Economist.com **BUSINESS**

Internet advertising

The ultimate marketing machine

Jul 6th 2006 | SAN FRANCISCO
From The Economist print edition

Thanks to the power of the internet, advertising is becoming less wasteful and its value more measurable

IN TERMS of efficiency, if not size, the advertising industry is only now starting to grow out of its century-long infancy, which might be called “the Wanamaker era”. It was John Wanamaker, a devoutly Christian merchant from Philadelphia, who in the 1870s not only invented department stores and price tags (to eliminate haggling, since everybody should be equal before God and price), but also became the first modern advertiser when he bought space in newspapers to promote his stores. He went about it in a Christian way, neither advertising on Sundays nor fibbing (thus minting the concept of “truth in advertising”). And, with his precise business mind, he expounded a witticism that has ever since seemed like an economic law: “Half the money I spend on advertising is wasted,” he said. “The trouble is, I don't know which half.”

Wanamaker's wasted half is not entirely proverbial. The worldwide advertising industry is likely to be worth $428 billion in revenues this year, according to ZenithOptimedia, a market-research firm. Greg Stuart, the author of a forthcoming book on the industry and the boss of the Interactive Advertising Bureau, a trade association, estimates that advertisers waste—that is, they send messages that reach the wrong audience or none at all—$112 billion a year in America and $220 billion worldwide, or just over half of their total spending. Wanamaker was remarkably accurate.

What Wanamaker could not have foreseen, however, was the internet. A bevy of entrepreneurial firms—from Google, the world's most valuable online advertising agency disguised as a web-search engine, to tiny Silicon Valley upstarts, many of them only months old—are now selling advertisers new tools to reduce waste. These come in many exotic forms, but they have one thing in common: a desire to replace the old approach to advertising, in which advertisers pay for the privilege of “exposing” a theoretical audience to their message, with one in which advertisers pay only for real and measurable actions by consumers, such as clicking on a web link, sharing a video, placing a call, printing a coupon or buying something.

Rishad Tobaccowala, the “chief innovation officer” of Publicis, one of the world's biggest advertising groups, and boss of Denuo, a Chicago-based unit within Publicis with the job of probing the limits of new advertising models, likens traditional Wanamaker-era advertising to “an atom bomb dropped on a big city.” The best example is the 30-second spot on broadcast television. An independent firm (such as Nielsen, in America) estimates how many television sets are tuned to a given channel at a given time. Advertisers then pay a rate, called CPM (cost per thousand), for the right to expose the implied audience to their spot. If Nielsen estimates that, say, 1m people (“the city”) are watching a show, an advertiser paying a CPM of $20 would fork out $20,000 for his commercial (“the atom bomb”).

Gone for a brew

The problem is obvious. The television room may be empty. Its owners may have gone to the kitchen to make a cup of tea or to the toilet. They may have switched channels during the commercial break, be napping or talking on the telephone. The viewer may be a teenage girl, even though the advertisement promotes Viagra. It might even be a TiVo or other such device that records the show so that the owner can watch it later and skip through the commercials. Parks Associates, a consumer-technology consultancy, estimates that 10m American households already have a digital video recorder.

“Segmentation”, an advertising trend during the past two decades tied to fragmentation in the media, represents only a cosmetic change, thinks Mr Tobaccowala. Advertisers airing a spot on a niche channel on cable television, for example, might be able to make more educated guesses about the audience (in their 30s, gay and affluent, say), but they are still paying a CPM rate in order blindly to cast a message in a general direction. Instead of atom bombs on cities, says Mr Tobaccowala, segmentation is at best “dropping conventional bombs on villages”. The collateral damage is still considerable.

By contrast, the new advertising models based on internet technologies amount to innovation. Instead of bombs, says Mr Tobaccowala, advertisers now “make lots of spearheads and then get people to impale themselves.” The idea is based on consumers themselves taking the initiative by showing up voluntarily and interacting with what they find online.

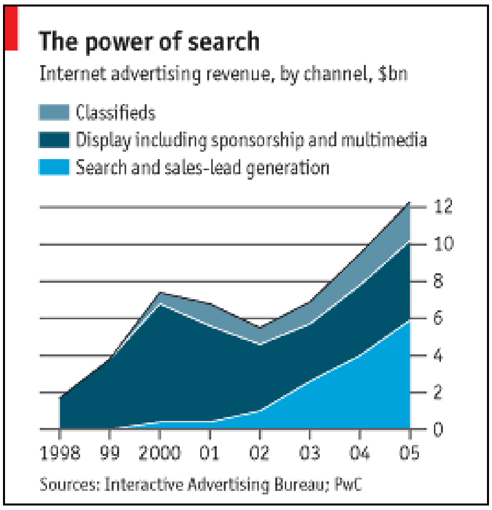
In its simplest form, this involves querying a search engine with keywords (“used cars”, say), then scanning the search results as well as the sponsored links from advertisers, and then clicking on one such link. In effect, the consumer has expressed an intention twice (first with his query, then with his click). The average cost to an advertiser from one such combination is 50 cents, which corresponds to a CPM of $500; by contrast, the average CPM in traditional (“exposure”) media is $20. A consumer's action, in other words, is 25 times as valuable as his exposure.

