It's becoming increasingly possible to target "smart ads" specifically to people who want them. And best of all, you can do this for a fraction of the price of mass-market.

BY DAVID H. FREEDMAN ILLUSTRATION BY C.J. BURTON

The Future of Advertising is Here
Unmissable Technology
like this is around the corner.
To see futuristic technology
that's being employed today,
turn the page.
Andrew Fano is showing off the living room. It's a plush, teaky, well-appointed affair, but what really catch the eye are several thin-screen video displays, including a few smaller ones that are embedded in furniture and picture frames. The displays are slowly cycling through what appear to be family digital photographs—an appealing idea, considering many of us let our thousands of digital photos sit unwatched on a computer hard drive. “But would you want to see an ad stuck in there?” asks Fano, indicating one of the digital slide shows, apparently of a family vacation to a theme park. “No? Because you just saw one.” One of the themepark photos was a professional image designed to “enhance your memories” of the park, explains Fano, a senior researcher at consulting giant Accenture who is exploring new ways for advertisers to get their messages across. The tony living room is actually part of Accenture's technology laboratory, and the displays are an experimental prototype of a service that would arrange your photos into slide shows in exchange for the right to slip relevant sponsored pictures into the mix.

The world is awash in advertising clutter. For decades marketers have been spending more and more to try to get their message out—only to find their pitches drowned out in a sea of noise generated by countless other marketers trying to do the same thing. In effect, companies have been paying big bucks to be ignored. Now, inspired by the Internet's ability to do a better job of targeting prospects and measuring results, advertisers are dreaming up new ways to break through the clutter and connect with potential customers at a lower cost.

Though the advertising revolution got started online, some of the new techniques are already finding their way onto streets and walls and even into clothing pockets around the world. Perhaps just five years from now, companies will be able to routinely and inexpensively embark on ad campaigns that hit exactly the right prospects—and hardly anyone else—with entertaining, hard-to-ignore messages that can follow people via new high-tech media into their cars, offices, living rooms, and bedrooms. For companies that master the new techniques, the payoff is potentially enormous: a big jump in customer mindshare while holding the line on marketing costs. And whereas the big advances in advertising technology once favored traditional giants like Procter & Gamble, which could afford to mass-market its message, the new techniques are affordable to smaller companies, too.

“Over time,” says Karen Breen Vogel, CEO of ClearGauge, one of hundreds of interactive ad agencies that have sprung up to focus on online advertising, “we can cut the cost of the advertising in half while maintaining customer response.”

In an archipelago of art galleries and airy cafés at the periphery of Chicago's North Loop, the offices of ClearGauge have the hip, slightly subversive look you'd expect of a boutique advertising agency. Except that where the halls of other agencies regale visitors with blowups of their all-important creative, ClearGauge has proudly plopped a wicked-looking bank of servers front and center against the ex-

**Hot New Advertising Tools**

**Fun, targeted, effective. Being ignored is so 20th century**

Accenture has designed a 10-foot-wide touchscreen that lets crowds in malls or on the street interact independently with characters, games, and information.

With Reactrix Systems' interactive images, 10 or more people can kick around a virtual soccer ball, splash in a virtual pool, or (below) swirl through a logo.

Imagine a day when you can text-message a discount coupon to a cell phone user just as she walks past your shop. That day is here.
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posed concrete walls. It's a tip-off to the agency's sensibilities—and to a sea change in the advertising industry.

Advertising has long been a sort of black art with a murky ROI, and for a simple reason: Clients rarely know for sure who sees their ads, let alone whether the ads influence anyone. Even though companies spend a third of a trillion dollars a year on advertising, those ads often end up being irrelevant to the people who see them. On average, Americans are subject to some 3,000 essentially random pitches per day. Two-thirds of people surveyed in a Yankelovich Partners study said they feel "constantly bombarded" by ads, and 59% said the ads they see have little or no relevance to them. No wonder so many people dislike and ignore advertising, and so many business owners feel gun-shy about investing in serious campaigns.

The Internet has begun to change all that. The ability to measure the impact of an ad simply by counting how many people click on it, and to link advertisements to search-engine results, in large part drove Internet advertising to $9.6 billion in 2004, a 33% jump from 2003, according to Interactive Advertising Bureau reports. (For a cautionary tale about counting clicks, see "So Many Clicks, So Few Sales," on page 29.) But the real advantage is going to companies that figure out how to use these tools to hunt down specific types of prospects and nail them with the right pitch. "We look for subsegments of Internet users who care about certain things," explains Breen Vogel. "We find them when they're online, we intercept their activities, and we start a relationship with them."

