



## WIRED GUIDE

# LIFE ON THE DWEB

THE WEB IS a playground in a panopticon. Though *la vie* online can be exhilarating, many of our e-scapades take place on corporate estates that log our actions and juice them for ad dollars. Some rebels, pining for greater freedoms, are trying to build platforms outside the reach of Big Tech's tentacles. On the so-called decentralized web—truer to early dreams for online life—you can still shop or flirt, but your data remains encrypted and under your control. Boosters as varied as crypto-anarchists, venture capitalists, and the father of the web, Tim Berners-Lee, say the DWeb, as they call it, will create a digital commons less predisposed to privacy-invading monetization schemes. It's still young and glitchy, but the tech has matured enough that anyone with a browser can give it a try. Come play with us, fellow dwebbz. —TOM SIMONITE

Staff writer **Tom Simonite** (@tsimonite) covers intelligent machines for WIRED.

## Ask a Decentralized Investor

Silicon Valley's hordes of venture capitalists made billions of dollars fortifying the walled gardens of the internet. Andreessen Horowitz put money into Facebook and Twitter—but partner Chris Dixon, who helps run the firm's crypto fund, says the next wave of tech will be decentralized.

### What's wrong with the web you helped create?

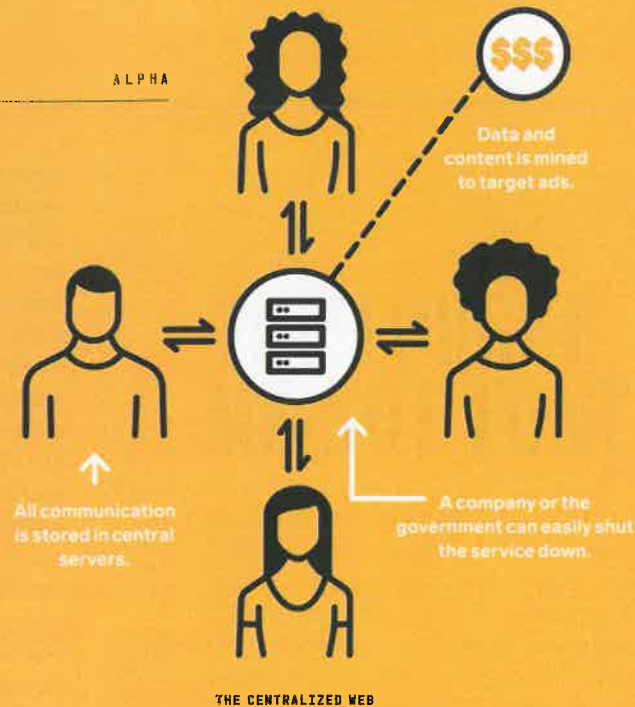
We backed into the situation where four or five companies control the code that powers everything. All the companies we see need Apple or Google's permission—or Facebook to rank them a certain way.

### What business opportunities are there on the DWeb?

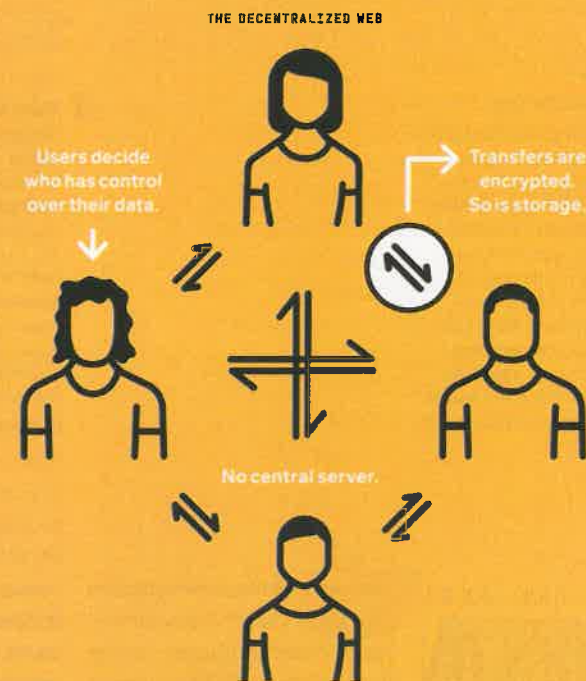
You can create digital money or virtual goods, like CryptoKitties, and new types of organizations, like autonomous companies that run as code in the cloud. It's sort of like mobile phones in 2005—the iPhone hasn't come out yet.

