# The Moving Target of Advertising

By Sean McCormick

Advertising tactics and techniques have evolved just a tad from the days when Greek prostitutes (Pornai) in ancient Mesopotamia would lure potential clients with imprints of "follow me" in the dirt, made by special sandals they wore (Smithfield, 2016). Today, advertisers are able to get their wares in front of eyeballs far more efficiently. My intent with this paper is to provide an overview of how advertising has tried to keep up with the information age, and possibly demonstrate that we need advertisers as much as they need us.

**Back in my day…**

In the 20th century, radio and television broadcasting was a huge step forward for advertisers (which terrified the newspaper industry). All of a sudden, you could reach millions of wallets every day! The problem was, there were no audience rating systems in place, so the products on display had to be pretty low common denominator items such as vehicles and cigarettes (I'd walk a mile for a Camel). That kind of marketing was all one-way. There was no mechanism for ascertaining demographic information about the viewer/listener. Not until the big three (CBS, NBC, ABC) networks began allowing affiliate stations could businesses begin narrowing down the commercials to a more regional or local level. There's not much sense in airing a spot for snow tires in Florida.

That being said, having over 50 million potential customers (Superbowl I) see your product was a game-changer. Before the internet, television viewers in the U.S. were all on the same page Monday morning around the office water cooler. Live or

event-specific TV advertising *still* rules the roost these days, but not for long. I worked on a Jeep ad, "Anti-Manifesto" that aired during Superbowl LII this year. It was seen by over 100 million viewers. It cost over $5 million to place it there (Marketing Charts, 2018). This is a brute force method to sell one's wares.

The arrival of cable television in the 1980's inched advertisers closer to their intended targets, as the proliferation of different channels and networks meant that viewers could now choose sides and have specific allegiances to certain kinds of programming. Companies knew they had a fantastic chance of reaching the coveted 18-34-year-old demographic by placing ads on MTV, versus CNN. Despite this new advantage, advertisers were still firing fairly blindly down the cable, with only nebulous Nielsen numbers to bolster their decisions.

In the late 90s, there was an effort to deploy something called Enhanced Television, or eTV. It was part of the OpenCable Applications Platform, although it could run independently of it as well. eTV also used set top boxes. A big difference between it and its older brother (early, traditional cable television) was that it was designed to be a two-way street, where the end user could provide feedback and control, which was a huge get for potential advertisers. From 1997-2000, I worked at a company called PSW Technologies. One of their new business models was partnering with Scientific Atlanta to develop the operating system for eTV. The advent of DVR (digital video recorder) technology, like Tivo, allowed ad-watching (and largely skipping) habits to be observed.

**Targets on our backs**

What exactly makes advertising targeted? One group of researchers define targeted advertising as "a practice delivering personalized ads relevant to users as opposed to pushing the same ads to all" (Zhang, Zhou, Tan, Bagheri, & Er,

2017). You might think throwing up a giant ad on a highway billboard would be not terribly specific to one demographic, but there's several common denominators that determine who might view the advertiser's message.

If a business is located a few miles from a billboard they are putting their message on, say a truck stop, it's perfectly reasonable for them to invest in that form of advertising. Every vehicle requires fuel that the business can provide, along with other goods and services that are staples of travelers. Conversely, should a Japan-based landscaping company decide to advertise their offerings on that same U.S. highway, they might get seen by thousands of confused motorists every day, but their customer base will not increase at all.

The use of the U.S. Postal Service in the 20th century is a great example of both targeted and non-targeted advertising. There is a huge difference between the tree-killing, confetti cannon approach and the companies who carefully use metrics to optimize who receives their message. If your business is high-end resort travel, you aren't going to find much value in sending thousands of flyers to zip codes where the median income is below the poverty line.

**Web 1.0**

Try out this link: http://thefirstbannerad.com/ . This is a great example of the early ad eyesores World Wide Web neophytes were exposed to. Hardly a targeted approach, unless you consider anyone with a computer and internet connection a target. Like cable TV, advertisers began to spackle websites with banner ads, usually (but by no means always) relevant to the subject matter. I briefly worked for a dotcom startup called LearnFree.com. We would repackage old broadcast training videos for the web. Their plan was to monetize the content with advertising that coincided with the topic of the training. This is a common practice today.