To understand how the Internet and firms like ClearGauge have been changing advertising from a slippery craft to what might be called "persuasion engineering," consider the campaign ClearGauge has been developing on behalf of Mod-Pac, a Buffalo company that manufactures cartons and handles printing and packaging for more than 5,000 companies. Mod-Pac came to ClearGauge for help in launching a new 24-hour online service specializing in running fast, less expensive print jobs for businesses. Instead of conducting endless brainstorming sessions in search of a clever campaign hook, a team led by Breen Vogel—a former industrial engineer with experience in supply-chain management—attacked the problem the way a government contractor might set about building a nuclear submarine.

The team started off by breaking Mod-Pac's target market into seven submarkets, including event planners, ad agencies, and not-for-profit organizations. Each of these submarkets was further broken down according to who influenced the key purchase in each category—in some cases a secretary can have as much influence on a buying decision as a CEO, but the two need very different sorts of pitches. In
the past, for example, ClearGauge has gone after doctors' spouses to sell medical supplies and lawyers to sell commercial financial services. ClearGauge then enlisted online surveys and focus groups to uncover the hot buttons for each type of purchase influencer in each submarket. Some decision makers valued sophistication in their printing company, while others placed more emphasis on creativity, and still others on low cost. Different ads were then cooked up for the different targets, so that, for example, a creative director at an ad agency was targeted with a pitch that featured a dancing, mischievous lizard mascot, while a CFO at a nonprofit got a more sober version of the lizard with glasses and a pitch that emphasized cost-savings. To make sure each pitch ended up in front of its intended target, ClearGauge studied the click-through statistics on hundreds of business-oriented websites for banner-ad placement and paid search engines to have specific ads come up in response to some 5,000 carefully chosen terms. By obsessively monitoring how many people click on each of the ads to end up on Mod-Pac's website, and then noting what each person does at the website, ClearGauge can further refine the relevance and placement of each of the ads while weeding out the less effective efforts.

Online advertisers are about to get a new tool that will vastly increase their ability to place highly relevant ads in front of prospects. Emerging now are powerful "behavioral targeting" services that can track what an individual clicks on and looks at across a range of sites over the course of weeks and months, making it possible to build a detailed profile of that person's interests, purchases, and preferences. The companies prepared to do the tracking, including 24/7 Real Media, Blue Lithium, Dotomi, and Claria, don't capture personal information such as names or e-mail addresses—only surfing habits—and even then follow only people who have opted in to the tracking.

But that's enough to let advertisers do a far better job of matching pitches and prospects. At least 950 out of every 1,000 Internet automobile ads still land in front of people who aren't in the market for a car, notes Scott Eagle, chief marketing officer of Claria, based in Redwood City, Calif. "If you're starting a high-end pet-food company, you only want to talk to people who have a certain type of pet and are willing to pay a premium to feed it," he adds. "We can identify those people. Why do you need to reach anyone else?" In a study, website visitors were, on average, 14 times more likely to click on an ad when it matched their profiles, claims Eagle. He says he has already lined up more than 200 advertisers for his new tracking service and expects to reach 500 by the end of the year.

Given privacy concerns, will many Internet users opt to participate in these sorts of services? Actually, they might. Because according to a 2004 survey by the Ponemon Institute, a consultancy that specializes in Internet privacy issues and has worked with Claria, two-thirds of Internet users believe better targeted ads would be less annoying, and 45% would share personal information in exchange for that advertising relevance.

But it's not just the Internet that's poised to become a bastion of highly targeted advertising. In fact, the trend to interactive, targeted advertising is starting to break its chains to the computer screen. Even television, the grande dame of conventional mass marketing, is taking steps to offer a more focused advertising experience. For starters, A.C. Nielsen and other companies have been rolling out technology to measure more accurately who is watching which shows, providing test viewers with pagers, for example, that can measure TV-watching habits outside their homes. Experian, a consumer data company in Costa Mesa, Calif., is cross-referencing this sort of detailed TV-viewer information with vast troves of other consumer behavior data so that a network can pinpoint viewers not just by age or income but also by what products they're in the market for."If you give people a television program that indexes well against their preferences, you'll get more mental click-through," says William Engel, co-CEO of Experian subsidiary Simmons Market Research Bureau. Some advertisers are getting even finer-tuned pitches by negotiating the ability to alter their TV ad slots in response to changing conditions. Some TV ads for Royal Caribbean Cruise Lines, for example, have been set to run only when the temperature drops below a certain point in a given market.

