

The Atlantic

Skinner Marketing: We're the Rats, and Facebook Likes Are the Reward

Our Internet handlers are using operant conditioning to modify our behavior.

BILL DAVIDOW | JUN 10, 2013 | TECHNOLOGY

TEXT SIZE
- +



Alexis C. Madrigal

One of the most popular announcements at Google's recent developers conference was the new version of Google Maps, which has a lot of spiffy new bells and whistles, to be sure.

But there's an ominous side note here: The new Google Maps for mobile devices allows marketers to offer products and deals based on the consumer's physical location.

We're entering the age of Skinnerian Marketing. Future applications making use of big data, location, maps, tracking of a browser's interests, and data streams coming from mobile and wearable devices, promise to usher in the era of unprecedented power in the hands of marketers, who are no longer merely appealing to our innate desires, but programming our behaviors.

And the new Google Maps is just the start. Google, Facebook, Twitter, retailers, and thousands of application developers are now positioned to keep users engaged on Web sites and program behaviors. That is, to operant condition them.

In the 1930's, B. F. Skinner developed the concept of operant conditioning. He put pigeons and rats in Skinner boxes to study how he could modify their behavior using rewards and punishments. His pigeons pecked at buttons in search of food. We peck at keys in search of virtual rewards -- good news arriving in an email, a retweet, a thumbs-up on a blog post, or leveling up in World of Warcraft.

The effectiveness of these behavioral modification techniques are in plain sight -- families ignoring one another while checking the email and Facebook at dinner, drivers texting in heavy traffic, and 14-year-old girls sending hundreds of text messages a day.

Skinner's techniques of operant conditioning and his notorious theory of behavior modification were denounced by his critics 70 years ago as fascist, manipulative vehicles that could be used for government control.

Skinner's critics were prescient. They were right about control but wrong about the controllers. Our Internet handlers, not government, are using operant conditioning to modify our behavior today.

Skinner's basic technique was to give his subjects a cue that triggered them to engage in an activity that provided them with a reward -- see the button light up, peck at it, and get food.

Thanks to Skinner's work, brain MRIs, and more recent research by psychologists, neuro-scientists, and behavioral economists, we now know how to design cue, activity, and reward systems to more effectively leverage our brain chemistry and program human behavior.

According to psychologist Scott Rigby, we have an innate desire to gain mastery of new situations. As a result, players crave leveling up in a computer game. Just try getting a kid to turn off a game when he is almost at the next level. As humans, we have a powerful need for human connection and recognition. Facebook and Twitter meet the need by enabling us to gather friends and followers. Facebook and Twitter's "like" or "tweet" buttons are designed into Web sites throughout the Internet. Big rewards that come at unpredictable times trigger dopamine releases in the pleasure centers of our brains and keep us searching the web for the best price, trying to win an eBay auction, or pushing buttons on slots.

Gambling casino operators such as Harrah's were among the first to employ operant conditioning for profit. They used carefully designed physical environments, skillfully designed slot machines, highly motivating unpredictable reward systems to ensnare rows of players in "the zone" in which time, space, and social identity are suspended while they push buttons and pull levers -- some so absorbed they urinate in cups so as not to break the flow. One of the keys to making these environments effective is the ability to track individual gamblers' activities using reward cards. Unfortunately for Harrah's when you leave the casino,

you leave their Skinner box.

The beauty of the Internet is that by combining big data, behavioral targeting, wearable and mobile devices, and GPS, application developers can design more effective operant conditioning environments and keep us in virtual Skinner boxes as long as we have a smart phone in our pockets.

Virtual Skinner Boxes will undoubtedly be used to help us get thin (See [The Perfected Self](#) by David H. Freedman) and keep America fat.

One of the reasons America is hooked on junk foods is that we are gnomically designed to crave sweet, salty, and fatty tastes (as Michael Moss has documented and reported on in his recent *Salt, Sugar, Fat*). Many obese people have those cravings. If a fast-food provider using big data can discover by analyzing your Internet behavior that you have been looking for ways to lose weight, they have a pretty good idea that you might be one of those cravers and a candidate for a fast food virtual Skinner box.

At that point, the marketing imperative becomes pretty simple. When your iPhone tells McDonald's or Burger King you are near a franchise, they send you a text message announcing 20 percent off on a Big Mac, or a Whopper and fries -- an unpredictable reward -- in hopes that you will react just like the rats in Skinner's boxes. Still more compelling is advergaming, and the role it plays in the cue, activity, reward cycle. For young boys, target-shooting video games now come with targeted ads for purchasing guns. Point of Impact, a mobile app released by Guns & Ammo magazine, is rated for ages 9 and up, for its "Infrequent/Mild Cartoon or Fantasy Violence" and "Suggestive Themes." The game allows players to shoot AR-15 rifles, the semiautomatic rifle used in recent mass killings, and provides links to gun manufacturers' websites.

Advertisers will be able to engineer these gaming experiences in ways that are so compelling that they go from suggesting behavior to programming it? As virtual experiences become more real and behavioral targeting more precise, will consumer marketers be able to create BMW and Victoria Secret buying compulsions?

For grown men desiring a shot of adrenaline, there's the BMW M3 Driving Challenge. In this beautifully rendered game, drivers can experience the roar of the engine as they test their driving skills by racing around the Nürburgring track. Virtual drivers are in control. But with a smart phone in his pocket, a virtual driver might decide to take the wheel of a real car when he gets a surprise offer for a demo ride as he drives past a dealership.

Woman can go to Game Voyage and play a [Victoria's Secret fashion show game](#). Then they can share their fetching creations on Facebook and get an ego boost when their friends tell them they look great. Some will undoubtedly be tempted to turn those virtual compliments into real ones when they get an enticing message on their smart phone as they pass by the shopping mall.

Yes, big data, behavioral targeting, Internet cookies, and GPS positioning can all be integrated with operant conditioning techniques to motivate us to lose weight and study harder. But as with any technology, they can be employed to less admirable ends.

Operant conditioning techniques will and are currently being used to program the behavior of susceptible Internet users -- young men who play MMORPG (Massively Multiplayer Online Role-Playing Games) for forty hours a week, women who commit hours to social networks, shoppers seeking the thrill of a deal, and poker players. As smart devices become integrated into our lives, retailers who will know where we are

standing in stores and fast food restaurants and bars will find ways to provide us with cues to trigger behaviors. The real question is how many hundreds of millions of us will become susceptible to what I believe will prove to be history's most potent marketing techniques.

LATEST VIDEO



A Visceral Portrait of Life at the U.S.-Mexico Border

A short film captures the humanity of those at the center of the immigration debate.

ABOUT THE AUTHOR



BILL DAVIDOW is an adviser to Mohr Davidow Ventures and the author of *Overconnected: The Promise and Threat of the Internet*.

 Twitter
