

Digital marketing to youth: an emerging threat

Jeff Chester, Executive Director of the Center for Digital Democracy, and Dr Kathryn Montgomery argue for decisive action on digital marketing

Much of the debate on the roles that media and advertising have in the youth obesity crisis has focused on television. In this article the authors argue that increasingly sophisticated digital marketing has escaped the same level of scrutiny, with the result that young people on both sides of the Atlantic are at risk from a marketing industry that is able to target them with an ever-increasing level of personalisation. They conclude that, while self-regulation is undoubtedly of value, the time has come for governments to take decisive action of their own.

A powerful global digital marketing system—designed to deliver personalised interactive commercial messages wherever we are—is emerging as one of the principal features of the internet era. Advertisers and marketers around the world are collaborating to perfect what they are calling a ‘media and marketing ecosystem.’¹ Harnessing the interactive capabilities of social networks, broadband video channels, mobile services, video games, and virtual worlds, marketers are, not surprisingly, focusing much of their attention on children and adolescents. Products linked to the youth obesity epidemic are now regularly advertised through such digital advertising strategies, with food and beverage companies playing a major role developing this new marketing landscape. Beyond junk food, of course, consumers young and old will increasingly face a dizzying array of sophisticated pitches delivered to their personal computers, mobile devices, and digital TVs. Pharmaceuticals and other health care products, toys, autos, travel, and (if we can afford it) mortgages and loans, are already being marketed in the United Kingdom and elsewhere using cutting-edge online advertising strategies.²

Much of the debate on the role media and advertising play in the youth obesity crisis has focused on television. But while governmental action has recently been taken in the United Kingdom to limit the promotion of high-fat and low-density foods on TV, and some new self-regulatory measures have been adopted in the US, digital marketing has escaped serious scrutiny. The advertising industry is well aware that, as one marketer recently remarked, ‘the eyeballs have moved.’³ There has been remarkably little critical analysis of the new digital advertising system and its implications for the public health of young people. But today’s youth are being treated as digital ‘guinea pigs,’ where an array of marketing techniques finely honed to influence emotion, behaviour, and identity are being deployed without a thorough understanding of the consequences. Purposefully created ‘immersive’ and ‘virtual’ environments that promote relationships with brands have been developed; technologies that closely examine one’s online network of friends to help trigger a ‘viral’ marketing response have been deployed.⁴

Under the digital microscope

The food and beverage industry are using a broad range of digital marketing practices for reaching and engaging young people, including behavioural targeting, in-game advertising, mobile marketing, user-generated ads, viral videos, and immersive, ‘brand-saturated’ environments.⁵ Working with advertising agencies, research institutes, technology companies, and media companies to better understand how to effectively target youth in this new landscape, food marketers are a key part of a well-funded digital marketing research infrastructure.

While marketers have long studied children and teens, over the last several years they have expanded their research efforts. The major brands and advertising agencies have been concerned that unless they fully understand the interests and motivations of today’s digital-savvy global youth, they risk losing their ability to influence and sell. Consequently, many of the leading online companies have conducted research efforts that analyse how young people use technology, communicate online, and view adverts. For example, Microsoft’s Digital Advertising division joined forces with MTV in 2007 to produce ‘Circuits of Cool/Digital Playground,’ billed as ‘the largest study of its kind’ to explore how young people (8-24 year olds) were interacting with technology around the world. Based on more than 300 hours of interviews and ethnographic studies with 240 10-20 year olds, the report analysed how 13-17 year olds were ‘deepening’ their ‘engagement’ with the social dimensions of digital technology.⁶

Among some of the other leading digital advertising firms involved with youth research are Google, Yahoo, and Nickelodeon.⁷ Analysing the youth market is only a part of a more elaborate global online advertising research apparatus. Microsoft, for example, has created ‘adCenter Labs’—with one based in Beijing—to ‘incubate’ new digital marketing technologies. Yahoo’s Bangalore-based lab working on online advertising is exploring ‘Machine Learning techniques to learn the associations between pages, advertisements and users.’ Advertisers have also been closely studying EU-based ‘digital families.’⁸

Beyond market research, food and beverage companies are also part of the online ad industry’s stampede to

take advantage of the latest insights from neuroscience.

