US-China tech war is headed for digital decoupling

Posted: 2020-09-10

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The Trump administration's recent efforts to restrict Huawei's access to U.S.-designed chips is yet another salvo fired in the U.S.-China tech war. It threatens to hamstring the company's business of selling smartphones and telecommunication gear.

For more than a decade, Huawei has been in the crosshairs of the U.S. government, considered a threat to privacy and national security.

In December 2018, Canadian authorities arrested Huawei's Chief Financial Officer Meng Wanzhou, daughter of Huawei founder Ren Zhengfei, on U.S. request, for allegedly breaching sanctions against Iran. The Trump administration banned the company from participating in laying down 5G networks in the U.S.

The Trump administration also mounted a high-profile, high-stakes, diplomatic pressure campaign in an attempt to stop its allies such as the U.K., Australia, Canada, Japan, Germany, India, etc. from allowing Huawei to build their 5G networks.

The U.S. has repeatedly contended at every diplomatic forum that Huawei is a Chinese state-controlled company and allowing it in the next-generation wireless telecommunication networks is a folly.

While Australia and Japan banned Huawei from their 5G networks, other countries refused or were reluctant to follow suit for a number of reasons.

First, they believed that the threats emanating from allowing Huawei in 5G networks can be mitigated by keeping Huawei telecommunication equipment in a "periphery network" and excluding it from their "core networks."

Second, the equipment provided by Huawei is cheaper than its competitors like Nokia and Ericsson.

The other reason was that in many countries including the U.K., Huawei was part of their 4G telecommunication network. So, banning it from the next-generation network services would involve a huge cost in removing Huawei from existing wireless networks, which will also delay the rollout of 5G networks.

Then in May 2019, when the U.S. and China failed to finalize a trade deal agreed at the G20 summit in Bueno Aires in December 2018, the Trump administration reimposed suspended tariffs and banned U.S. companies including Qualcomm, Google and Micron from selling chips and software to Huawei.

The move marked a major escalation because Chinese tech companies are dependent on U.S.-designed chips and U.S. chip companies' major source of profit comes from selling chips to companies like Huawei.

The U.S. chip companies found a legal workaround enabling them to continue selling chips to Huawei. The situation was a win-win for all. On the one hand, the U.S. government could curb Huawei semiconductor development ambitions, and at the same time, the U.S. chip companies could continue to generate profits. But Huawei survived although its ambition of self-reliance in semiconductors was undermined.

The Trump administration had also increased its pressure tactics on its allies to force them to jettison Huawei from their next-generation telecommunication plans. Washington threatened Germany to revoke its intelligence-sharing agreement if Berlin allows Huawei into German next-generation networks.

But the pressure was not one-sided. China warned the countries that banning Huawei under U.S. pressure will invite retaliation from Beijing in the form of economic sanctions. This puts the countries in a double bind. If they allow Huawei into their next-generation wireless networks, they risk losing their privileged position as the security partners of the U.S., and if they ban Huawei, they risk losing access to the second-biggest market of the world.

In the initial weeks of 2020, it appeared that the U.S. campaign against Huawei had been lagging. The U.K. government limited Huawei's participation in its 5G networks but did not ban completely.

The European Union recommended its member states to limit the involvement of "high-risk" vendors like Huawei in their telecommunications networks, but did not suggest an outright ban on the Chinese company. The U.S.-China first-phase trade deal in January 2020 also calmed the waters across the Pacific.

Then in July 2020, the U.K. government reversed its earlier decision and blocked Chinese tech companies from its 5G networks. The U.K. government has asked its telecom operators to swap out Huawei equipment from their 4G networks by 2027.

The Indian government has reversed its earlier decision to allow Huawei to participate in 5G trials. Similarly, Israel has also announced the ban of Huawei from its 5G networks. Of all, the U.K.'s decision to ban Huawei was most eye-popping because it is part of the Five Eye — the U.S., the U.K., Australia, New Zealand and Canada — the intelligence-sharing network of English-speaking countries.

The Trump administration's latest ban will force not only U.S. chip companies but also foreign chipmakers because most of the semiconductor companies are somehow dependent on Silicon Valley companies for design and software to manufacture and install chipsets.

Without help from American tech companies, most companies, if not all, will struggle to develop chips. And without these foreign chipsets, Huawei cannot or will find it difficult to build 5G base stations and other equipment.

Meanwhile, the Chinese government is providing huge subsidies to local companies to become self-reliant and dominant in the semiconductor industry.

In recent years, especially after ZTE's case - a kind of "sputnik moment" for it - the Chinese government has doubled its efforts to develop its domestic semiconductor industry. But it will take years, if not decades, for China to become a leader in the semiconductor industry.

So, the latest action of the Trump administration is somewhat tantamount to a death sentence for Huawei. China is likely to use every arrow in its quiver to prevent the collapse of its national pride.

But the digital decoupling between the two superpowers is already underway and it is going to cost additional billions of dollars for countries and delay the rollout of 5G networks around the world.

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