

Opinions

China is racing ahead of the United States on blockchain

By [Josh Rogin](#)

The grand strategic competition between the United States and China will be won or lost based on who controls the rules and systems that govern 21st-century commerce, communications and security. Washington can no longer ignore that China is way ahead on the core technology that will underpin those systems: blockchain.

Last month, the Trump administration finally issued a broad U.S. plan for the development of [artificial intelligence](#). But there's no U.S. government strategy at all for blockchain. Meanwhile, the Chinese government's blockchain effort is already well underway.

“Ever since the start of the 21st century, a new generation of industrial revolution is substantially reshaping the global economic structure,” based on artificial intelligence, the Internet of things and blockchain, Chinese President Xi Jinping [told](#) the Chinese Academy of Sciences in May.

Blockchain [is described](#) as “an open, distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way.” It is a core technology for Web 3.0, the infrastructure of the next generation of online connectedness. For Western societies, blockchain is transformative in that it can be used to distribute power, which in turn can promote rule of law, fight corruption and crime, and protect digital identity and privacy.

That's not how Beijing sees it, though. If China can be first and build a blockchain system it controls, such as it did with its state-controlled Internet, Beijing will be able to use the technology to repress its people, expand its influence and subvert the Western rule-of-law-based system.

Days after Xi's remarks, state-controlled media organ CCTV ran [a one-hour special](#) explaining that “the value of blockchain is 10 times that of the Internet.” In that program, Chinese official Xu Hao said that the Chinese government's vision for blockchain was not “decentralization” but “de-intermediarization.”

“There is no way to get rid of the center,” he said.

The Chinese government's blockchain strategy has been twofold: investing heavily in blockchain development, innovation and implementation while also cracking down on blockchain systems it can't control. Blockchain development [is part](#) of China's “13th Five-Year Plan.” The Chinese government has invested billions in blockchain partnerships with Chinese firms. Through 2017, China [filed](#) more blockchain-related patents than any other country. Last year, the China Development Bank [signed a memorandum of understanding](#) for blockchain research collaboration with Brazil, Russia, India and South Africa.

On the local government level, China is now implementing blockchain for [supply-chain management](#), [tax collection](#), [food and drug safety](#), and more. As the National Interest [reported](#), China's People's Liberation Army is already working on how to weaponize blockchain for "gray zone" attacks, meaning cyber and information warfare.

Meanwhile, Beijing has outlawed most crypto-currencies such as bitcoin and begun banning [all virtual currency exchanges](#), deemed a threat to government control over the economy. The Chinese government [is reportedly developing](#) its own central-bank-backed blockchain currency.

Beijing is also cracking down on blockchain users' privacy and free speech. In January, the Chinese government [issued regulations](#) requiring blockchain companies to collect users' private data, make that data available to authorities and censor user content. The South China Morning Post [wrote](#) that might be a response to a Chinese woman posting an open letter alleging sexual harassment at her university on a blockchain after being censored on other social media.

Experts warn that the Chinese government is regulating blockchain not just for internal repression. Beijing is investing huge amounts of time and effort to develop blockchain technologies that can be used to exert Chinese influence abroad. While Westerners envision blockchain-based Web 3.0 as an open system, China could build a closed blockchain that it controls and corrupts for its own purposes.

For example, Beijing could build a closed blockchain to manage the flow of goods, services and funds through its multitrillion-dollar Belt and Road Initiative. Everyone would have to use that system, and the Chinese government could abuse its control by inserting back doors — enabling data theft, intelligence gathering, cyberattacks and more.

[Victoria Adams](#), an executive at the blockchain firm ConsenSys, [wrote](#) last month that a Chinese Web 3.0 would not be an open and transparent vision expressed by the United States, "but would be an authoritarian system controlled by the Chinese government." Furthermore, she wrote, "such a blockchain would allow China to set the terms for Web 3.0 and control digital communications, asset transfer, and global supply chains that pass through the Belt-and-Road system—potentially seriously impacting U.S. interests."

The United States is way behind, but it's not too late. Last month, the Chamber of Digital Commerce issued a [National Action Plan for Blockchain](#), a call to action for the U.S. government. The Trump administration should pivot from a regulation-based approach to one that supports blockchain technology development and innovation through a coordinated interagency strategy, the paper argues.

If the Chinese government is able to control the way blockchain is developed and governed worldwide, that would be a grave and long-term threat to U.S. and international economic and national security.

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Josh Rogin is a columnist for the Global Opinions section of The Washington Post. He writes about foreign policy and national security. Rogin is also a political analyst for CNN. He previously worked for Bloomberg View, the Daily Beast, Foreign Policy, Congressional Quarterly, Federal Computer Week and Japan's Asahi Shimbun newspaper. **Follow** 