The Nielsen Company, for example, already well established in the field of traditional audience measurement in more than 100 countries, has extended its reach into the internet through its 'online intelligence' properties—NetRatings and BuzzMetrics.⁹ More recently, the company made a 'strategic investment' in NeuroFocus, a firm that specialises in the application of brainwave research to advertising, programming, and messaging.¹⁰

Other companies have turned to such techniques as eye-tracking studies, galvanic skin response, functional magnetic resonance imaging (fMRI), and electroencephalography (EEG) in an effort to assess the effectiveness of various advertising campaigns. Marketers are particularly interested in research that addresses how 'specific patterns of brain activation predict purchasing,' the potential 'shopping centers in the brain,' and the neurological basis of purchasing.¹¹ Food and beverage companies, including Coca-Cola, Pepsi, McDonald's, and KFC, have already used some form of neuromarketing research.¹²

The digital marketing paradigm

At the heart of this interactive advertising revolution is *data collection and measurement*—specifically, more precise techniques for gathering and assessing user interaction and response, yielding unprecedented amounts of details about individual consumers.¹³ Users, including children and adolescents, are being electronically shadowed across multiple websites as their online activities are monitored. So-called 'behavioural advertising' has become a mainstay in most digital marketing campaigns. Many of the leading online ad services in the UK have deployed this digital marketing dossier tactic. Yahoo!, for example, calls its UK behavioural targeting effort 'intelligent user profiling.' Claiming it captures consumer 'DNA' from our online 'behaviours,' its profiles assess how Yahoo! users are 'most likely to respond' to a wide range of services.¹⁴ Advertising.com, AOL's digital marketing subsidiary, offers marketers a UK 'behavioural network' where they can track and target consumers throughout their online journey.¹⁵ Microsoft Advertising in the UK explains to potential clients that 'behavioural targeting uses detailed analysis of the pages that users view to build an intuitive profile of their interests, and then puts this information at the heart of precisely targeted internet marketing solutions.'¹⁶

The goal, as one trade publication recently explained, is to develop a 'complete view of the customer journey,' where user behaviour is both well-understood and directed.¹⁷ A March 2008 *New York Times* report on behavioural targeting revealed that five U.S. companies alone—Yahoo, Google, Microsoft, AOL and MySpace—record at least 336 billion data 'events' each month.¹⁸ The personalised targeting that results from this vast stockpile of digital data has become a veritable goldmine. As the J.P. Morgan *Nothing but Net* report explained in

January 2008: 'We believe that advertisers used to pay for audiences on websites but will now start to pay for specific users.'¹⁹

Armed with such behavioural targeting technologies, Coca-Cola used online marketing specialist Tacoda (now part of AOL's Advertising.com) to target 'specific behavioural segments' for the MyCoke Rewards program. The result was a dramatic increase (250 per cent) in the number of users who engaged in the desired 'click-through' behaviour.²⁰ Food and beverage companies using data collection strategies to advance their marketing efforts also include McDonald's, Burger King, Pizza Hut, and Pepsi.²¹

Enhanced forms of behavioural advertising are emerging, based on technologies that better 'predict' how consumers will respond to interactive ads.²² There are also new approaches that incorporate details about our values and attitudes. For example, psychographic targeting company Mindset Media announced a new service early in April 2008 to 'enable brand advertisers to target consumers with specific personality traits that drive buyer behaviour and brand affinity...[based on] 20 different elements of personality, including creativity, assertiveness, self-esteem, and spontaneity...'²³

The \$200 billion target

The latest deployment of these tracking and targeting technologies can be found within social networks, the site of so much online activity by children and youth. According to a recent Ofcom report, nearly half (49 per cent) of all U.K. children ages 8-17 currently have a profile on a social networking site.²⁴ The two leading social networks—MySpace and Facebook—have witnessed amazing growth, particularly among young people. Facebook (the second-most visited site in the UK, behind Google) grew 125 per cent in a single year, and reported more than 60 million users in 2007.²⁵ By April 2008, Facebook officially caught up with MySpace in terms of unique monthly visitors worldwide, with 115 million visitors.²⁶ In the UK, just over half of Bebo's 22.4 million worldwide users in January 2008 were British, and Bebo is the most searched-for brand (ahead of EBay and Facebook) in the country.²⁷ (Time Warner's AOL acquired the popular Bebo site in April 2008 for \$850 million.²⁸) 'Social media is booming,' concludes the UK-based *Top Brands in Social Media 2008* report. Food marketers have rushed in to exploit this new territory for connecting with young consumers, including Pepsi, Coca-Cola, McDonald's, and Burger King.²⁹

