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TRAVEL
VIRGIN
GALACTIC
RESERVE YOUR
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HEALTH
TIME IS
EVERYTHING
WORLD BRACES FOR
SPREAD OF NEW VIRUS



Control

WHY iOS SHOULD BE KEPT LOCKED DOWN



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‘TIME IS EVERYTHING’: WORLD BRACES FOR SPREAD OF NEW VIRUS

China’s massive travel restrictions, house-to-house checks, huge isolation wards and lockdowns of entire cities bought the world valuable time to prepare for the global spread of the new virus.

But with troubling outbreaks now emerging in Italy, South Korea and Iran, and U.S. health officials warning Tuesday it’s inevitable it will spread more widely in America, the question is: Did the world use that time wisely and is it ready for a potential pandemic?

“It’s not so much a question of if this will happen anymore, but rather more a question of exactly when this will happen — and how many people in this country will have severe illness,” said Dr. Nancy Messonnier of the U.S. Centers for Disease Control and Prevention.





Some countries are putting price caps on face masks to combat price gouging, while others are using loudspeakers on trucks to keep residents informed. In the United States and many other nations, public health officials are turning to guidelines written for pandemic flu and discussing the possibility of school closures, telecommuting and canceling events.

Countries could be doing even more: training hundreds of workers to trace the virus' spread from person to person and planning to commandeer entire hospital wards or even entire hospitals, said Dr. Bruce Aylward, the World Health Organization's envoy to China, briefing reporters Tuesday about lessons learned by the recently returned team of international scientists he led.

"Time is everything in this disease," Aylward said. "Days make a difference with a disease like this."

The U.S. National Institutes of Health's infectious disease chief, Dr. Anthony Fauci, said the world is "teetering very, very close" to a pandemic. He credits China's response for giving other nations some breathing room.

China locked down tens of millions of its citizens and other nations imposed travel restrictions, reducing the number of people who needed health checks or quarantines outside the Asian country.

It "gave us time to really brush off our pandemic preparedness plans and get ready for the kinds of things we have to do," Fauci said. "And we've actually been quite successful because the travel-related cases, we've been able to identify, to isolate" and to track down those they came in contact with.





With no vaccine or medicine available yet, preparations are focused on what’s called “social distancing” — limiting opportunities for people to gather and spread the virus.

VIRUS REACHES MORE THAN 3 DOZEN COUNTRIES AND 81,000 PEOPLE

Coronaviruses are a large family of viruses, some of which cause the common cold. Others have evolved into more severe illnesses, such as SARS and MERS.

LOCATION	FIRST REPORTED	CONFIRMED CASES ▼	DEATHS
China	December 31, 2019	78,064	2,715
South Korea	January 20, 2020	1,261	11
Japan	January 15, 2020	885	7
Italy	January 31, 2020	323	11
Iran	February 19, 2020	139	19
Singapore	January 23, 2020	93	0
Hong Kong	January 23, 2020	81	2
United States	January 21, 2020	57	0
Thailand	January 13, 2020	40	0
Taiwan	January 21, 2020	32	1
Australia	January 25, 2020	23	0
Malaysia	January 25, 2020	22	0
Bahrain	February 24, 2020	22	0
Germany	January 28, 2020	21	0
Kuwait	February 24, 2020	18	0

Data as of Feb. 26 at 10:25 a.m. Eastern; *705 of Japan's reported cases were from a cruise ship docked in Yokohama.

Source: AP reports / Graphic Phil Holm

AP

That played out in Italy this week. With cases climbing, authorities cut short the popular Venice Carnival and closed down Milan’s La Scala opera house. In Japan, Prime Minister Shinzo Abe called on companies to allow employees to work from home, while the Tokyo Marathon has been restricted to elite runners and other public events have been canceled.

Is the rest of the world ready?

In Africa, three-quarters of countries have a flu pandemic plan, but most are outdated, according to authors of a modeling study published last week in The Lancet medical journal. The slightly better news is that the African nations most connected to China by

air travel — Egypt, Algeria and South Africa — also have the most prepared health systems on the continent.

Elsewhere, Thailand said it would establish special clinics to examine people with flu-like symptoms to detect infections early. Sri Lanka and Laos imposed price ceilings for face masks, while India restricted the export of personal protective equipment.

India's health ministry has been framing step-by-step instructions to deal with sustained transmissions that will be circulated to the 250,000 village councils that are the most basic unit of the country's sprawling administration.

Vietnam is using music videos on social media to reach the public. In Malaysia, loudspeakers on trucks blare information through the streets.

In Europe, portable pods set up at United Kingdom hospitals will be used to assess people suspected of infection while keeping them apart from others. France developed a quick test for the virus and has shared it with poorer nations. German authorities are stressing "sneezing etiquette" and Russia is screening people at airports, railway stations and those riding public transportation.

In the U.S., hospitals and emergency workers for years have practiced for a possible deadly, fast-spreading flu. Those drills helped the first hospitals to treat U.S. patients suffering from COVID-19, the disease caused by the virus.

Other hospitals are paying attention. The CDC has been talking to the American Hospital Association, which in turn communicates coronavirus news daily to its nearly 5,000









member hospitals. Hospitals are reviewing infection control measures, considering using telemedicine to keep potentially infectious patients from making unnecessary trips to the hospital and conserving dwindling supplies of masks and gloves.

What's more, the CDC has held 17 different calls reaching more than 11,000 companies and organizations, including stadiums, universities, faith leaders, retailers and large corporations. U.S. health authorities are talking to city, county and state health departments about being ready to cancel mass gathering events, close schools and take other steps.

The CDC's Messonnier said Tuesday she had contacted her children's school district to ask about plans for using internet-based education should schools need to close temporarily, as some did in 2009 during an outbreak of H1N1 flu. She encouraged American parents to do the same, and to ask their employers whether they'll be able to work from home.

"We want to make sure the American public is prepared," Messonnier said.

How prepared are U.S. hospitals?

"It depends on caseload and location. I would suspect most hospitals are prepared to handle one to two cases, but if there is ongoing local transmission with many cases, most are likely not prepared just yet for a surge of patients and the 'worried well,'" Dr. Jennifer Lighter, a pediatric infectious diseases specialist at NYU Langone in New York, said in an email.

In the U.S., a vaccine candidate is inching closer to first-step safety studies in people, as Moderna





Inc. has delivered test doses to Fauci's NIH institute. Some other companies say they have candidates that could begin testing in a few months. Still, even if those first safety studies show no red flags, specialists believe it would take at least a year to have something ready for widespread use. That's longer than it took in 2009, during the H1N1 flu pandemic — because that time around, scientists only had to adjust regular flu vaccines, not start from scratch.

The head of the World Health Organization, Tedros Adhanom Ghebreyesus, said the U.N. health agency's team in China found the fatality rate between 2% and 4% in the hard-hit city of Wuhan, the virus' epicenter, and 0.7% elsewhere.

The world is "simply not ready," said the WHO's Aylward. "It can get ready very fast, but the big shift has to be in the mindset."

Aylward advised other countries to do "really practical things" now to get ready.

Among them: Do you have hundreds of workers lined up and trained to trace the contacts of infected patients, or will you be training them after a cluster pops up?

Can you take over entire hospital wards, or even entire hospitals, to isolate patients?

Are hospitals buying ventilators and checking oxygen supplies?

Countries must improve testing capacity — and instructions so health workers know which travelers should be tested as the number of affected countries rises, said Johns Hopkins University emergency response specialist Lauren Sauer. She pointed to how Canada diagnosed the first traveler from Iran arriving there with





COVID-19, before many other countries even considered adding Iran to the at-risk list.

If the disease does spread globally, everyone is likely to feel it, said Nancy Foster, a vice president of the American Hospital Association. Even those who aren't ill may need to help friends and family in isolation or have their own health appointments delayed.

"There will be a lot of people affected even if they never become ill themselves," she said.

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BUFFETT SAYS WALL STREET ADVICE USUALLY FAVORS MORE DEALS

Taking advice from Wall Street on deals is a bit like asking “the barber whether you need a haircut,” according to billionaire Warren Buffett.

Buffett said in his annual letter to Berkshire Hathaway shareholders last weekend that the current system of reviewing deals doesn’t always work well for investors because it almost always favors the deal that corporate CEOs propose. Companies should consider hiring two sets of advisers to argue for and against a deal before moving forward instead of just hiring a Wall Street firm that favors the deal, he wrote.

“Don’t hold your breath awaiting this reform: The current system, whatever its shortcomings for shareholders, works magnificently for CEOs and the many advisors and other professionals who feast on deals,” he wrote.

Buffett compared corporate deals to marriages that can be either blissful or troubled. He said Berkshire's record is filled with more happy deals than unpleasant ones, but he has recently struggled to find acquisition targets to court. Berkshire held roughly \$128 billion in cash and short-term investments at the year's end because Buffett hasn't found any reasonably priced major acquisitions in recent years. Berkshire is also facing more competition for acquisitions from private equity firms and other companies such as privately held Koch Industries.

Buffett's letter is always well-read in the business world because of his remarkable track record, his habit of dissecting the economy or other topics, and his talent for explaining complicated subjects in plain language. But in this year's letter, he mostly focused on Berkshire's businesses and reiterated messages he has delivered before.

Investor Bill Smead said he thinks Buffett "pulled his punches" in the letter and is resisting leveling broad criticisms at this late stage of his career.

"Buffett is wisely stepping back. He will not be the moral compass in the market going forward," said Smead, who leads Smead Capital Management.

Edward Jones analyst Jim Shanahan said Buffett kept this year's letter focused on business and didn't venture into other topics the way he has in the past.

"The annual letter has been getting shorter over the years, and it has lost some of the humor and wisdom that has made it so entertaining," Shanahan said.









Buffett said he remains optimistic about the future of the conglomerate that he and his partner, Charlie Munger, have built over the decades, even though Buffett is 89 and Munger is 96 years old. Buffett said Berkshire's managers and board members will protect the company after he and Munger are gone.

"We possess skilled and devoted top managers for whom running Berkshire is far more than simply having a high-paying and/or prestigious job," Buffett wrote. "Finally, Berkshire's directors — your guardians — are constantly focused on both the welfare of owners and the nurturing of a culture that is rare among giant corporations."

Buffett, who has no plans to retire, didn't offer any new details about the succession plan that has long been in place at Berkshire to eventually promote an internal manager to be the company's next CEO.

But he did say that longtime Berkshire executives Greg Abel and Ajit Jain will also take questions along with Buffett and Munger at this year's annual meeting. Since 2018, Jain has overseen all of Berkshire's insurance businesses while Abel has overseen all of the conglomerate's non-insurance business operations.

Andy Kilpatrick, a retired stockbroker who wrote a Buffett biography and follows the company closely, said Berkshire's many businesses generally delivered solid results last year even though the company's stock trailed the overall market. Berkshire's stock gained 11 percent last year to the S&P 500's 31.5 percent gain.

"It wasn't an exciting year, but it was a good year," Kilpatrick said.

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In the fourth quarter, Berkshire reported earning \$29.159 billion, or \$11.94 per Class B share, because of a big improvement in the paper value of its investments. A year ago, Berkshire lost \$25.4 billion, or \$10.31 per Class B share, in the fourth quarter because of a big drop in the paper value of several of its stock investments.

Buffett has long said Berkshire's operating earnings offer a better view of quarterly performance because they exclude investments and derivatives, which vary widely. By that measure, Berkshire's operating earnings fell to \$4.42 billion, or \$1.81 per B share, in the quarter, from \$5.72 billion, or \$2.32 per B share, a year earlier.

The four analysts surveyed by FactSet expected Berkshire to report operating earnings of \$2.39 per Class B share in the fourth quarter.

Berkshire Hathaway Inc. owns more than 90 companies, including BNSF railroad, Geico insurance and utilities. The company also has major investments in such companies as Apple, American Express, Coca-Cola and Bank of America.

WELLS
FARGO



WELLS FARGO TO PAY \$3B TO RESOLVE PROBES INTO FAKE ACCOUNTS

Wells Fargo agreed to pay \$3 billion to settle criminal and civil investigations into a long-running practice whereby company employees opened millions of unauthorized bank accounts in order to meet unrealistic sales goals.

Since the fake-accounts scandal came to light in 2016, Wells has paid out billions in fines to state and federal regulators, reshuffled its board of directors and seen two CEOs and other top-level executives leave the company. Wells Fargo's reputation has never fully recovered from the sales scandal, even four years later.

The \$3 billion payment includes a \$500 million civil payment to the Securities and Exchange Commission, which will distribute those funds to investors who were impacted by Wells' behavior.

"Wells Fargo traded its hard-earned reputation for short-term profits" said U.S. Attorney Nick Hanna for the Central District of California.

Before the scandal broke, Wells Fargo was considered to have a sterling reputation among the big banks. Bank executives referred to its branches as "stores," and once had a policy of trying to get each Wells Fargo customer to have eight financial products with the company.

Behind the scenes, Wells' top management was pushing sales goals that were both aggressive and unrealistic. Bank employees were berated for not making bloated quotas, leading sometimes to mental health breakdowns, and ultimately resulting in many employees gaming Wells Fargo's sales system in order to meet the targets. For example a number of Wells Fargo customers, notably the elderly, were signed up for online banking when they did not have internet access.

The behavior by Wells' employees caused damage to customers' credit scores and cost some of them money in fees.

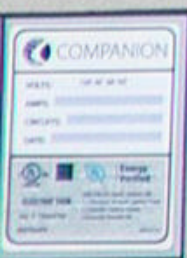
The documents that lay out the charges against Wells Fargo lean heavily on the behavior of "Executive A," described as the head of Wells' community bank business and the regional bank division from 2002 until 2017. Carrie Tolstedt held those positions during that time period. Tolstedt was aware of employees using fraudulent means to achieve sales goals as early as 2004, according to the DOJ.



WELLS FARGO



WEL FARO





WELLS FARGO

"I just want (Executive A) to be constantly aware of this growing plague," one Wells Fargo executive wrote in a 2004 email.

"Ms. Tolstedt acted appropriately and in good faith at all times, and the effort to scapegoat her is both unfair and unfounded," said Enu Mainigi, a lawyer for Tolstedt.

The settlement with the Department of Justice covers Wells Fargo as a company, and the DOJ could still go after individuals for violating bank laws. The Office of the Comptroller of the Currency, one of the nation's bank regulators, fined several of Wells' former top executives earlier this year for their role in the scandal.

Former CEO John G. Stumpf was fined \$17.5 million and agreed to a lifetime ban from the banking industry. The OCC sued Tolstedt for \$25 million for her role in the scandal, a suit that Tolstedt's lawyers have said they intend to fight.

Current Wells Fargo CEO Charlie Scharf, who started the job only a few months ago, has staked his early reputation on resolving all of the bank's legal questions. He has been blunt in saying that what the bank did under previous management was unacceptable.

"The conduct at the core of today's settlements — and the past culture that gave rise to it — are reprehensible and wholly inconsistent with the values on which Wells Fargo was built," Scharf in a statement.

Despite Scharf's comments, Wells' problems are far from over.

San Francisco-based Wells Fargo remains under probation with the Federal Reserve, which has restricted the bank's ability to grow assets or

expand until the Fed believes Wells has solved all of its culture problems. That probation, which started two years ago, was only expected to last a year and there are no signs that it will end soon.

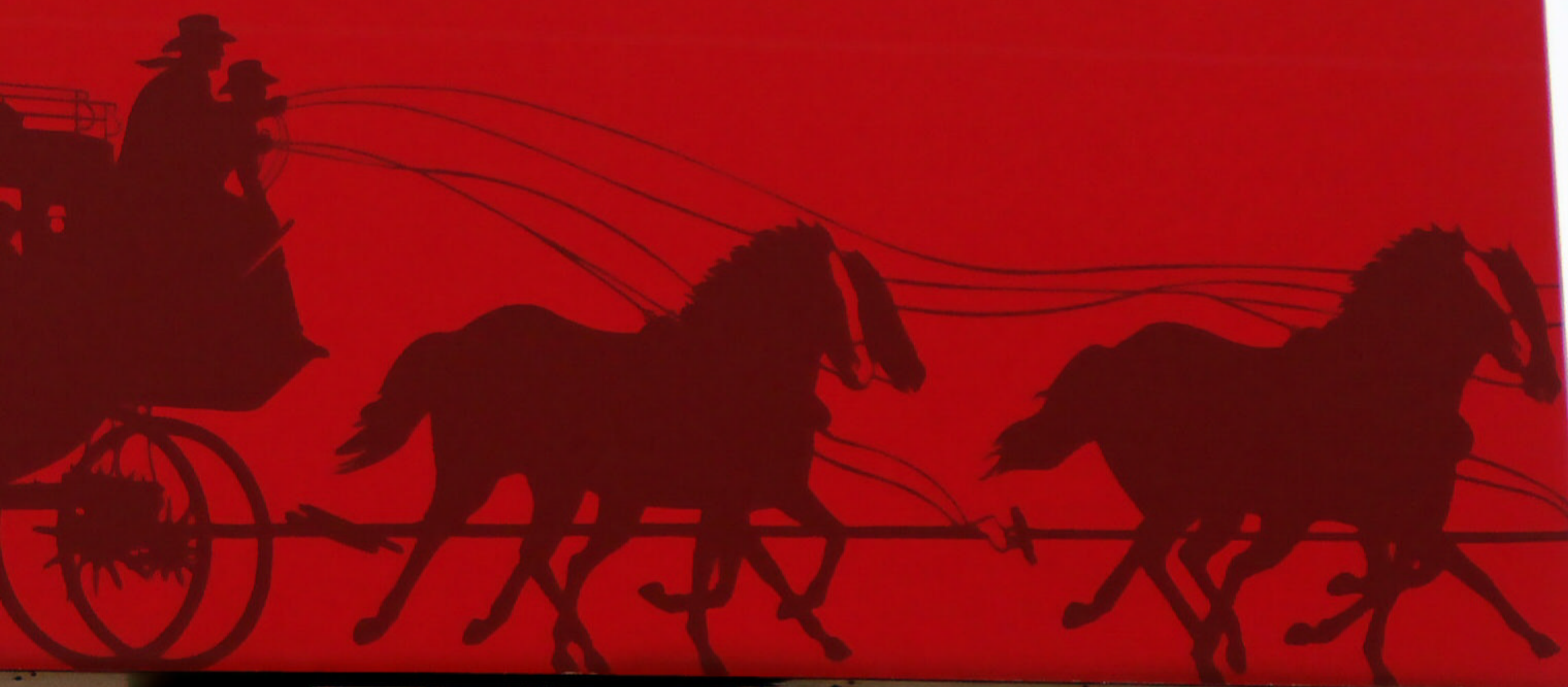
Further, the \$3 billion settlement doesn't resolve the bank's problems related to auto insurance and mortgages, which happened in the years following the sales practices scandal. Those issues remain under investigation by state and federal authorities.