### If those work out, how will the world change?

I hope it's going to be a golden period in the way the '90s were for entrepreneurs and small businesses. Maybe people on the internet will be happier too. Everyone seems really grumpy right now.



## The Two Faces of the Internet



# 76

Estimated percentage of top 1 million normie-internet websites that contain a Google tracker.

## Obstacle Course

Just because the DWeb sorta works doesn't mean it will win. These are the four biggest challenges to widespread adoption.

### 1. Network effects

If your encrypted "Hello world" message blasts out and there's no one around to read it, do you even exist? The web we have today may be flawed, but it's a big metropolis and all the people, businesses, and information you need and crave are there. By comparison, the DWeb is a one-horse town. Persuading people to give up the tools they've built their lives around will be difficult—not least because internet companies designed their products to feel indispensable.

### 2. Meanies—and worse

There are (surprise) bad people on the internet, spewing hatred and promoting violence (sometimes on behalf of foreign agents). Companies like Facebook have broad powers to filter out some of that content, but decentralized platforms can be designed to be accountable to no one. Sites like D.Tube rely for the most part on community moderation, but as the 4chans and Reddits show, self-policing doesn't guarantee productive discourse.

### 3. Lost keys

Being the only person with the encryption key needed to access your data protects your privacy. It means your service provider or

government can't easily snoop on what you're doing. Awesome! It also means that if you lose that key, no one can help you. F\*\*k! Unless you kept a backup—a security risk in itself—that data is out of reach forever.

### 4. Webonomics

DWeb advocates say they can create an online realm less dependent on ad tracking and targeting than the one we live in today. Instead, they claim, people will pay for services they use. Cryptocurrencies do make it easier to digitally toss this creator or that platform a few cents, but it's unclear whether users will pay at all for online services that they get on the standard internet for free.

## Giant-Killer Apps



### Graphite Docs

Similar to Google Docs, except you don't entrust your data to a giant ad-hosting company. Files are encrypted with a digital key that only you have. (This article was written in Graphite.)



### Blockstack

A new web needs new tools for developers. Blockstack's network helps with key building blocks like storage and authentication. DWeb apps using it include Graphite, social network Afari, and encrypted chat app Stealthy.



### Textile

This photo app functions like a private Instagram account—your shareable photos are encrypted and sent to a decentralized storage network run mostly by volunteers. Available for Android and iOS.



### D.Tube

The stars of videos on this decentralized YouTube mimic don't chase ads—cryptocurrency is distributed based on upvotes. So far, the site's community seems to lean right and attract technolibertarians.



### Augur

Join this prediction market built on the computing system Ethereum to stake digital currency on everything from US elections and NBA championships to ghoulish bets like whether the president will be assassinated.



### OpenBazaar

Buyers and sellers can find one another here without needing a company (like eBay) in the middle. Wares include drones, *Star Wars* merch, and oxycodone tablets. Payment in cryptocurrencies only, please.

## We Adopted a CryptoKitty

Meet WIRED's new mascot. She's a CryptoKitty, a digital collectible you can trade with other cryptocat people—and even breed. One specimen changed hands for more than \$170,000 in September; ours, less prized, cost \$1.05. CryptoKitties have become one of the most popular applications for Ethereum, a go-to cryptocurrency network for builders of decentralized apps. Developers like Ethereum not just for its widely held currency, ether, but as a way to support their services with things like blockchain-backed smart contracts. Googly-eyed cartoon felines may seem frivolous, but they illustrate how decentralized services can give consumers power. You may love your Pokémon, but—hold them close—they're not really yours: The world they inhabit could be shut down in a corporate eye-blink. WIRED's CryptoKitty, however, lives immortally on the Ethereum blockchain. Even if the venture-backed startup that created her shutters, she will still be ours (as long as we don't lose our encryption key). We call her Catashi Nakameowto.