The person who deserves more credit than anybody else for this insight is Bill Gross, an internet entrepreneur with a kinetic mind and frenetic speech who in 1996 started Idealab, a sort of factory for inventions. One of the companies to come out of his factory was GoTo.com, later renamed Overture, which pioneered the market for “paid search” or “pay-per-click” advertising. In 2001 Mr Gross ran into Sergey Brin and Larry Page, the young co-founders of Google, a search engine that was just then becoming popular, but still had no way of making money. He offered them a partnership or merger, but Messrs Brin and Page were purist at the time about not diluting the integrity of their search results with commercialism and they turned him down.

Within a year, however, Messrs Brin and Page changed their minds and came up with AdWords, a system based on Overture's idea of putting advertising links next to relevant search results and charging only for clicks (but with the added twist that advertisers could bid for keywords in an online auction). Google soon added AdSense, a system that goes beyond search-results pages and places “sponsored” (ie, advertising) links on the web pages of newspapers and other publishers that sign up to be part of Google's network. Like AdWords, these AdSense advertisements are “contextual”—relevant to the web page's content—and the advertiser pays for them only when a web surfer clicks. Together, AdWords and AdSense produced $6.1 billion in revenues for Google last year.

Because this advertising model is so lucrative, all internet portals want to catch up with Google. In 2003 Yahoo!, the largest media property on the web, bought Overture from Mr Gross for $1.6 billion. Yahoo! then dropped the technology it had been licensing from Google. Then Microsoft, which owns MSN, another large internet portal, built adCenter, its version of a “monetisation engine”, which has now replaced Yahoo! as the advertising system for searches on MSN. In addition, eBay, the largest auction site on the web, has a version called AdContext. Pay-per-click advertising is not without its problems—especially “click fraud”, the practice of generating bogus clicks for devious reasons, such as making a rival advertiser pay for nothing. Nonetheless, pay-per-click remains much more efficient than traditional marketing for many advertisers. It is the fastest-growing segment of the online advertising market (see chart).

Some companies are already exploring other methods of charging advertisers for consumers' actions. Mike Hogan, the boss of ZiXXo, a start-up near San Francisco, says that he is "disrupting the existing coupon system", dominated by companies such as Valpak and Valassis in America. Some 335 billion coupons were distributed in America last year—priced, like other traditional media, in CPM—but only 4.5 billion were redeemed, which amounts to a "Wanamaker waste" of almost 99%. ZiXXo, by contrast, lets advertisers issue coupons online and places them on search results, online maps and other such places, but charges advertisers only when a consumer prints one out (50 cents per coupon from next year), thus expressing an intent to redeem it.



As ZiXXo is pioneering "pay-per-print" advertising, Ingenio, another San Francisco firm, is betting on "pay-per-call". Instead of coupons, it places toll-free telephone numbers on local-search pages—its biggest partner is AOL—and charges advertisers only when they receive a live call from a consumer. This is especially popular among accountants, lawyers, plumbers and other service providers who find it easier to close a deal on the telephone. EBay is planning to sell pay-per-call advertising on a larger scale, by placing little buttons from Skype, an internet-telephony firm it bought last year, on its own web pages and perhaps those of others, so that consumers can talk with a seller after just a single click.

Meanwhile, Mr Gross, almost famous from his first innovation (and not at all bitter that Google got most of the credit), is once again busy pursuing what he considers the "Holy Grail" of advertising—the complete elimination of Wanamaker waste. He calls this cost-per-action, or CPA, although he means cost-per-sale, and says that it "just makes too much sense" not to catch on. His start-up this time is called Snap.com, a small search engine. An airline, say, that advertises on Snap's search results would pay not when a consumer clicks on its link but only when he buys a ticket. Google, which is researching almost all conceivable advertising methods, also has plans for CPA. Its new Google Checkout, an online payments system set up to rival eBay's PayPal, will allow Google to know more about how many users who click on one of its advertisements subsequently go on to complete a purchase.

Branded

If the internet enables such snazzy performance-based advertising methods, it is also sparking a renaissance in branded advertising. Some products—such as mortgages—might conceivably be sold entirely through performance-based marketing one day, says Mr Stuart at the Interactive Advertising Bureau, but many other products—such as cars, cosmetics and alcohol—will probably always require branding as well. Even when consumers start their shopping research on a search engine, they still see several competing sponsored links, and may be swayed by their previous brand exposure in deciding which one of these links to click on. And in the "offline" world, brands are still "the ultimate navigation device," says Mr Tobaccowala at Denuo, and often determine which door a tired traveller far away from home walks through.

Brand advertising is inherently about leaving an impression on a consumer, and thus about some sort of exposure. On the internet, however, an exposure can also be tied to an action by a consumer, and these actions can be counted, tracked and analysed in ways that exposure in the established mass media cannot. Consumers also tend to be more alert on the internet. Whereas people might watch a television show in a semi-comatose state of mind and at obtuse angles on their couches, consumers typically surf the web leaning forward while "paying attention to the screen," says Mr Stuart.