The House Financial Services Committee, meanwhile, said that it will hold two days of hearings next month at which it will announce the findings of its investigation into the bank's compliance with regulatory orders issued in the wake of the fake accounts scandal. Scharf and other top executives are due to appear at the hearings, the committee said.

"Despite today's settlement, these hearings and the Committee's investigation will make clear that the problems at Wells Fargo remain unresolved," Committee Chairwoman Maxine Waters, D-Calif., said.



WELLS FARGO







TSA HALTS EMPLOYEES FROM USING TIKTOK FOR SOCIAL MEDIA POSTS

The Transportation Security Administration said it has stopped allowing employees to use the China-owned video app TikTok to create social media posts for the agency after the Senate's top Democrat raised concerns about potential national security issues.

New York Sen. Chuck Schumer sent a letter to TSA Administrator David Pekoske, months after news reports that the U.S. government launched a national security review of the app, which is popular with millions of U.S. teens and young adults. Schumer also cited a Department of Homeland Security policy prohibiting TikTok on agency devices.

The TSA said in a statement that a "small number of TSA employees have previously used TikTok

on their personal devices to create videos for use in TSA's social media outreach, but that practice has since been discontinued."

In his letter, Schumer said national security experts have raised concerns about TikTok's collection and handling of user data and personal information, locations and other content. He also noted in the letter that Chinese laws compel companies to cooperate with China's government and intelligence collection.

"Given the widely reported threats, the already-in-place agency bans, and the existing concerns posed by TikTok, the feds cannot continue to allow the TSA's use of the platform to fly," Schumer said in a statement to The Associated Press.

Over the past few months, the agency has posted a number of videos reshared on other social media platforms such as Twitter, which have amassed hundreds of thousands of views.

The agency said it never directed viewers to TikTok or published content directly to the platform, despite videos reposted on other TSA social media accounts having the TikTok logo in the bottom of the screen. The agency said it had an "active and award-winning presence on several social media platforms."

Some of the videos are musical parodies about what can and cannot be brought on an aircraft, while others advertise services like TSA's expedited screening program known as PreCheck. In one of the videos, a TSA spokeswoman with Nutella spread on her face is showing different containers of the chocolate-hazelnut spread to detail which one can be brought in carry-on luggage.

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CONTROL:

WHY iOS SHOULD BE
KEPT LOCKED DOWN





Developers are quietly working on iOS 14 and its Mac and Watch counterparts, and many are wondering what the next-generation operating system will look like. A Bloomberg report has shed some light, and Apple looks set to loosen its grip on its privacy-focused ecosystem.

APPLE MEANS PRIVACY

Ever since the introduction of iOS back in 2007 (formally iPhoneOS with the launch of the original iPhone), Apple's stance on privacy has been clear. Though third parties are actively encouraged to build apps and experiences for Apple's ecosystems, **they must play carefully by the Cupertino company's rules or be kicked out.** Each piece of software designed for macOS, iOS, and watchOS is compartmentalized, existing in a bubble to ensure data isn't transferred between apps to resell to advertising and e-commerce giants, something that sets Apple apart from its Android-powered rivals.

Apple's privacy focus has not been without its controversy, though. Who can forget the FBI drama, in which **US officials asked Apple to create a "back door" to iOS and iCloud for investigations?** The company dragged its heels and decided against offering the government body access to its billions of users' personal data. The **FBI has since managed to crack the iPhone 11**, demonstrating that Tim Cook and Co have a long way to go if they want to build a truly impenetrable device, but by setting itself up as the paragon of privacy, Apple's managed to win over the support of the anti-Google, anti-Samsung brigade, and ultimately shift millions more iPhones, iPads, Apple Watches, Macs, and subscriptions.







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happens
on your
iPhone,
stays
on your
iPhone.**

apple.com/privacy



In fact, over the past couple of years, privacy has become a pretty big deal for Apple. The firm recognizes privacy as a “fundamental human right” and **one of its “core values” on an all-bells, all-whistles microsite**, saying that they “design Apple products to protect your privacy and give you control over your information. It’s not always easy. But that’s the kind of innovation we believe in.” And though some may argue it’s as much about publicity as it is about protecting human rights, there’s no denying that Apple is head and shoulders above its rivals when it comes to protecting sensitive user data.

Last year’s controversy over **Siri recordings being sent to Apple employees for transcription** and future development purposes proved the firm was far from perfect, but Apple’s quick response, **introducing a new toggle feature in iOS Settings**, helped the firm regain some favor.

OPENING UP iOS

For the world’s biggest technology company, the key to keeping data secure is by locking down the ecosystem and encouraging consumers to use Apple-owned software. It can, to an extent, limit the power of third-party apps from getting their hands on information, as it did with **the new Sign in with Apple feature in iOS 13 as a direct hit to Google and Facebook**. However, as the firm looks to offer users more choice and avoid potential lawsuits, Apple is reportedly now considering offering rival apps the ability to gain even more prominence on iPhones and iPads, and allowing the HomePod to **play music and**

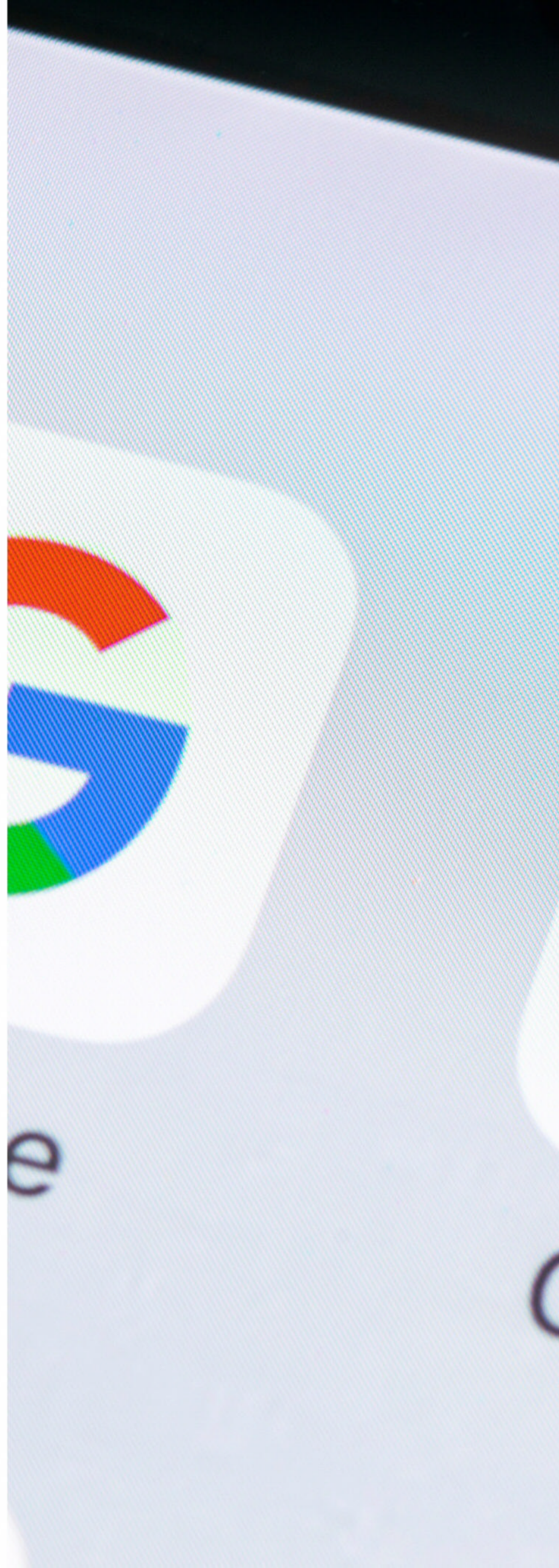
podcasts from rival third-party streaming services like Spotify, Amazon Music, Pandora, and TIDAL.

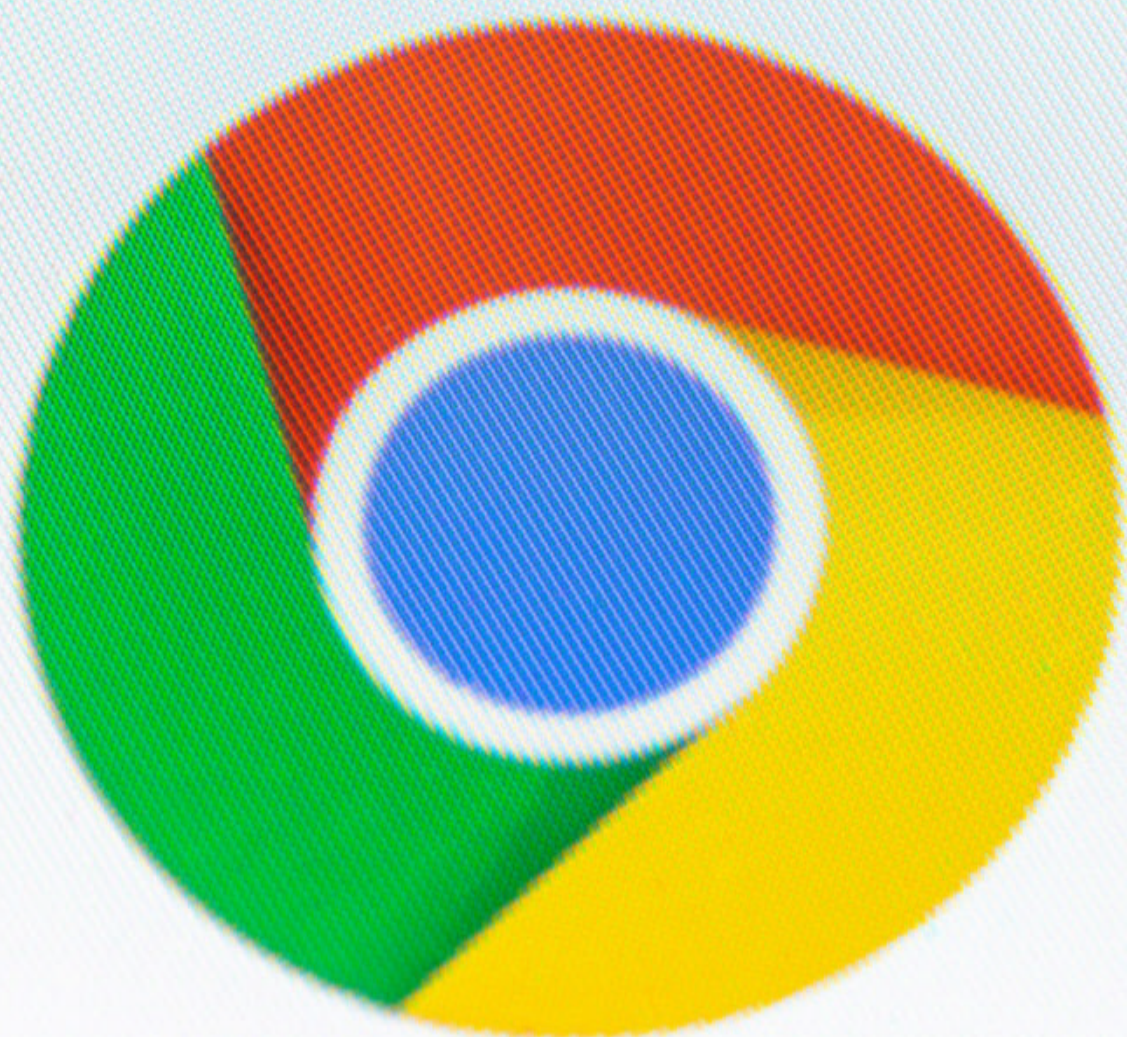
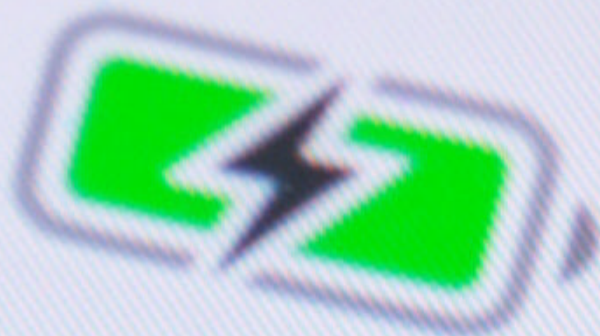
Why? Apple has received a barrage of criticism in recent months about its unfair advantage, especially now that it's expanding into new services like Apple Music, Apple News+, Apple Arcade, and Apple TV+. As a result, the giant is reportedly discussing whether to 'open up' its operating system to third parties, allowing users to choose their own default options like Gmail instead of Apple Mail, Spotify instead of Apple Music, and Chrome instead of Safari. It has, until now, been impossible to replace Apple apps with third-party alternatives by default, a sticking point for **devs who complain they can't compete with Apple's preloaded apps.**

Apple's Safari web browser and Mail apps, for example, are two of the most-used apps on the iPhone and iPad, and though rivals Chrome, Firefox, Google Mail and Microsoft Outlook are available, users will automatically be sent to Safari and Mail when they open links in an iMessage or WhatsApp. **58.06% of iOS users stick to the default Safari browsing experience in the United States,** despite Safari having just a 3.60% market share on laptops and desktops. By comparison, Chrome has a 67.63% share of the desktop market. Of all emails opened, **40% of them are done so in Apple's iOS Mail app,** followed by Gmail with 24%.

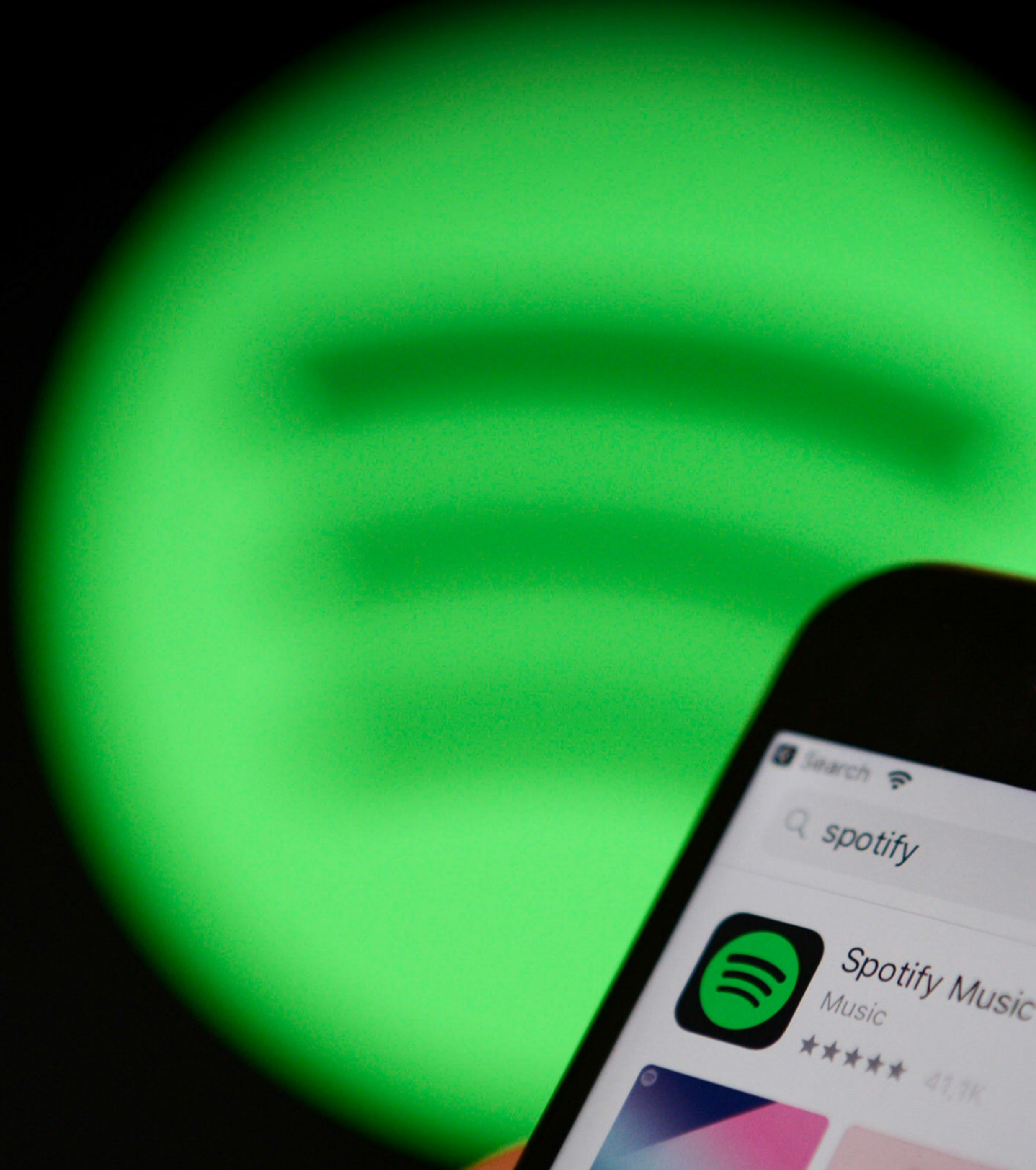
ANTI-TRUST CASES

One of Apple's biggest challenges is that its closed system prohibits users from choosing their own third-party apps as defaults. Rivals





Chrome





including Android allow third-party apps to be chosen, bypassing Google Maps and Google Chrome for rivals, offering developers a fairer playing field. Last year, the U.S. House of Representatives' antitrust panel discussed the closed nature of Apple's ecosystem, questioning whether it was right for Apple to push the use of its default Apple-owned apps. Being the default app allows Apple to attract hundreds of millions of users overnight (as of January 2019, **there were more than 1.4 billion active iOS devices**) and by keeping users tethered to Apple's services, like iCloud and Apple Music, rivals like Spotify and Google Drive suffer, with **Apple TV+ rival Netflix removing the ability to subscribe on iOS** to circumvent Apple's extortionate 30% subscription revenue cut, an entirely separate antitrust issue which is also sparking conversations around the world.