Because young people live so much of their personal lives on these sites, marketing through social networks can combine a variety of digital techniques, including behavioural profiling; viral, peer-to-peer brand promotion; user-generated advertising; broadband video; and mobile campaigns. An entire infrastructure has emerged—from specialty ad agencies to tracking and measurement services to 'third-party developers'—to

facilitate what is now called 'social media marketing.' In the words of UK-based Immediate Future, '*Social media is a global phenomenon in which old demographics no longer apply. Conversations happen at the click of a button. New communities are born every day and brands need to be involved; in the first instance to listen, and then to participate.*'³⁰

MySpace's new marketing service shares many of these invasive characteristics. A so-called 'hypertargeting' system, it can create, the company boasts, a 'detailed profile of each user and their friends, including age, gender, location and interests,' offering access to the valuable demographic groups that frequent its platform.³¹ By combining registration data ('personal demographic information provided by MySpace users when they become members') with profiling data ('freely expressed information by consumers about their passions and interests'), MySpace promises to deliver 'next-generation targeting.' Among the initial advertisers to take advantage of this new service was Taco Bell.³²

MySpace executives report that marketers who make use of the behavioural data on its members have experienced success ('733 per cent lift in brand awareness, 800 per cent lift in recall, 152 per cent increase in brand favorability, and 179 per cent increase in purchase intent'³³) Not to be outdone, Facebook launched a multi-pronged approach for marketing on its site in November 2007, unveiling '*an ad system for businesses to connect with users and target advertising to the exact audiences they want,*' offering '*advanced targeting*' by '*age, gender, location, interests*' and other variables, as well as '*deep analytics*' for understanding exactly how individuals are engaging with the marketing.³⁴ Facebook has embraced what it calls 'social ads,' which permit brands to integrate their messages into the profiles and relationships of its members.

Food and beverage companies such as Coca-Cola, Kraft, Pepsi, and Taco Bell are among the pioneers of this new marketing strategy.³⁵ Kim Lloyd, senior director of global marketing for McDonald's (whose extensive online advertising efforts include HappyMeal.com, a new virtual playground for children), makes clear the primary reason for targeting the 80-million-strong millennial demographic: '*They are community-oriented, optimistic, civic-minded and have \$200 billion in spending power annually.*'³⁶

Viral outbreak

One of the more curious by-products of the social networking revolution is the phenomenon known as 'widgets'—small, downloadable applications that allow users to customise their personal pages while also serving as a means of delivering advertising and tracking user responses to those ads. From games, such as Scrabulous (based on the game Scrabble), to entertainment, such as iLike (which lists one's favourite music), to Google's 'gadget' utility, widgets are becoming omnipresent devices in the world of social networks.³⁷

They can be created solely as an ad, or can contain an ad that is launched as the user interacts with the application. In either case, they have become an important part of the interactive marketing infrastructure, promoting brands, selling products, and collecting user data. Food and beverage marketers have embraced widget advertising, with Mars, Pizza Hut, Papa John's, Coca-Cola, and Pepsi among the many brands and products promoting their products via widgets.³⁸ Travelling as they often do from user to user, widgets are prototypical viral devices, aptly described by one advertising company as 'Snaggable Ads,' which can be shared across social networks, home pages, and blogs. Each widget comes equipped with a 'unique ID' that permits tracking and campaign analysis as the ad is shared (forwarded) virally across the internet.³⁹