And even bigger changes are in the wings as television starts
Karen Breen Vogel, for one, is hesitant to be among the first to reach beyond the Internet to tag people in intimate, surprising ways. "It's the next wave for us," she says. "But right now we're in investigation mode."

to morph into a more Internet-like experience. Cable provider Comcast offers advertisers in parts of Florida the chance to buy ads that run only in specific neighborhoods, so that, for example, ads for a Spanish-language newspaper appear only in heavily Latino communities. The technology to target cable ads all the way down to specific homes according to household viewing habits already exists, with deployment largely awaiting the resolution of privacy concerns. Cable companies are also experimenting with interactive channels that let viewers enlist their remote controls to click on banner ads and onscreen buttons. Video games are getting with the program too. Some are already packed with ads integrated into the cyberscenery, and a New York company called Massive has developed a technique for changing those ads to match an individual player's moves and preferences.

As more networked display screens permeate our homes—on appliances, walls, even furniture—each one will become a potential medium for tuned-to-your-lifestyle ad services of the sort that Accenture's Fano and others are dreaming up. Think of this new breed of advertisement as "smart," in that these ads know, in a sense, to whom they will be playing and under what circumstances. Smart ads, it turns out, won't be confined to the home and office. In three Massachusetts Stop & Shop supermarkets, an electronic tablet attached to the shopping carts asks for a swipe of the shopper's loyalty card—and in return provides a shopping list that the store's computers have prepared based on the shopper's past purchases. Oh, and by the way, the tablet also offers targeted electronic coupons that pop up when the shopper turns down the aisle with the featured product. "Why offer a discount on your yogurt to someone who usually buys it anyway?" asks Fano, whose lab helped develop a similar technology. "You want to pitch someone who's about to buy a rival brand."

Computer screens are popping up everywhere, and more and more advertisers are thinking up ways to make sure those screens don't go to waste. Take elevators, which now often sport displays above the floor buttons. These screens are becoming prime advertising real estate as marketers grab the chance to catch businesspeople or affluent tourists on their way to the street. Targeting elevator ads to the location, time of day, and audience is not rocket science, notes Larry Harris, who heads up multicultural marketing at marketing agency Draft New York. "Bloomingdale's could boost sales 5% if it put up an ad for a one-day sweater sale in my building at lunchtime," says Harris. "Everyone in the elevator will see it because they're desperate to not have to look at anyone else."

Taxis are becoming smart-ad vehicles too. Some New York City cabs have screens inside, and some taxis in New York and elsewhere have electronic messaging signs that are tied to GPS location sensors, so that a cab can pitch a nearby store or restaurant wherever it roams. Even your own car will get in the game. General Motors has been experimenting with location-aware sponsored messages tied to its OnStar communications system—and all the major auto manufacturers are looking into ways to hook car-based displays up to the Internet, ads and all.

Not that drivers of nonwired cars, or even pedestrians, will miss out on the fun of targeted ads. Digital billboards and posters, which function essentially as large video screens, are already popping up alongside roads and sidewalks, adjusting their displays to different audiences—a commuter crowd during morning rush hour, moms running errands midmorning, and young couples on dates in the evening. For even more precision, Smart Sign Media in Sacramento operates digital highway billboards that detect the radio stations playing in passing cars and flash up client ads that best match the profiles of those stations' listeners. And Mobiltrak in Herndon, Va., places car-radio-station-identifying sensors in the parking lots of retail clients so they can tell if people driving into the lots have been nudged there by their radio ads, allowing them to adjust a radio campaign to get the most traffic for the least cost.

By rotating ads at the right time through these various media, an advertiser can create a campaign that hits its best prospects several times a day in different locations—and in theory pay less to do it, since the advertiser won't be paying to put the ad up in front of a mass audience. "The idea," says David L. Smith, founder and CEO of San Francisco advertising agency Mediasmith, "is to vertically stack the ad frequency among different ad vehicles rather than to horizontally stack it within a single vehicle"—as with a repeating television ad.