Indeed, last year, **streaming rival Spotify submitted an antitrust complaint to the European Union**, complaining about Apple's 30% cut. The Cupertino company responded by saying Spotify wanted "the benefits of the App Store without paying for them," but Spotify singled out the fact that it can't play on HomePod devices or become a default music option when asking Siri to play a track.

With Apple potentially backtracking and allowing third-parties to be chosen as the default option, users will have more choice over how they listen to their favorite music, and Apple will have to work harder to persuade users to stay loyal to its Music service. Last year, **Apple Music overtook Spotify in paid subscribers in the United States following several promotions.**

Though the changes are yet to be finalized and are subject to change, Apple could add the new default apps feature in iOS 14, which will be unveiled at the Worldwide Developers Conference in June and be released to the public in September. The update would appease consumers and subscription competitors, potentially ending ongoing antitrust consultations. Apple has already been told that it will **have to face an App Store monopoly lawsuit in the US**, and company Tile has criticized the company for changes to location tracking in iOS 13 which rendered its product useless, **ahead of Apple's plan to launch its own AirTags product**, but its update could silence the critics and allow Apple to carry on ahead unscathed.

THE FUTURE IS COMING

The truth is that we know nothing for certain about Apple's proposed changes. Though there are insiders suggesting that the changes are set in stone and set to arrive this year, Apple is known to pull the plug on features and ideas at the last minute, so until we have the first beta build of iOS 14 in our hands, we can do little but speculate over the company's changing tides. Though Apple's current restrictions and "lockdowns" ultimately improve the underlying security of iOS, they lead to a lack of competition which not only harms software developers and tech rivals, but it means that Apple can rest on its laurels, without having to innovate every year. And at a time when consumers have been complaining about fewer features on iPhones and iOS releases, perhaps increased competition is something Apple really needs.

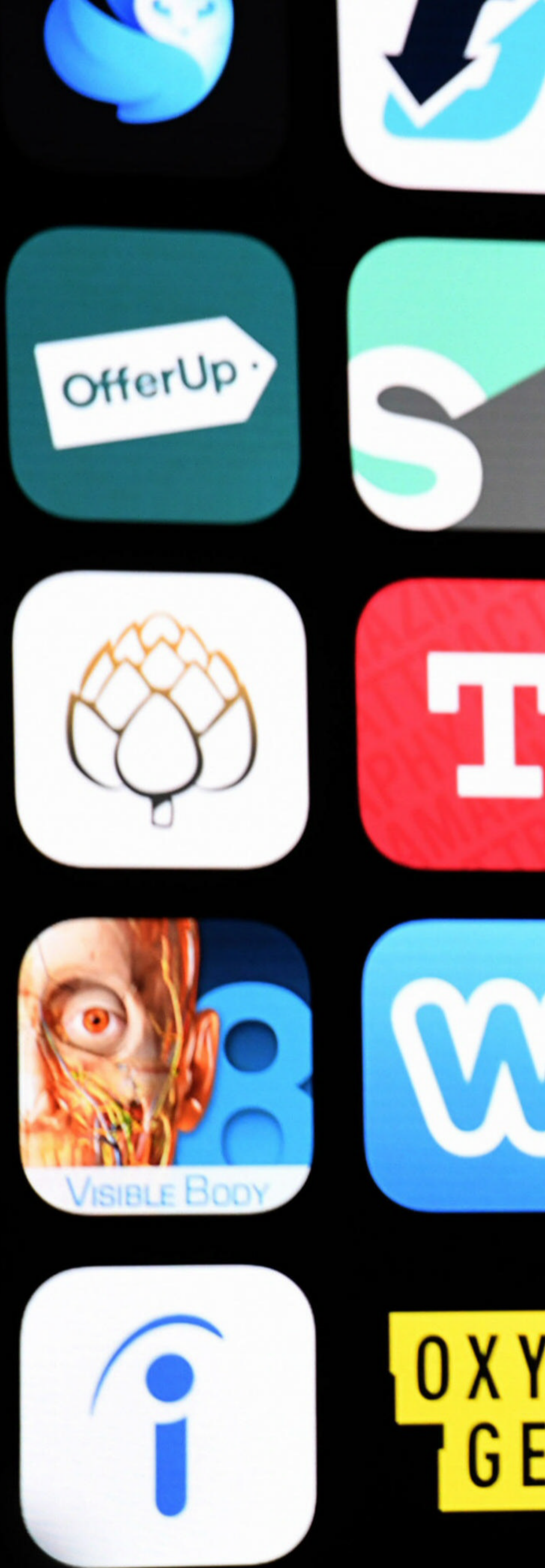
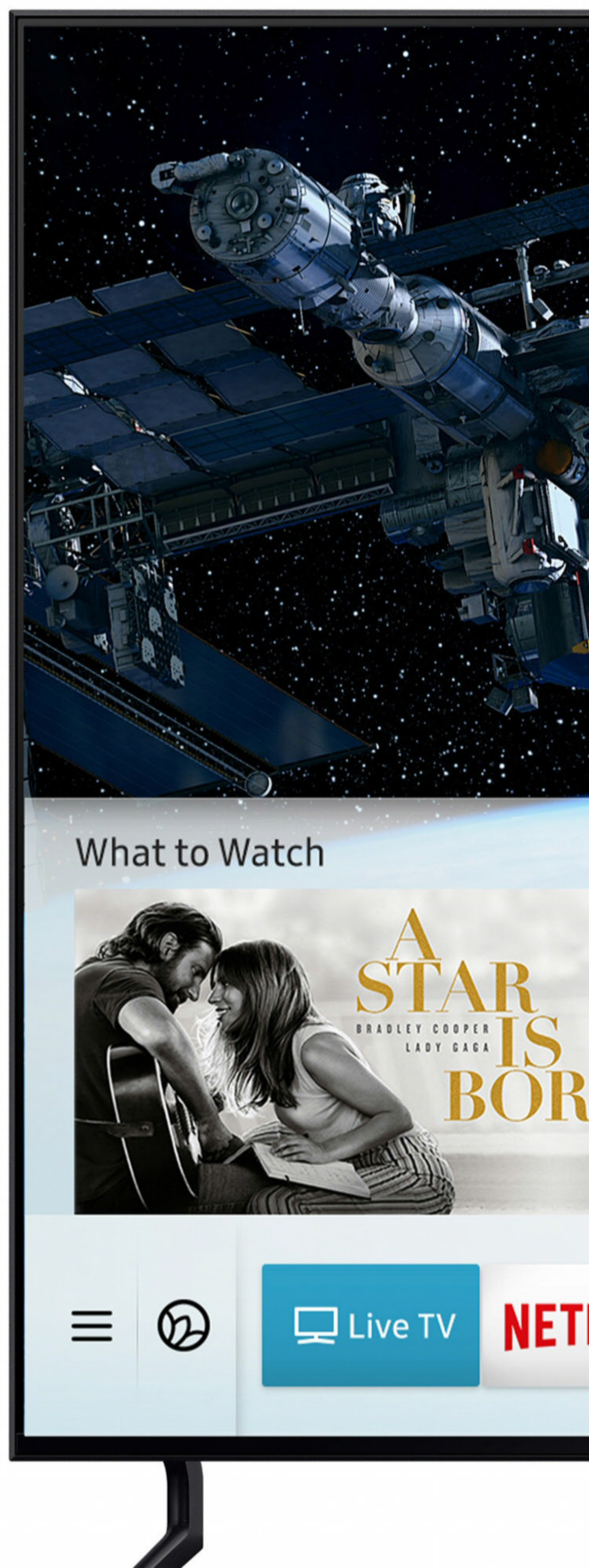




Image: David Paul Morris

Over the past couple of years, Apple has proven that lowering its walls helps it to deliver a better service to users. When Apple created CallKit to allow VoIP apps like WhatsApp and Facebook Messenger to more closely integrate with the phone dialer in iOS, users were given more choice on how they communicate with friends overnight. And with **Apple finally adding AirPlay support and the Apple TV app** to third-party TV sets to play Apple TV+ and purchased iTunes content, Apple again helped users consume material in the way that suits them best, without harming privacy or profits.

Though restrictions and limitations must be put in place to reduce the chances of 'bad actors' exploiting Apple's carefully-built ecosystem, opening up the software to third-party apps should prove to be a positive change for everyone. If Apple gives users choice and ensures its core apps are the best they can possibly be, the company will surely come out on top.





ハソニョフ製リチウムイオン

Panasonic

Lithium ion
Rechargeable battery



Li-ion



PANASONIC SCRAPS SOLAR PANELS PARTNERSHIP WITH TESLA

Panasonic is pulling out of its partnership with Tesla to produce solar panels at a factory in New York state, the Japanese electronics maker said.

Panasonic's production at the factory in Buffalo will end by May, with an exit by September, it said in a statement. The decision is to streamline the company's global solar energy operations, it said.

Panasonic will continue making batteries for Tesla's electric vehicles in another factory in Nevada, it said.

Panasonic also quoted Tesla as saying that the move won't affect Tesla's solar business plans.

Panasonic will also continue selling solar panels under its brand in the U.S. through its own distribution channels, it said.

The two companies' agreement to work on solar energy was announced in 2016.

Panasonic will offer severance packages to employees at the Buffalo plant. Tesla will hire as many as possible of those who wish to keep working there, according to Panasonic.

Tesla did not immediately respond to requests for comment.



“The decision to transition away from U.S. solar manufacturing in Buffalo aligns with our global solar strategy,” said Panasonic executive Shinichiro Nakajima.

Panasonic is a major manufacturer of home appliances, such as washing machines and refrigerators, but its operations include services and products for businesses.

Tesla, based in Palo Alto, California, leads the world in electric vehicle sales.

Competition from cheaper Chinese manufacturing of solar components has posed a problem for Panasonic as it strives to reposition itself for future growth.







PENTAGON ADOPTS NEW ETHICAL PRINCIPLES FOR USING AI IN WAR

The Pentagon is adopting new ethical principles as it prepares to accelerate its use of artificial intelligence technology on the battlefield.

The new principles call for people to “exercise appropriate levels of judgment and care” when deploying and using AI systems, such as those that scan aerial imagery to look for targets.

They also say decisions made by automated systems should be “traceable” and “governable,” which means “there has to be a way to disengage or deactivate” them if they are demonstrating unintended behavior, said Air Force Lt. Gen. Jack Shanahan, director of the Pentagon’s Joint Artificial Intelligence Center.

The Pentagon's push to speed up its AI capabilities has fueled a fight between tech companies over a \$10 billion cloud computing contract known as the Joint Enterprise Defense Infrastructure, or JEDI. Microsoft won the contract in October but hasn't been able to get started on the 10-year project because Amazon sued the Pentagon, arguing that President Donald Trump's antipathy toward Amazon and its CEO Jeff Bezos hurt the company's chances at winning the bid.

An existing 2012 military directive requires humans to be in control of automated weapons but doesn't address broader uses of AI. The new U.S. principles are meant to guide both combat and non-combat applications, from intelligence-gathering and surveillance operations to predicting maintenance problems in planes or ships.

The approach outlined this week follows recommendations made last year by the Defense Innovation Board, a group led by former Google CEO Eric Schmidt.

While the Pentagon acknowledged that AI "raises new ethical ambiguities and risks," the new principles fall short of stronger restrictions favored by arms control advocates.

"I worry that the principles are a bit of an ethics-washing project," said Lucy Suchman, an anthropologist who studies the role of AI in warfare. "The word 'appropriate' is open to a lot of interpretations."







Shanahan said the principles are intentionally broad to avoid handcuffing the U.S. military with specific restrictions that could become outdated.

“Tech adapts. Tech evolves,” he said.

The Pentagon hit a roadblock in its AI efforts in 2018 after internal protests at Google led the tech company to drop out of the military’s Project Maven, which uses algorithms to interpret aerial images from conflict zones. Other companies have since filled the vacuum. Shanahan said the new principles are helping to regain support from the tech industry, where “there was a thirst for having this discussion.”

“Sometimes I think the angst is a little hyped, but we do have people who have serious concerns about working with the Department of Defense,” he said.

Shanahan said the guidance also helps secure American technological advantage as China and Russia pursue military AI with little attention paid to ethical concerns.

University of Richmond law professor Rebecca Crootof said adopting principles is a good first step, but the military will need to show it can critically evaluate the huge data troves used by AI systems, as well as their cybersecurity risks.

Crootof said she also hopes the U.S. action helps establish international norms around the military use of AI.

“If the U.S. is seen to be taking AI ethical norms seriously, by default they become a more serious topic,” she said.



A Virgin Galactic spacecraft is shown in flight against a clear blue sky. The spacecraft is white with a black nose and is positioned on the left side of the frame. The background is a solid blue sky with a slight gradient from light blue at the bottom to a deeper blue at the top.

VIRGIN GALACTIC REPORTS HIGH INTEREST IN ITS SPACE FLIGHTS

Virgin Galactic has received nearly 8,000 online reservations of interest since its first successful test flight into space 14 months ago, the company said Tuesday as it nears commercial operation and prepares to reopen ticket sales.

Virgin Galactic already had more than 600 firm reservations that were taken from customers in 60 countries until the December 2018 flight, when it closed down ticket sales.

The company said that on Wednesday it will begin a process called "One Small Step" that will allow those online registrants who are serious about becoming passenger astronauts to register online for a firm reservation by paying a fully refundable deposit of \$1,000.

Confirming a spaceflight reservation will be a process called “One Giant Leap,” echoing the words of Apollo 11 astronaut Neil Armstrong when he became the first person to set foot on the moon in 1969.

The company did not say when the new set of seats would be released or the actual cost. The initial seats were sold at \$250,000 apiece.

After years of development and testing at Mojave Air & Space Port in Mojave, California, Virgin Galactic has been moving toward starting actual operations at Spaceport America in southern New Mexico — although it has not set a date.

A special carrier aircraft recently ferried its spaceship, VSS Unity, from California to New Mexico and said construction of the next two spacecraft is well underway.

Virgin Galactic is offering suborbital flights to an altitude of at least 50 miles (80.5 kilometers), where passengers will see a vast swath of the Earth far below and experience a few minutes of weightlessness before the spacecraft glides to a landing.

The current 7,957 online registrations are more than double the number the company last reported in September 2019.

Stephen Attenborough, the company’s commercial director, said in a statement that the increasing demand for personal spaceflight was encouraging.

“One Small Step allows us to help qualify and build confidence in our direct sales pipeline, as well as to ensure that those who are most keen to make reservations, are able to do so at the earliest opportunity,” he said.







Virgin Galactic was founded by British billionaire Richard Branson after the historic 2004 flights of the experimental SpaceShipOne, which was funded by Microsoft co-founder Paul Allen and won the \$10 million Ansari X Prize as the first privately developed, manned rocket to reach space.