Video that also watches you

Thanks to sites such as Google's YouTube, Yahoo! Video, Vimeo, and Daily Motion, online video is quickly becoming a fully developed medium, offering long-form programming and highly targeted interactive advertising that will be viewed by tens of millions. In March 2008, 66 per cent more U.S. internet users watched online videos than only one year before.⁴⁰ As the online video market matures, we will see not only more advertising, but also new forms of product placement and ad targeting. Google's new 'branded entertainment division,' for example, recently launched a Burger King-sponsored series on YouTube, involving comedic shorts produced by Fox's 'Family Guy' creator Scott MacFarlane and prominently introduced by an animated Burger King character. Google is distributing the cartoon ad series widely throughout its network of content sites.⁴¹ An online video diary by two young extreme sports enthusiasts was similarly used to snag young users into the exploits of a General Mill Totinos Pizza Roll campaign.⁴² Bebo has helped pioneer the placement of products as part of the narrative of its 'Kate Modern' online video series, including for Cadbury and Mars.⁴³ Online video, including so-called 'branded environments,' has become a digital marketing staple for food advertisers. The list includes Pepsi, KFC, Nestle, Mars, Wendy's, and McDonald's.⁴⁴

It's all in the game

Along with the videogame industry itself (which now rivals the film industry in annual revenues), in-game advertising continues to grow.⁴⁵ The gaming industry is quickly adopting business models that allow it to deliver more targeted interactive adverts, while simultaneously measuring more accurately its impact on consumers. In-game advertising is now predicted to more than double by 2012, with \$650 million to be spent by advertisers for game placement. In March, research firm eMarketer estimated that the overall videogame advertising market would be worth \$1 billion within five years.⁴⁶ Microsoft

has acquired one of the leading in-game ad firms, Massive, which actively touts its ability to sell candy and other food products. The company has pointed to a branding campaign backed by a candy bar company in Electronics Arts' 'NASCAR 08.' Among those surveyed, '72 per cent agreed with the statement that the advertised candy bar is 'a great snack to eat while playing video games,' a 29 per cent increase from the control group not tempted with pictures of sugary treats.'⁴⁷ Other in-game ad companies promoting food and beverage ads include Double Fusion, which has worked with Coca Cola and now has partnered with Habbo, Engage (which has worked with Subway), and Fox's IGN (Taco Bell and Wrigley).⁴⁸

The Interactive Advertising Bureau (US) released a 'status report' on game advertising last fall, highlighting research done for Microsoft by Nielsen, which showed that ads in such games were effective. The study showed that 'brand familiarity increased by 64 per cent... average purchase consideration increased by 41 per cent, average ad recall increased by 41 per cent due to in-game ads...'⁴⁹

Mobile marketing

Now called the 'mobile marketing ecosystem' by advertisers, the mobile phone is further empowering new campaigns for food and beverages.⁵⁰ The principles and techniques of online advertising over broadband—including behavioural targeting—have been consciously transplanted to the mobile service. Google, for example, has told advertisers that it can deliver ads to any mobile device that accepts 'cookies,' the little data collection and identification software files advertisers and other content providers place on our personal computers. In addition to knowing the content mobile users have viewed or requested, such marketing, of course, also provides precise location information.

The UK-based Blyk Media, which bills itself as 'the free mobile network for 16-24s that connects young people with the brands they like,' claims a user base of over 200,000 subscribers who have 'opted-in to receive communications on their mobile phones.'⁵¹ These communications include vouchers for a free bottle of Lucozade energy drink, and (for those over the age of 18) a video ad for WKD vodka. Among other companies relying on various mobile marketing campaigns are McDonald's, Coca-Cola, Pepsi, Masterfoods, Arby's, Frito-Lay, Burger King and Jack in the Box.⁵²

Virtual branding

As more young people simultaneously live their lives in both cyberspace and the 'real' world, marketers have responded. Companies such as Coca-Cola, McDonald's, Kellogg's, and Pepsi, for example, have either created or promoted products in a variety of virtual worlds. As Viacom's MTV explained describing the success of its virtual site for its 'The Hills' series, technologies are now

available that permit the behavioural tracking of an individual's virtual self-representation (called an avatar). Increasingly, young people's profiles will be developed by merging the data from their online and virtual viewing.⁵³

Beyond virtual and other digital marketing tactics, food and beverage companies are also heavily involved in creating what the ad industry has termed a '360 degree' strategy. Interactive advertising is tied into sporting events, live music performances, sponsorship, and the seeding of so-called 'brand evangelists'—young people who promote products as cool.⁵⁴

Public policy safeguards

What we have described is just, literally, the tip of the digital advert iceberg. A far-reaching and complex system of digital marketing grows daily across the world. Even with the current economic crisis, online ad revenues are predicted to grow—but more slowly. The basic business model has been largely set—a system that combines the awesome power inherent in being able to track, analyse, and target individual users, wherever they are. What's missing is widespread consumer understanding of how this system poses new threats to consumer welfare, especially its impact on those under 18 years of age.