Of course, the ultimate smart-ad tool would enable a marketer to hit any individual with a low-cost, interactive message
Internet advertising was in 1996—it's about to take off. There are already more mobile phones in use worldwide than televisions and computers put together.
**Purveyors of the Brave New Ad World**
**Bringing you the future, and future customers**

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<thead>
<tr>
<th>NAME</th>
<th>LOCATION</th>
<th>SPECIALTY</th>
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<tbody>
<tr>
<td>Claria (claria.com)</td>
<td>Redwood City, Calif.</td>
<td>Behavioral targeting service tracks the online habits of Web surfers and hits them with relevant advertising.</td>
</tr>
<tr>
<td>Enpocket (enpocket.com)</td>
<td>Boston</td>
<td>Sends ad messages, coupons, and branded video files to mobile phones—in some cases tracking the phone's location.</td>
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<tr>
<td>Pulse (pulse3d.com)</td>
<td>San Francisco</td>
<td>Online tools turn a photo of any person or animal into a lip-synched talking head for viral ad campaigns.</td>
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<tr>
<td>Zebra Imaging (zebraimaging.com)</td>
<td>Austin</td>
<td>Produces large promotional holograms that make images of objects or people stand out in 3-D—no glasses needed.</td>
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<tr>
<td>Experian (experian.com)</td>
<td>Costa Mesa, Calif.</td>
<td>Collates consumer data to predict which people are likely to be in the market for particular products.</td>
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<tr>
<td>Reactrix (reactrix.com)</td>
<td>Redwood City, Calif.</td>
<td>A motion-sensitive projector turns any surface into a crowd-drawing, brandable interactive display.</td>
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<tr>
<td>Massive (massiveincorporated.com)</td>
<td>New York City</td>
<td>Inserts ads via an online connection into video games while they're being played. Coming is technology that will adapt the ads to individual players.</td>
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be directed at individuals interacting with the display while passersby hear almost nothing. All of it, of course, would be mixed in some way with an advertising message.

You don’t even really need a screen to get your interactive message out to the crowds. Reactrix Systems in Redwood City, Calif., offers a system that projects a colorful image on a sidewalk, wall, piece of furniture, or anything else, and that tracks the motion and gestures of people on or near the image to make it interactive. Ten or more people can stomp on or wave at the several-feet-wide image at once, kicking around a virtual soccerball or splashing in a virtual pool, all while ogling a sponsor’s logo blended into the image. McDonald’s, Sam Goody, and the MGM Grand have been among the clients, along with movie theater chains and malls, where the devices routinely attract enthusiastic crowds. According to Reactrix CEO Mike Ribero, studies have shown that as many as 86% of the people who interact with the Reactrix image can recall the sponsor days later, compared with 5% for prime-time television advertising. "In a world with a lot of advertising clutter, this sort of thing provides advertisers with a consumer’s attention for an unprecedented amount of time," says Ribero. "Advertising has been built around reach and frequency, but depth and duration of experience is going to be the next big metric." What’s more, he says, getting an advertising experience out closer to the stores can have a stronger influence on buying decisions.

And if you really want to reach out and grab the attention of people out in the real world, why not actually, well, reach out? Zebra Imaging in Austin produces large, lifelike holographic images that appear to float in 3-D in front of a film-like panel—no goofy glasses or goggles needed. People can even walk around the ersatz object to examine it from different angles. Zebra has created car-show-stopping holograms of automobiles for Ford to showcase new designs, as well as holograms of celebrities for promotions. As the technology’s cost comes down and quality improves, says Zebra CFO Rubin Curie, these startling images could eventually be popping out routinely at consumers on the street and in stores.

Advertisers may drool over the promise of smart ads, but many are also wary of invading the public prematurely with clumsy, personalized, unignorable pitches on billboards and cell phones before anyone has a chance to get used to the idea. ClearGauge’s Breen Vogel, for one, is hesitant to be among the first to reach beyond the Internet to tag people in intimate, surprising ways. "It’s the next wave for us," she says. "But right now we’re in investigation mode."

Until marketers can read consumers’ minds, there will always be uncertainty about the most effective ways to deliver messages. And mind reading, at least, is a technology that’s still a long, long way off. Oh, wait—scratch that. Neuroscientists at the California Institute of Technology and Baylor College of Medicine are already using high-tech brain scans to measure people’s responses to marketing messages. So stay tuned.

As if you had a choice. 

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