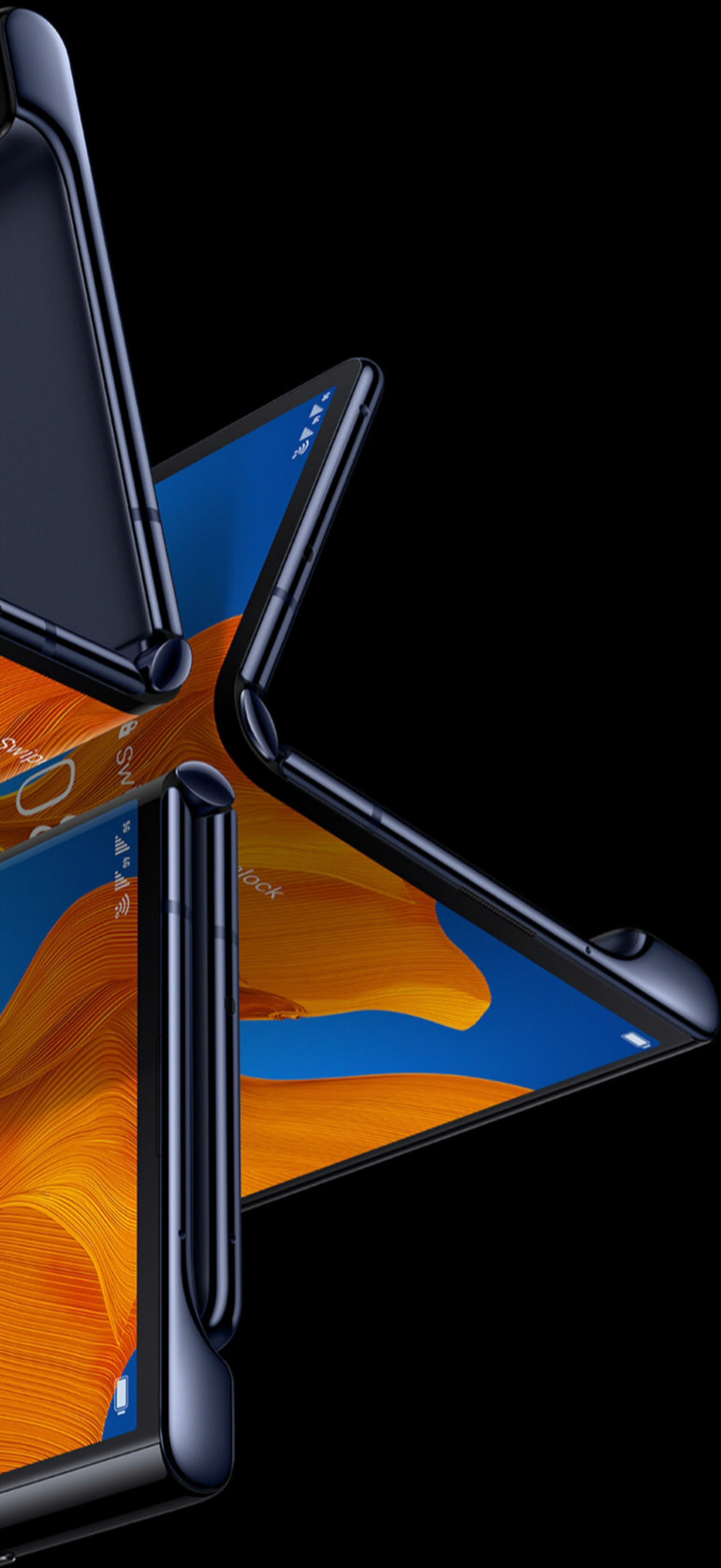
Virgin Galactic's six-passenger spacecraft is a type called SpaceShipTwo. A carrier aircraft carries it to high altitude and releases it before its rocket engine ignites.

The company is now formally named Virgin Galactic Holdings Inc. and went public on the New York Stock Exchange in October. The fleet is being manufactured by The Spaceship Company, a wholly owned subsidiary.



CHINA'S HUAWEI DEBUTS LATEST VERSION OF FOLDING PHONE





China's Huawei unveiled its latest folding smartphone and its first such device to be available internationally, competing in a niche category with new models from Samsung and Motorola.

The company took the wraps off the new Mate Xs by video instead of a press launch, as the tech show in Spain where it had planned to hold the unveiling was cancelled over worries about the new coronavirus outbreak.

Like its predecessor, the Mate X, which only saw limited release in China last year, the display wraps around the phone's outside when closed and unfolds to a tablet-size eight-inch screen.



Image: Ryan Browne



The company says there are improvements under the hood, including a redesigned four-layer screen and upgraded “falcon wing” hinge. It also gets Huawei’s latest homegrown Kirin 990 chipset, a four-lens camera system and can be used on a wider range of high-speed 5G network bands.

However, the Mate Xs also faces a distinct disadvantage because it lacks the full Android operating system by Google. The Trump administration last year blocked Huawei’s access to U.S. components and technology on national security grounds, part of a wider trade and tech war between the U.S. and China.

Instead, the Mate Xs runs a stripped-down open source version of Android. Users can still download apps but they’ll be from Huawei’s own app store, not the Google Play store.

Huawei, the world’s No. 2 phone maker, faces competition from Samsung and Motorola, which recently launched new folding screen smartphones.

Faced with stagnating sales as consumers hold on to their devices longer, smartphone makers have turned to foldable technology to rejuvenate the market. It’s unclear, however, whether the pricey devices will appeal to more than just die-hard tech enthusiasts.

There are also questions about reliability. Samsung’s first folding device, the Galaxy Fold, was plagued by reports of screens breaking after it was unveiled last year, delaying its launch for months.

The phone is expected to go on sale in March priced at 2,499 euros (\$2,700) though it’s unlikely to be widely available in the U.S.



Image: Ted S. Warren



NO CHECKOUT NEEDED: AMAZON OPENS CASHIER- LESS GROCERY STORE

Amazon wants to kill the supermarket checkout line.

The online retailing giant is opening its first cashier-less supermarket, where shoppers can grab milk or eggs and walk out without waiting in line or ever opening their wallets. It's the latest sign that Amazon is serious about shaking up the \$800 billion grocery industry.

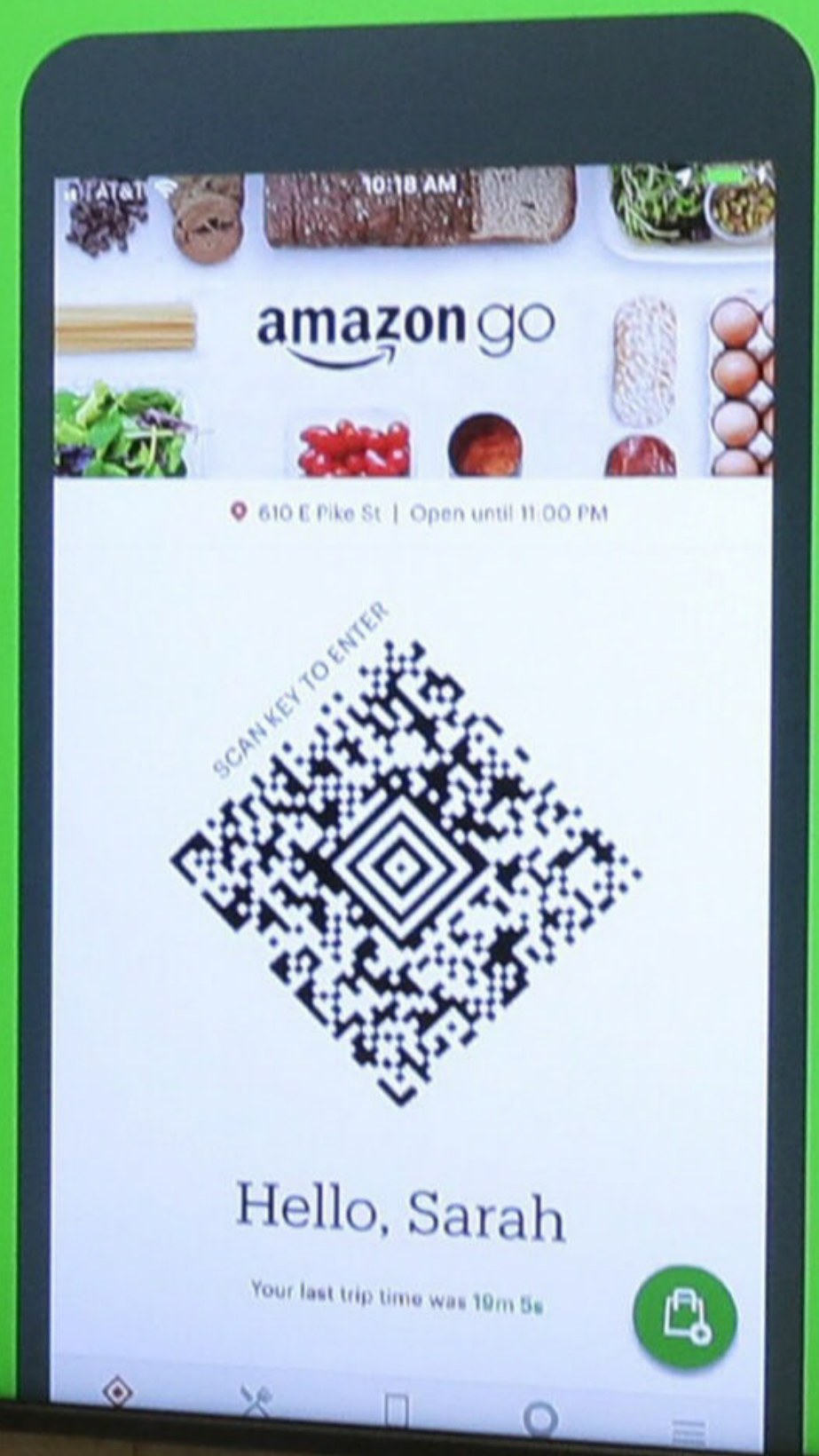
At the new store, which opened this week in Amazon's hometown of Seattle, shoppers scan a smartphone app to enter the store. Cameras and sensors track what's taken off shelves. Items are charged to an Amazon account after leaving.

"I love the convenience of literally grabbing and going" said Art Kuniyuki, a payroll and benefits manager from Seattle, who spent \$15 on Barilla pasta, Dove chocolate and other groceries shortly after the store opened.

Called Amazon Go Grocery, the new store is an expansion of its 2-year-old chain of 25 Amazon Go convenience stores. It's 10,400 square feet — more than five times the size of the convenience

JUST
WALK
OUT
Groceries

Scan your
app to enter





stores — and stocks much more beyond the sodas and sandwiches found at Amazon Go. Cameron Janes, who helps oversee Amazon's physical stores, said the technology had to be tweaked to account for how people squeeze tomatoes to test for ripeness or rummage through avocados to find just the right one. Nothing at the store is weighed. One blood orange goes for 53 cents; a banana is 19 cents. Amazon is not new to groceries. It made a splash in 2017 when it bought Whole Foods and its 500 stores. It's also been expanding its online grocery delivery service. But it's still far behind rival Walmart, the nation's largest grocer, which has more than 4,700 stores. Walmart's online grocery service has also been popular with customers, who buy online and then drive to a store to pick up their order. Amazon also plans to open another type of grocery store in Los Angeles sometime this year, but the company said it won't use the cashier-less technology at that location and has kept other details under wraps. The company declined to say if it plans to open more Amazon Go Grocery stores, and said there are no plans to bring the technology to Whole Foods stores. Much of the fruits and vegetables come from the same suppliers at Whole Foods, Janes said. And it has products from the Whole Foods store brand 365, such as organic oatmeal and bagged baby carrots. But it also sells Oreos, Cheez-Its and other stuff banned from the natural grocer. Families can shop together with just one phone scanning everyone in. Anything they grab and leave the store with will be added to the tab of the person who signed them in. But shoppers

PRODUCE

365 Organic

BANANAS
APPLES
TOMATOES
LIMES
AVOCADOS
LETTUCE
ONIONS
ASPARAGUS
CARROTS

3

PEPPERS
HERBS
CUT VEGETABLES

Organic Honeycrisp Apple
\$1.35 each

Organic Ruby Marsh Grapefruit
\$1.29 each

Organic Navel Orange
\$1.23 each

Organic Fuji Apple
\$1.25



shouldn't help out a stranger reaching for the top shelf: Amazon warns that grabbing an item for someone else means you'll be charged for it. Hoping to catch up to Amazon, other retailers and startups are racing to bring similar cashier-less technology to stores. Earlier this month, 7-Eleven said it is testing a cashier-less store for employees inside its offices in Irving, Texas. But cashier-less stores have come under scrutiny from lawmakers and advocates who say they discriminate against low-income people who may not have a credit card or bank account.





Image: Ted S. Warren

Amazon has since let customers pay with cash at its convenience stores, and the company said shoppers can do the same at the grocery store by alerting a worker to let them in through the turnstile.

The stores also eliminates the job of cashiers. Janes declined to say exactly how many people the store employs, only saying it is “several dozen.” Workers greet customers and walk around aisles restocking shelves. One employee stands by the alcohol section, checking IDs of shoppers who want wine or beer.

While cashier-less stores remove the annoyance of waiting in line to pay, it also kills some joys of the supermarket. There’s no one to bag groceries. Instead, Amazon gives out reusable bags so shoppers can fill them as they shop. And there’s no deli counter, butcher or fishmonger. Instead, sliced ham, steaks and salmon fillets are already packaged and found in refrigerated shelves.

“Just walk out technology is kind of cool, in theory,” said David Bishop, a partner at retail consultancy Brick Meets Click, but shoppers decide where to shop based on other factors besides how quickly they can get in and out of the store.

He said those who want thinly sliced ham may skip Amazon Go Grocery and walk two blocks away to the Kroger-owned QFC supermarket, which is about five times the size.

Still, Bishop said, it’s hard for the grocery industry to ignore Amazon, which has the cash and technology to experiment with groceries. “They’re not giving up,” he said of Amazon.





ALASKA UNION FILES GRIEVANCE OVER STATE TECHNOLOGY PLAN

A major Alaska public employees union has filed a grievance, saying the state is improperly seeking to outsource information technology jobs.

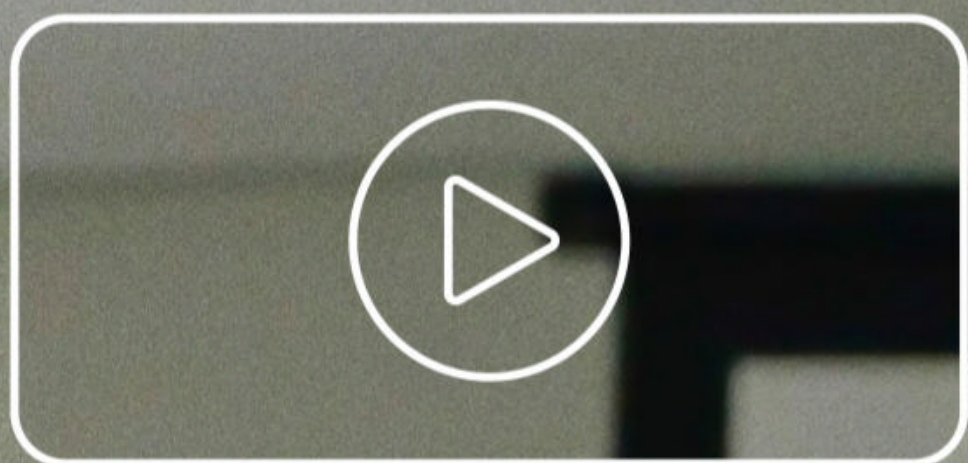
The Alaska State Employees Association/ AFSCME Local 52 said a feasibility study should have been conducted under terms of a collective bargaining agreement.

Earlier this month, the Department of Administration announced what it called a digital alliance with Microsoft and plans to work together on various initiatives, including efforts to modernize state information technology.

The department also said Microsoft would support efforts to move data to the cloud, saying this would allow for greater data security and cost savings. The union said such a move could cost money and disrupt services.

A message seeking comment was left for the department.

The union said the grievance was filed Feb. 14.



The Day Shall Come - Official Trailer | HD | IFC Films

Movies & TV Shows



by Chris Morris
Genre: Comedy
Released: 2019
Price: \$14.99

★★★★★
8 Ratings

Rotten Tomatoes



65%

The Day Shall Come

An impoverished Miami preacher, Moses Al Shabaz (Marchánt Davis), voices eccentric ideas about overthrowing the US government. Funding for his scheme is offered by a supposed Middle Eastern terrorist body, but it's actually a front for FBI agent Kendra Glack (Anna Kendrick).

FIVE FACTS:

1. The film is directed by the controversial British satirist Chris Morris, who has attracted attention and notoriety for his black humor.
2. This is the first film Morris has directed since 2010's *Four Lions*, which also had a terrorist theme.
3. Morris has also directed four episodes of the political satire TV series *Veep*, starring Julia-Louis Dreyfus.
4. The world premiere of *The Day Shall Come* took place at South by Southwest in Austin, Texas on March 11, 2019.
5. The critics' consensus on Rotten Tomatoes has hailed this "bleakly funny satire" for its "knotty real-world themes".



"The Day Shall Come" Script Read Like A Funny, Russian Novel For Anna Kendrick & Danielle Brooks



Line of Duty

Detective Frank Penny (Aaron Eckhart) accidentally kills a child abductor, losing a vital lead to the whereabouts of the Chief of Police (Giancarlo Esposito)'s daughter. A live-streaming citizen journalist, Ava (Courtney Eaton), joins Frank on a race against time to trace the missing girl.

