Who Wants to Supply China's Surveillance State? The West

Companies vie to revolutionize 'Big Brother' surveillance with AI to read your mood and trawl your life

Visitors check out the latest in surveillance technology at the 16th China Public Security Expo in Shenzhen, China, which ran Oct. 29 to Nov. 1.

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1 COMMENTS

SHENZHEN, China—U.S. tech giants and Chinese state-backed companies showed off the future of policing in this southern technology hub as they vie for a slice of the world's biggest surveillance market.

Companies from across the globe packed one of the world's biggest surveillance trade shows to demonstrate the latest gizmos and algorithms powering the high-tech revolution in the industry, of which China is on the vanguard. Tools being hawked included facial-recognition cameras, iris scanners, software that can read a subject's mood and cameras that can scan license plates in the dark.

The surveillance-equipment market in China was worth \$6.4 billion last year, according to IHS Markit . China is a big buyer of surveillance technology as Beijing steps up its efforts to better monitor its 1.4 billion people. That is providing a boon for equipment makers—who are looking to export their gear abroad. But it has also sparked concern from rights activists about how the authoritarian government is using the souped-up "Big Brother" technology.

'It can't kill. Just burns clothes.'

-Henan RongTai Security Technology representative

Seagate Technology PLC, Qualcomm Inc. and United Technologies Corp. were among the foreign companies to pitch up at the 16th China Public Security Expo, where prospective customers included Chinese police, government officials and businesses.

"Ninety percent of the companies here have some kind of facial-recognition products, and they all want to sell it to the police," said Jiang Jun, an executive of CloudWalk Technology Co., which is a two-yearold startup from Chongqing. A spinoff of the Chinese Academy of Sciences, the company counts police units in 23 provinces and more than 50 banks as customers of its facial-recognition algorithm.

Qualcomm booked rooms at the nearby Ritz-Carlton hotel to demonstrate its latest tech: not-yetreleased tools that, when plugged into security cameras, recognize not just faces but offer a judgment on the subject's demeanor, such as "calm" or "happy." The technology was made in partnership with Chinese facial-recognition pioneer SenseTime, the company said.

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"Internet of Things is just blowing up, and one of those key areas is cameras," said Danny Petkevich, product management director for Qualcomm's connected-cameras business. "As we were looking at the areas of growth, security cameras is obviously a big portion of that market."

The Silicon Valley data-storage company Seagate—which had its name splashed across the expo welcome banner—occupied one of the convention's largest display areas, where it unveiled a new hard drive for storing surveillance footage.

At a standing-room-only booth hosted by Dahua Technology Co., China's second-largest maker of surveillance equipment, a live camera projected the faces of passersby on the screens alongside text describing their gender, age range and expression.

The demo wasn't a hit with everyone: It described Peng Xue, 27 years old, as "young" and "sad."

"My first impression is this is an overexpose of my information," she said. "And it doesn't seem to be right. I am actually happy."

Meanwhile, a separate Dahua display was also estimating subjects' ages. But depending on the facial expression, the display spit out an age range of 16 years—from 30 to 46—for a reporter from The Wall Street Journal testing the technology.

Next-Level Surveillance: China Embraces Facial Recognition

Once the stuff of science fiction, facial-scanning cameras are becoming a part of daily life in China, where they're used for marketing, surveillance and social control. Originally published in June. Video: Paolo Bosonin. Photo: Qilai Shen/Bloomberg

Also on display by Dahua was a big-data platform that enables the police to piece together a target's social network by scooping up information from China's prolific personal-data records, from national identification numbers and marriage records to electronic vehicles plates and Wi-Fi logins.

"This is already in use in Zhejiang," Dahua's home province on China's eastern coast, a company representative said.

Most products shared a common thread: a combination of artificial intelligence, like facial-recognition software, with increasingly high-powered surveillance devices.

"The purpose to come here is to find innovation. You realize how far behind Western countries are," said Mark Raine, managing director at CCTVdirect, a U.K.-based distributor of surveillance equipment. He was watching a gadget demonstration by the Chinese appliance maker Haier Group. "What starts here ends up in homes, airports and businesses back in America," he added.

Mr. Raine said the integration of artificial intelligence is revolutionizing the surveillance industry. "The market is moving away from recorded images," he said. "Now, the computer tells you when something's wrong."

Onlookers view a demonstration of cameras equipped with facial-recognition technology at a booth for camera maker Dahua Technology Co. at the 16th China Public Security Expo in Shenzhen, China, which ran Oct. 29 to Nov. 1.

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At a nearby booth for DeepGlint Technology Ltd., the Beijing-based software maker demonstrated an array of artificial-intelligence offerings that it said it is selling to Chinese police. Among them: technology that can sift through reams of surveillance footage to search for specific colors, makes and models of vehicles.

"Say you want to know if a black bus has been in this area," said a DeepGlint representative while gesturing toward a screen showing a congested highway. A series of black buses filled a screen. "We can just look it up in the system."

Another corridor of the convention center was filled with high-powered surveillance drones. Nearby, Henan RongTai Security Technology Co. was hosting a stand to show off laser rifles used for crowd control and for disabling drones.

"It can't kill," a company representative said of the Star Wars-like device resting on the table. "Just burns clothes."