiom's mobile solutions as well as further enhance our mobile content delivery technology by integrating Acxiom's powerful data and analytics capabilities into our eMAP. This partnership gives our clients unprecedented targeting capability to ensure Spot Relevance."⁵¹

B. Location-based Targeting

"The Holy Grail of Mobile Marketing"

—Third Screen Media's Brian Stoller, discussing location-based targeting

If behavioral targeting is a potent force in interactive advertising, the mobile marketplace increases the power of such targeting still further by pinpointing the precise location

⁴⁸ http://personifi.com/mobile_optimization.html (viewed 8 Dec. 2008).

⁴⁹ "Acxiom Corporation and Acuity Mobile Partner to Power Targeted Mobile Marketing Solution," 21 May 2007, <http://www.acuitymobile.com/docs/Press05212007.php> (viewed 8 Dec. 2008).

⁵⁰ <http://www.acuitymobile.com/company/technology.php> (viewed 8 Dec. 2008).

⁵¹ "Acxiom Corporation and Acuity Mobile Partner to Power Targeted Mobile Marketing Solution."

where various consumer behaviors take place. In the past, of course, marketers could determine the *approximate* location of mobile device users through a complex system of triangulation. But the latest generation of cellular phones, which are increasingly equipped with sophisticated global positioning capabilities, are taking all of the guesswork out of location-based targeting. Utilizing these advances in GPS technology, marketers can now determine the precise location of mobile users—within three feet.⁵² As *Ad Age* noted, “Context-based banner ads now morph into GPS locators for the closest product from the user’s current location. Ads can initiate calls or purchase DVDs for instant viewing. Ads can incorporate audio, video and web browsing, and can also direct users to the iPhone App Store or iTunes.”⁵³ Predictably, the response of the marketing community to these technological advances has been universally positive. According to Brian Stoller of Third Screen Media, for example, location targeting could well be the “holy grail of mobile marketing,” allowing advertisers to “to mass-target ads to users on a local basis.”⁵⁴ No less enthusiastic, Mark Slade of 4th Screen Advertising (itself no stranger to targeting mobile consumers), refers to location-based targeting as “the Promised land of mobile advertising.”⁵⁵

Unfortunately, without adequate oversight and regulatory safeguards, that Promised Land for mobile marketers could soon become Armageddon for consumer privacy. Location-based strategies are often supplemented and refined by other profiling factors, including the user’s compiled content interests and even the time period in which those interests were expressed. Third Screen Media (which is part of Time Warner’s “Platform A” online ad services division and typical of how online PC and mobile marketing, data collection, and targeting are merging) provides targeting by content channels. Among the 26 channels for “unmatched targeting” are business and finance, automotive, careers, family, food and drink and health and fitness.⁵⁶

Location-based Capabilities: Navigation, Geotagging, and Mobile Listings

Nokia is a leader among the many companies experimenting with location-based capabilities. As a company document reveals, “on Nokia’s multimedia computers, particularly the Nokia Nseries and Nokia Eseries devices, global maps and routing information are now standard on new devices.”⁵⁷ Through this proliferation of location-based capabilities, Nokia has enabled a host of geo-targeting services. According to a company press release, its Nokia Maps service “is taking its mapping and navigation experiences to the next level by enhancing its pedestrian navigation, adding multimedia

⁵² “Acuity Mobile Partners with AlphaTrek to Provide Advanced Location Targeting for Mobile Marketing Clients; Expands Patent Portfolio,” 22 Apr. 2008, <http://www.acuitymobile.com/docs/Press04222008.php> (viewed 8 Dec. 2008).

⁵³ http://adage.com/digital/article?article_id=129861 (subscription required).

⁵⁴ Brian Stoller, “10 Best Practices: Mobile Advertising Campaign Planning,” Third Screen Media, May 2007.

⁵⁵ Mark Slade, “Display Advertising and the Power of Mobile,” 4th Screen Advertising, 14 Nov. 2007.

⁵⁶ <http://www.advertising.com/advertisers-mobile.php>; <http://www.thirdscreenmedia.com/products-TSM-mobile-ad-network.php> (viewed 8 Dec. 2008).

⁵⁷ Nokia, “Navigate through Nokia’s ‘Location-based Experience’ portfolio,” 2008

city guides, offering satellite images.... Nokia Maps 2.0 adds ‘Walk,’ a pedestrian focused navigation component to the application, while still offering ‘Drive,’ a world class car navigation system.”⁵⁸

Additionally, Nokia is making pioneering advances in “geotagging,” the practice of automatically adding location information (metadata) to cell phone photographs. “The metadata consists of latitude and longitude and, once enabled in the settings of the device, the GPS coordinates are automatically included when storing photo information.” Nokia believes that “location tagging can help anyone find a wide variety of location-specific information online. For instance, if you are thinking of going to a certain beach for holiday, you can search images taken near that beach by clicking on the beach on a location tagged map. Location tagging-enabled information services can also potentially be used to find location-based news or Web sites.”⁵⁹

What Nokia does not mention is that the same technology that allows its users to find goods and services nearby will also permit marketers to find those same users, regardless of location, hour, or consumer preference. Thus although the new location-based services may be useful to consumers, they also represent an entirely new advertising medium, one with potentially grave privacy implications. Accordingly, regulators must ensure that the needs and concerns of mobile users are taken into account by mobile marketers who utilize these new geo-marketing channels.

Companies like Acuity Mobile demonstrate some of the most invasive methods that marketers have devised to incorporate targeted marketing into location-based capabilities. In April 2008, the company partnered with AlphaTrek, a technology firm specializing in real-time location services. According to a press release,

Acuity will combine its Embedded Mobile Advertising Platform (EMAP) with AlphaTrek’s superior tracking technology to deliver precision mobile marketing opportunities for its clients with an accuracy range of 3-5 feet. Tracking accuracy of 3-5 feet can identify a consumer’s proximity to a specific retail store rack or display. By combining that level of accuracy with Acuity’s user demographics capabilities, mobile marketers can offer coupons for specific products as a shopper walks the aisles of a supermarket; discounts from retailers as consumers move from one section of a store to another; or introductory messages from vendors to visitors walking a trade show floor.

⁵⁸ “Untethering the Internet: Nokia Unveils New Converged Devices and Internet Services that Encourage Collaboration, Creativity and Sharing,” 11 Feb. 2008, <http://devicearena.com/2008/02/11/untethering-the-internet-nokia-unveils-new-converged-devices-and-internet-services-that-encourage-collaboration-creativity-and-sharing/> (viewed 11 Dec. 2008).

⁵⁹ Nokia Location-Tagging Backgrounder.

Commenting on the venture, Ashok Agrawala, CEO of AlphaTrek, praised his company's new partner and its targeting capabilities. "Acuity Mobile's location-based platform," Agrawala states, "represents the next generation of e-commerce offerings."⁶⁰

Acuity Mobile is not the only company creating a name for itself in the field of location-based targeting. In June 2008 Ringleader, a mobile ad-serving company, partnered with HopStop, a navigational search engine for public transportation systems in large metropolitan areas, to let advertisers hyper-target consumers via Ringleader's advertising platform. Essentially, Ringleader's advertising platform takes user location data from HopStop and identifies nearby advertisers. Bob Walczak, the CEO of Ringleader, described the deal in the following manner: "A lot of our advertisers are very sensitive to location and that's why we are creating a valuable option for advertisers looking for location-based targeting features. As the mobile advertising industry continues to grow, it's becoming more valuable to be able to target based on consumer location and interests while still ensuring ad relevancy," he said. "Our model is able to do that."⁶¹

Ringleader's Bob Walczack is correct. Mobile advertisers *are* looking for location-based targeting features. As companies like Ringleader, Hop Stop, Acuity Mobile and AlphaTrek continue to make advances in the medium, the demand for these services will only grow. Although such location-based targeting is still at an early stage, the contours of the emerging mechanism are apparent. Beyond the very real concerns that location-based capabilities and the perpetual broadcasting of consumers' whereabouts raises for personal security (the threat of stalking, or even worse, must be a constant concern with such a system), location-based targeting represents yet another way that marketers will be able to capitalize on mobile users' personal information without giving thought to the interests of consumers themselves.

Beyond Behavior: The Many Faces of Mobile Targeting

Although behavioral targeting is one of the more controversial targeting practices migrating to the mobile Web, with location targeting emerging as a new threat to user privacy, still other targeting techniques loom on the horizon. In some respects, behavioral and geographic targeting represent only the prelude to a perfect storm of targeting capabilities taking hold and transforming the mobile marketing environment. In addition to behavioral targeting, there is *contextual targeting*, which allows advertisers to place ads in and around content that their audience frequently visits, and *device targeting*, geared to the specific make, model or functionality of a mobile device. *Time-based targeting* permits advertisers to select the time of day when an ad will appear, and there is also *demographic targeting*, which utilizes a wide range of demographic data in order to mark mobile users for advertising.⁶² Taken together, this arsenal of mobile-based

⁶⁰ "Acuity Mobile Partners with AlphaTrek to Provide Advanced Location Targeting for Mobile Marketing Clients; Expands Patent Portfolio."

⁶¹ Gabrielle Kalika, "HopStop Lets Advertisers Hyper-target with WAP Site," *Mobile Marketer*, 11 June 2008, <http://www.mobilemarketer.com/cms/news/advertising/1134.html> (viewed 3 July 2008).

⁶² Stoller, "10 Best Practices: Mobile Advertising Campaign Planning."

targeting technologies affords marketers plenty of opportunities to breach consumer privacy.

Third Screen Media's MADX Agency, for example, allows marketers to create "innovative and successful mobile advertising campaigns—from research and planning, to buying, to creative development, to delivery, reporting and accounting."⁶³ The company claims "unmatched reporting and measurement tools," which it uses to enable "precise targeting capabilities" built upon consumers' age, gender, marital status, ethnicity, the time, place and frequency of mobile use and even what kind of car the consumer drives.⁶⁴ In planning campaigns, the MADX Agency runs "reports based on actual mobile user trends and get[s] statistical snapshots." Meanwhile, "advanced Site Search functionality lets agencies access demographic data (provided by mobile users, publishers or third-party sources) to reach their target with unmatched relevance." Third Screen Media boasts that its MADX Agency is the only "total mobile ad management and delivery solution."⁶⁵ Unfortunately, for privacy-minded consumers, this is not the case.

The SOMA mobile advertising platform, created by the mobile advertising technology company Smaato, also provides fine-grain targeting capabilities. According to a company fact sheet, "the SOMA platform enables the management and delivery of targeted display advertising to mobile phones within applications and on mobile sites."⁶⁶ Targeting consumers by "interests, age, application, application type, device type, time, language," and other content categories, "the SOMA server delivers ads directly into predefined ad spaces on mobile Web pages and indirectly via the SOMA client into mobile applications for in-application advertising. The SOMA server collects ads from the affiliated ad sales networks and sends tracking data back into their reporting databases."⁶⁷

Rhythm NewMedia, similarly, offers ad serving and content sourcing with its platform, which enables "broad reach" to an audience, "sharp targeting," "precise frequency management" as well as "extensive reporting" on ad campaigns.⁶⁸ According to its website, with "over two years of experience delivering individually targeted mobile campaigns, Rhythm accurately and precisely measures the impact of brand campaigns to make building mobile advertising campaigns easier than ever before."⁶⁹ The company actively targets such demographic criteria as age and gender and provides tools to

⁶³ Third Screen Media MADX Agency Fact Sheet, 1 Apr. 2008.

⁶⁴ Third Screen Media, "Mobile Advertising. As Easy as 1,2,3," 2007; Third Screen Media MADX Agency Fact Sheet.

⁶⁵ Third Screen Media MADX Agency Fact Sheet.

⁶⁶ Smaato, "SOMA—The Mobile Advertising Platform and Ad Server from Smaato," company brochure, 2008.

⁶⁷ <http://www.smaato.com/adsales-networks.php> (viewed 3 July 2008); "SOMA—The Mobile Advertising Platform and Ad Server from Smaato."

⁶⁸ http://www.rhythmnewmedia.com/about_us.html (viewed 11 Dec. 2008).

⁶⁹ <http://www.rhythmnewmedia.com/advertisers.html> (viewed 11 Dec. 2008).

measure the effectiveness of campaigns. Rhythm's services are extremely popular with leading companies, with clients that have included BMW, Puma, Unilever, Mazda, Paramount, and Toshiba.⁷⁰

Still other companies exploring this new frontier of interactive advertising are SiteSpect and Quattro Wireless. SiteSpect closely monitors and analyzes the actions of mobile users to refine its ad targeting, examining the following data points:

- Specific actions taken during a visit, such as viewing an article, completing a purchase, or abandoning a shopping cart.
- Historical details such the recency, frequency and monetary value of previous purchases and transactions.
- Origin of their visit (e.g. Google PPC ad, or a specific ad creative.)
- Time of day / day of week of their visit.
- Language (e.g. English, Spanish, French, etc.)
- Browsing device, including WAP/mobile devices.⁷¹

Quattro Wireless, finally, has seized upon the growing "smart phone" market, mobile devices that rival laptop computers in power and flexibility, to produce "...the industry's first true location-based iPhone ad unit courtesy of Quattro Wireless and the uLocate WHERE™ application....