FIVE FACTS:

1. Eckhart's highest-profile role so far is as District Attorney Harvey Dent, who becomes the Batman villain Two-Face, in the 2008 film *The Dark Knight*.
2. Coincidentally, two of Eckhart's *Line of Duty* co-stars have been cast in Batman-themed TV series: Dina Meyer as Batgirl in *Birds of Prey* and Ben McKenzie as Detective James Gordon in *Gotham*.
3. Reflecting on his fondness for *Line of Duty*, Eckhart told NME that he feels a responsibility to make movies "**that have a moral centre**".
4. *Line of Duty* is titled *In the Line of Duty* in the UK, presumably to avoid confusion with the BBC TV series of the same name.
5. Los Angeles Times critic Noel Murray describes the film as "**generally as fun as it is dumb**."



by Steven C. Miller
Genre: Thriller
Released: 2019
Price: \$12.99

★★★★★
22 Ratings

Rotten Tomatoes



59%

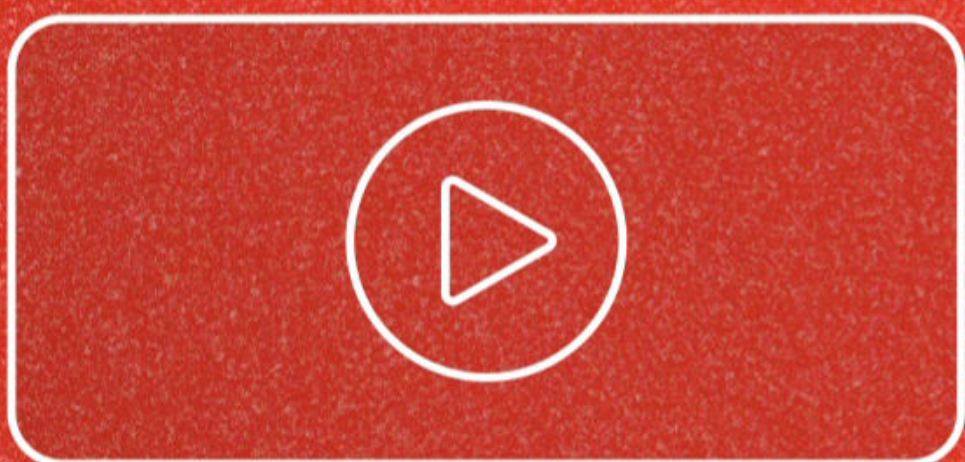
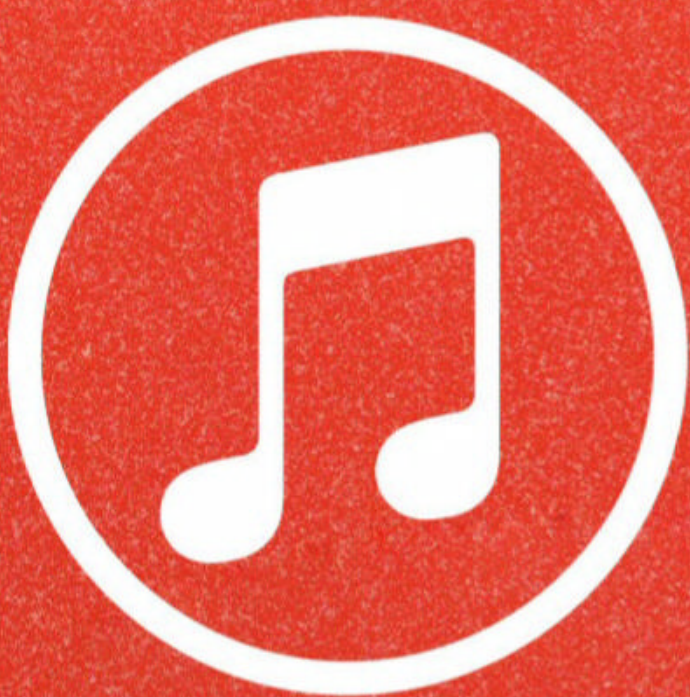


Line Of Duty Official Trailer (2019) - Aaron Eckhart



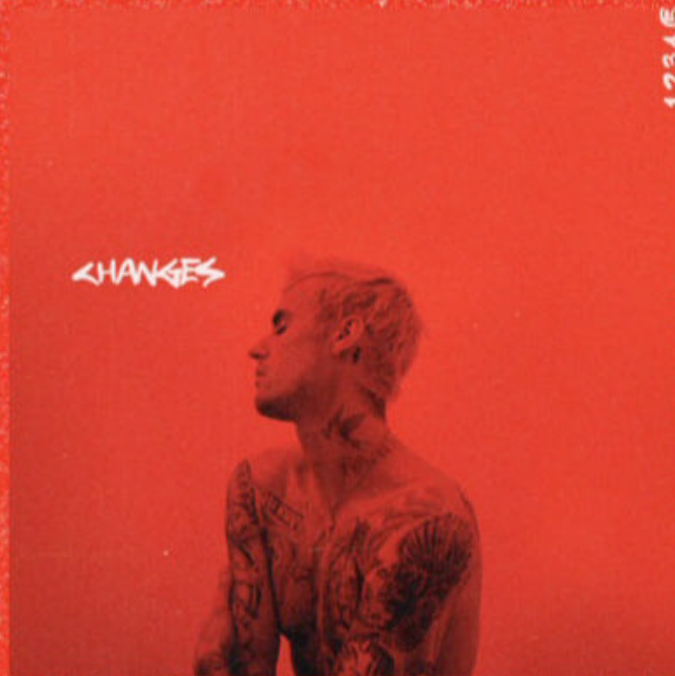


Aaron Eckhart's new movie "Line of Duty"



Justin Bieber - Yummy (Official Video)

Music



Genre: Pop
Released: Feb 14, 2020
17 Songs
Price: \$11.99

★★★★★
3.2k Ratings

Changes

Justin Bieber

The days when the now 25-year-old Justin Bieber was a teen idol associated with bubblegum pop are now fading into the distance. His fifth studio album, *Changes*, showcases a more mature and reflective sound, even serving as a tribute to his wife Hailey Baldwin.

FIVE FACTS:

- 1.** The new album arrives nearly a year after Bieber announced a break from music to focus on overcoming “deep-rooted issues” in his life.
- 2.** However, he recalled that the positive reaction to his surprise appearance at the Coachella music festival last April was a turnaround for his confidence.
- 3.** He told Apple Music that the crowd’s reaction “reminded me, ‘Oh, this is what I do. This is what I’m good at. I don’t need to run away from it.’”
- 4.** The album’s first single, released on January 27, was “Yummy”, a throwback to his more R&B-oriented past.
- 5.** The second single, “Intentions”, followed on February 7.



Justin Bieber - Intentions ft. Quavo (Official Video)



The Slow Rush

Tame Impala

The nature of time comes under focus with Australian singer-songwriter Kevin Parker's *The Slow Rush*, which he has produced under the banner of his musical project Tame Impala. The album is also something of a transition, reflecting the project's past while hinting at its future.

FIVE FACTS:

1. Parker originally conceived Tame Impala in 2007, with the first debut album credited under the moniker arriving in 2010.
2. Since then, Tame Impala has released another three studio albums and attracted acclaim for its psychedelic and hypnotic sounds.
3. Of *The Slow Rush*'s tracks, the earliest to be released as a single was "Borderline" on April 12, 2019.
4. It was not until the following October 28 that the album's second single, "It Might Be Time", was released.
5. Parker explained to Apple Music that the track "Lost in Yesterday" refers to the addictive, drug-like effect of nostalgia.



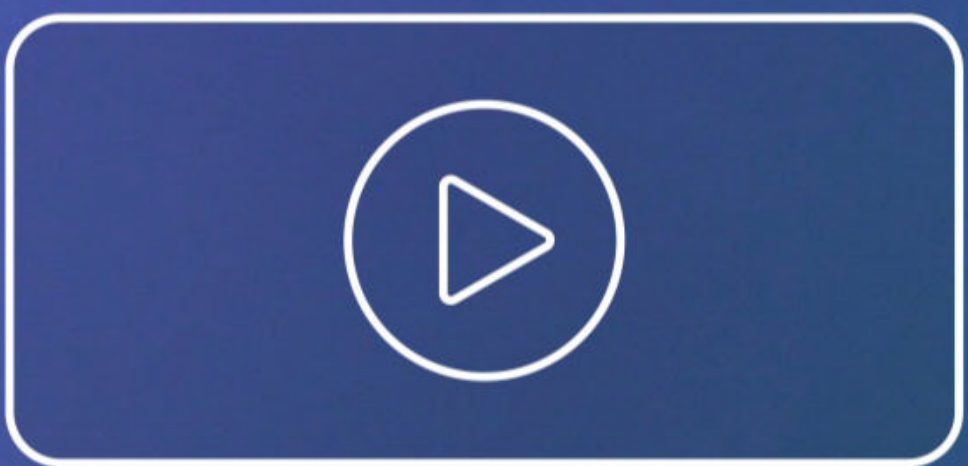


Genre: Alternative
Released: Feb 14, 2020
12 Songs
Price: \$9.99

★★★★★
50 Ratings



Tame Impala - Borderline (Official Audio)



Tame Impala - It Might Be Time (Official Audio)





A WILD SPIN ON THE PETER PAN MYTH IN 'WENDY'

A Peter Pan story told from Wendy's perspective sounds either too precious to be true or ripe for a skewering. But in the hands of the filmmakers behind "Beasts of the Southern Wild," "Wendy" resides — ever so delicately — in the space between. It is an achingly earnest, feral, transporting and (very) loose reimagining of the classic J.M. Barrie tale about not wanting to grow up.

Gone are the outdated mores and fancy window dressings of Barrie's story, however. Here, the Darlings are a raggedy American family living in the Deep South and surviving by slinging eggs and coffee in a diner full of characters with weathered faces and hearty laughs. In the opening scene, Wendy, a rosy cheeked toddler who is already getting a taste of labor helping her mom crack eggs over the stove, watches a young boy flee from his plate of bacon and the horrifying life sentence of possibly growing up to be a "broom and mop man." He spots a shadow figure of a child on a train speeding by and follows it out of town, away from the







unromantic realities around him to where he might just have a chance of being a pirate.

Years go by and Wendy, played by newcomer Devin France, grows up a little bit. She's become obsessed with the fantasy of what she saw, illustrating stories about the boy who left and intently watching the trains outside her window. Then one day the figure appears again and she and her twin brothers (Gage and Gavin Naquin) make a mad dash for the freedom they presume lies at the other end of the tracks.

The shadow figure, of course, is Peter Pan (Yashua Mack), who is closer to birth than he is to even being a teenager. Wearing a tattered red prep school blazer and no shirt, he has a mischievous grin, an insatiable thirst for danger and a complete disregard for (or plain ignorance of) consequences, which will reach a particularly disturbing climax later. His island is lush, mythic and full of wonders and perils, both real (like rusty, wrecked ships) and imagined (like aging, which is shown to be grotesque and sad). The Darlings delight in letting their wild sides take over and fear only getting older.

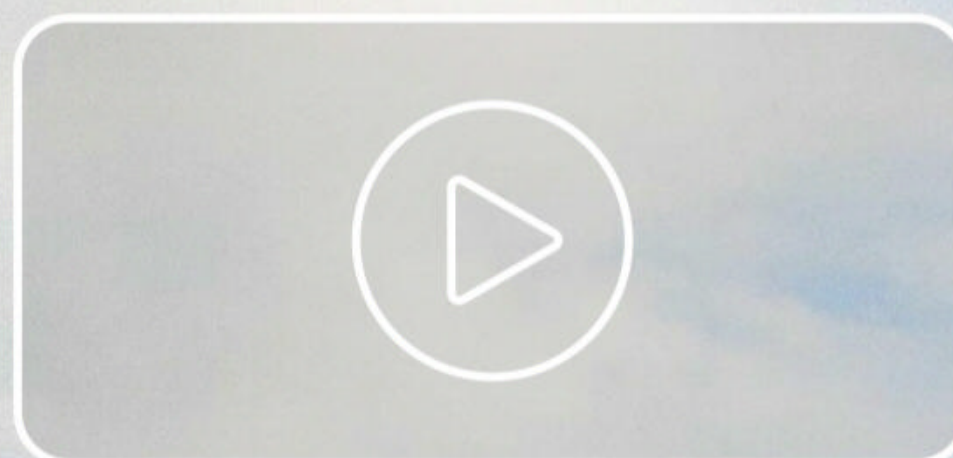
Director Benh Zeitlin, after "Beasts" in 2012 went from a Sundance gem to a four-time Oscar nominee (including best picture), spent much of the interim working on this follow-up, which he wrote with his sister Eliza Zeitlin. In a director's statement, he describes how neither of them wanted to grow up, but sometime after the wild success of "Beasts," they realized they'd have to. This is part of the reason why they've chosen Wendy's perspective instead of Peter's. But they get to have it both ways since they've released Wendy from the cages of ideal Victorian womanhood and made her into an adventurous

free spirit (or a real child), torn between wanting complete freedom and knowing that it can't last. There is much of "Beasts" in the DNA of "Wendy," and Zeitlin's aesthetic is no less enchanting, nor is his magic with novice child actors. Yet "Wendy" comes up short compared to "Beasts." There is a lack of that manic spark that made his breakout so undeniable. With its repetitiveness and lack of structure, it's even a little tedious at times.

And yet it's so sincere that it's hard to pick on "Wendy" for some wheel-spinning, or even the sullen whimsy of it all. It's headed somewhere good and worthwhile: This ending could warm the hearts of even the most grown up grown-ups in the audience.

"Wendy," a Searchlight Pictures release, is rated PG-13 by the Motion Picture Association of America for "for brief violent/bloody images." Running time: 112 minutes. Two and a half stars out of four.

MPAA Definition of PG-13: Parents strongly cautioned. Some material may be inappropriate for children under 13.



WENDY | Official Trailer | FOX Searchlight







DISNEY CEO BOB IGER STEPS DOWN IN SURPRISE ANNOUNCEMENT



Disney CEO Bob Iger, who steered the company's absorption of Star Wars, Pixar, Marvel and Fox's entertainment businesses and the launch of a Netflix challenger, is stepping down immediately, the company said in a surprise announcement Tuesday.

The Walt Disney Co. named as his replacement Bob Chapek, most recently chairman of Disney's parks, experiences and products business.

"Did not see this coming -- Wowza," tweeted LightShed media analyst Rich Greenfield.

Iger will remain executive chairman through the end of his contract on Dec. 31, 2021. Besides leading the board, Iger said he will spend more time on Disney's creative endeavors, including the ESPN sports network, the newly acquired Fox studios and the Hulu and Disney Plus streaming services. He said he could not do that while running Disney on a day-to-day basis.

"It was not accelerated for any particular reason other than I felt the need was now to make this change," Iger said on a conference call with reporters and analysts.

Iger's most recent coup was orchestrating a \$71 billion acquisition of Fox's entertainment assets in March and launching the Disney Plus streaming service in November. That service gained nearly 29 million paid subscribers in less than three months. In a statement, Iger said it was the "optimal time" for a transition.

Pivotal Research Group analyst Jeffrey Wlodarczak said Iger had implied he would stay until his contract ended in 2021.

"On the other hand, they just successfully closed the Fox deal and had an unquestionably successful launch of Disney Plus so maybe he felt earlier was better to hand off the reins," he said.

Colin Gillis, director of research at Chatham Road Partners, said the choice of Chapek seems solid because his parks division has had success.

Chapek said that while he has not led television networks or streaming services, his background in consumer-oriented businesses should help. Chapek and Iger both stressed that Disney would continue to follow the direction it had already been taking.





Disney is facing challenges to its traditional media business as cord-cutting picks up. Its own streaming services require it to forgo money in licensing revenue, although the company is betting that money from subscriptions will eventually make up for that.

In the short term, Disney parks in Hong Kong and Shanghai, China, remain closed because of the coronavirus outbreak. In a CNBC interview, Chapek said the virus outbreak may be a “bump in the road,” but he said the company could weather it. “Affinity for the brand will way outlast any short-term blip we have from the coronavirus,” Chapek said.

Iger told CNBC he had no plans to stay with Disney beyond next year.

Iger’s appointment as CEO in 2005 had been accompanied by controversy and protest from dissident shareholders Roy E. Disney and Stanley Gold. But he has come to be seen as a golden-boy top executive, and even someone who could run for president.

Iger told Vogue in 2018 that he had started seriously exploring a run for president because he is “horrified at the state of politics in America today,” but the Fox deal stopped his plans. Oprah Winfrey told Vogue that she “really, really pushed him to run.”

Iger, a former weatherman, joined ABC in 1974, 22 years before Disney bought the network.

At ABC, Iger developed such successful programs as “Home Improvement,” “The Drew Carey Show,” and “America’s Funniest Home Videos” and was instrumental in launching the quiz show “Who Wants to Be a Millionaire.”









He was also criticized for cancelling well-regarded but expensive shows such as “Twin Peaks” and “thirtysomething.”

Before the Fox deal, Iger steered Disney through the successful acquisitions of Lucasfilms, Marvel, Pixar and other brands that became big moneymakers for Disney.

Since Iger became CEO, Disney’s stock price has risen fivefold. Its stock fell more than 2% in extended trading following the announcement.

Iger, 69, was the second-highest paid CEO in 2018, as calculated by the press and Equilar, an executive data firm. He earned \$65.6 million. The top earner was Discovery’s David Zaslav who earned \$129.5 million.

Susan Arnold, the independent lead director of the Disney board said succession planning had been ongoing for several years.

Chapek, 60, is only the seventh CEO in Disney history. Chapek was head of the parks, experiences and products division since it was created in 2018. He was previously head of parks and resorts and before that president of consumer products.

