

[Hot Clicks: Is Technology Hijacking Your Mind?](#)

Rounding up IT and advanced tech-related news impacting government and industry.

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Former design ethicist at Google, Tristan Harris, seems to think so, as he spent his time designing in a way that protected people’s minds from being hijacked — exploring the not-so optimistic side of technology. And even before Google, Harris began thinking about how technology exploits our minds’ weaknesses when he was a magician looking for people’s vulnerabilities and limits of perception, which he says is exactly what product designers do to our minds.

“They play your psychological vulnerabilities (consciously and unconsciously) against you in the race to grab your attention,” Harris wrote. He explains 10 hijacks

from product designers, starting with menu design and choices. He says the illusion of free choice is given with a menu, but really it's architected so that the website holders, product designers, magicians or companies behind the menu always win. He even compares the art of app addiction to slot machines — when we take out our phones, we're playing a slot machine to see what notifications we receive, refreshing our email to see new ones pop up, or swiping our finger to scroll our Facebook feeds to see what comes next.

Apps and tech are designed so we fear missing out, yearn for social approval and reciprocity, become slaves to infinite feeds and autoplay, and so on. And it's all done on purpose. [Medium](#)

Spies Eavesdrop on Calls and Texts

The Homeland Security Department said it received reports of surveillance systems tracking the locations of cellphone users and spying on their calls, texts and data streams. Specifically, “nefarious actors may have exploited” global cellular networks “to target the communications of American citizens,” DHS wrote in a letter. These surveillance systems tap into a global messaging system that allows cell users to move from network to network when they travel, thanks to an outdated, old and minimally secured messaging system called the Signaling System 7, or SS7. It's allowing intelligence agencies and criminals to spy on people based on just their cellphone numbers.

In fact, Sen. Ron Wyden, D-Ore., who the DHS letter was written to, wants us to understand just how unsecure U.S. telephone networks are, and how easy it is for criminals to track and hack our mobile phones. In a separate letter, Wyden said a major American cellular carrier referred an “SS7 breach” with customer data to federal law enforcement for investigation, and blamed the Federal Communications Commission for failing to address these national threats.

Industry access to SS7 has expanded over the years to thousands of companies, but there's been a lack of built-in security, making it easier for anyone with access to the network to pretend to be a carrier making requests for information about customers. And these techniques are used worldwide. [The Washington Post](#)

Reproduction in Mars Could Mean New Human

Subspecies

If we want to colonize on Mars, we're going to have to reproduce to achieve long-term success — but it could get challenging and dangerous. According to a study published in *Futures*, international scientists found some major medical, social, biological and ethical difficulties of conception and birthing on Mars' inhospitable environment. And even if we successfully colonize the Red Planet, researchers said reproducing will lead to a new species of human beings.

But why? Well, a few things: female astronauts are advised not to get pregnant on their way to Mars because of radiation risks, which could result in difficult pregnancies. Low doses of ionizing radiation can kill egg cells in a female fetus during pregnancy, and even if the baby is successfully delivered in a Martian environment, a female newborn is likely to be sterile.

Babies conceived in space are also likely to suffer from mental impairment or other genetic effects because of the damage to stem cells where sperm cells originate. The lack of gravity can also cause women to experience menstrual cycle problems, and long-term effects on the ovaries in space are still unknown. [TechTimes](#)

Bitcoin Miners Hogging Power in Central Washington

Chelan, Douglas and Grant counties have been hotspots for cryptocurrency miners since 2012 because of the region's super cheap hydropower. Mining requires trillions of computer calculations, meaning lots and lots of power, so the area was a prime location. It has since turned into a cyber-boomtown with bitcoin mining operations that range from state-of-the-art warehouses to backyard sheds. By the end of 2018, it's estimated the Mid-Columbia Basin could account for 30 percent of the global output of new bitcoin and large shares of other digital currencies like Ethereum.

But this energy-intensive growth is causing some problems for the Basin's three public utilities districts as they decide if they can keep up, because it's a challenge they've never really had to tackle before. Previously, yearly demand for electric power in Chelan County grows by 4 megawatts, but since January 2017, as bitcoiners bid up the price of currency, miners have requested 210 megawatts for

mines they want to build in the county.

That's almost how many megawatts the county and its residents were already using, and because it's a public utility, PUDs are obligated to consider the request. So, the Chelan County PUD has to rethink its business model (or models), some residents are concerned about the miners and potential of "cyber-gambling," and others feel it can re-energize the region. [The Seattle Times](#)

AI Can Almost Do Your Chores, Rejoice!

Imagine a world where robot assistants do our household chores. Thanks to researchers and computer scientists at MIT's Computer Science and Artificial Intelligence Laboratory and the University of Toronto, we are steps closer to this reality. They've been working on a "VirtualHome," a system that can simulate detailed household tasks and have artificial "agents" actually do them. The researchers demonstrated this system in a 3-D world inspired by the Sims videogame, and it can eventually be the basis for teaching robots how to do these tasks.

The team trained the system using 3,000 programs of different activities by breaking them down to subtasks the computer could understand. For example, the task of "making coffee" included the subtask of "grabbing a cup." In the Sims-like world, the artificial agent can execute 1,000 of these interactions in eight different scenes, like a living room, kitchen and bedroom. So once these programs were created, the team fed them into the VirtualHome 3-D simulator to be turned into videos, and from there, a virtual agent executed the tasks defined by the programs.

Describing actions as computer programs defines the clear steps needed to be taken to complete a larger task, and these computer programs can ultimately instruct a robot or virtual character to do chores. This system also created a large database of household tasks described with natural language — a potentially valuable asset for commercial companies with smart home assistants. [MIT News](#)

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