The iPhone represents the ultimate 1-1 marketing and advertising opportunity—the savvy advertiser gets to participate in the intimate and highly functional relationship between the consumer and their personal device.... Advertising within iPhone applications provide an additional level of functionality and innovation for the advertiser. With full integration and the ability to determine the user's location, marketers have many new personalized and localized advertising opportunities. WHERE™'s local search functionality further extends the marketer's opportunity to pinpoint a consumer's location and serve up relevant messages paired to their search interests.⁷²

Advertising giant Google is also among those companies eager to exploit the power of smart phones, by employing more sophisticated, Web-like ad campaigns. To this end, Google has introduced its highly successful contextual advertising program, AdWords, to handheld devices with full HTML browsers, including the iPhone and its own touch-screen device, the G1 from T-Mobile. "Google says these phones can handle standard AdWords ads and landing pages without requiring modification or other special action by marketers," ClickZ's Zachery Rodgers reports. "Additionally, AdWords advertisers can create campaigns targeted exclusively to iPhone and G1 owners. Separate calls to action can be created for all mobile users, or even for the users of individual devices. That

⁷⁰ http://www.rhythmnewmedia.com/case_studies.html (viewed 11 Dec. 2008).

⁷¹ <http://www.sitespect.com/behavioral-targeting.shtml> (viewed 11 Dec. 2008).

⁷² http://www.quattrowireless.com/success/advertisers/iphone_and_in_application_ad_units (viewed 11 Dec. 2008).

approach might be desirable for marketers of iPhone or other mobile apps, or for the makers of device accessories.”⁷³

According to a September 2008 Mobile Marketing Association white paper, consumers should expect a full range of ad-supported “click-to” transactions, the simplicity of which will obscure both the vast marketing engine these actions will trigger, and the degree to which users will be monitored and analyzed as a result:

- Click-to-call (users place an outgoing call to the content provider or advertiser)
- Click-to-locate (users find, for example, the closest car dealer or movie theatre, enabled by location-based services)
- Click-to-order brochure (users receive marketing materials by supplying their postal addresses)
- Click-to-enter competition (users enter text or sweepstake to win prizes)
- Click-to-receive email (users receive an email and a link to online site by supplying their email address)
- Click-to-receive mobile coupon (users receive an electronic coupon on their mobile phone that can be redeemed immediately at a participating merchant)
- Click-to-buy (users make a purchase paid for with a credit card, added to their monthly mobile bill or using some other form of mobile payment)
- Click-to-download content (users download content, including logos, wallpapers or ringtones, onto their mobile phones)
- Click-to-enter/browse branded Mobile Web site (users click a banner to get connected to standing or campaign-specific Mobile Web site)
- Click-to-forward content (users forward relevant content to friends, creating a viral campaign effect)
- Click-to-video (users click a banner to view an advertiser’s commercial for a product or service)
- Click-to-vote (users reply to a ballot or poll from their mobile phone and provide marketers and brands with valuable research insights) enter mobile phones “on the fly” as mobile widgets that users can easily install, use and uninstall.⁷⁴

Consumers, clearly, will increasingly receive such mobile-based “calls to action,” urging them to engage in some form of reputedly “quick and easy” transaction, but including some that involve such sensitive matters as financial and health concerns, and all of which will have privacy implications. Accordingly, the FTC must investigate how mobile marketers have constructed these mobile marketing action “calls,” to determine whether consumers have sufficient understanding of the process, with enough information and control so their true intent is fully recognized.

⁷³ Zachary Rodgers, “Google Extends Search Campaigns to iPhone, G1 Devices,” ClickZ, 9 Dec. 2008, <http://www.clickz.com/3632024> (viewed 9 Dec. 2008).

⁷⁴ Mobile Marketing Association, “Mobile Applications,” p. 7, <http://mmaglobal.com/mobileapplications.pdf> (viewed 9 Dec. 2008).

C. User Tracking/Mobile Analytics

Reporting “the who, what, where and when of advertising on the mobile Web”
—comScore/M:Metrics

As we have seen, mobile marketers are adopting an elaborate system of surveillance that tracks, compiles and analyzes the movements of mobile users. Among the most notable of the companies contributing to the development of mobile analytics is M:Metrics (now a part of comScore). Through its M:Ad service, a competitive mobile advertising tracking program, the company “reports the who, what, where and when of advertising on the mobile Web,” precisely identifying and classifying competitors’ ads and advertising campaigns “by industry, company, division and product/service and by industry/sector.”⁷⁵ M:Metrics does not restrict these capabilities to use on mobile competitors, however. It also utilizes its proprietary data collection faculties to target consumers by means of mobile analytics, data mining, “sophisticated survey techniques,” “direct behavioral measurement,” and “content/ad monitoring.”⁷⁶

With its suite of applications, M:Metrics provides advertisers a full complement of tools to conduct targeted mobile campaigns. M:Audit, for example, collects website audience composition data, helping publishers and ad networks “attract advertisers by providing trusted, third-party analysis of their mobile audiences.” Through “custom on-device surveys specially designed to reveal key demographic and psychographic information about audiences,” M:Metrics collects data on age, gender, education level, postal codes, employment status, ethnicity and even if a consumer is “interested in buying an automobile this year.”⁷⁷ The company’s MeterDirect, moreover, promises “a direct line to the mobile media consumer” through “direct, continuous behavioral measurement via metered mobile phones.” M:Metrics states that “MeterDirect measures the actual behavior of the most active segment of mobile media consumers” to “evaluate audience demographics, brand reach, frequency and duration of usage.” As the M:Metrics website declares, “The Meter is Running. MeterDirect continuously captures detailed information on mobile user behavior and delivers it monthly via an intuitive Web query interface. With metrics such as page views, active reach, session length, duration, day of week and time of day, MeterDirect makes evaluating mobile media audience behavior easy.”⁷⁸

In addition, its customers can also “use MeterDirect’s detailed Web browsing data to determine which audiences are visiting where on the mobile Web, when, how often and for how long.”⁷⁹ With M:Metrics’ Target Group Index, media owners achieve “a 360 degree understanding of target groups of consumers and [it] is used to steer marketing strategies.” The service accurately defines a target audience and then fine-tunes digital

⁷⁵ M:Metrics M:Ad Backgrounder.

⁷⁶ Dag Olav Norem, “Mobile Advertising Update: Mobile Ad Degree,” 14 May 2008, p. 6, http://www.mobileaddegree.com/docs/MAD_LA_2008_MMetrics.pdf (viewed 8 Dec. 2008).

⁷⁷ M:Metrics M:Audit Backgrounder.

⁷⁸ M:Metrics MeterDirect Backgrounder.

⁷⁹ <http://www.mmetrics.com/services/meterdirect.aspx> (viewed 9 Dec. 2008).

campaigns in an effort to ensure that they resonate with consumers. This service is marketed in connection with MobiLens, M:Metrics' syndicated monthly survey of media consumption and demographic characteristics of a sample of more than 40,000 mobile device users.⁸⁰ Together, these services combine "mobile consumer behavior, content merchandising and device capabilities to provide the most comprehensive, trusted mobile market intelligence in the industry." Acting in concert, MobiLens and the Target Group Index offer "market-leading insight to a broad set of consumer behaviors linked to the use of mobile media."⁸¹

Through its Nielsen Mobile unit, the Nielsen Company—"the world's leading provider of marketing information, audience measurement and business media products"—has entered the mobile industry.⁸² "Nielsen Mobile's comprehensive research programs provide complete measurement of the mobile consumer" to "understand what consumers think about brands, devices and services" and "measure awareness, purchase intent, satisfaction, recommendations and loyalty."⁸³ In the process, Nielsen assesses consumer behavior in three broad areas:

- Attitudes: Understand what consumers think about brands, devices and services; measure awareness, purchase intent, satisfaction, recommendations and loyalty.
- Behavior: Track what consumers actually do; measure market share, consumer spending, revenue share and other consumer behaviors.
- Experience: See how consumers experience services, networks and devices; measure network, service and application quality.⁸⁴

In order to create a robust set of mobile analytics, Nielsen supplements the mobile information that it collects with data culled by its other operations. In this way the company can leverage its various business units to provide mobile marketers with some of the most comprehensive research available on the market. In June 2008 Nielsen launched its Mobile @Plan, "an extension of Nielsen's @Plan for profiling online audiences," which is "intended to provide marketers with lifestyle and demographic information on the users of popular mobile Web sites."⁸⁵ According to the Mobile Marketing Association website, the service provides audience profiles based on leisure activities, life events, electronics ownership, media use and brand-level purchase activity across travel, auto, finance, food and beverage, real estate, pets and more.⁸⁶ Nielsen

⁸⁰ <http://www.crunchbase.com/company/m-metrics> (viewed 9 Dec. 2008).

⁸¹ TGI M:Metrics Backgrounder.

⁸² <http://www.nielsen.com/about/index.html> (viewed 9 Dec. 2008).

⁸³ <http://www.nielsenmobile.com/html/solutions.html> (viewed 9 Dec. 2008).

⁸⁴ <http://www.nielsenmobile.com/html/solutions.html> (viewed 9 Dec. 2008).

⁸⁵ Lauren Bell, "Nielsen, ComScore Offer Mobile Metrics," *DMNews*, 2 June 2008, <http://www.dmnews.com/Nielsen-ComScore-offer-mobile-metrics/article/110725/> (viewed 9 Dec. 2008).

⁸⁶ http://mmaglobal.com/modules/article/view_article.php/2023. For an animated "tour" of mobile advertising services provided by Jinny, see http://www.jinny.ie/_fileupload/file/barry_master_006.swf (both viewed 9 Dec. 2008).

itself notes that “information gleaned from Mobile @Plan will be leveraged in Nielsen’s TotalWeb service, which combines data from mobile and online for more complete audience measurement....” Commenting on this new service, Nic Covey, director of insights for Nielsen Mobile, stated that “for marketers, Mobile @Plan will allow a new precision when targeting mobile media audiences.”⁸⁷

Measuring the Mobile “Fingerprint”

Jinny, a mobile software developer, claims that its Jinny Advertising Engine provides “a fast entry to market so that the mobile operator will capture the returns from this expanding business and position itself as the primary partner for advertisers in their market.” By conducting “segment targeting,” “analysis of customer impressions and response activity” as well as “demographic capture of subscribers,” the “Jinny Advertising Engine provides advertisers and operators with the ability to select subscribers that can receive adverts, to select why and when they will be received and to decide the type of advertisements....”⁸⁸

Fabric, a mobile content platform created by Mobile IQ, provides operators with a wide range of marketing possibilities that incorporate sophisticated user reporting. Information on the company’s website indicates that

Mobile IQ recognizes that full and accurate reporting is essential to measure and understand the success of mobile sites. Fabric records as much information as possible about site activity to support its reports.... For services with unique user identification, all information possible is recorded against the user. Return visits from the same user are recorded against the same user record ensuring accurate reporting of unique users.... User submissions of data capture forms, content ratings and send to a friend requests are recorded against the user and session, allowing analysis of user habits within your sites.⁸⁹

Unica Corporation’s Affinium NetInsight mobile analytics product has been adopted by Wmode, a leading mobile content distributor. “Everyone’s unique in the mobile world,” a Wmode spokesman declares, “—we know a user’s identity. And by adding NetInsight’s web analytics capabilities to the mix, we’re now able to see how many new and repeat customers come to the site, what they’re doing, what interests them and what they’re buying.” As a Unica press release explains, “With the information generated from web analytics, companies can provide users with personalized communications when they next visit. Based on the data collected, they can provide targeted information to individual customers, leading to increases in the overall effectiveness of the customer experience as well as increases in conversion rates.” According to Andrew Hally, VP, product marketing and strategy, Unica On Demand, “The mobile market is ripe for web analytics; this sector has recently begun to fully realize the power and benefits web analytics brings to its marketplace, and we’ve seen significant interest worldwide in our

⁸⁷ Bell, “Nielsen, ComScore Offer Mobile Metrics.”

⁸⁸ Jinny Advertising Engine Backgrounder.

⁸⁹ <http://www.mobileiq.com/77.html> (viewed 9 Dec. 2008).

