

WHERE DID PERSUASIVE DESIGN TECHNOLOGY COME FROM?

In the 1990s, a Stanford behavioral scientist named B.J. Fogg wondered if he could **create technology that influenced human behavior by combining technology with the principles of behavioral science**. In 1998, he founded The Stanford Persuasive Technology Lab with the optimistic vision that his research would motivate people to eat healthier, exercise more and pay their bills on time. His goal was to design technology that taps into our brain's reward system and he has described his work by saying, "I create systems that influence human behavior"

In 2007, Fogg invited 75 of Stanford's brightest young tech designers to a class at his Persuasive Technology Lab, where he taught them everything he knew about behavioral science and asked them to design apps that used these principles to persuade and motivate human behavior. **Though Persuasive Design Technology changed almost everything about how we relate to our screens, the general public was told nothing about it.**



HOW DOES PERSUASIVE DESIGN TECHNOLOGY WORK?

Our brain has a reward system that was wired into our brains over 100,000 years ago during the Paleolithic Era. Our reward system evolved to guide us toward behaviors that helped us survive by releasing a pleasure chemical called dopamine during certain activities. Dopamine is responsible for feelings of wanting, craving, seeking and motivation. **You can think of dopamine as the “I want more of that!” chemical.**

If you want to know how your brain feels during a high-dopamine activity, take a bite of a chocolate bar or some crunchy bacon and notice how much you really, really want to take another bite. Then for contrast, try a low-dopamine activity. Go sweep your kitchen floor and notice how much you want to run next door and sweep your neighbor’s floor. Not so much, right? Food keeps us alive, sweeping floors does not.

In Paleolithic times, when our world was a place of scarcity, this reward system was pretty infallible. It guided us toward survival activities, like eating high-fat, high-calorie food, and seeking social approval, love and sex. Humans like pleasure. In the last several thousand years, we’ve used our incredible ingenuity to create many non-survival-related ways to get a dopamine hit. Our modern world is no longer a place of scarcity but a cornucopia of high-reward activities that can hijack our dopamine system. **Today, our internal reward system can lead us astray,** motivating us to seek and repeat behaviors that, if taken to excess, aren’t very healthy.



HERE ARE SOME EXAMPLES OF MODERN, HIGH-REWARD ACTIVITIES:

- highly-processed/sugary/fatty/salty foods
- alcohol
- drugs
- cigarettes
- caffeine
- porn
- shopping
- slot machines/gambling

All of these substances and behaviors light up our reward system, releasing the “I want more of that!” chemical. **You’ll notice that this happens to be a list of things well known to defeat human will power.** When B.J. Fogg taught those 75 Stanford tech designers how to use behavioral science to make technology that changed human behavior, what he really taught them was how to create technology that significantly raises our dopamine. With the addition of Persuasive Design, much our screen technology went from being a neutral tool to something that belongs on this “hard to regulate” list:

- **Persuasive Design Technology.**



THE MILLIONAIRE MAKER

Ten weeks after the 2007 Stanford Persuasive Design Technology class ended, **the apps the students created had already amassed 16 million users and generated a million dollars in revenue.** B.J. Fogg quickly became known as The Millionaire Maker. Fun fact: Instagram actually originated as homework for the class!

Despite Fogg's optimistic hope that Persuasive Design Technology would be used to make people's lives healthier, **any invention with that much power also has the potential to be used to make billions of dollars at the expense of human health and happiness.** Unfortunately, once the tech industry saw how this new and powerful science could make the money pour in, they have used it to do exactly that: make unprecedented amounts of money at the expense of our health and happiness. B.J. Fogg's students were hired to add addictive elements to the majority of tech products we use and the era of high-dopamine, Persuasive Design Technology was born.

Much of our screen time today - video games, social media, Youtube, smartphones, news feeds, dating apps, streaming platforms and pornography all use aspects of Persuasive Design. In fact, many of these products now raise our dopamine as high as drugs of abuse. **Chances are, if your kids own or use a device and it feels like a battle to regulate how much time they're spending on it, you're coming up against Persuasive Design.**

Tristan Harris, one B.J. Fogg's students, explains it this way:

"There are a thousand people on the other side of the screen whose job it is to break down the self-regulation you have."



WHY TECH COMPANIES WANT OUR EYES ON THE SCREEN

The tech companies could create non-addictive versions of their video games, social media feeds, smartphones and other apps tomorrow. Removing the Persuasive Design would take us back to the days before 2007 when screen use was much easier to self-regulate and parenting around screens wasn't so difficult. However, they will not be doing this anytime soon.

