

TECH

China Has ‘Concerning’ Leads Over U.S. in Tech, Defense Department Official Says

Michael Brown sees lack of government investment, as well as tensions between Washington and Silicon Valley, as part of problem

By Heather Somerville

Oct. 23, 2019 2:44 pm ET

LAGUNA BEACH, Calif.—The U.S. is trailing China in numerous critical technologies, making the role of the private tech sector more important than ever to American national and economic security, a Defense Department official said Wednesday.

Michael Brown, director of the Defense Innovation Unit, a branch of the Pentagon, said that while the U.S. has a lead in certain technologies, the list of tech where China has the edge is extensive, including: 5G cellular networks, drones, batteries, hypersonic systems, wind and solar energy, as well as cryptocurrency.

The U.S. government and the military, for example, often use drones from Chinese company DJI Technology Co.

“A number of them are concerning from a national-security standpoint,” Mr. Brown said.

And even with the technologies where the U.S. is ahead, the lead isn’t “insurmountable,” Mr. Brown said during the WSJ Tech Live conference here.

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Mr. Brown said a lack of U.S. government investment is part of the problem. Sixty years ago, most of the country’s technology innovation was supported by the military, he said. But the government’s investment has been on a steady decline since the 1960s.

That leaves technology for defense and weapons systems, and humanitarian and disaster relief, to Silicon Valley, said Mr. Brown.

Tensions between Washington and Silicon Valley can make such a marriage difficult. Employees at large companies such as Alphabet Inc. 's Google have opposed working on technology that could be used in combat, and startups worry about the bureaucracy of doing business with the Pentagon and losing out on more lucrative commercial deals. Last year, Google pulled out of a project to help the U.S. military improve aerial-drone imagery after an uproar from employees.

Mr. Brown said many tech companies do want to work with the Pentagon, especially smaller ones seeking revenue. He said he has helped bring about 60 new vendors, mostly small tech companies, to the Department of Defense since 2015. But he said the relationship can be difficult if big companies engage in what he described as “crowdsourcing your business strategy,” an apparent reference to a deference to some employees’ political views in business decisions.

A more comprehensive approach to prioritizing and funding technology to compete with China would give the U.S. an advantage, Mr. Brown said.

“The private sector isn’t necessarily going to take the risk to invest in long-term technologies where the payoff is uncertain. That is the role of government,” Mr. Brown said.

He also credited China’s concerted government approach to tech dominance as something to heed. The U.S. has “been a bit allergic to how China manages their economy with industrial policy,” Mr. Brown said, adding that China’s approach is “moving them forward.” But he also said backing individual national corporate champions isn’t necessarily the way for the U.S. to go.

Mr. Brown in 2017 co-authored a Defense Department paper that cautioned Chinese investment in private tech startups gave China access to the “crown jewels” of the U.S. and opportunities to spy or steal that technology. The paper was followed by new policies restricting Chinese investments in startups and was also criticized as stereotyping Chinese investors as potential spies.

“They are very focused on technology transfer because they see that as a way to economically transform their society,” Mr. Brown said.

But he said that the ability to attract and retain global talent has been key to Silicon Valley’s success over the decades, adding that an environment unwelcoming to immigrants would ultimately backfire.

“The concern I have is that [the paper] is used too much as a justification for protectionist ideas and not enough for stimulus for further investment,” he said.

Write to Heather Somerville at Heather.Somerville@wsj.com