NetInsight solution.” That solution, however, raises serious questions about NetInsight’s facilitation of the following tracking and targeting functions:

- Identify individuals who viewed products but did not convert online, and create a list with the products that they viewed for a multi-channel re-marketing campaign.
- Present real-time offers to shoppers using behavioral targeting techniques.
- Automatically detect changes in the behavioral pattern of online and offline customers to trigger action for preventing attrition or presenting cross-sales offers....
- Explore clickstream/path data to discover insights into visitor behavior.
- Monitor best-practice KPIs, dashboards, and reports for visitor engagement and conversion.
- Capture not only single-session but, also, delayed conversions and revenues.⁹⁰

Amethon, meanwhile, is bringing its “Content Fingerprinting” technology to P2P (peer-to-peer) and MMS (Multimedia Messaging Service) traffic. “With more than 90% of MMS traffic typically generated through peer to peer communication,” the company explains, “it is essential for any product manager or marketing team to know what is driving this traffic as well as providing critical performance and planning information to engineering teams. Furthermore, Content Fingerprinting enables a number of other revenue streams to be developed including:

- Rewarding subscribers who create revenue generating content
- Superdistribution of 3rd party content through P2P and viral transmission
- Providing marketers and consumer brand owners to measure penetration of their viral or branded marketing campaigns.⁹¹

Ringleader Digital offers a similar service called Media Stamp, “the industry’s first persistent device identification technology.” Although it claims its tracking is “anonymous,” and that it doesn’t collect personally identifiable information, Ringleader also reveals the power of Media Stamp to shadow specific mobile users:

By “stamping” a mobile device, Ringleader Digital enables agencies and brands to identify unique visitors and track their clicks, impressions, and acquisitions across all browsing sessions, mobile sites, and wireless carriers. Media Stamp is the first technology to standardize these ad serving and analytic capabilities in mobile, which were previously only available for online advertising.

Media Stamp’s anonymous device identification technology does not track users. Rather, it builds profiles of each device by tracking mobile online usage patterns across nearly 100 discriminators that include device type, geography, and mobile carrier information. Importantly, Ringleader Digital’s solution does not collect

⁹⁰ http://netinsight.unica.com/products/eCommerce_Optimization.htm (viewed 9 Dec. 2008).

⁹¹ http://www.amethon.com/Content_Common/pg-content-fingerprinting.seo (viewed 9 Dec. 2008).

personally identifiable information—and, for example, would not track mobile phone numbers or other personal data.⁹²

Claims of anonymity aside, the kind of immediacy and intimacy that Ringleader and similar companies promise has become a smokescreen for mobile marketers. One of the main attractions of mobile devices to companies and advertisers is their ability to relay information to and from consumers in real-time, anywhere they might be. iLoop Mobile, which develops platforms for mobile advertising, marketing, and content distribution, creates flexible reports that “show message traffic, sales and Internet page view stats for selectable yearly, monthly, weekly, daily and hourly increments as well as by company, campaign, category, sales and service.” The company claims that its interface makes “it very easy to spot both instantaneous data for any time increment and to quickly spot trends in user behavior.”⁹³ Through its mFinity platform for mobile website creation, the company states that it can use “pixel tracking” to monitor consumer page use and “automatically populate site pages with ads according to customer designated categories or demographics.”⁹⁴

Unicast, a division of Enliven Marketing Technologies Corporation, announced the introduction of a new mobile marketing SMS technology as a part of the Unicast Rich Media Mobile suite of products, which sends consumers “real-time text messages from an online ad to a mobile device, directing the recipient to a rich mobile minisite where they can watch videos and enjoy other downloadable content.” “Combined with Unicast’s rich media minisite capabilities and a robust reporting interface, the new SMS technology will enable marketers to create a continuous branding experience for their audience on the Web and on mobile devices.”⁹⁵ Even before this development, Unicast was a major player in mobile marketing. It had partnered with AdMob, the world’s largest mobile marketplace, to create campaigns for such major companies as Land Rover and Adidas, offering “rich multi-page mobile Web sites featuring data capture” as well as Unicast’s business intelligence reporting, which “tracks user interactions on the mobile sites, in order to provide marketers with deeper insight into user behavior and brand engagement.”⁹⁶

Nor should the power of SMS technology—the text-based Simple Messaging Service that is anything but simple in its reach and potential impact—be underestimated. According to SMS advertising provider ChaCha, more than 136 million Americans use SMS,

⁹² <http://www.designtaxi.com/news.jsp?id=21995&monthview=1&month=2&year=2006> (viewed 9 Dec. 2008).

⁹³ <http://www.iloopmobile.com/pages/platform/platform.php> (viewed 9 Dec. 2008).

⁹⁴ http://www.iloopmobile.com/pages/platform/plat_mobile.php (viewed 9 Dec. 2008).

⁹⁵ “Unicast Introduces New Mobile Marketing Technology for an End-to-End Mobile Solution,” 21 Apr. 2008, <http://www.reuters.com/article/pressRelease/idUS130144+21-Apr-2008+PRN20080421> (viewed 9 Dec. 2008).

⁹⁶ “Unicast Partners with AdMob to Power Rich Media Mobile Web Sites,” 26 Feb. 2008, <http://www.enliven.com/press/unicast-partners-with-admob.aspx> (viewed 9 Dec. 2008).

including 85 percent of young Americans. Some 75 billion text messages were sent in the month of June 2008 alone.⁹⁷

The campaign of President-elect Obama was quick to seize on the power of text messaging, signing up thousands of participants with offers of free ringtones, wallpapers, and insight into the campaign, and getting much more back in return. “Typically,” Obama’s SMS technology provider Distributive Networks explains,

the only data points captured during a mobile marketing opt-in process are the end-user’s phone number, their mobile operator, and the date and time of their message. Distributive Networks’ technology made it possible for the Obama campaign to create a dialogue with participants via text messaging that generated well-rounded participant profiles, including zip codes and address information, interest in various issues, and the ability and willingness to volunteer and to travel to help the campaign in battleground states.

Obama for America was able to vary the type of messages based on what each participant had thus far volunteered, at each step seizing opportunities to gather more information. To encourage participants to provide more information, the campaign used incentives like campaign merchandise giveaways, VIP invitations to events, and even opportunities to meet the candidate in person... More than 80% of the participants in the Obama for America mobile campaign submitted additional profile information and received tailored messages across the duration of the campaign.⁹⁸

As Distributive Networks explains, “there are four characteristics of the mobile messaging channel that distinguish it from other media:

1) Ubiquity

Mobile messaging is affordable for end users, and penetration in the United States is 84% and still climbing; nearly everyone has and uses a mobile phone on a daily basis.

2) Interactivity

Mobile messaging allows for interactive two-way communication, providing instant gratification and enabling personal relationship-building.

3) Immediacy

Mobile messages have the highest chance of reaching a recipient wherever they are, and within moments of being sent. On average, incoming text messages are read within 15 minutes of receipt.

4) Impact

Mobile communications spur recipients to act, whether to purchase a product, make a donation, attend an event, share information with a friend, or any other call to action. Text message reminders have been found to increase the likelihood

⁹⁷ ChaCha Media Kit, p. 2.

⁹⁸ Distributive Networks, “Txt We Can,” 5 Nov. 2008, p. 4.

of an individual voting by 4.2 percentage points.⁹⁹

The practice of monitoring mobile user behavior is thus creeping into virtually every sector of the mobile environment, and even companies whose primary focus is not marketing are taking part. Crisp Wireless, for example, specializes in helping companies and brands build mobile websites, but it also offers monetization services through its Crisp Wireless Ad Server, which “enables publishers to sell and manage their advertising inventory in-house, or supplement outside ad networks.”¹⁰⁰ The capabilities of this ad server are predicated upon the employment of extensive reporting and user analytics. According to the company’s website, “the Crisp Wireless Ad Server offers standard and custom reporting options, providing customers with data showing total ad views, total clicks and click-through-rates. This information can be sorted to view day-by-day or hour-by-hour to judge user behavior.”¹⁰¹ The aforementioned Xtract, which focuses on the “analysis of social network conversations,” offers the clearest glimpse into the rationale for the erstwhile purveyors of Web analytics and online tracking to turn their attention to the mobile arena. “Mobile has the best potential for social marketing intelligence,” the company declares. “The solutions that Xtract has developed can revolutionise your marketing with new customer profiles that are self-learning through multi-dimensional analytics of real operator customer data...”¹⁰²

Rich Media, Widgets, Games, GPS, and Data

The construction of the mobile marketing interface is being designed to engage users so that privacy and consumer protection are at best marginalized concerns. Just as customized websites and social networks have attracted mobile users, so-called widgets are also emerging as leading mobile applications. In the words of mobile widget company Zumobi, “...widgets enable brands to create completely immersive experiences on the handset... Advertisers can create an immersive brand experience for consumers through an enhanced user interface on the handheld device, stimulating repeat usage.”¹⁰³ Mobile-based games will also play a role in data collection, just as we have seen with in-game advertising. As a Greystripe product manager declares, “Critically, mobile games go beyond simple advertising to mobile marketing. For example, they can collect email addresses for customer mailings...”¹⁰⁴ Greystripe’s “AdWRAP Campaign Manager,” explains the company, “provides advertising agencies... control... in creating, trafficking, and monitoring their mobile in-game ad campaigns.” Noting that marketers can take advantage of mobile’s pervasiveness (“the only media that’s always with them”), the

⁹⁹ Distributive Networks, “Txt We Can,” p. 6.

¹⁰⁰ <http://www.crispwireless.com/products> (viewed 9 Dec. 2008).

¹⁰¹ http://www.crispwireless.com/products/advertising/ad_server (viewed 9 Dec. 2008).

¹⁰² <http://www.xtract.com/solutions/mobile/> (viewed 9 Dec. 2008).

¹⁰³ Ken Willner, “The Role of Widgets in Mobile Marketing,” *Mobile Marketer’s Classic Guide to Mobile Advertising*, Aug. 2008, <http://www.mobilemarketer.com/cms/news/advertising/1468.html> (viewed 9 Dec. 2008).

¹⁰⁴ Jim Durrell “Mobile Games and Advertising: The Ins and Outs,” *Mobile Marketer’s Classic Guide to Mobile Advertising*, Aug. 2008.

company urges marketers to consider that they can “reach your audience when they are most receptive, and immerse them in the experience. Mobile gamers are solely focused on the phone during ad viewing, and Greystripe’s full-screen ads remain on the handset until the user takes an action.”¹⁰⁵

Mobile advertising will continue to combine unique features that will have a powerful influence on consumers. The industry has discussed the impact of “killer apps” that combine voice and visual ads, for example. “Ads delivered through the ear are arguably the most intimate and personal of all ad forms. Voice ads get five to 10 times higher click-through rates than banner or keyword ads; and thus, deliver compelling ROIs,” explained mobile marketer Apptera. The company claims that its “precision... targeting capabilities” are generated because “unlike other forms of advertising (such as TV, radio, direct mail, banner ads, keyword ads or billboards), voice ads are achieving unprecedented response rates.... [C]allers have implicitly opted-in.... Thus, their ‘mental door’ is unlocked.” Mobile targeting from Apptera can be “based on gender, location, and interests.”¹⁰⁶ Apptera also describes how its “Campaigns are targeted using a robust set of rules that pinpoint an ad for a particular locality, caller intent, business category, and timeframe....”¹⁰⁷

While the role mobile marketing will play in advertising is being uncritically heralded by the industry, a closer examination by the FTC and responsible policymakers should raise many concerns.¹⁰⁸ For obvious reasons, mobile marketers are eager to adopt advanced targeting practices. As Mark Slade, managing director of 4th Screen Media, declares, “mobile display advertising has the potential to be the most targeted advertising medium” yet developed.¹⁰⁹ Given advances in location-based capabilities and the singular ability of mobile devices to reach consumers at all times, this forecast could very well prove accurate. But not without profound implications for consumer privacy.

D. Audience Segmentation

Entertainment Addict, Social Butterfly, and Self-Improver
—three of 4INFO’s seven audience segments

Along with user profiling, audience segmentation has become an increasingly common practice in the mobile marketplace. AdMob, for example, groups users in categories for marketing purposes, including the “Business Traveler” (a male, 18-49 years of age with an income over \$100,000), “College Students,” “Technophiles” (males between the age

¹⁰⁵ Greystripe also refers to mobile ability to “engage” users, echoing the engagement paradigm which is increasingly a crucial marketing framework. See: <https://www.greystripe.com/index.php?product=campaign>

¹⁰⁶ <http://www.apptera.com/advertisers.html> (viewed 9 Dec. 2008).

¹⁰⁷ <http://www.apptera.com/TECHNOLOGY/index.php> (viewed 9 Dec. 2008).

¹⁰⁸ See, for example, “Mobile: A Brave New World for Advertisers.”