A good example is video games, which increasingly take place online and involve thousands or millions of other players. Companies such as Massive and Double Fusion are already placing two-dimensional brand advertisements into games. A player moving through the streets of New York to kill something or other might see a DHL truck or a billboard. "But the future is intelligent three-dimensional ads" and "ads with behaviour," says Jonathan Epstein, Double Fusion's boss. For instance, his technology will soon allow Coca-Cola to place a Coke can into a game, where it fizzes when a player walks by and might give him certain powers if he picks it up. If a character uses a mobile phone inside a game, the technology can swap the brand and model of the phone depending on which country the player is in. But the most important aspect of the technology, says Mr Epstein, is that it will track exactly how long the player uses the phone, thus leaving no doubt about whether an "impression" had indeed been made.

Propagating the message

That same transparency is now coming to "viral" marketing. Kontraband, a firm in London, takes funny, bizarre, conspiratorial or otherwise interesting video clips from its clients and places them on its own site and on popular video-sharing sites such as YouTube.com or Google Video. The hope in viral marketing is to create something that is so much fun that it will propagate by itself, as people e-mail it to each other or put the web link on their blogs. This means that a pure "cost-per-feed" system is out of the question, says Richard Spalding, Kontraband's co-founder, since a successful viral campaign "that gets out of hand and is watched by millions would run the client out of business." So Kontraband charges a flat fee based on a hoped-for audience, leaving the client with the economic upside if the real audience turns out to be larger. The important point, says Mr Spalding, is once again that the "sprites" (ie, bits of software) inside the video let Kontraband track exactly how many times a video is viewed and where, so that clients can see neat pie charts that summarise their success.

Understandably, this strange and thrilling online world can be unsettling to the old hands of the advertising industry, whether they are marketing bosses for advertisers or intermediaries at the agencies. "All of us have been classically trained, and now we're in a jazz age," says Mr Tobaccowala. Advertisers and their agents, he recalls, have already changed their minds about the internet twice. During the technology boom of the late 1990s, he says, the general outcry was, "Oh my god, I need a dotcom unit." When the boom turned to bust at the beginning of this decade, he says, there was a sigh of relief ("See, the internet is not for real."), and it suddenly seemed as though only those who did not "get it" still had jobs.

This was a mistake, says Mr Tobaccowala, since the sceptics confused the performance of the NASDAQ and the fate of individual dotcoms with genuine changes in consumer behaviour. In the consumer-driven market for classified advertising, for instance, ordinary people instinctively grasped the efficiencies of online sites such as Craigslist, thus causing a drop in classified revenues at newspapers. The large advertisers stayed more conservative, however, which may explain why the internet-advertising market is still disproportionately small. The Online Publishers Association, a trade group, estimates that all web advertising in America came to about 6% of total advertising expenditures last year, even though consumers spent 23% of their media time online.

Now, however, chief executives are taking trips to Silicon Valley, often without their "chief marketing officers", to educate themselves. And what they hear impresses them. Tim Armstrong, Google's advertising boss in North America, preaches to his clients a "notion of asset management" for their products that "shocks" them. Traditionally, he says, most firms would advertise only 5% to 10% of their wares—the blockbusters—in the mass media to publicise their brand, hoping that it shines a halo on the remainder of their products. Now, however, "companies market each individual product in that big digital stream," says Mr Armstrong, from the best seller to the tiniest toothbrush. This is called exploiting the economics of the "long tail".

They do this, first, because the internet, in effect, eliminates scarcity in the medium. There are as many web pages for advertisers as there are keywords that can be typed into a search engine, situations that game players might find themselves in, and so forth. Each one comes with its own context, and almost every context suits some product. The second reason is that if you can track the success of advertising, especially if you can follow sales leads, then marketing ceases to be just a cost-centre, with an arbitrary budget allocated to it. Instead, advertising becomes a variable cost of production that measurably results in making more profit.

This often leads to more subtle changes in the way that advertisers think about their craft, says Mr Armstrong. In the traditional media, he says, advertisers are always "trying to block the stream of information to the user" in order to "blast their message" to him. That quickly gets annoying and turns consumers off. In American prime-time television, advertising interruptions added up to 18 minutes an hour last year, up from 13 minutes an hour in 1992, according to Parks Associates. On the internet, by contrast, advertisers have no choice but to "go with the user," says Mr Armstrong, and "the information coming back from the users is more important than the messages going out."

For consumers this may turn out to be the biggest change. The kids in "Generation Y", "echo-boomers" and "millennials"—young people who tend to be adept at using media, constantly online and sceptical—are increasingly immune to the clichés of prime-time television and radio and mentally tune out these nuisances. Online, however, they may accept advertising, if it is unobtrusive, relevant and fun. Insofar as they took some action to invite the advertisement, they may even find it useful. And this, aptly enough, is a consumer reaction that John Wanamaker would have expected all along.