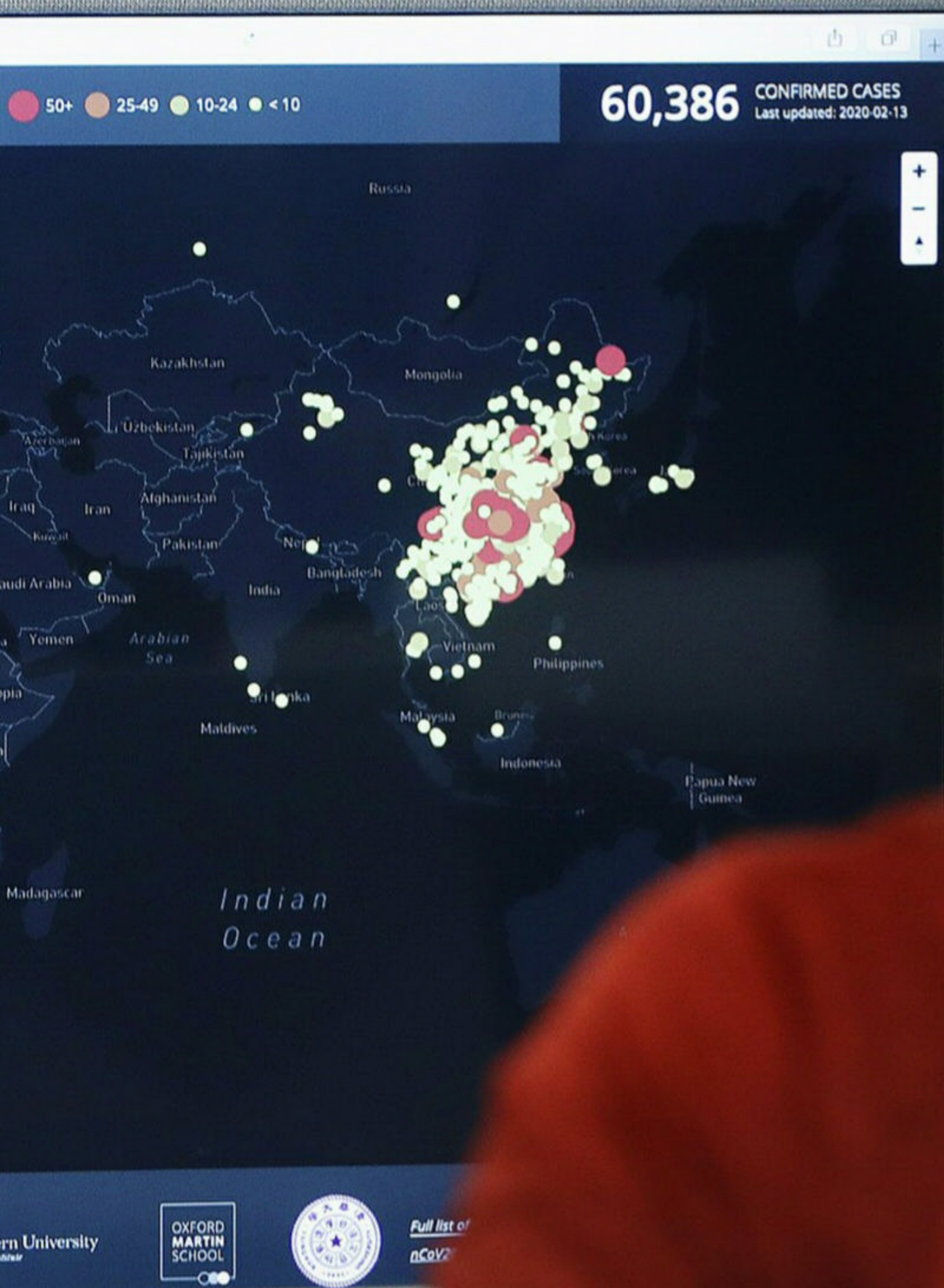
CAN AI FLAG DISEASE OUTBREAKS FASTER THAN HUMANS? NOT QUITE

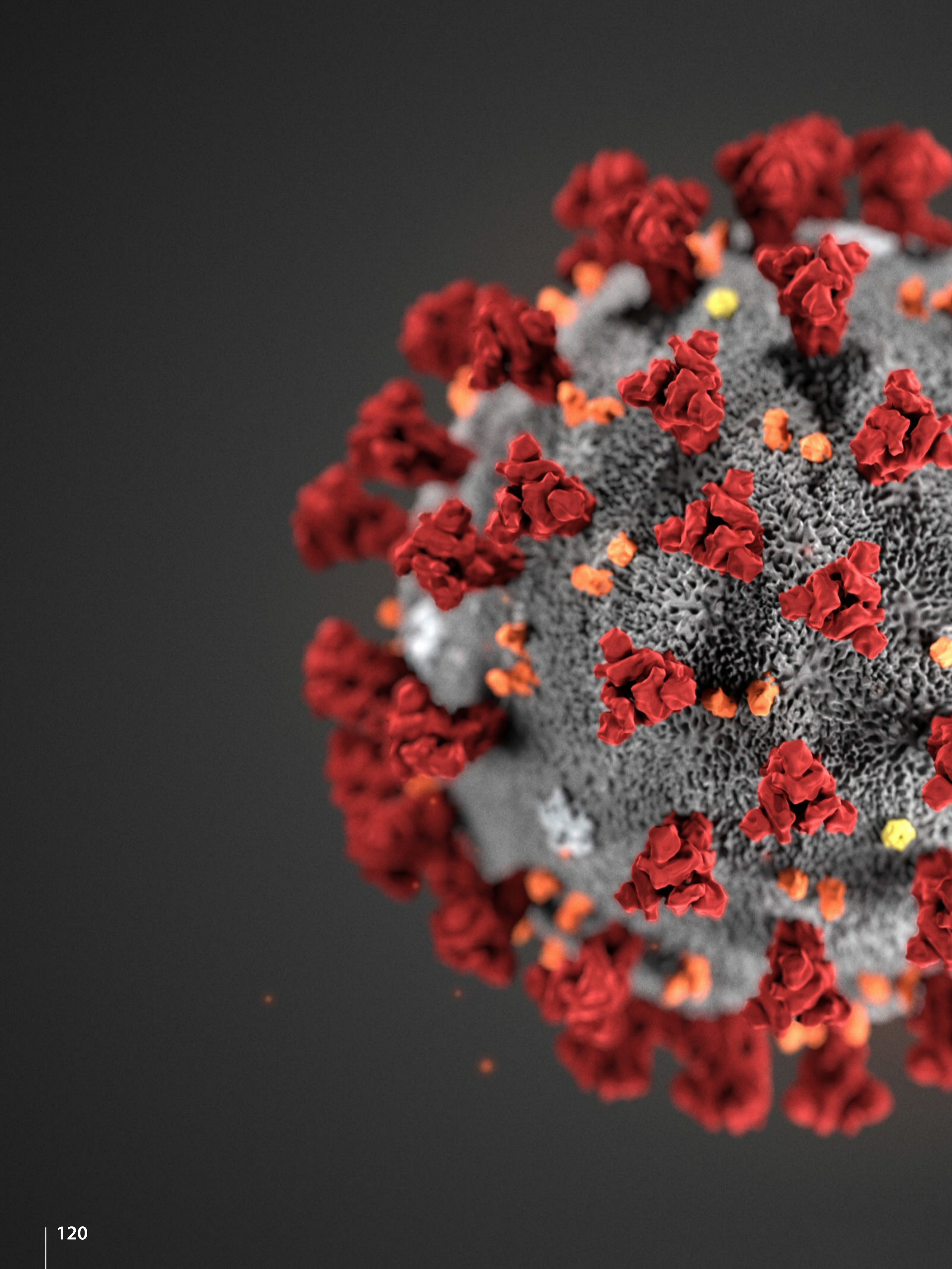
Did an artificial-intelligence system beat human doctors in warning the world of a severe coronavirus outbreak in China?

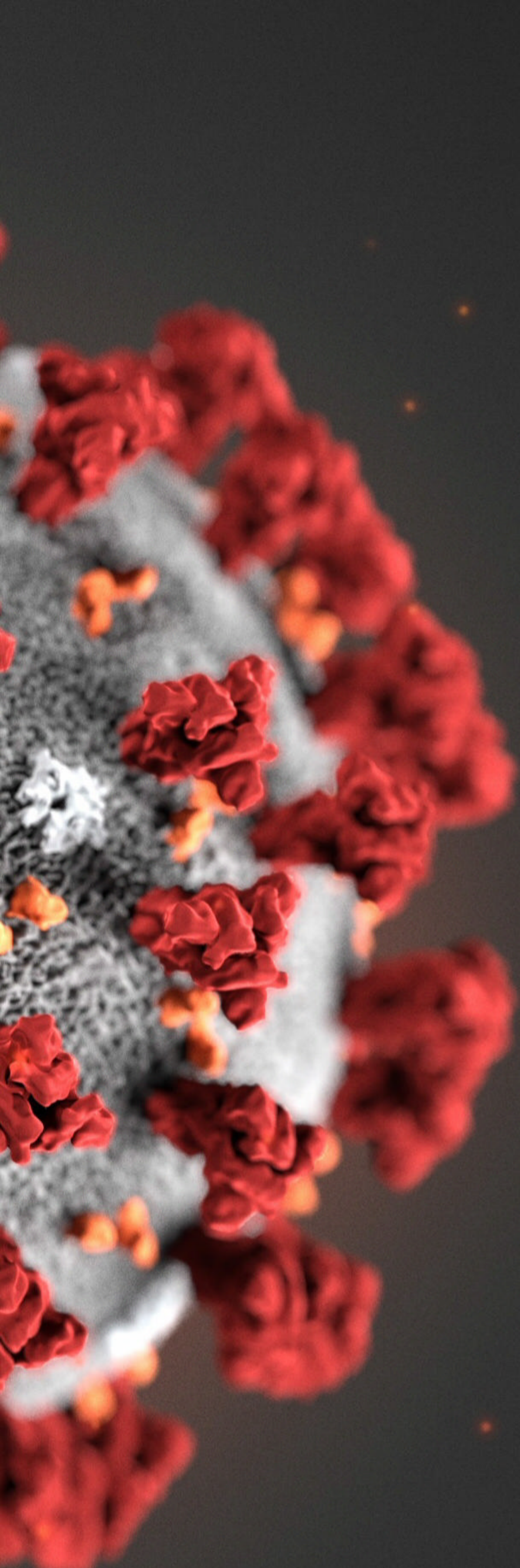
In a narrow sense, yes. But what the humans lacked in sheer speed, they more than made up in finesse.

Early warnings of disease outbreaks can help people and governments save lives. In the final days of 2019, an AI system in Boston sent out the first global alert about a new viral outbreak in China. But it took human intelligence to recognize the significance of the outbreak and then awaken response from the public health community.









What's more, the mere mortals produced a similar alert only a half-hour behind the AI systems.

For now, AI-powered disease-alert systems can still resemble car alarms — easily triggered and sometimes ignored. A network of medical experts and sleuths must still do the hard work of sifting through rumors to piece together the fuller picture. It's difficult to say what future AI systems, powered by ever larger datasets on outbreaks, may be able to accomplish.

The first public alert outside China about the novel coronavirus came on Dec. 30 from the automated HealthMap system at Boston Children's Hospital. At 11:12 p.m. local time, HealthMap sent an alert about unidentified pneumonia cases in the Chinese city of Wuhan. The system, which scans online news and social media reports, ranked the alert's seriousness as only 3 out of 5. It took days for HealthMap researchers to recognize its importance.

Four hours before the HealthMap notice, New York epidemiologist Marjorie Pollack had already started working on her own public alert, spurred by a growing sense of dread after reading a personal email she received that evening.

"This is being passed around the internet here," wrote her contact, who linked to a post on the Chinese social media forum Pincong. The post discussed a Wuhan health agency notice and read in part: "Unexplained pneumonia???"

Pollack, deputy editor of the volunteer-led Program for Monitoring Emerging Diseases, known as ProMed, quickly mobilized a team to look into it. ProMed's more detailed report





went out about 30 minutes after the terse HealthMap alert.

Early warning systems that scan social media, online news articles and government reports for signs of infectious disease outbreaks help inform global agencies such as the World Health Organization — giving international experts a head start when local bureaucratic hurdles and language barriers might otherwise get in the way.

Some systems, including ProMed, rely on human expertise. Others are partly or completely automated.

“These tools can help hold feet to the fire for government agencies,” said John Brownstein, who runs the HealthMap system as chief innovation officer at Boston Children’s Hospital. “It forces people to be more open.”

The last 48 hours of 2019 were a critical time for understanding the new virus and its significance. Earlier on Dec. 30, Wuhan Central Hospital doctor Li Wenliang warned his former classmates about the virus in a social media group — a move that led local authorities to summon him for questioning several hours later.

Li, who died Feb. 7 after contracting the virus, told The New York Times that it would have been better if officials had disclosed information about the epidemic earlier. “There should be more openness and transparency,” he said.

ProMed reports are often incorporated into other outbreak warning systems, including those run by the World Health Organization, the Canadian government and the Toronto startup BlueDot. WHO also pools data from HealthMap and other sources.





Computer systems that scan online reports for information about disease outbreaks rely on natural language processing, the same branch of artificial intelligence that helps answer questions posed to a search engine or digital voice assistant.

But the algorithms can only be as effective as the data they are scouring, said Nita Madhav, CEO of San Francisco-based disease monitoring firm Metabiota, which first notified its clients about the outbreak in early January.

Madhav said that inconsistency in how different agencies report medical data can stymie algorithms. The text-scanning programs extract keywords from online text, but may fumble when organizations variously report new virus cases, cumulative virus cases, or new cases in a given time interval. The potential for confusion means there's almost always still a person involved in reviewing the data.

"There's still a bit of human in the loop," Madhav said.

Andrew Beam, a Harvard University epidemiologist, said that scanning online reports for key words can help reveal trends, but the accuracy depends on the quality of the data. He also notes that these techniques aren't so novel.

"There is an art to intelligently scraping web sites," Beam said. "But it's also Google's core technology since the 1990s."

Google itself started its own Flu Trends service to detect outbreaks in 2008 by looking for patterns in search queries about flu symptoms. Experts criticized it for overestimating flu prevalence. Google shut down the website in 2015 and handed its technology to nonprofit

organizations such as HealthMap to use Google data to build their own models.

Google is now working with Brownstein's team on a similar web-based approach for tracking the geographical spread of tick-borne Lyme disease.

Scientists are also using big data to model possible routes of early disease transmission.

In early January, Isaac Bogoch, an infectious disease physician and researcher at Toronto General Hospital, analyzed commercial flight data with BlueDot founder Kamran Khan to see which cities outside mainland China were most connected to Wuhan.

Wuhan stopped outbound commercial air travel in late January — but not before an estimated 5 million people had fled the city, as the Wuhan mayor later told reporters.

"We showed that the highest volume of flights from Wuhan were to Thailand, Japan, and Hong Kong," Bogoch said. "Lo and behold, a few days later we started to see cases pop up in these places."

In 2016, the researchers used a similar approach to predict the spread of the Zika virus from Brazil to southern Florida.

Now that many governments have launched aggressive measures to curb disease transmission, it's harder to build algorithms to predict what's next, Bogoch said.

Artificial intelligence systems depend on vast amounts of prior data to train computers how to interpret new facts. But there are no close parallels to the way China is enforcing quarantine zones that impact hundreds of millions of people.









PIONEERING BLACK NASA MATHEMATICIAN KATHERINE JOHNSON DIES

Katherine Johnson, a mathematician who calculated rocket trajectories and earth orbits for NASA's early space missions and was later portrayed in the 2016 hit film "Hidden Figures," about pioneering black female aerospace workers, has died. She was 101.

Johnson died Monday of natural causes at a retirement community in Newport News, Virginia, family attorney Donyale Y. H. Reavis told The Associated Press.

NASA Administrator Jim Bridenstine said in a statement that Johnson "helped our nation enlarge the frontiers of space even as she made huge strides that also opened doors for women and people of color."

Johnson was one of the "computers" who solved equations by hand during NASA's early years and those of its precursor organization, the National Advisory Committee for Aeronautics.

Johnson and other black women initially worked in a racially segregated computing unit in Hampton, Virginia, that wasn't officially dissolved until NACA became NASA in 1958. Signs had dictated which bathrooms the women could use.

Johnson focused on airplanes and other research at first. But her work at NASA's Langley Research Center eventually shifted to Project Mercury, the nation's first human space program.

"Our office computed all the (rocket) trajectories," Johnson told The Virginian-Pilot newspaper in 2012. "You tell me when and where you want it to come down, and I will tell you where and when and how to launch it."

In 1961, Johnson did trajectory analysis for Alan Shepard's Freedom 7 Mission, the first to carry an American into space. The next year, she manually verified the calculations of a nascent NASA computer, an IBM 7090, which plotted John Glenn's orbits around the planet.

"Get the girl to check the numbers," a computer-skeptical Glenn had insisted in the days before the launch.

"Katherine organized herself immediately at her desk, growing phone-book-thick stacks of data sheets a number at a time, blocking out everything except the labyrinth of trajectory equations," Margot Lee Shetterly wrote in her 2016 book "Hidden Figures," on which the film is based.

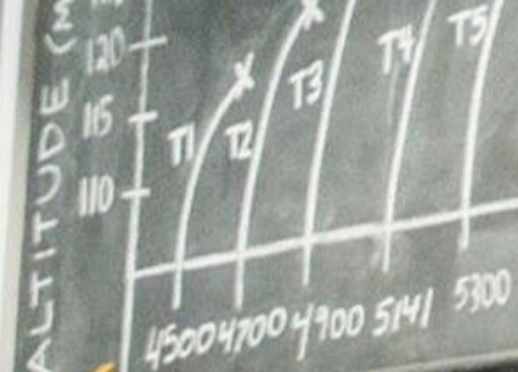
"It took a day and a half of watching the tiny digits pile up: eye-numbing, disorienting work," Shetterly wrote.







In this image released by Twentieth Century Fox, Taraji P. Henson, right, portrays Katherine Johnson in a scene from the film "Hidden Figures."



$$\phi^{2+1} = \phi^2 + \frac{(0.001)(\dots)}{(1.155)}$$

$$Z^{2+1} = \frac{(1.12 \times 10^3)(0.015)}{2(5.98 \times 10^2)}$$

$$U^{2+1} = \frac{(2.877) \cos(\pi/4)}{\sqrt{(9.81)(1.155)}}$$

Shetterly told the AP that Johnson was “exceptional in every way.”

“The wonderful gift that Katherine Johnson gave us is that her story shined a light on the stories of so many other people,” Shetterly said Monday. “She gave us a new way to look at black history, women’s history and American history.”

Johnson considered her work on the Apollo moon missions to be her greatest contribution to space exploration. Her calculations helped the lunar lander rendezvous with the orbiting command service module. She also worked on the Space Shuttle program before retiring in 1986.

Johnson and her co-workers had been relatively unsung heroes of America’s Space Race. But in 2015, President Barack Obama awarded Johnson — then 97 — the Presidential Medal of Freedom, the nation’s highest civilian honor.

The “Hidden Figures” book and film followed, telling the stories of Johnson, Dorothy Vaughan and Mary Jackson, among others. Johnson was portrayed in the film by actress Taraji P. Henson. The film was nominated for a Best Picture Oscar and grossed more than \$200 million worldwide.