¹⁰⁹ Mark Slade, “The UK’s Leading Mobile Sales House,” 4th Screen Advertising, p. 20.

of 18 and 34 who make more than \$75,000), and “Digital Natives” (which include boys and girls as young as 13).¹¹⁰ “Advertising needs to get the customer’s attention,” the Jinny website declares. “To do this it must be a message that means something to the customer and it must be the right message. It must be sent to the correct market segment, the right customer and it must be sent to the customer when the information will be of use to them, at the right time. Through the Jinny Advertising Engine, advertisers can plan when each message will be received by a market segment and which message this market segment will receive.”¹¹¹

SiteSpect, accordingly, offers its customers a “patent-pending mobile web optimization technology” that enables marketers “to test multiple variants of user experience to understand what elements deliver the optimal conversion rates.”¹¹²

SiteSpect’s Mobile Web Optimization solves the problem of device compatibility because it is the only multivariate testing and behavioral targeting platform that works with all mobile devices. The SiteSpect solution does not require JavaScript or cookies, and is able to test and track behavior across any type of content including WML, HTML, CSS, streaming media, and more. This capability enables mobile site operators to non-intrusively test variations of any content and track visitor behavior, revealing which versions are most engaging and persuasive. As a result, mobile marketers are empowered to achieve their goals of increased conversion, registrations, and end-user adoption of self-service functions.¹¹³

4INFO, similarly, conducts user surveys and collects demographic information to develop user profiles for segmented ad targeting. Such profiles include the “Sports Fan,” the “Self-Improver,” the “Entertainment Addict,” the “Social Butterfly” and the “Connected Youth.”¹¹⁴ Although targeting relevancy is often achieved using demographic or contextual data, by utilizing audience segmentation, 4INFO has been able to conduct ad-targeted campaigns on behalf of clients. For example, it used its targeting to promote the mobile television subscription service of MobiTV, a leading mobile video and television platform. According to Brent Bamberger, vice president of marketing at MobiTV, 4INFO’s profiles and marketing support allowed his company to target its audience with “laser-like focus.”¹¹⁵

Millard Group, a direct-marketing company involved in mobile advertising, claims to have access to “detailed segmentation” information on 63 million U.S. consumers. According to an informational brochure for its mobile marketing programs, Millard states that it maintains a wide range of information on these consumers, including their “full

¹¹⁰ <http://www.admob.com/s/solutions/targeting> (viewed 9 Dec. 2008).

¹¹¹ http://www.jinny.ie/solutions/mobile_advertising.463.html (viewed 9 Dec. 2008).

¹¹² <http://www.sitespect.com/mobile-web-optimization.shtml> (viewed 9 Dec. 2008).

¹¹³ <http://www.sitespect.com/news-mobile-content-testing042208.shtml> (viewed 9 Dec. 2008).

¹¹⁴ <http://advertising.4info.net/solutions/demographics.php> (viewed 9 Dec. 2008).

¹¹⁵ 4INFO, “MobiTV Reaches Mobile Enthusiasts with 4INFO,” 2008.

demographics,” religion, marital status, “auto interest,” political party affiliation, pet ownership, personal finances, sexual orientation, and even whether or not a person gambles. With this data, Millard can provide clients a “multichannel reach” by matching email and postal addresses for each record, allowing clients to adopt a multi-pronged advertising campaign that targets consumers through both electronic and traditional mail, in addition to text messages.¹¹⁶

Although profiling mobile consumers based on social and financial indicators is in itself enough cause to initiate a serious debate about audience segmentation, the classification of individuals based on their race and ethnicity truly reveals the crass and manipulative nature of this new form digital stereotyping and redlining.

Minority Reports: Profiling Hispanics

A recent *Mediaweek* article found that Hispanics are not only “ahead of the general market on mobile data use,” but are also “the No. 1 consumers on a lot of the various segments related to the mobile phone and, in text, they absolutely lead the way.”¹¹⁷ According to the Pew Internet & American Life Project, “90% of US English-speaking Hispanics with mobile communication devices have used one or more mobile data services, as compared with 79% of African Americans and 73% of whites.”¹¹⁸

Marketers are well aware of these data. As Briabe Media notes, “...Hispanics and African Americans outpace other customer segments in voice and data usage... [T]his...affords agencies and brands the unique opportunity to target customers at the geographic, demographic, psychographic and behavioral level in a cost effective manner.”¹¹⁹ Michael Foschetti, the managing director of Mobisix, a mobile marketing agency, notes that “[m]obile marketing is emerging as a powerful marketing tool for all marketers, but those trying to reach the Hispanic segment should really take note. While online penetration and general technology adoption among the Hispanic segment lags the general market, the Hispanic segment significantly over-indexes in mobile phone and

¹¹⁶ http://www.millard.com/promotions/MobileDirectHandout_-vs2_508.pdf (viewed 9 Dec. 2008).

¹¹⁷ Della de LaFuente, “Marketers are Taking Advantage of the Fact that Hispanics are Ahead of the General Market on Mobile Data Use,” *Mediaweek*, 7 Apr. 2008, <http://www.hipcricket.com/news/inthenews/pdf/040708.pdf> (viewed 10 Dec. 2008). “Hispanics now represent the fastest-growing and youngest-skewing U.S. mobile segment—with a higher average revenue per user (ARPU) than any other demographic group. Also, English-speaking Hispanics reportedly are the most tech-savvy mobile demographic, sporting the most sophisticated devices for rich mobile media interactions. African-American mobile subscribers are the largest purchasers of premium content services such as ringtones, wallpapers and games. Additionally, a recent study by GfK NOP says that African-American consumers also have the highest levels of mobile advertising recall of all demographic groups, which suggests that they might be more receptive to mobile advertising messages. James Briggs, “4 Tips to Boost Mobile Campaign Success,” *iMedia Connection*, 5 Aug. 2008, <http://www.imediaconnection.com/content/20090.asp> (viewed 9 Dec. 2008).

¹¹⁸ Pew Internet & American Life Project, “Data Memo,” http://www.pewinternet.org/pdfs/PIP_Mobile.Data.Access.pdf (viewed 11 Dec. 2008).

¹¹⁹ http://briabemedia.com/documents/articles/Mobile_Marketing_to_Multicultural_Audiences.php (viewed 11 Dec. 2008).

data usage...partially due to the fact that in many cases cell phones are serving as a replacement for a home computer or Internet connection.”¹²⁰

According to M:Metrics, “Hispanics are much more likely to use their mobile phones to do things beyond normal voice calls. While 3.1 percent of the general population used their mobile devices to watch videos, 6.7 percent of Latinos did and 26.8 percent of Hispanics sent a photo or video with their phones vs. 15.3 percent of the general population.”¹²¹ All in all, 71 percent of English-speaking Hispanics are “engaged” in consuming mobile content and “75 percent of all U.S. Hispanic households have multiple mobile phones and use them more than other personal, handheld technologies, with more than half regularly using text messaging and responding favorably to text message advertisements.”¹²²

In April 2008, the mobile marketing agency HipCricket partnered with Bustos Media and Lotus Media to create a national Hispanic-targeted digital advertising network for radio and television broadcasters. According to HipCricket CMO Jeff Hasen, “this new network will allow marketers to create customized media plans for Hispanic stations in the network and their audiences with a single buy based on the markets, stations and demos they want to target.” HipCricket CEO Ivan Braker added that the initiative “is aimed at the marketing companies and brands that are looking to gain access to the Hispanic community and to the Latino world in a way that they can communicate on a one-on-one basis [via mobile] with special offers and unique things they can provide.”¹²³

The budget motel chain Motel 6 has adopted a program to target Hispanics with mobile marketing. In June 2008 the company partnered with Grupo Gallegos, a Hispanic-focused advertising agency, and Punchkick Interactive, a mobile marketing design firm, to launch a mobile marketing campaign to influence the buying behavior of Hispanics who are traveling or on vacation. The campaign began with a series of regional radio advertising spots, primarily in California and the Southwest, prompting traveling listeners to text MOTEL6 to 95495 to get a schedule of events for their destination city. When listeners texted to MOTEL6, they received a reply message in Spanish asking them to text to VAMOS6 with their destination city. Consumers then received a confirmation message that said they would receive a text alert for the next three days with events in their destination city as well as any close major urban city. Although this campaign isn’t actually selling anything to consumers, as Zak Dabbas, a managing partner at Punchkick, explained, “the ultimate goal was to try and get Hispanics who are traveling to think of

¹²⁰ Michael Foschetti, “Why Hispanic Marketers Need to Consider Mobile,” Mobile Marketing Association, 24 June 2008, <http://mmaglobal.com/modules/article/view.article.php/2021> (viewed 11 Dec. 2008).

¹²¹ de LaFuente, “Marketers are Taking Advantage of the Fact that Hispanics are Ahead of the General Market on Mobile Data Use.”

¹²² “M:Metrics: Hispanics a Young, Diverse Audience Built for Mobile Advertising,” 14 May 2007, <http://www.mmetrics.com/press/PressRelease.aspx?article=20070514-hispanic>; Della de LaFuente, “HipCricket Creates Hispanic Mobile Marketing Network,” 10 Apr. 2008, <http://www.hipcricket.com/news/inthenews/pdf/041008b.pdf> (both viewed 10 Dec. 2008).

¹²³ de LaFuente, “HipCricket Creates Hispanic Mobile Marketing Network.”

Motel 6 when thinking of where to stay.” According to research by Grupo Gallegos, this service was an effective marketing tactic. The company found that Hispanics tend to spontaneously pick up and leave for a vacation without making definite plans or hotel reservations, and thus the program both serves a need for Hispanic consumers while exposing them to the Motel 6 brand.¹²⁴

Such leading companies as Proctor & Gamble, Ikea, Coca-Cola, Univision and McDonald’s have also recognized the potential of user profiling of mobile consumers as a way to reach the Latino market. For example, Proctor & Gamble’s cosmetics line “CoverGirl was a premier advertiser in the first entertainment special on Univisionmovil.com, a mobile portal that features news, music, horoscopes, entertainment and youth-oriented content.” Similarly, “McDonald’s promoted its Filet O’ Fish sandwich through a cross-channel promotion focusing on SMS short codes and the Hispanic market. Every component of the campaign, from point of purchase, banner ads and packaging, featured the mobile aspect, instructing customers to send a message to a short code to gain access to free content such as games, wallpapers, and ringtones.”¹²⁵

Teen Targeting

Hispanics are not the only subgroup being profiled by mobile marketers. Children and teens are also high on the list for targeted mobile marketing, for obvious reasons. As Steve Largent, president and CEO of CTIA—The Wireless Association, recently observed, “Teens are a pivotal segment of wireless users. As the first generation born into a wireless society, how they use their cell phones and what they expect of these devices in the future will drive the next wave of innovation in our industry.” According to findings from the Nielsen Company’s “Mobile Kids Insights” report “profiling the mobile activities and preferences of U.S. “tweens” (ages 8–12)—a population segment of 20 million young consumers who represent a significant opportunity in the competitive mobile marketplace....

- 46% of tweens use cell phones.
- On average, kids get their own cell phone between the ages of 10 and 11.
- 55% of tweens who own a cell phone send text messages and 21% download ringtones....
- 65% of tweens with cell phones are on family plans¹²⁶

Not only is mobile device ownership widespread among children, studies show that minors are especially susceptible to mobile advertising. Harris Interactive research shows mobile marketing has a great deal of potential to influence young mobile consumers and “can gain a foothold among this large and growing group,” if the advertising is both

¹²⁴ Giselle Abramovich, “Motel 6 Uses Mobile to Influence Buyer Behavior,” *Mobile Marketer*, 20 June 2008, <http://www.mobilemarketer.com/cms/news/messaging/1189.html> (viewed 10 Dec. 2008).

¹²⁵ Foschetti, “Why Hispanic Marketers Need to Consider Mobile.”

¹²⁶ “46% OF U.S. Tweens Use a Cell Phone, Nielsen Reports,” 10 Sept 2008, <http://www.nielsenmobile.com/html/press%20releases/MobileKids.html> (viewed 10 Dec. 2008).

“unobtrusive” and “targeted.”¹²⁷ Mobile marketers and brands are not oblivious to children and the commercial opportunity they represent.

...[A]s teenagers continue to spend less time with print and television media sources, mobile marketing is becoming an increasingly attractive alternative.... The best mobile marketing tools for connecting with AA teenagers are: SMS (text) messaging; Mobile sweepstakes; Free Ringtones, ringback tones and other mobile content; Free mobile games; and Viral messaging campaigns (can be voice, text, etc.)... Teenagers most be receptive group to mobile marketing programs given that they are so used to being interrupted with instant messaging, phone calls and texting. But to keep their attention marketers must constantly seek new creative approaches to engage them.

According to a new national survey, “Teenagers: A Generation Unplugged,” released in September 2008 by CTIA, “...teens view their cell phones as more than just an accessory....