That's because the tech industry's entire business model has changed. The business model we grew up with was that we were the consumer and **the technology was a product being sold to us.** The new model, which is responsible for the huge rise in children's screen time, is that **our attention (eyes on a screen) is the product.** Who is the new consumer? Advertising companies, paying the tech industry to show us their ads. *That's right, we are no longer the consumer, we are the product.* **Our children's attention is now a product being sold to advertisers to make billions of dollars** and Persuasive Design gives the tech companies the perfect way to capture more and more hours of their attention. In one hour on TikTok, they'll see X number of ads. But 6 hours on TikTok = 6X the number of ads shown and TikTok makes 6X as much money. In the new video game model, instead of an upfront purchase of the game as a product, gaming companies make their money through both advertisements and in-game purchases. More hours on Fortnite, means kids see more ads and make more in-game purchases. **This new business model is much more lucrative than the old one.**



PERSUASIVE DESIGN AND OUR KIDS

Kids and teens are most susceptible to these new and addictive aspects of technology. That's because the prefrontal cortex, (the part of our brain responsible for self-regulation, delayed gratification and future planning) doesn't fully develop until our mid-twenties. What we've been seeing for almost two decades now is our children's underdeveloped self-control mechanisms pitted against thousands of the smartest tech designers, behavioral scientists, and neuroscientists in the world. **It's not a fair fight.**

If it feels like you're losing this fight in your house, **please know that it's not your fault.** As parents, we bought technology for the same reasons our parents did: for entertainment, for convenience, and to give our kids opportunities they'd never had before. But we were never told that the business model had changed and that Persuasive Design had been used to add addictive elements to the products we were buying our kids. We've been kept in the dark about the fact that many technology companies are no longer selling us products that make our lives easier, happier, or more productive. **The new tech business model is to sell us products that intentionally make our children's lives less healthy, and our parenting more difficult, because that's how they make the most money.**



DON'T GET HIGH ON YOUR OWN SUPPLY

A recurring pattern you'll find is that **the people who DID know about Persuasive Design**, the tech moguls themselves, were some of the **strictest parents** when it came to technology and their own kids.

*"Bill Gates sure is strict on how his children use the very technology he helped bring to the masses. In a recent interview with the Mirror, the tech mogul said **his children were not allowed to own their own cell phone until the age of 14**. "We often set a time after which there is no screen time, and in their case that helps them get to sleep at a reasonable hour," he said. Gates added that the children are not allowed to have cellphones at the table, but are allowed to use them for homework or studying."*

—excerpt from an interview with Bill Gates for *the Mirror* in London, by Emily Retter.

*"In late 2010, [Steve] Jobs told New York Times journalist Nick Bilton that **his children had never used the iPad**. "We limit how much technology our kids use in the home." Bilton discovered that other tech giants imposed similar restrictions. Chris Anderson, the former editor of *Wired*, enforced strict time limits on every device in his home, "because we have seen the dangers of technology first hand." His five children were never allowed to use screens in their bedrooms. Evan Williams, a founder of *Blogger*, *Twitter* and *Medium*, bought hundreds of books for his two young sons, but refused to give them an iPad. Walter Issacson, who ate dinner with the Jobs family while researching his biography of Steve Jobs, told Bilton that, "No one ever pulled out an iPad or computer. The kids did not seem addicted at all to devices." It seemed as if the people producing tech products were following the cardinal rule of drug dealing: never get high on your own supply. "*

—excerpt from Adam Alter's book *Irresistible: The Rise Of Addictive Tech And The Business Of Keeping Us Hooked*



PERSUASIVE DESIGN-PROOF YOUR FAMILY

Understanding the reason technology use is so hard to regulate in your family today is one of the most important and helpful things for parents to know when making decisions about technology and their kids. **The way your kids respond to their screens is not an accident. It's a purposeful exploitation of a vulnerability in the human brain.**

I encourage you to learn as much as you can about Persuasive Design. Two great resources for this are the documentary *The Social Dilemma* on Netflix and the book *Better Than Real Life: How Silicon Valley's Secret Science of Persuasive Design is Stealing Childhood* by Richard Freed. Knowing the mechanisms behind why the people in your house have a hard time looking away from their screens makes it so much easier to come up with solutions to "Persuasive Design-Proof" your family.