All good stuff, but the content providers still couldn't learn much about their visitors, other than browser used, computing platform, OS, time spent on certain pages, etc. It wasn't long before search engines got in on the game. In 1996, if you typed the word "golf" into Yahoo, there would be a golf-related banner ad included in your search results.

This approach led to Google's deployment of its AdSense service in 2003, which generates billions of dollars these days. You've no doubt seen the teeny word "ad" next to your top Google search returns. I just typed the search term "bird seed" into an incognito Google Chrome browser tab (which supposedly means I'm not sharing my browser cache) and got a slew of ads along with bird seed-related content, plus a Google map that shows my general area, even though I'm using the incognito feature. Things do get creepier…

**The Shills Have Eyes**

There have been some pretty far out attempts by marketers in the digital age to get you to whip out your credit card. The aforementioned behemoth, Google, used to scan their non-paying customers' email to target ads to them within the Gmail interface. They later gave end users the option to opt out of these ads based on concerns their paying, business customers had. Google still scans email, however. New York Times columnist Daisuke Wakabayashi notes, "Google had said its policy was not to target ads in Gmail based on personal information, such as race, religion, sexual orientation, health, or financial data, and that information extracted from a user's email will only be used for ads in Gmail" (Wakabayashi, 2017).

Some large brick and mortar retail outfits who are desperately trying to remain relevant utilize the GPS data in your phone to send you notifications when you are in proximity of them, or, even weirder, when you are in or near one of their competitors. Some stores track you via Wi-Fi by making note of

your device's MAC address (a unique identifier associated with the networking hardware) once you are in the facility, even if you don't log in. Web consultant Gary Angel writes, "phones regularly ping out looking for a network and those pings – anonymized – can be triangulated to figure out the position. Put those pings together, and you have a journey" (Angel 2017).

Back in 2013, British gas chain Tesco deployed facial scanners at the gas pumps, so that custom advertising could be displayed to the customer inside the store, based on the scans estimate of age and gender (Falk, 2013). One can only surmise that these scans also can factor in race as well. This a great setup for a debate on privacy. Perhaps they only want to sell you a soda, but what if those scanners wound up connected to a law enforcement database?

Journalist Simon Hill describes a technology called Silverpush. "It uses audio beacons to track your activities across devices: Your TV emits a tone during a commercial break, a tone that's inaudible to you, but your phone is listening for it. Now they can link the TV and phone as belonging to the same person" (Hill, 2017). Ever feel your phone or home assistant is eavesdropping on you? I could find no company who admits to this practice, but there are many online anecdotes from people who have been served ads relating to conversations they had, when they hadn't done a web search about the product in question.

Consultant Robert Ferguson posted an experiment his friends conducted. A man and his wife had a fairly lengthy conversation about minivans (which they both personally loathe) in earshot of their Amazon Echo. It took all of three days for ads to appear and a week later they were still getting them on Facebook (Ferguson, 2017). Facebook flatly denies they use a device's microphone for eavesdropping, but that doesn't mean someone else isn't and then links their learnings to an ad exchange which does post ads to Facebook.

**Farcebook**

No discussion about modern advertising would be complete without bringing up the heavyweight champion of all time, Facebook. From an advertising perspective, Facebook's value to marketers can't be overstated. The Facebook Data Policy claims your intellectual property is yours, but they get to play with it while you are a user of their service.

At the end of 2017, Facebook was sporting 2.13 BILLION monthly active users. A treasure trove of personal data. People willingly dump their daily doings into the Facebook platform, making it vastly easier for companies to market their wares to the right folks. Journalist Kurt Wagner explains how Facebook turns your details into dollars, "Facebook doesn't sell your data. But it does sell access to you, or more specifically, access to your News Feed, and uses that data to show you specific ads it thinks you're likely to enjoy or click on" (Wagner, 2018). Facebook rang up around $40 billion dollars from advertisers in 2017.

Facebook also uses the aforementioned cookies to assist in assigning ads deemed relevant to each user. The recent Cambridge Analytica kerfuffle, where millions of Facebook users had their data accessed without consent, has caused Facebook to retool how third parties access information about your Facebook 'friends'. Facebook has become a monopoly of sorts. When asked by Senator Lindsey Graham what alternatives to Facebook exist, Facebooks CEO Mark Zuckerberg struggled to form a definitive answer. This should be troubling, as Facebook is arguably the biggest repository of personal information out there, with Google running a close second. They have a massive target on their back for hackers.