The study also found that cell phones are fast becoming a social necessity among teens. A majority (57 percent) view their cell phone as the key to their social life.

With nearly four out of every five teens (17 million) carrying a wireless device (a 40 percent increase since 2004), it’s not surprising that six in ten teens (57 percent) credit mobility for improving their quality of life. Over half of the respondents (52 percent) agree the cell phone has become a new form of entertainment and one-third of teens currently play games on their phone. On a more serious note, 80 percent of teens surveyed said their cell phone provided a sense of security while on the go, confirming the cell phone has become their mobile safety net when needing a ride (79 percent), getting important information (51 percent), or just helping out someone in trouble (35 percent).

From texting to talking and logging on to social networking sites, teens carry cell phones to have access to friends, family and current events. Ironically, while only one in five (18 percent) teens care to pinpoint the location of their family and friends via their cell phone, 36 percent hate the idea of a cell phone feature allowing others to know their exact location.¹²⁸

Youth are also leading the charge in the area of mobile video, one of the fastest growing sectors of the mobile industry. “According to data compiled by Nielsen for the third quarter of 2008, more than 100 million U.S. consumers—42 percent of mobile subscribers—have video-capable cell phones. An estimated 10.3 million of those mobile

¹²⁷ “New Harris Interactive Study: During Economic Downturn, Mobile Advertising Seen as Key to Reaching On-the-Go Consumers,” 28 May 2008, <http://www.harrisinteractive.com/news/allnewsbydate.asp?NewsID=1310> (viewed 10 Dec. 2008).

¹²⁸ CTIA–The Wireless Association and Harris Interactive. “Teenagers: A Generation Unplugged,” 2008, <http://www.ctia.org/advocacy/research/index.cfm/AID/11483> (viewed 11 Dec. 2008).

consumers are watching TV/video on their cell phones” (a 14 percent increase over the previous quarter):

- 65 percent of mobile video viewers are under the age of 35 compared to 35 percent for total mobile subscribers.
- 32 percent of mobile video viewers are between 25-34 years old.
- 18 percent of mobile video viewers are teens, an avid and engaged mobile video segment.
- On average, teens watch 22 mobile video sessions per month and spend 15 minutes per session viewing mobile video.
- Over half of teens (54 percent) report watching video on their cell phones in bed. That’s 1.5x more likely than average viewers.
- 64 percent of teens report watching programs to completion, the highest portion of any age group.
- Teens are watching an average of 11.7 channels a month on their cell phones.
- Teens are also more interested in seeing more user-generated content in the future than average viewers.¹²⁹

Milton Ellis, a vice president and senior consultant at Harris Interactive, a digital market research company, has addressed the potential of mobile devices for marketing to teens directly:

No other advertising medium approaches the personal relationship consumers have with their mobile devices.... This relationship needs to be respected, but can be leveraged by marketers through robust segmentation and personalization. The key is to gain consumer interest by baiting the hook and providing them with something traditional advertising cannot. Our research indicates that teens will be strong early adapters to this advertising, with adults not far behind.¹³⁰

Not surprisingly, the leading online gathering places for teens, including Facebook, MySpace, and Bebo, all have mobile versions, with the same questionable practices of data collection and user tracking that we cited in our earlier complaint.¹³¹ Ever-present mobile communications will only escalate these practices. Among the first to seize this opportunity to capture the youth demographic is AdMob, which “...enables developers to monetize Facebook mobile applications by integrating AdMob's industry-leading mobile publishing solutions into any Facebook mobile application.”¹³²

¹²⁹ “Nielsen: Mobile Video Use Rises,” *AdWeek*, 26 Nov. 2008, http://www.adweek.com/aw/content_display/news/digital/e3i7b1dd533ab2eae76e8bee0aa3a6db99d (viewed 11 Dec. 2008).

¹³⁰ “New Harris Interactive Study: During Economic Downturn, Mobile Advertising Seen as Key to Reaching On-the-Go Consumers.”

¹³¹ Facebook: <http://www.facebook.com/apps/application.php?id=2915120374&b>; MySpace: <http://www.myspace.com/myspacemobile>; Bebo: <http://www.bebo.com/MobileHome.jsp> (all viewed 11 Dec. 2008).

¹³² <http://www.admob.com/s/solutions/facebook>; <http://www.facebook.com/apps/application.php?id=12940065303> (both viewed 11 Dec. 2008).

The role that mobile social networks are increasingly playing in data collection and consumer targeting is illustrative of why the commission must analyze the structure of the mobile marketing offer. Itsmys.com, for example, purportedly the “second-largest mobile-only social network in the U.S.,” tells advertisers that, via data collection, it can help “brands to address mobile surfers with custom-tailored individual ads wherever they are,” and that its rich-media mobile advertising “brings interaction and response channels to your mobile campaigns in form of sounds, animated pictures, personalizable branded content, full-screen advertising, interactive design tools, mobile video and TV and many other options.”¹³³

Many other mobile companies are already looking to exploit teens for commercial gain. Kiwibox.com, an online community for females between 13 and 21, has developed a mobile community tied to its 1.8 million-member online community. In promotional literature, Kiwibox claims that its communities provide “one of the largest distribution and marketing channels that connects marketers in a controlled and interactive environment with this highly sought after female audience.” The company adds that its “suite of custom-built market research tools ... can be directed toward teens in general, or can be targeted by age, gender and location.” Kiwibox boasts to advertisers that “our market research will allow you to find out what is really on the mind of your teen customers.”¹³⁴

No less an online powerhouse than Microsoft has targeted a similar demographic. In May 2007, Microsoft acquired Screen Tonic, a mobile advertising delivery platform, which created STAMP, the first technological platform specifically designed for managing and delivering mobile advertising.¹³⁵ With STAMP, Microsoft gained the ability to allow mobile portals to display advertising content on their mobile pages or in their mobile applications to generate new revenues. Microsoft was quick to capitalize on this acquisition. One of the marketing campaigns that incorporated Screen Tonic’s capabilities was for Nivea, which wanted “to transform the company brand from simply a product to an experience for mobile teenage women.” According to the Microsoft website, Screen Tonic distributed banner ads across the Microsoft mobile network for Nivea’s teen-focused magazine *Fun, Young and Independent*, which “enticed young female readers with the promise of ‘Girly gossip, news and tips.’” Once girls visited the site, they were prompted to add their emails to the company’s mailing list, a vital part of the plan for “capturing users’ email addresses” for future marketing purposes.¹³⁶

¹³³ Dan Butcher, “Reebok Breaks Mobile Social Networking Campaign,” *Mobile Marketer*, 11 Dec. 2008, <http://www.mobilemarketer.com/cms/news/social-networks/2269.html>; <http://www.itsmy.biz/social/> (both viewed 11 Dec. 2008).

¹³⁴ Kiwibox.com Media Kit.

¹³⁵ Kristen Nicole, “Microsoft Acquiring ScreenTonic for Mobile Ad Platform,” Mashable.com, 3 May 2007, <http://mashable.com/2007/05/03/microsoft-screentonic/> (Viewed on July 3, 2008); <http://www.screentonic.com/at-a-glance1.htm> (both viewed 3 July 2008).

¹³⁶ <http://advertising.microsoft.com/research/nivea> (viewed 11 Dec. 2008).

ELLEgirl, an international style guide for the “brand savvy teen,” has also developed a “fully branded mobile website” called ELLEgirl Mobile. According to a company media kit, ELLEgirl offers “daily celeb gossip,” a fashion section complete with trends, “hot items,” and “celeb style,” as well as an entertainment section containing CD reviews and a TV guide.” It is clear from the available information that ELLEgirl is very interested in its teenage audience as a marketing demographic. Having profiled its user base by age (the average user is 16.4 years old), the company alerts advertisers and marketers that the average ELLEgirl reader “spent an average of \$125 on cosmetics, hair care, skin care, fragrance and other beauty products in the past 6 months.”¹³⁷

Myxer, meanwhile, a provider of ad-supported digital content and media for mobile devices, “offers advertisers an opportunity to reach one of the Internet’s largest communities of tech savvy young users.”¹³⁸ The company’s 9.5 million users are “primarily teenagers and college students,” and it allows brands like McDonald’s, NBC, ABC Family and Friendly’s to use its “mobile platform to deliver branded mobile content and integrated digital ad campaigns” targeting this audience.¹³⁹ Over 12 percent of its target audience is 13 to 17 years old, Myxer tells its customers: “Get your message across. Grab the attention of mobile, savvy trendsetters in a big way! Play your latest commercial, advertisement or audio spot to a captive audience. You’ll have their complete attention while they wait for their download.”¹⁴⁰

Almost all US teens, noted a recent research report, will soon own a mobile phone (17 million by 2012), with the market “reaching a saturation point.” Market research into gender differences regarding cell phone use, as well as teens’ overall use of mobile communications, underscore why establishing protections on youth mobile marketing should be a top commission priority. Marketers are also closely following multicultural youth. As a recent MultiMedia Intelligence report notes, “Within the teen segment, Hispanic teens have unique wireless usage characteristics.... Like the broader US teen market, Hispanic teens ask their phones to do more, from text messaging to purchasing content and feature a higher overall Average Revenue per User (ARPU).”¹⁴¹

Frank Dickson, chief research officer for MultiMedia Intelligence, makes clear the intentions of the mobile industry with regard to the youth: “Teens overall are a critical wireless market segment, as initial subscriber and handset relationships can establish

¹³⁷ “Ellegirl Mobile 2008,” media kit.

¹³⁸ “Myxer: Go With It,” company overview and media kit.

¹³⁹ Dan Butcher, “Myxer Reaches 10 Million Users,” *Mobile Marketer*, 19 June 2008, <http://www.mobilemarketer.com/cms/news/content/1184.html> (viewed 11 Dec. 2008).

¹⁴⁰ Myxer Media Kit.

¹⁴¹ “Free Teen Wireless Whitepaper Quantifies and Describes the US Teen Market,” 16 Sept. 2008, http://www.multimediantelligence.com/index.php?option=com_content&view=article&id=125:free-teen-wireless-whitepaper-quantifies-and-describes-the-us-teen-market&catid=37:frontpagetitleonly; “Hispanic Teens Increasingly Important Wireless Consumers, According to MultiMedia Intelligence,” 7 Oct. 2008, <http://www.forbes.com/businesswire/feeds/businesswire/2008/10/07/businesswire20081007005370r1.html> (both viewed 11 Dec. 2008).

lifelong purchasing patterns.”¹⁴² With this most vulnerable population squarely in the crosshairs of an aggressive mobile ad targeting system, the duty of the FTC to act should be equally manifest.

E. Data Mining

“Reach your customers anytime and anywhere”
—Impact Mobile

Few mobile users realize that their communications and actions are monitored and recorded for marketing purposes. Indeed, mobile subscribers are often too busy *using* their phones and PDAs to concern themselves much with the privacy implications of the mobile platform. But AdMob’s approach to Apple’s iPhone is typical of industry’s opportunistic stance in this regard. “People take their mobile phones with them on-the-go,” explains the AdMob website, “and our iPhone ad unit leverages dynamic maps, allowing customers to enter their zip code within the ad unit itself to find your locations nearest them. Convert clicks to in-store sales.” That kind of service comes with a hidden cost, however, and as with so many mobile marketing applications, the flipside of convenience is surveillance. AdMob admits as much in its promise to “Capture Personal Information: Collect lead generation information directly from your target audience. Let a mobile subscriber provide registration information or other details directly from your ad.”¹⁴³

Such data mining efforts are not limited to mobile transactions alone, moreover, with companies such as Wmode, a mobile content distributor, integrating such technologies as NetInsight to “[m]onitor usage of loyalty cards and personal offer codes to connect the dots across online and offline channels... and [c]apture conversions and revenues across online and offline channels.”¹⁴⁴ Ringleader Digital, similarly, explains that “[a]s mobile browsing, search and other behavioral components are tracked and a history is built up, we can begin to integrate that data with zip code, context and perhaps publisher level data profiles. The granularity of targeting will be an evolution that comes together over time.”¹⁴⁵

Nielsen Mobile, with its P\$YCLE application, its Marketing Customer Information Files (MCIF), and extensive marketing databases, is among the leaders in bringing online and offline data together. “When you append P\$YCLE codes to your MCIF or any other marketing database,” the company explains to prospective clients,

¹⁴² Quoted in “Hispanic Teens Increasingly Important Wireless Consumers, According to MultiMedia Intelligence.”

¹⁴³ <http://www.admob.com/s/solutions/campaignstrategies#landing> (viewed 11 Dec. 2008).

¹⁴⁴ http://netinsight.unica.com/products/eCommerce_Optimization.htm (viewed 10 Dec. 2008).