Given the global nature of such digital food marketing—with the same approaches we've described occurring in China, for example—a collective response is required. Neither the UK, the EU, nor the US has adequately responded to these new threats to the health of children and adolescents. Much of the debate on children and the internet has focused on a variety of concerns related to online safety and the effects of videogame violence. In the UK, one doesn't have to look far to quickly observe what's being done. Many of the cutting-edge digital ad campaigns are developed here—the UK is viewed as an important testing ground by US marketers.⁵⁵

First, there are substantial privacy issues at stake. Marketers claim that the behavioural targeting and other approaches don't violate privacy, since they don't know the user's real name or physical address. This is a disingenuous argument. In today's online world, understanding how each 'unique' user behaves—through some form of online profiling and tracking—provides sufficient detail to support interactive marketing campaigns.

Privacy policies must be revised so that no data are collected from children and teens without governmental rules, such as a ban on behavioural targeting for those under 18 years of age.⁵⁶ Consumer and privacy groups in the U.S. have filed a number of petitions with the Federal Trade Commission, calling on the agency to investigate and regulate online marketing.⁵⁷ A coalition of child advocacy and health groups filed comments with the agency, calling for privacy and marketing safeguards to protect adolescents as well as children in the digital media. These actions have helped to renew a

debate over internet privacy that began in the mid-90s. The public controversy has in turn placed political pressure on the online marketing industry. In response, the major self-regulatory trade group for interactive advertising companies, the Network Advertising Initiative, proposed a ban on behavioural targeting aimed at children under 13.⁵⁸ Microsoft has also responded to the rising concerns over privacy by revising its own corporate guidelines.⁵⁹ Online advertising, privacy and youth will likely become of the key legislative issues addressed as a new White House administration and Congress take office in January 2009.

EU data protection commissioners, known as the Article 29 Working Party, are currently investigating behavioural targeting as part of their 2008-2009 work plan. There is an opportunity to press the Working Party to analyse and make recommendations concerning contemporary privacy threats to youth from digital marketing in the EU. One of the most pressing needs is for more scholarly research, especially among childhood development and public health experts, regarding the impact of digital advertising on youth. Many media scholars have focused their criticism on television adverts. Much of online media targeted to youth has been specifically designed to appeal to their developmental vulnerabilities and needs. Given the online ad industry's use of psychological, behavioural, and social techniques, including immersive multimedia and brain

research, to help craft these ads, an independent assessment of its potential harms and consequences should be immediately commissioned. Advertising plays an important role in our society, including as the source of revenues that support online content. But, as with our physical environment, a balance is required.⁶⁰

Marketers should not engage in any digital marketing to youth unless they can say with certainty it will not have a negative or other consequential impact (to one's identity, for example). Certainly, more meaningful self-regulation is required. But the time for speedy formal governmental safeguards—to protect against the present and potential youth obesity crisis—is now.

Jeff Chester is the author of Digital Destiny: New Media and the Future of Democracy (New Press, 2007).

Kathryn Montgomery, PhD is the author of Generation Digital: Politics, Commerce, and Childhood in the Age of the Internet (MIT Press, 2007).

For ongoing information on the current use of digital and interactive marketing techniques targeting youth to promote food and beverages, see the Berkeley Media Studies Group and the Center for Digital Democracy website: <<http://www.digitalads.org/updates.php>>

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 <<http://www.lse.ac.uk/collections/media@lse/whosWho/soniaLivingstone.htm>> David Buckingham, Institute of Education, University of London, is chairing a UK-government sponsored consultation examining 'how children's engagement with the commercial world has changed and what the impact those changes are having.'
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