Unscrupulous businesses can use personal information to find gullible and vulnerable users that might easily fall for scams. Plus, as a bonus, advertisers now have the ability to use race-related data to avoid displaying housing or

employment ads to certain demographics (Dayen, 2018).

**Cookie Monsters**

Does all the time and money spent trying to custom tailor messages for each consumer actually pay off? There are people like researcher Justin Johnson who gin up crazy-looking equations to try to make such a determination. There is zero point in me including his calculus, as it literally looks Greek to me, but Johnson's takeaway is "improved targeting benefits firms but that such improvements may make consumers worse off" (Johnson, 2013). Basically, it's profitable, but it can have some unintended consequences.

I'll use myself as an example. I am self-employed, I have a little audio services business. I pretty much do EVERYTHING pertaining to said business. This includes evaluating and purchasing new equipment, which I have to spend thousands of dollars on every year to help offset my tax bill. I buy almost everything online, so I am inundated with advertising. I've trained my eyes to ignore the spam baked into websites that the ad-blockers can't remove.

Over the last year, we've all noticed the strangeness of browsing a site or product, only to have the same or similar product appear in a completely different site or on social media. At first, I thought it was pretty neat. Instead of seeing a hair dryer or mulcher ad, I was being reminded of the cool toy I was contemplating a few minutes before. It rekindled the obsession that had organically run its course. Over the next few weeks, what I had previously thought was a good idea from a marketing perspective, became more of an irritant. Instead of continuing to lust over the product, I began to resent it. The continual reminders wound up galvanizing my decision not to acquire that particular gizmo, as it felt like some guy in a store who's trying to hard-sell you something you may not actually need. Salespeople are Kryptonite to me.

This ‘magic’ is often being done by modern techniques using old technology, the browser cookie. A small text file that’s placed on your computer when you visit a website. Most people don’t take the time to block cookies, some websites demand you accept them as a tradeoff for accessing their content. Your browsing experience can also be affected by companies like Google and Yahoo, if you are one of their users, they know quite a bit about you. Your information is bid on by advertisers so that they can get their ad placed in front of you if they feel you are a potential buyer (Sydell, 2010).

Some researchers at Ohio State University conducted a study where they placed online ads in front of students who were made to think the ads were custom tailored to them, based on their online activity. Participants evaluated themselves as more sophisticated after receiving an ad that they thought was individually targeted to them, compared to when they thought the same ad was not targeted. In other words, participants saw the targeted ad as reflective of their own characteristics (Reczek, R., Summers, C., & Smith, R., 2016).

There are those who claim profitability for advertisers is unclear, as a good deal of the positive research touted is done by the tech platforms who are selling access to the data; Procter & Gamble, the world’s largest advertiser, cut its budget for targeted digital ads last year because they found it to be a waste of money.

**And finally, acceptance.**

The bottom line for me is cheerful surrender. Over a decade ago I decided to fully embrace Google’s offerings, fully aware that I would become one of their products to sell as a tradeoff for the convenience and upfront cost ($0) of using their apps and services. A Zogby poll in 2016 showed that over 85 percent of respondents prefer ad-supported apps versus paying for them. Ad revenue has largely been the life-support system of the web, most internet users accept the fact that

ads are going to be part of the landscape. An ad-free internet is just not in the budget for most consumers.

In 2013, ad revenues totaled $42.8 billion, the 269 million U.S. internet users divvying up that cost would be close to $159 per person per year (Fottrell, 2014). This would be in addition to whatever the household already pays for internet access. Like a lot of users, I deploy ad and pop-up blocking software as a basic malware defense, but I whitelist (allow ads from certain sites) because I want to keep the internet as "free" as possible. Common sense went a long way pre-internet in protecting yourself from scammers and it's no different now.

The Federal Trade Commission does step in from time to time when those creeps cross the line. You can certainly lock down your computer, your browser, and your phone to prevent any information gathering from marketers, but that will eventually force content providers to embrace the paywall model, charging for subscriptions or pay-per-use. Many newspapers and online magazines are already implementing these. If I have to see an ad or two to keep up with the news or whatever, it's a relatively small price to pay.

I'm not wild about Facebook's practices, or Facebook in general (to me it's largely a vapid timesuck where fragile misfits go to obtain validation), but it's technically a free service that billions of people choose to use every day. No one is forcing them to.

If you don't want your information utilized, don't put it out there in the first place. Now get back to your cat videos.

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