¹⁴⁵ Phil Leggiere, “Closing the Mobile BT Loop,” *Behavioral Insider*, 5 Nov. 2008, http://www.mediapost.com/publications/?fa=Articles.showArticleHomePage&art_aid=94206 (viewed 11 Dec. 2008).

you can pinpoint targets who have the resources and propensity to purchase specific financial products and services.

- P\$YCLE links your segments to the outside world with links to actionable third-party data—Nielsen Claritas has combined the power of P\$YCLE segmentation with up-to-date consumer data from Equifax, Experian, and Acxiom. Our partnership with all three of the major consumer-database companies means that you can get P\$YCLE codes where you already get your household-level data.¹⁴⁶

Since many mobile devices do not yet support Web-like tracking cookies, it can be difficult to gather consumer behavior for marketing analysis and segmentation. However, mobile applications are being designed to compensate for this deficit. As Steven Feldman, the marketing vice president of Cielo Group, points out to marketers, Cielo’s “branded application comes to the rescue, essentially serving as that tracking ‘cookie’” that mobile marketing lacks. “Within the application, brands can follow consumers’ activity—where they visit and what content they view. Marketers can also ask profiling and survey questions over time in order to gain information for segmentation and targeting. All the while, your ongoing dialogue with consumers serves to strengthen the relationship.”¹⁴⁷

Impact Mobile, a mobile advertising agency, is also involved in the current push by marketers to promote mobile data mining. Its JumpTXT Media Platform enables “companies and partner agencies to implement time-sensitive, personally relevant customer retention and acquisition campaigns.” This platform provides a range of user analytic and data mining tools that mobile websites can use to commodify their audiences. For example, registration for a mobile community using the platform is

based around one page of questions that the member *has* to fill out. Here the most important data such as name, post code, email, mobile number and high-level interests are entered. Following the activation, the member is encouraged to further profile himself. For example, if an interest in Music was initially given, the member can choose from a wide range of music categories to specify his interest in more detail. And because it is a mobile application, the company stresses that advertisers “can reach your customers anytime and anywhere, create a brand new dialogue and obtain real-time tracking and reporting information.”¹⁴⁸

Mobile data mining practices are constantly improving as companies devise new ways to extract greater quantities of more precise personal data from consumers. Google is one of the companies most energetically pushing the envelope and actively encouraging the adoption of tracking cookies on mobile devices. Through its mobile operations, “Google

¹⁴⁶ “Nielsen Mobile and Mediamark Research & Intelligence Partner on Mobile Audience Targeting Tool,” 31 July 2008, <http://www.nielsenmobile.com/html/press%20releases/NielsenMobile-MRI.html> (viewed 11 Dec. 2008).

¹⁴⁷ Steven Feldman, “10 Reasons to Launch a Mobile App,” *iMedia Connection*, 25 Feb. 2008, <http://www.imediaconnection.com/content/18438.asp> (viewed 11 Dec. 2008).

¹⁴⁸ http://www.impactmobile.com/mobile_media.php (viewed 11 Dec. 2008).

provides mobile conversion tracking on phones that support cookies. Google can measure clicks, impression and conversions for all campaigns.”¹⁴⁹ In addition, the company will use the introduction of its much-anticipated mobile operating system and software platform, Android, to fundamentally reorient the mobile landscape in favor of mobile cookies. According to a company website, Google is planning on incorporating a variety of cookies into the Android platform.¹⁵⁰ Although it isn’t yet clear what these cookies will do, there are at least a dozen cookies included in the programming specifications.

Google and its Android platform, in fact, provide an excellent example of how a large and powerful company can shape the practices, capabilities, and core architecture of the emerging mobile system. Within the last year there has been a troubling degree of consolidation in the mobile industry among media, advertising, and technology companies. The result of this consolidation is not only the concentration of power in fewer hands, but also (2) an increased ability of these companies to use collections of user data to violate consumer privacy; (3) the integration of existing technologies to synthesize newer, more invasive targeting practices; and (4) as Google illustrates, monopolistic organizations capable of altering the DNA of the mobile marketing environment to suit their own ends.

These trends in mobile advertising aren’t an isolated American phenomenon, either. Speaking at the Mobile Marketing Forum meeting in June, Stephen Oman, global program director for the UK mobile data personalization company ChangingWorlds, commented on the importance of behavioral targeting to the future of mobile marketing. Mr. Oman stated that “advertising is another form of content that must be highly personalized over mobile and not just using basic demographic profiling. Highly targeted and relevant mobile adverts, far beyond the level achieved in traditional methods of advertising, must be realized.” He went on to comment on the importance of data mining in these campaigns, stressing that “in-depth subscriber intelligence which implicitly or automatically learns about the interests and content preferences of individual subscribers is absolutely essential for the mobile environment where a very personal device must offer only information and advertising that is strictly related to personal interests.”¹⁵¹

The actions and intentions of a European company would be of little interest to U.S. regulators were it not for the fact that the company in question has brought its expertise and technology to bear on American consumers, too. In January 2008 ChangingWorlds did just this when it launched its ClixSmart Ad Personalizer for the U.S. mobile

¹⁴⁹ Deepak Anand, “Google Mobile and What’s Next: Little Screen, Big Opportunity,” May 2008, http://s3.amazonaws.com/thearf-org-aux-assets/downloads/cnc/emerging-media/2008-05-01_ARF_EmM_Anand.pdf (viewed 11 Dec. 2008).

¹⁵⁰ <http://code.google.com/android/reference/org/apache/http/cookie/package-summary.html> (viewed 11 Dec. 2008).

¹⁵¹ “ChangingWorlds Addresses the Mobile Marketing Forum in New York City,” 11 June 2008, <http://www.earthtimes.org/articles/show/changingworlds-addresses-the-mobile-marketing-forum-in-new-york-city.428612.shtml> (viewed 11 Dec. 2008).

market.¹⁵² With its Ad Personalizer, the company “has extended its unique and patented blend of personalization and unrivalled subscriber intelligence capabilities to mobile advertising.”¹⁵³ On its website ChangingWorlds claims that its “personalized mobile advertising solution is a unique solution to deliver truly targeted and highly personalized mobile adverts that will ensure mobile operators keep both subscribers and advertisers happy.” It advises potential clients that achieving “true personalization of mobile advertising where adverts are highly relevant, attention grabbing and will illicit [sic] a response that can be measured, requires very sophisticated and PURE subscriber intelligence.”¹⁵⁴

In addition to its Ad Personalizer, ClixSmart’s Campaign Manager “captures detailed business intelligence information based on actual user behaviour” and “enables mobile operators to rapidly launch branded mobile marketing campaigns, which can be targeted at individual subscribers....” Meanwhile, the ClixSmart Recommender is touted as being “unrivalled in its ability to implicitly build user community preference information which implicitly links a subscriber’s interests to the interests of other similar subscribers and then to relevant content.” “Both individual and community subscriber intelligence is used to automatically generate personalized content recommendations based on a user’s preferences as captured by their mobile portal use and also by leveraging community business intelligence to generate community based recommendations.”

As ChangingWorlds explains,

at the core of the ClixSmart platform is a business intelligence and personalization engine that is capable of capturing unrivalled *subscriber intelligence* by automatically monitoring the implicit behaviour of users online in order to learn rich preference information and by combining this information with external sources of complimentary data, from demographic details to billing data.... The ClixSmart platform has used its behavioural profiling techniques to record approximately 50 million mobile subscriber intelligence, providing its mobile operator clients with an unrivalled repository of subscriber intelligence.... Moreover this subscriber intelligence is characterised by its use of fine-grained preference and behaviour data, unlike more traditional coarse-grained demographic features. This is important because it means that these profiles facilitate a more targeted approach to content recommendation and advertising. For example, these ClixSmart profiles cover approximately 1 billion preference features that capture critical information on the lifestyle and behavioral preferences of individual subscribers and communities of likeminded users.”¹⁵⁵

¹⁵² “ChangingWorlds Announces US Launch of AdPersonalizer for Targeted Mobile Advertising,” 1 Apr. 2008, http://www.changingworlds.com/pr_02_04_08.htm (viewed 11 Dec. 2008).

¹⁵³ http://www.changingworlds.com/mobile_advertising.htm (viewed 11 Dec. 2008).

¹⁵⁴ <http://www.changingworlds.com/personalization.htm> (viewed 11 Dec. 2008).

¹⁵⁵ <http://www.changingworlds.com/personalization.htm> (viewed 11 Dec. 2008).

Such data mining technology, as Acuity Mobile explains, “Improves with Use—All user response is tracked and used to augment the system’s understanding of the user’s preferences and interests to improve accuracy and to populate the client’s customer database.”¹⁵⁶ Ultimately, of course, the goal of mobile marketers is the same: “...to reach individual consumers on the most intimate level without wasting exposures on uninterested or irrelevant audiences,” as Ad Infuse points out.¹⁵⁷ Commenting on its own adInMotion platform, Ad Infuse explains that “To find the most relevant advertisement for an individual mobile customer, the advanced matching algorithms of adInMotion™ use:

- Data about content and advertisements
- Contextual information, e.g. time, place, media usage patterns
- Customer data, e.g. age, geography, subscription type
- External customer intelligence sources, e.g. M:Metrics, ComScore, etc.¹⁵⁸

With so-called “just-in-time search advertising” on mobile devices, moreover, ads can be tailored according to where the user is perceived to be in a given transaction cycle. For example, Medio’s MobileNow explains that

with the immediacy of ads placed within search results, you can influence mobile customers at the exact moment they’re ready to act.... [Y]ou’ll target the people who are the most interested in your product.... [U]sing data beyond keywords, Medio presents timely ads relevant to the user’s query and individual context, including device type, location, language, recent searches, and more.... Medio works closely with our partners to create the richest set of user data available. Through our deep expertise in data mining and analytics, we create behavioral “clusters,” mapping users’ tastes and preferences to provide better search results and more relevant ads. Of course, we also provide targeting parameters, specified by the advertiser.¹⁵⁹

Boasting of its “unique data mining and analytics expertise, enabling supercharged merchandising based on historic and similar behaviors,” Medio also explains that mobile marketing will offer highly personalized results as well, via “customer insights derived from advanced data mining... with an understanding of what’s important to the individual subscriber.”¹⁶⁰ What’s important to the individual subscriber, if truth be told, is privacy and security and reliability, concepts that are conspicuously absent in the trade press. It is incumbent upon the FTC, then, to ensure that mobil marketers begin to take these consumer interests to heart.

¹⁵⁶ <http://www.acuitymobile.com/products/emap.php> (viewed 11 Dec. 2008).

¹⁵⁷ <http://www.adinfuse.com/brand.php> (viewed 11 Dec. 2008).

¹⁵⁸ <http://www.adinfuse.com/platform.php> (viewed 11 Dec. 2008).

¹⁵⁹ <http://medio.com/technology/advertising/>; <http://medio.com/solutions/advertisers/> (both viewed 11 Dec. 2008).

¹⁶⁰ <http://medio.com/technology/merchandising/> (viewed 11 Dec. 2008).

F. A New Phase for the Mobile Industry

“...every mobile user has a unique phone number, a known address, and an identified sex...”

—Chetan Sharma, Joe Herzog, and Victor Melfi

The mobile industry has entered a critical phase in its development, as Smaato, a mobile advertising technology provider that is no stranger to the targeted marketing potential of mobile technology, makes abundantly clear on its website:

2008 will be a decisive year for the mobile advertising industry. The mobile Internet will establish itself as a standard medium in the media mix of many advertisers. The mobile medium will attract substantial ad budgets due to the proven effectiveness and cost efficiency of mobile campaigns. Advertisers will learn how to appreciate the advantages of mobile communication and how to optimize their communication with mobile consumers, many of whom can only be reached via mobile.¹⁶¹

If 2008 was indeed a decisive year for the mobile advertising industry, and all indications are that it was, we can only hope that 2009 will be equally decisive for consumer rights in the mobile arena. To that end, the FTC must now develop a more sophisticated analysis of contemporary digital marketing practices and data collection. The digital marketing “ecosystem” goes far beyond cookies and clickstreams. It now includes an array of purposefully “immersive” rich-media techniques, social media surveillance applications, viral targeting strategies, virtual world representations, the commingling of online and offline databases, and increasingly advanced analytical tools and metrics. All of these techniques have now migrated to the mobile phone. As an article in the *International Journal of Mobile Marketing* explained, “These new metrics are also being applied to mobile advertising right from the onset.... Meanwhile, every mobile user has a unique phone number, a known address, and an identified sex, which makes it easy to identify them as a segment. This level of detail has never been available in any previous media.”¹⁶²

¹⁶¹ <http://www.smaato.com/whitepaper> (viewed 11 Dec. 2008).