In 2017, Johnson was brought on stage at the Academy Awards ceremony to thunderous applause. Jackson and Vaughan had died in 2005 and 2008 respectively.

Johnson was born Katherine Coleman on August 26, 1918, in White Sulphur Springs, West Virginia, near the Virginia border. The small town had no schools for blacks beyond the eighth grade, she told The Richmond Times-Dispatch in 1997.





EQUAL EMPLOYMENT OPPORTUNITY AWARD

To

KATHERINE G. JOHNSON

For Continued Encouragement and Personal Assistance in
Helping Minorities and Females Pursue and Attain Their
Career Goals



LANGLEY RESEARCH CENTER

Richard H. Johnson
Director

FEBRUARY 4, 1985

Each September, her father drove Johnson and her siblings to Institute, West Virginia, for high school and college on the campus of the historically black West Virginia State College.

Johnson taught at black public schools before becoming one of three black students to integrate West Virginia's graduate schools in 1939.

She left after the first session to start a family with her first husband, James Goble, and returned to teaching when her three daughters grew older. In 1953, she started working at the all-black West Area Computing unit at what was then called Langley Memorial Aeronautical Laboratory in Hampton.

Johnson's first husband died in 1956. She married James A. Johnson in 1959. He died last year.

Johnson is survived by two of her three daughters, six grandchildren and 11 great-grandchildren, said Reavis, the family attorney.

Johnson spent her later years encouraging students to enter the fields of science, technology, engineering and mathematics.

"Just last week, she was giving an interview to a high schooler who wanted to talk to her in French," Reavis said. "She had two degrees. One in French, and one in Mathematics."

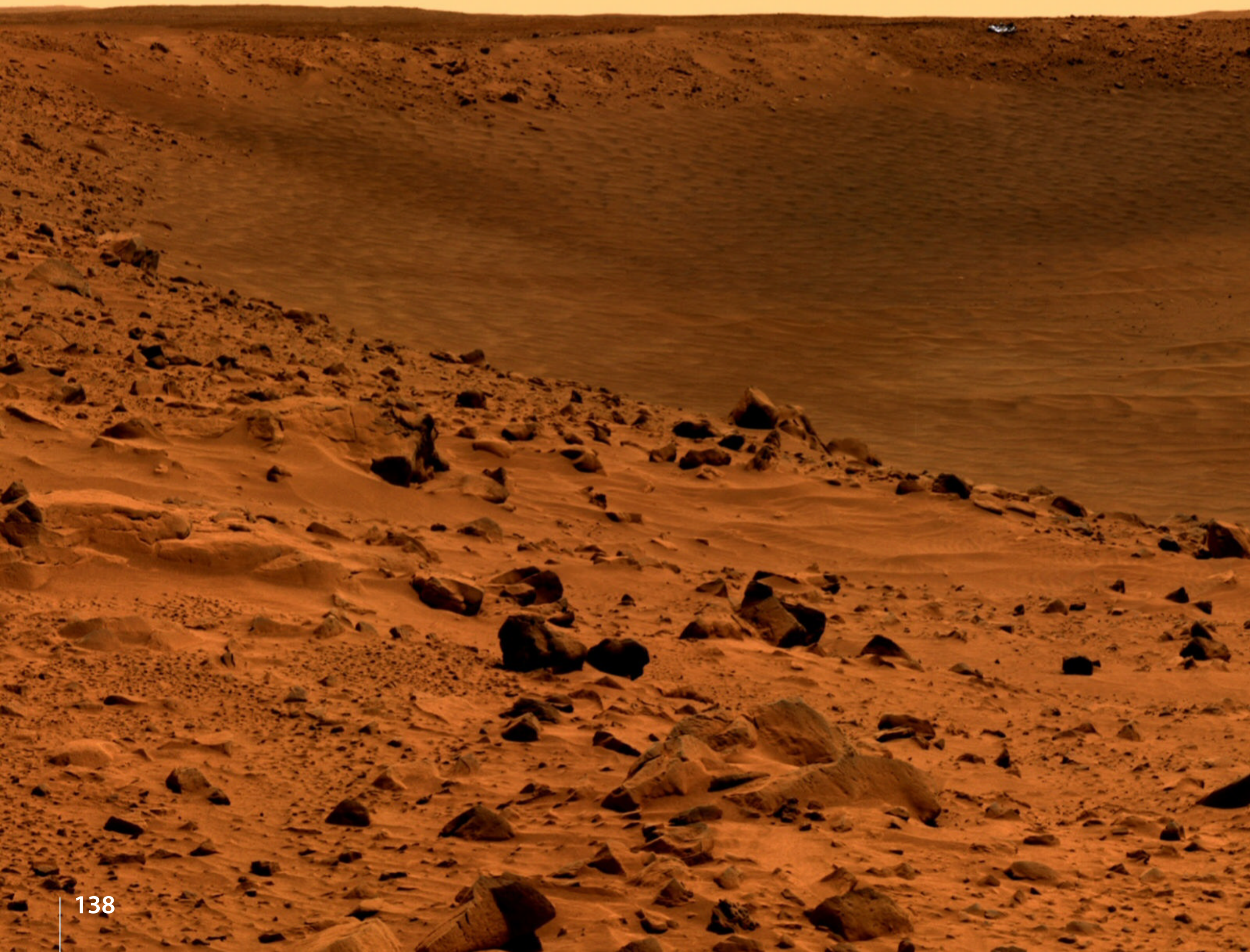
Looking back, Johnson said she had little time to worry about being treated unequally.

"My dad taught us 'you are as good as anybody in this town, but you're no better,'" Johnson told NASA in 2008. "I don't have a feeling of inferiority. Never had. I'm as good as anybody, but no better."





MARS LANDER CONFIRMS QUAKES, EVEN AFTERSHOCKS ON RED PLANET





NASA's newest Mars lander has confirmed that earthquakes and even aftershocks are regularly jolting the red planet.

Scientists reported that the seismometer from the InSight spacecraft has detected scores of marsquakes.

A series of research papers focus on the 174 marsquakes noted through last September.







Twenty-four were relatively strong — magnitude 3 to 4 — and apparently stemmed from distant underground triggers. The rest were smaller, with uncertain magnitude and origin. Even the stronger quakes would not have posed a hazard to anybody on the planet's surface, researchers said in a press conference.

The overall tally has since jumped to more than 450 marsquakes, most of them small, InSight's lead scientist, Bruce Banerdt of NASA's Jet Propulsion Laboratory, said in an email.

The basic cause of Martian quakes is a long-term cooling of the planet, which makes it contract, fracturing its brittle outer layers, Banerdt told reporters. But it's not clear what detailed mechanisms bring on specific quakes, he said.

While the team cannot rule out meteor impacts, the source of the tremors appears to be underground, according to the researchers. Nevertheless, Mars-orbiting spacecraft are on the lookout for signs of recent impacts, and InSight's cameras scan the night sky for meteors. So far, they've come up empty.

Banerdt said he had hoped to find more larger quakes, which are useful for probing deeper under the planet's surface. In an email, he said "another year of observations will be needed to complete the goals of the mission."

InSight landed in a small crater in Mars' Elysium Planitia in November 2018. Its French seismometer was placed directly on the volcanic plain the following month.

This region has especially turbulent weather, with dust devil-like vortexes.

The lander still has another year of geologic observations for a total of two years, or one

full Martian year. There likely are more quakes occurring than the seismometer is registering; interference from wind and other weather conditions can mask the measurements.

And while no marsquakes with magnitudes greater than 4 have been detected, that doesn't mean they aren't occurring, according to Banerdt.

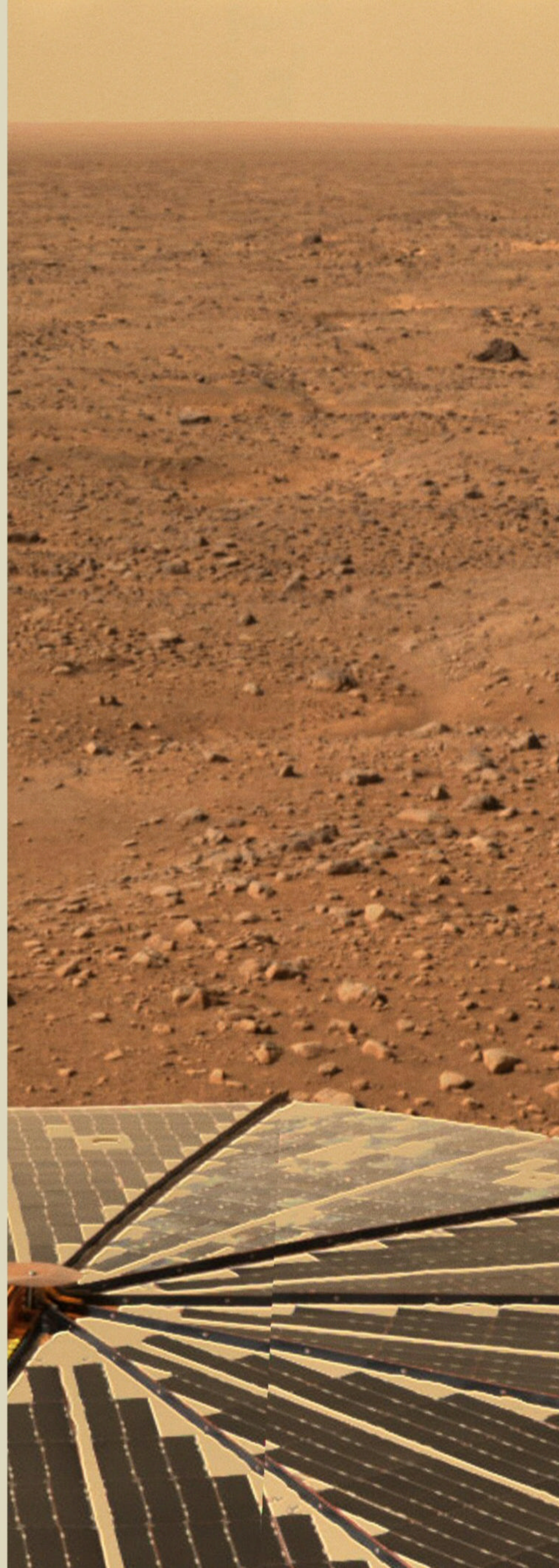
Banerdt describes Mars as moderately active from a seismic standpoint, more than the moon but less than Earth. The findings are close to initial predictions. The moon's seismic activity is known thanks to instruments left behind a half-century ago by the Apollo astronauts.

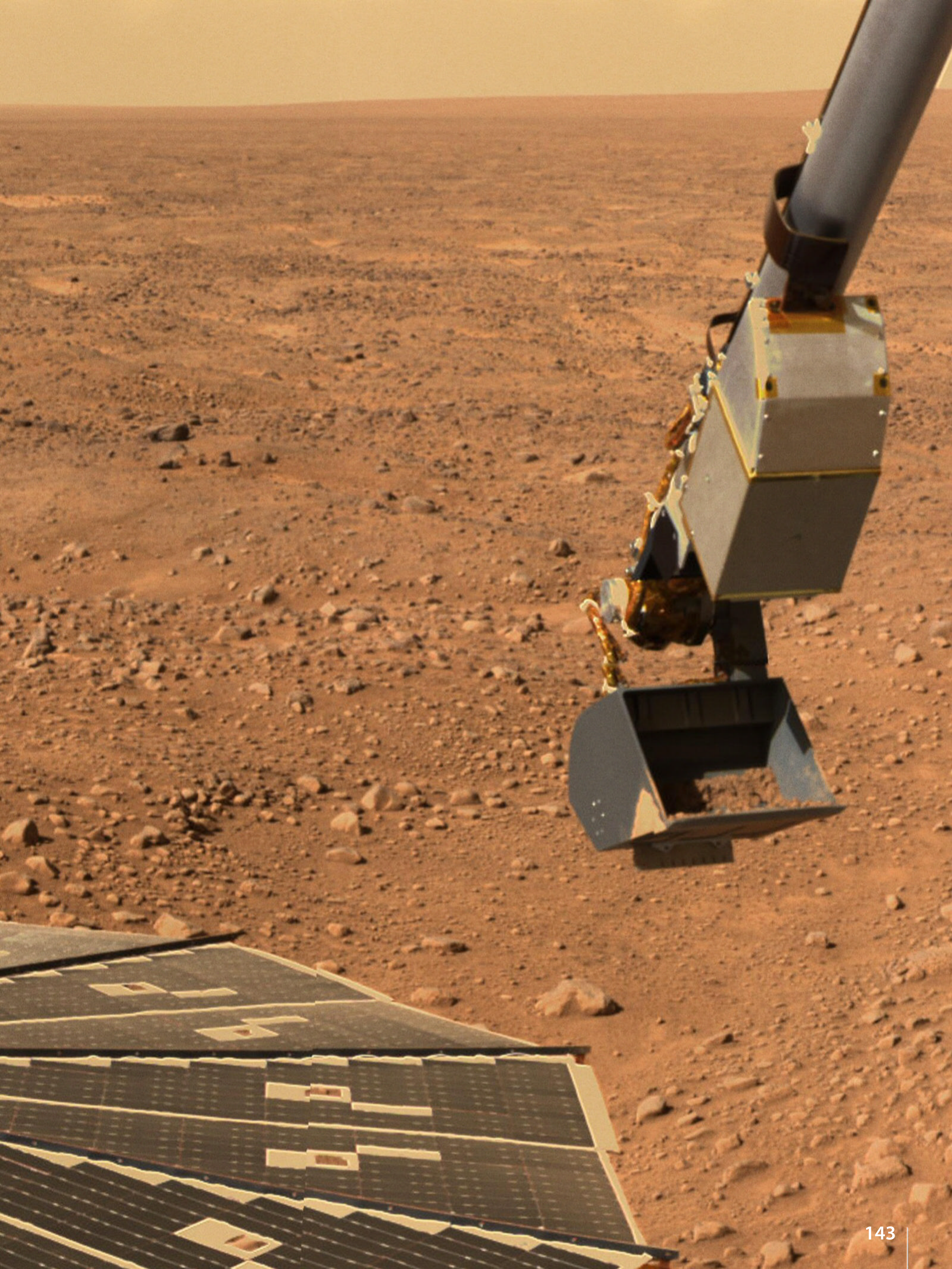
"Knowledge of the level of seismic activity is crucial for investigating the interior structure and understanding Mars' thermal and chemical evolution," Banerdt wrote in an overview article in *Nature Geoscience*. The journal as well as *Nature Communications* feature four papers from the InSight team.

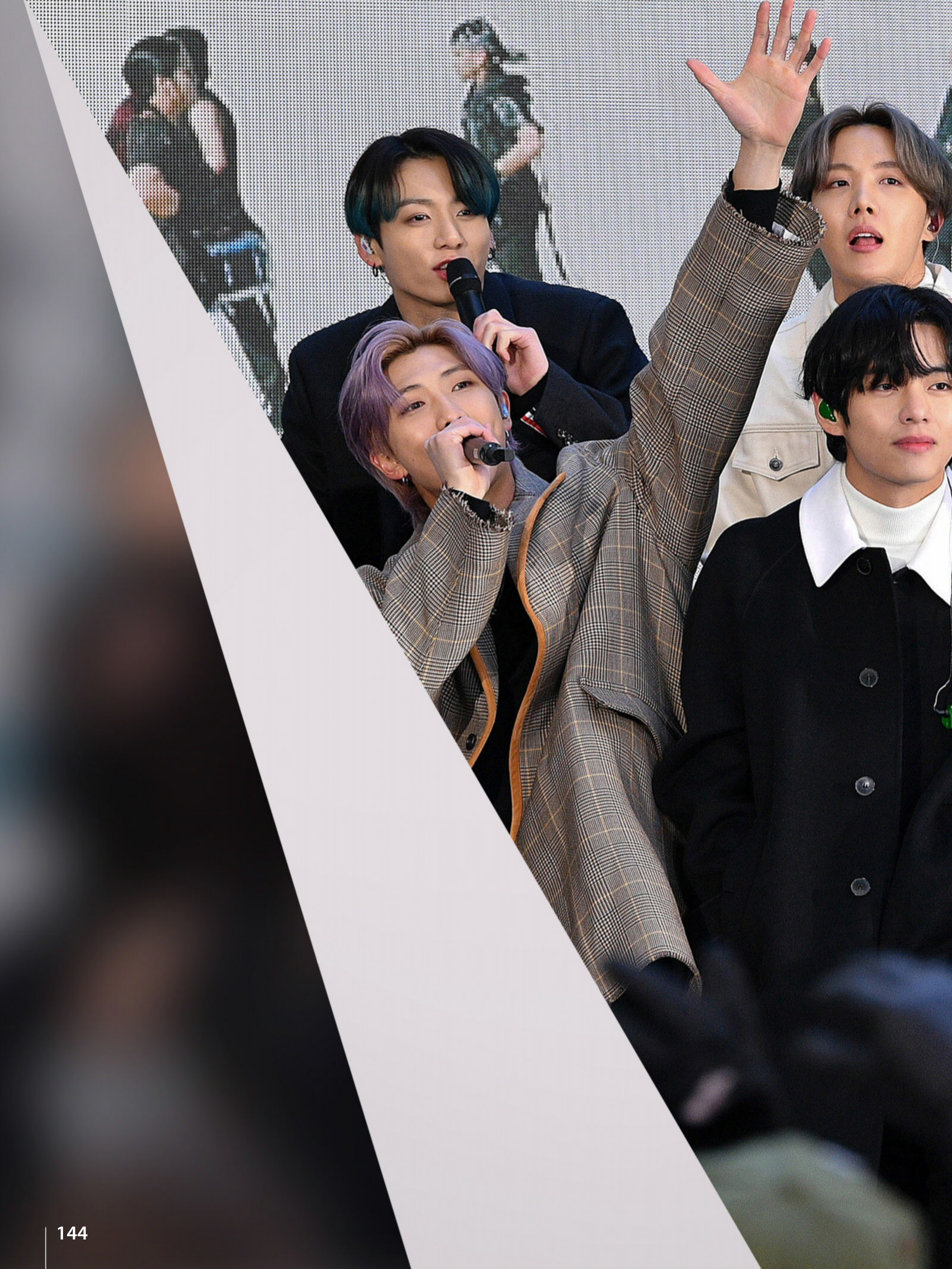
Other key findings: The first magnetic measurements from the Martian surface show a local magnetic field that's 10 times stronger than detected from orbit, and weather instruments have found a surprisingly dynamic atmosphere around the spacecraft.