¹⁶² The authors also note, “Even though consumers are often not aware of the process, an ad that is promoted by their actions tends to be more relevant to their needs and therefore more valuable. TV ads had time and demographics on their side, whereas the Internet bought about breakthroughs in context and determination of user intent from search. Mobile embraces all these in addition to location and far stronger contextual and behavioral targeting.... Turning the mobile digital footprint into a consumer’s ‘declared intent’ is more achievable in mobile than in any other medium. Imagine the potential of an advertising campaign that relies on a combination of demographics (zip code, age, calling plans, and phone types), calling history and patterns, comprehensive mobile data usage and browsing history, real-time location, and has a simple-to-use voice search interface. Mobile operators already have all this information and capability.... This mobile combination could be unrivaled....” Chetan Sharma, Joe Herzog, and Victor Melfi, “A Five-Points Measurement Framework for Mobile Advertising,” *International Journal of Mobile Marketing* 3.1 (June 2008): 6.

As a means of harnessing the power of this new platform, the new guidelines in support of consumer privacy rights, published earlier this year by the Mobile Marketing Association (MMA), simply do not go far enough.¹⁶³ Many of the members of the MMA, it should be noted, including Zoove, XIAM, Limelife, Augme, and others profiled in this complaint, either use or have developed invasive mobile products of their own. The privacy committee is wholly lacking, on the other hand, in any consumer advocates or representatives of public interest organizations.¹⁶⁴ The solution to the mobile privacy puzzle, in any case, is not a quick opt-in procedure, but a full and fair description of *all* marketing practices that materially affect consumers, alerting them to how they are profiled and targeted by various technologies. A real opt-in provides *disclosure* and granular *control* of what the consumer experience will be. It should not be encumbered with offers of discount coupons or free services, in which consumers may be enticed to barter away their right to private, secure communications.¹⁶⁵

The MMA Global Code of Conduct, unfortunately, while replete with vague references to Notice (“an easily understandable and quickly discoverable description of the terms and conditions of a marketing program”) and legalistic definitions of Consent (which “is not carried into other programs unless the user has consented to such communications either 1) when they consented to the initial program or 2) upon the commencement of a subsequent messaging program”), is bereft of any notion of enforcement or mechanism for third-party oversight. Nor are individual members of the mobile advertising community any better in this regard. While ad companies regularly pay lip service to consumer privacy, their actions in the marketplace belie their words. “The ability to provide enhanced targeting and analytics also creates an increased requirement to fine-tune privacy guidelines,” claims Sonjoy Ganguly, vice president of product management at Ringleader Digital. “Ringleader Digital is committed to supporting privacy best practices and is taking an active role shaping future mobile privacy policies with industry organizations.”¹⁶⁶ At the same time, Ringleader is actively using techniques (e.g., mobile server-side cookies, location-based targeting, and its proprietary Media Stamp device identification technology) that are nothing if not antithetical to user privacy.

Nancy King, an associate professor of business law at Oregon State University, has assessed and summarized privacy concerns and regulatory issues connected with mobile marketing for consumers in an article in the *Federal Communications Law Journal* entitled “Direct Marketing, Mobile Phones and Consumer Privacy: Ensuring Adequate Disclosure and Consent Mechanisms for Emerging Mobile Advertising Practices.” King

¹⁶³ Mobile Marketing Association, “*Global Code of Conduct*,” 15 July 2008, <http://www.mmaglobal.com/codeofconduct.pdf> (viewed 11 Dec. 2008).

¹⁶⁴ For the membership of the MMA Privacy Committee, see <http://mmaglobal.com/modules/article/view.article.php/2029> (viewed 11 Dec. 2008).

¹⁶⁵ Studies have shown that people may trade in their privacy for free service, and generally have no idea about what’s really going on in such transactions. See, for example, “Survey Finds 61 Percent of Mobile Users Would Agree to View Advertising for Discount on Monthly Bill,” 17 Nov. 2008, http://www.gotransverse.com/news/transverse_111708.html (viewed 11 Dec. 2008).

¹⁶⁶ <http://www.ringleaderdigital.com/news.php> (viewed 11 Dec. 2008).

writes that “although telecommunications carriers are heavily regulated in the U.S. and mobile phone subscribers in the U.S. have some enhanced privacy protections over landline customers, the direct marketing industry in the U.S. is not heavily regulated. As a result, direct marketers are generally free to use consumers’ personally identifying information to generate advertising and direct marketing to mobile subscribers, subject to regulations that limit the generation of unsolicited advertising messages.”

King goes on to point out four fundamental problems associated with mobile marketing. First, it raises privacy concerns associated with mobile phones and other portable wireless communications devices, because it often involves “the collection, use, or disclosure of consumers’ personal data.” Location privacy is a second concern raised for consumers. King notes that it “is possible for mobile phone service providers and other third parties (even those consumers may not be aware of) to electronically track the geographic locations and Web surfing behaviors of mobile phone users. The mobile phone user’s cell phone number and a unique Mobile Identification Number (‘MIN’) (assigned by the manufacturer to each mobile phone and unchangeable by the user) make it possible for mobile phone carriers... to track an individual cell phone user by tracking the location of his or her mobile phone.” Third, mobile marketing “creates a risk that consumers’ personal data will increasingly be the focus of data aggregators. Without adequate privacy regulation, advertisers, mobile carriers and other third parties may combine consumers’ personal data, the contents of their electronic communications and geographic location information with other data about consumers that is already in electronic databases, thus creating larger consumer profiles with associated privacy implications.” Fourth, “there is the likelihood that unsolicited advertising will increasingly be received on consumers’ mobile phones, thus intruding on consumers’ personal space and time in both public and private spheres.”¹⁶⁷

The major carriers themselves are also among the leading mobile marketers, through their own services and with partners. For example, Verizon is using Time Warner’s Advertising.com and Third Screen Media service. “Third Screen Media’s advanced mobile advertising options include geographic, demographic, and content targeting, display, and sponsorship opportunities on Verizon Wireless’ portal, sections and article Web pages.”¹⁶⁸ Third Screen enables Verizon to utilize what it calls “precise targeting capabilities.”¹⁶⁹ Millennial Media also signed a mobile marketing deal with Verizon. Millennial’s “sophisticated targeting... options include content channel, demographic, time-of-day, handset, carrier, geography and behavior.”¹⁷⁰ Also, Sprint enable’s

¹⁶⁷ Nancy King, “Direct Marketing, Mobile Phones and Consumer Privacy: Ensuring Adequate Disclosure and Consent Mechanisms for Emerging Mobile Advertising Practices,” *Federal Communications Law Journal* 60.2 (Mar. 2008): 239-334.

¹⁶⁸ “Platform-A to Manage Verizon’s Online and Mobile Web Ad Inventory,” 14 Apr. 2008, <http://www.timewarner.com/corp/newsroom/pr/0,20812,1730581,00.html> (viewed 11 Dec. 2008).

¹⁶⁹ http://www.thirdscreenmedia.com/pdf/TSM_Advertiser_Snapshot.pdf (viewed 11 Dec. 2008).

¹⁷⁰ Scott Dance, “Millennial Media Inks Mobile Ad Deal with Verizon Wireless,” *Baltimore Business Journal*, 3 Apr. 2008, <http://www.bizjournals.com/baltimore/stories/2008/03/31/daily27.html>; http://www.millennialmedia.com/advertisers/advertisers_mbrand.htm (both viewed 11 Dec. 2008).

marketers to engage in a broad range of targeting, including through the use of “demographics: age, gender, household income, geography, education; time of day and day of week; Content Categories: search & directories, news & finance, entertainment sports.” “With Sprint's advanced targeting capabilities, brands can add a level of relevance to their campaigns not available with other traditional media. Through demographic, contextual and behavioral targeting, you can get the right message to the right people at the right time....”¹⁷¹

Finally, AT&T encourages marketers to partner with them: “Every quarter, AT&T approved content providers have an opportunity to submit their promotional ideas—from sweepstakes and contests to exclusivity offers and more—to AT&T for inclusion in our cobranded marketing. AT&T reviews the submissions in each of the major product categories (games, videos, apps, graphics, and ringtones) and selects 10 to 12 promotions that look especially promising.”¹⁷² Last September AT&T announced a partnership with Yahoo for mobile advertising services.¹⁷³ Yahoo mobile marketing services (“Mobile is the medium to reach your audience wherever they go”) provides AT&T and others “... spot-on behavioral demographic, geographic and device targeting which helps you understand—and anticipate—exactly what your customer needs....”¹⁷⁴

Yahoo allows third-party developers to create “mobile widgets,” which the company defines as “a software module developed in accordance with these Terms of Use and capable of operating on the Yahoo! Mobile Widget Platform that enables users to access certain content and/or services from such software module.”¹⁷⁵ Examples of such widgets are the MySpace and eBay widgets.

The MySpace widget allows consumers to use “the best of MySpace anytime, anywhere.

Keep up-to-date on all your friends with the MySpace widget on your phone. Send a message to your friends, check out your friends' photos, or admire your own, and update your mood and status on the fly. You'll always know what's going on with the people that matter to you, with a widget that keeps you connected, wherever you are.

With the MySpace widget, you can always check for comments and messages from your friends, see photos the minute they're posted, and never feel out of

¹⁷¹ <http://www.sprintmedianetwork.com/relevance.php> (viewed 11 Dec. 2008).

¹⁷² <http://developer.att.com/developer/index.jsp?page=goToMarketArticle&id=24100175> (viewed 11 Dec. 2008).

¹⁷³ Dan Butcher, “Yahoo to Power AT&T Mobile Search,” *Mobile Marketer*, 9 Sept. 2008, <http://www.mobilemarketer.com/cms/news/search/1678.html> (viewed 11 Dec. 2008).

¹⁷⁴ <http://mobile.yahoo.com/business/advertiser> (viewed 11 Dec. 2008).

¹⁷⁵ <http://info.yahoo.com/legal/us/yahoo/mobilewidgetdvlpr/mobilewidgetdvlpr-2070.html#> (viewed 17 Dec. 2008).

touch. It's the MySpace experience you can take with you, keeping you checked in, even when you've stepped out.¹⁷⁶

The eBay mobile widget urges users to “Stay on top of the bidding, selling and winning with the eBay widget....

Keep an eye on the bidding action with the eBay widget on the go. Search for items, check prices, and view photos of the things that interest you. You'll get real time updates on items you're watching, bidding on, and winning—with a widget that keeps you in the game.

Make better buying and selling decisions with the eBay widget when you're mobile. Stay in touch with your potential buyers to make quick adjustments, on pricing, shipping or payment. Get the eBay widget, and never be out of reach from the item you want.¹⁷⁷

These widgets raise privacy questions. They will certainly gather personal data for marketing purposes, with little regulation or oversight. Though the Yahoo Mobile Widget Developer Terms of Use requires notice and disclosure of the widget developer's data-gathering and privacy policy, we have seen that such disclosures are often phrased in unclear terms amidst a sea of words in a long “Terms of Use” agreement.¹⁷⁸

The Federal Trade Commission must investigate these mobile marketers and their practices. The commission should ensure that the marketers clearly disclose to their consumers a full and fair description of *all* marketing practices that materially affect consumers, alerting them to how they are profiled and targeted by various technologies.

The discussion of mobile marketing practices in this complaint is in no way exhaustive. Nor is it possible to elucidate fully the designs that marketers have on the mobile industry. Given the personal and portable characteristics of mobile technology, it appears that the ambitions and reach of the mobile marketing industry are bounded only by its imagination. Digby, for example, one of the companies that is just beginning to exploit

¹⁷⁶ <http://mobile.yahoo.com/myspace> (viewed 17 Dec. 2008).

¹⁷⁷ <http://mobile.yahoo.com/ebay> (viewed 17 Dec. 2008).

¹⁷⁸ “2.7 You SHALL do the following: (i) If your Mobile Widget will access, store, copy, distribute, or otherwise use personal data or information of users, such as users' log-in identifications, email addresses, or any information or files stored or created by a particular user on an Internet service or website, you must (a) notify each user of your Mobile Widget of how the user's personal data or information will be collected, stored, and used by you and your Mobile Widget, and (b) collect, store, and use such personal data or information in a manner that respects and safeguards the user's privacy. You must also post your privacy policy in a manner that is easy for your Mobile Widget users to access. If any user requests, or Yahoo! requests on behalf of any user, that (a) you remove such personal data and information from your Mobile Widget, servers, databases and other records, or (b) you comply with any other reasonable request with respect to such user's personal data and information, you will promptly comply with such request and provide written confirmation of your compliance.” Yahoo Mobile Widget Developer Terms of Use, <http://info.yahoo.com/legal/us/yahoo/mobilewidgetdvlpr/mobilewidgetdvlpr-2070.html#> (viewed 17 Dec. 2008).

the possibilities of the medium, claims that its mobile commerce software platform—Powered by Digby—gives “retailers the ability to deliver a superior mobile shopping experience to their customers,” enabling “their customers to purchase products anytime, anywhere. . . .”¹⁷⁹ It is just this flexibility, and the inherent multi-tasking nature of mobile devices, that demand new rules for the protection of consumer interests.¹⁸⁰

If left unregulated, marketers will ultimately strive for nothing short of a totally mobile-based data collection and targeting environment. For example, a technology company called Abaxia has developed Mobile Tag, an embedded application that enables camera phones to read and decode 2D barcode prints that can be inserted into any text, paper document, on TV or in almost any other visual medium. When a user photographs this barcode with a mobile device, Mobile Tag automatically redirects the consumer to one or more advertising opportunities, including accessing a Web page, viewing a commercial, or displaying a store locator. This application provides a method, almost unprecedented in its simplicity and rapidity, for marketers to transmit information to and track consumers.¹⁸¹

Abaxia is not the only company developing such capabilities. Another is Mobot, a “company singularly focused on mobile visual search.”¹⁸² Mobot services allow consumers to take a picture of an object and then, using technology emphasizing “image recovery, pattern recognition and image matching capability,” the company can serve relevant marketing content to the user based on what was photographed.¹⁸³ The company informs marketers of the vast possibilities of this new service:

When a consumer snaps a picture and gets an immediate response to their personal phone, you’ve made an indelible impression. Your brand is in their hand. . . . Each picture can launch a thousand marketing possibilities including promotions, voice messages, samples, trivia and polls, jingles, coupons, alerts, store locations, product information, links to purchase, links to your Web site.¹⁸⁴

¹⁷⁹ “Digby Launches Mobile Commerce Platform,” 9 June 2008, <http://www.austinstartup.com/2008/06/digby-launches-mobile-platform/> (viewed 11 Dec. 2008).

¹⁸⁰ “The final bastion of personalisation is your own data. Yet another limitation of traditional mobile devices is their capacity to store and process this data, and their proprietary methods of connectivity. To solve this problem, enter cloud computing. Cloud computing refers to concept of huge data centers operating in a networked infrastructure collectively known as ‘the cloud’. This is capable of delivering supercomputer-level power, through a thin client such as a web browsers or mobile devices. Through the cloud, data, applications and limitless processing power are accessed ‘on-demand.’ This separates the local capacity of the device, from the functionality that is accessible to it.” Jenny Williams, “Mobile Web 3.0,” *iMedia Connection*, 12 Aug. 2008, <http://www.imediaconnection.com/printpage/printpage.aspx?id=20179> (viewed 11 Dec. 2008).

¹⁸¹ http://www.abaxia.com/pdf/Abaxia_MobileTag.pdf; <http://www.abaxia.com/products-tag.php> (both viewed 11 Dec. 2008).

¹⁸² <http://www.mobot.com/company.html> (viewed 11 Dec. 2008).

¹⁸³ <http://www.mobot.com/technology.html> (viewed 11 Dec. 2008).

¹⁸⁴ <http://www.mobot.com/marketers.html> (viewed 11 Dec. 2008).

On its own website, Mobot openly discusses its grand plans for its service. “When we walk down the street, ride in the car and go about our day to day lives, we see a world rich with visual messages . . . a world ready to be mobotized. . . . We see mobotized cereal boxes, direct mail, headlines, placards, human billboards, brand tattoos, street signs, posters, logos, magazines, coasters, book covers, wild postings, CD jackets, retail signs and much, much more.”¹⁸⁵ We can only hope that our basic rights of privacy and free expression will not be mobotized in the process.

G. Unfair and Deceptive Practices Are Rampant

“By assigning a digital fingerprint to each user, you can attach demographics and behavior to individual mobile users.”
—Bango

Section 5(a) of the Federal Trade Commission Act, 15 U.S.C. § 45(a), prohibits “unfair or deceptive acts or practices in or affecting commerce.” As we have clearly detailed, there are numerous unfair and deceptive practices within the mobile advertising industry. We will highlight three egregious examples: Bango, Marchex, and AdMob.

Bango Analytics: “A Marketer’s Dream”

Bango, a mobile software developer, uses unfair and deceptive practices in its Bango Analytics service. Personal data, such as an individual’s phone or mobile service provider, is gathered surreptitiously. In fact, Bango takes great pains to ensure that its data-gathering is invisible:

How it works

- Simply place an invisible image tag on each page you wish to track especially landing pages, home pages and goals, such as download pages and forms.
- When a visitor lands on your page the tracking image is loaded
- We identify each visitor and collect a whole range of data
- Your visitor is not disrupted, [i.e., no real opt-in] they simply browse as usual
- You have immediate access to analyze or download this data.¹⁸⁶

The Bango Analytics service “monitors millions of visitors across many leading sites every moment of the day.” The company states that it assigns individual mobile users “a unique persistent Bango User ID” that it uses “for tracking and recording data as visitors click on ads and search links.” Bango is able to record a mobile user’s “identity along with a wide range of information such as their operator, country, phone, language and more.”¹⁸⁷

Bango trumpets its data-gathering ability, explaining, “In the PC world, Web analytics can’t tell you whether a mobile user is a unique individual or the same person coming

¹⁸⁵ <http://www.mobot.com/company.html> (viewed 11 Dec. 2008).

¹⁸⁶ <http://bango.com/tour/information/siteanalysis.aspx> (viewed 9 Dec. 2008).

¹⁸⁷ Bango, “Bango Analytics. A Getting Started Guide,” 2008.

back again. But this critical piece of information is available on the mobile Web,” via Bango Analytics. “By assigning a digital fingerprint to each user, you can attach demographics and behavior to individual mobile users. This is a marketer’s dream, giving you a microscopic view on consumer behavior and buying patterns.”¹⁸⁸

Bango gathers this data without adequate notice to the consumer, making it difficult for a mobile user to weigh the costs and benefits and choose whether to opt out of this profiling. This constitutes unfair and deceptive practices, and the Federal Trade Commission should scrutinize these actions.

Marchex: Call Tracking

Marchex is a local online advertising company and publisher of local content, and it uses unfair and deceptive practices in its call-tracking service. Marchex has agreements to provide call-based advertising services to three leading mobile advertising providers: AdMob, Ringleader Digital and 4INFO. Marchex surreptitiously gathers data on mobile users and even records calls made in response to ads.

Marchex’s call tracking service enables mobile advertising providers to: “(i) track the calls generated by advertisements on their network, (ii) determine exactly which advertisements delivered the calls, (iii) track and report key information including the duration, time of day and geographic location of callers, and (iv) record the calls. Marchex makes this information available to the mobile advertising provider through its comprehensive reporting interface.”¹⁸⁹

Marchex gathers this data (including recording phone calls) without adequate notice to the consumer, making it difficult for a mobile user to weigh the costs and benefits and choose whether to opt out of this profiling. This constitutes unfair and deceptive practices, and the Federal Trade Commission should scrutinize these actions.

AdMob: “Mining All the Data We’ve Captured”

AdMob is a “mobile advertising network” seeking to “target mobile users and monetize mobile traffic.” There is inadequate notice and little opportunity to opt-out of this data-gathering. Few mobile users realize that their communications and actions are monitored and recorded in order to create intimate profiles for marketing purposes.

AdMob also targets the youth demographic. It segments “market audiences” into several categories, including a “Digital Natives” category, which include boys and girls as young as 13.¹⁹⁰ AdMob also focuses on social networking sites, claiming it “enables developers to monetize Facebook mobile applications by integrating AdMob’s industry-leading mobile publishing solutions into any Facebook mobile application. Developers building

¹⁸⁸ Keefe, “Mobile: A Brave New World for Advertisers.”

¹⁸⁹ “Marchex Extends Local Strategy to Mobile Channel—Company to Provide Call-Based Advertising Services to AdMob and Other Leading Mobile Advertising Providers,” 30 Apr. 2008, <http://www.marchex.com/marchex-news/20080430.html> (viewed 9 Dec. 2008).

¹⁹⁰ <http://www.admob.com/s/solutions/targeting> (viewed 9 Dec. 2008).

mobile web applications for the Facebook community using the Facebook Platform for Mobile can easily integrate the AdMob code to start serving ads....”¹⁹¹

And AdMob is continually seeking to mine and monetize the data gathered on unsuspecting youths and other mobile users. AdMob’s CEO Omar Hamoui admitted, “We are investing a fair amount of development resources into mining all the data we’ve captured over the last 12 months of ad serving and targeting.”¹⁹²

AdMob gathers this data (and targets youths) without adequate notice to the consumer, making it difficult for a mobile user to weigh the costs and benefits and choose whether to opt out of this profiling. This constitutes unfair and deceptive practices, and the Federal Trade Commission should scrutinize these actions.

H. Conclusion

It will be essential, as mobile marketing evolves and becomes an established platform, that the commercial systems in place preserve the rights of consumers. It is especially critical that FTC act *now* to protect the interests of the public, while the mobile platform is still in development, and as an even more interactive Mobile 2.0 environment looms on the horizon.¹⁹³

The Center for Digital Democracy and the U.S. Public Interest Research Group ask that the FTC also act to protect consumers from a growing number of deceptive and unfair marketing practices and the resultant threats to consumer privacy that are a part of the rapidly growing U.S. mobile advertising landscape. We ask that the Federal Trade Commission:

1. **Require True Notice and Disclosure.** The FTC must require *notice* of all information collected on mobile devices and full *disclosure* of how that data will

¹⁹¹ <http://www.admob.com/s/solutions/facebook;>
<http://www.facebook.com/apps/application.php?id=12940065303> (both viewed 11 Dec. 2008).

¹⁹² <http://www.admob.com/s/solutions/campaignstrategies#landing> (viewed 11 Dec. 2008).

¹⁹² Brad Berens, “AdMob Talks Wireless Success Strategies,” *iMedia Connection*, 13 Feb. 2007, <http://www.imediaconnection.com/printpage/printpage.aspx?id=13639> (viewed 11 Dec. 2008).

¹⁹³ “Designed as a two way communication vehicle, much of Mobile 1.0 was one way—distributing ringtones, wallpapers, music, information, and videos to the consumer, so that they could enjoy them anywhere, anytime. Mobile 2.0 will return the device to its original use, two-way communication, with dynamic services that allow the consumer to participate in a community or social network, share media, express opinions.... It is these unique attributes of mobility combined with what we have learned through the social web phenomenon that will define Mobile 2.0 services. Mobile 2.0 services will provide consumers with mobile entertainment, mobile connections to their social network, mobile connections to their digital world, and mobile tools to help them manage their ever increasing mobile lives.” And, it should be added, mobile assaults on their personal privacy. Nellymoser, “Mobile 2.0,” <http://www.nellymoser.com/demos.html> (viewed 11 Dec. 2008).

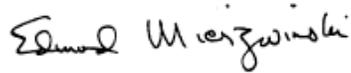
- be used. In particular, the commission needs to spell out how consumer consent is to be given, to ensure that it's meaningful.
- a. The FTC may need to ask Congress to pass federal legislation requiring affirmative consent for all data used—permission that must be regularly updated and re-affirmed by users.
 - b. All data collection and mobile marketing techniques must be unbundled, disclosed, and given affirmative consent by users.
 - c. The commission must strive to have industry develop meaningful codes of conduct related to marketing that go beyond these basic principles.
2. **Redefine “Unfair and Deceptive.”** In addition to refining and updating the concept of “personally identifiable information,” the commission must help consumers understand how tracking and targeting technologies can exploit their geographic location and the Mobile Identification Number (MIN) of their phones.
- a. The FTC will have to reframe what is “unfair and deceptive” in the mobile arena.
 - b. The commission also needs to examine the relationships mobile marketers have with carriers, to understand how and what data are being shared and used by partners and affiliates.
3. **Review Industry Self-Regulation.** With industry self-regulation having proved so ineffective, the FTC should examine the various mobile marketing standards groups to determine how well consumer interests are represented, including analyzing the various reports and self-regulatory proposals that have been produced thus far.
- a. The FTC should work with the FCC and state authorities to create a new Mobile Marketing, Consumer Protection, and Privacy Task Force. The Task Force should make annual reports to the public and, where appropriate, recommend new legislation to Congress.
4. **Protect Youth from Unfair or Deceptive Practices.** The commission should also open up a separate inquiry and propose rules to protect youth from unfair or deceptive mobile marketing practices. As this complaint demonstrates, emerging data collection and targeting mechanisms pose significant threats to the privacy of hundreds of millions of mobile users in the U.S. But those most susceptible to the risks and temptations of these practices are also those least able to guard against them—namely, children and teenagers. The commission must work to protect them.

The scope of the threat posed by the mobile marketing practices outlined in this complaint is clear. The urgent need to protect the public should galvanize the FTC into immediate action. Consumer privacy rights should not be lost—but rather enhanced—as we move farther into the wireless future.

Respectfully submitted,



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