While the French seismometer is exceeding expectations, a German-built probe has had trouble burrowing into Mars, barely penetrating a couple feet (50 centimeters). Scientists have not yet given up on the mechanical mole, which keeps popping out of the ground.

The mole was supposed to bury 16 feet (5 meters) into Mars to measure the planet's internal temperature.









TOP 10 SONGS

DANCE MONKEY

TONES AND I

ON

BTS

MEMORIES

MAROON 5

BLINDING LIGHTS

THE WEEKND

THE OTHER SIDE

SZA & JUSTIN TIMBERLAKE

MY TIME

BTS

FILTER

BTS

ADORE YOU

HARRY STYLES

WHAT A MAN GOTTA DO

JONAS BROTHERS

THE BOX

RODDY RIXH





TOP 10 ALBUMS

MAP OF THE SOUL: 7
BTS

ORDINARY MAN
OZZY OSBOURNE

**FROZEN 2 (ORIGINAL MOTION
PICTURE SOUNDTRACK)**
VARIOUS ARTISTS

MUSIC TO BE MURDERED BY
EMINEM

FINE LINE
HARRY STYLES

LOVER
TAYLOR SWIFT

CHANGES
JUSTIN BIEBER

**WHEN WE ALL FALL ASLEEP,
WHERE DO WE GO?**
BILLIE EILISH

WHAT YOU SEE IS WHAT YOU GET
LUKE COMBS

THE ALLEGORY
ROYCE DA 5'9"



MY
RULES

TOP 10 MUSIC VIDEOS

KINETIC MANIFESTO FILM : COME PRIMA
BTS

FOREVER COUNTRY
ARTISTS OF THEN, NOW & FOREVER

THE GIT UP
BLANCO BROWN

CHANGES
JUSTIN BIEBER

BOYFRIEND
MABEL

DANCE MONKEY
TONES AND I

YOU SHOULD BE SAD
HALSEY

IN MY BLOOD
TENILLE TOWNES

OLD TOWN ROAD (FEAT. BILLY RAY CYRUS)
OLD TOWN ROAD (FEAT. BILLY RAY CYRUS)

MY WEAPON (SACRED VERSION)
NATALIE GRANT





TOP 10 TV SHOWS

SQUEEZE

THE WALKING DEAD, SEASON 10

MAGIC MAN

BETTER CALL SAUL, SEASON 5

BABY ON BOARD

BELOW DECK SAILING YACHT, SEASON 1

50% OFF

BETTER CALL SAUL, SEASON 5

I WANT YOU TO BE MY MUDDY BUDDY

SHAHS OF SUNSET, SEASON 8

KENYA VS. KEN

THE REAL HOUSEWIVES OF ATLANTA, SEASON 12

2409

THE BACHELOR, SEASON 24

DAY OF DEATH

THE ROOKIE, SEASON 2

BUM STEER

9-1-1: LONE STAR, SEASON 1

A DIAGNOSIS

GREY'S ANATOMY, SEASON 16

LILLA GIRL



LILAC
GIRLS

TOP 10 BOOKS

BLINDSIDE

JAMES PATTERSON & JAMES O. BORN

A SPOL OF BLUE THREAD

ANNE TYLER

THE SPLENDID AND THE VILE

ERIK LARSON

THE WARSAW PROTOCOL

STEVE BERRY

THE TARGET

CATHERINE COULTER

LILAC GIRLS

MARTHA HALL KELLY

JUST ONE YEAR

PENELOPE WARD

THE ULTIMATE RETIREMENT GUIDE FOR 50+

SUZE ORMAN

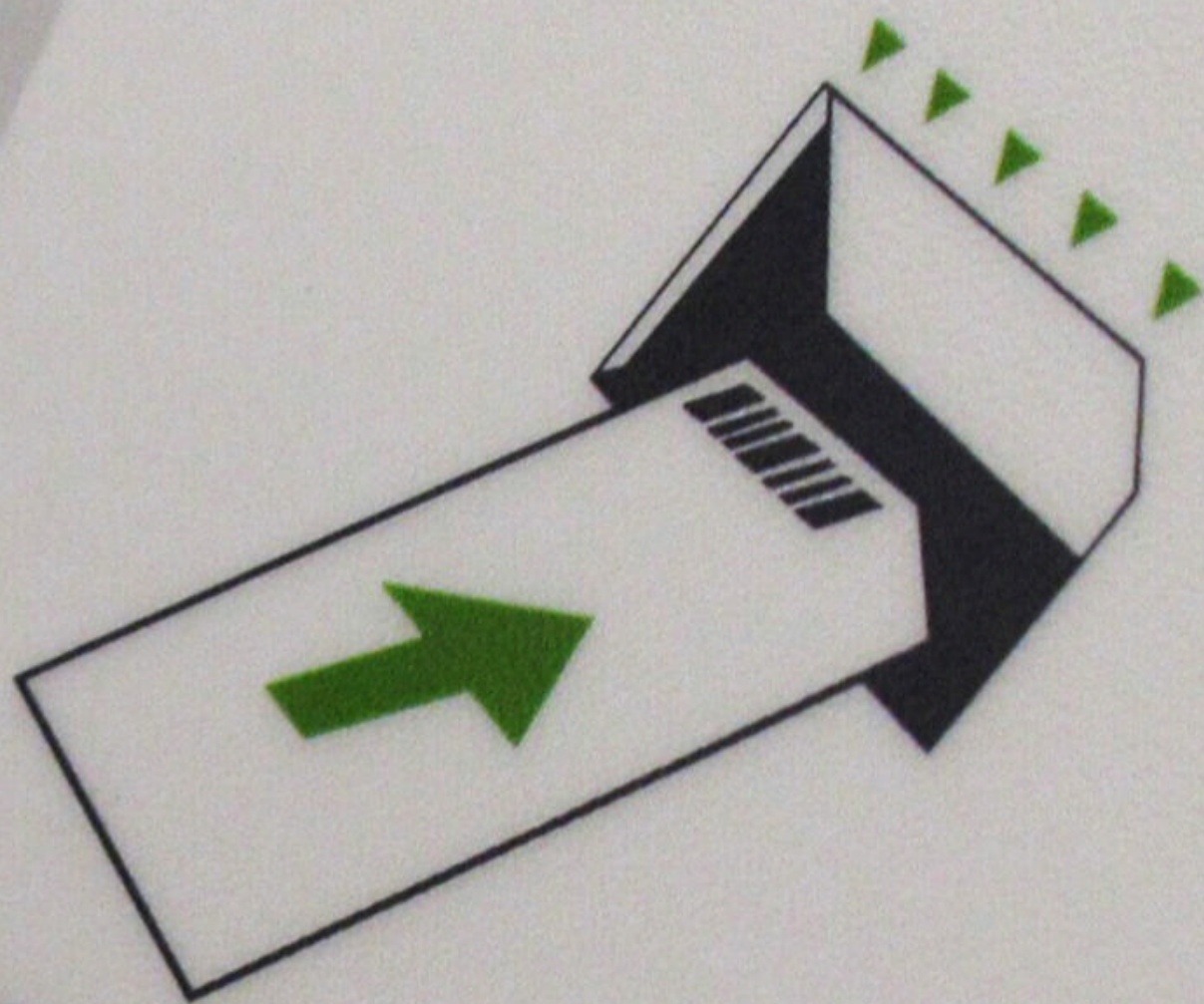
ONE MINUTE OUT

MARK GREANEY

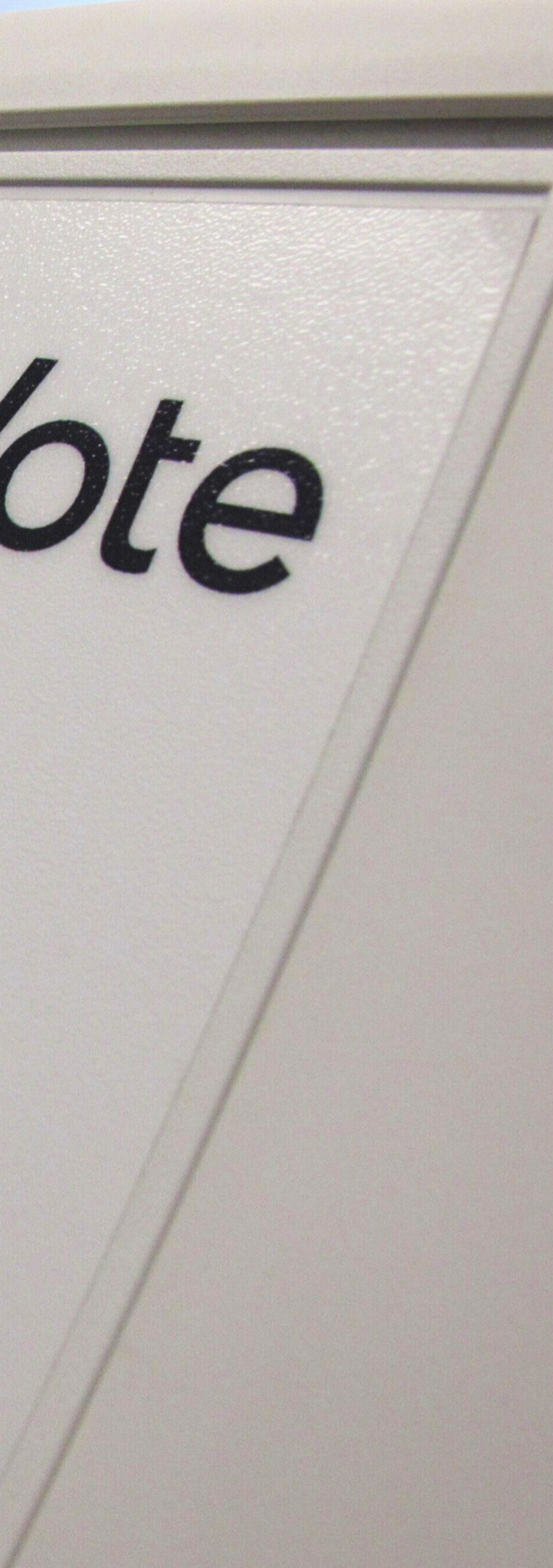
FRIENDS WITH BENEFITS

JENNA BENETT

Express V



Insert Activator



RELIABILITY OF PRICEY NEW VOTING MACHINES QUESTIONED

In the rush to replace insecure, unreliable electronic voting machines after Russia's interference in the 2016 U.S. presidential race, state and local officials have scrambled to acquire more trustworthy equipment for this year's election, when U.S. intelligence agencies fear even worse problems.

But instead of choosing simple, hand-marked paper ballots that are most resistant to tampering because paper cannot be hacked, many are opting for pricier technology that computer security experts consider almost as risky as earlier discredited electronic systems.

Called ballot-marking devices, the machines have touchscreens for registering voter choice. Unlike touchscreen-only machines, they print out paper records that are scanned by optical readers. South Carolina voters will use them in Saturday's primary.



00000001

PHILADELPHIA COUNTY/PENNSYL
GENERAL AND SPECIAL ELECTION
11/03/2020
DIVISION 1, DIVISION 1



The most pricey solution available, they are at least twice as expensive as the hand-marked paper ballot option. They have been vigorously promoted by the three voting equipment vendors that control 88 percent of the U.S. market.

Some of the most popular ballot-marking machines, made by industry leaders Election Systems & Software and Dominion Voting Systems, register votes in bar codes that the human eye cannot decipher. That's a problem, researchers say: Voters could end up with printouts that accurately spell out the names of the candidates they picked, but, because of a hack, the bar codes do not reflect those choices. Because the bar codes are what's tabulated, voters would never know that their ballots benefited another candidate.

Even on machines that do not use bar codes, voters may not notice if a hack or programming error mangled their choices. A University of Michigan study determined that only 7 percent of participants in a mock election notified poll workers when the names on their printed receipts did not match the candidates they voted for.

ES&S rejects those scenarios. Spokeswoman Katina Granger said the company's ballot-marking machines' accuracy and security "have been proven through thousands of hours of testing and tens of thousands of successful elections." Dominion declined to comment for this story.

Nearly 1 in 5 U.S. voters will be using ballot-marking machines this year, compared with less than 2% in 2018, according to Verified Voting, which tracks voting technology.

Pivotal counties in the crucial states of Pennsylvania, Ohio and North Carolina have bought ballot-marking machines. So have counties in much of Texas, as well as California's Los Angeles County and all of Georgia, Delaware and South Carolina. The machines' certification has often been streamlined in the rush to get machines in place for presidential primaries.

Ballot-marking devices were not conceived as primary vote-casting tools but as accessible options for people with disabilities.

Critics see them as vulnerable to hacking. At last year's DefCon hacker convention in Las Vegas, it took tinkerers at the 'Voting Village' not even eight hours to hack two older ballot-marking devices.

Tampering aside, some of the newer ballot-marking machines have stumbled badly in actual votes. That happened most spectacularly in November when ES&S's top-of-the-line ExpressVote XL debuted in a Pennsylvania county.

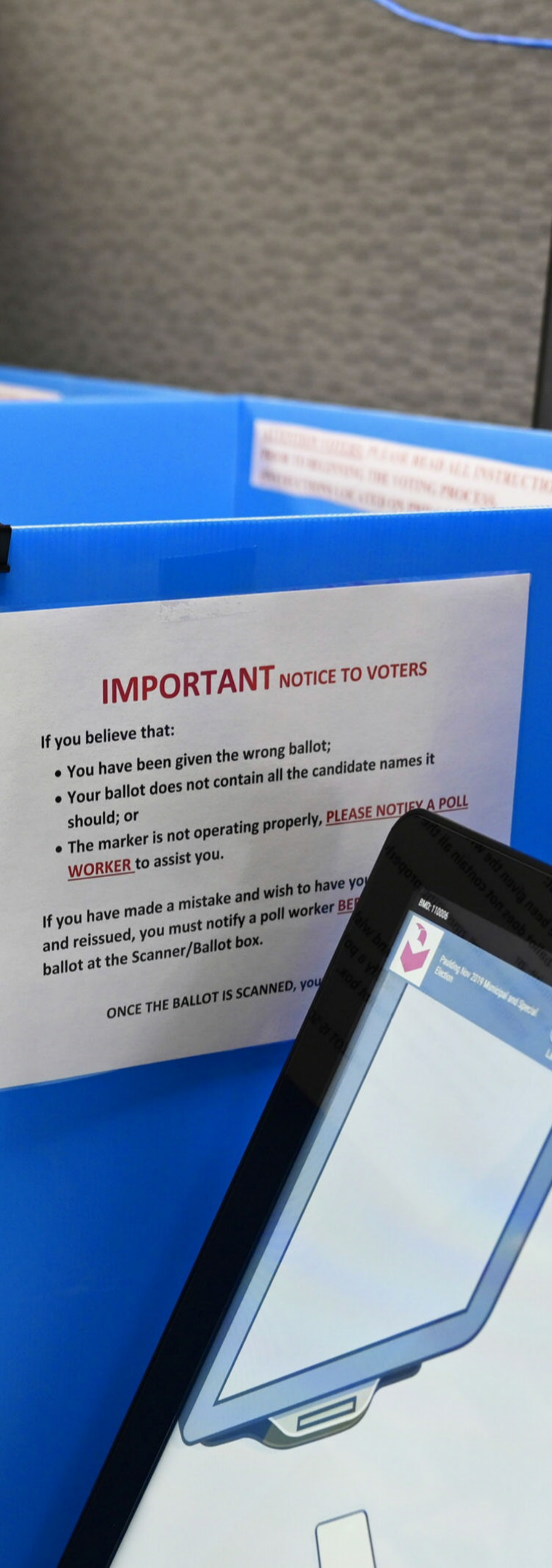
Even without technical troubles, the new machines can lead to longer lines, potentially reducing turnout. Voters need more time to cast ballots and the machine's high costs have prompted election officials to limit how many they purchase.

"There are a huge number of reasons to reject today's ballot-marking devices — except for limited use as assistive devices for those unable to mark a paper ballot themselves," says Doug Jones, a University of Iowa computer scientist who co-authored the voting technology history "Broken Ballots."









But election officials see ballot-marking devices as improvements over paperless touchscreens, which were used by 27 percent of voters in 2018. They like them because the touchscreens are familiar to voters, looking and feeling like what they have been using for nearly two decades, and officials can use one voting method for everyone.

Michael Anderson, elections director for Pennsylvania's Lebanon County, said "voters want it." The county offers voters both machine- and hand-marked ballots.

"When we give them a paper ballot, the very first thing they say to us is, 'We're going back in time,'" he said.

New York State election commission co-chair Douglas Kellner was an early critic of paperless electronic voting machines. But he is confident in a ballot-marking device, the ImageCast Evolution by Dominion, certified for use in his state. He said safeguards built into the machines and security protocols make a hack of the ImageCast Evolution "extraordinarily unlikely."

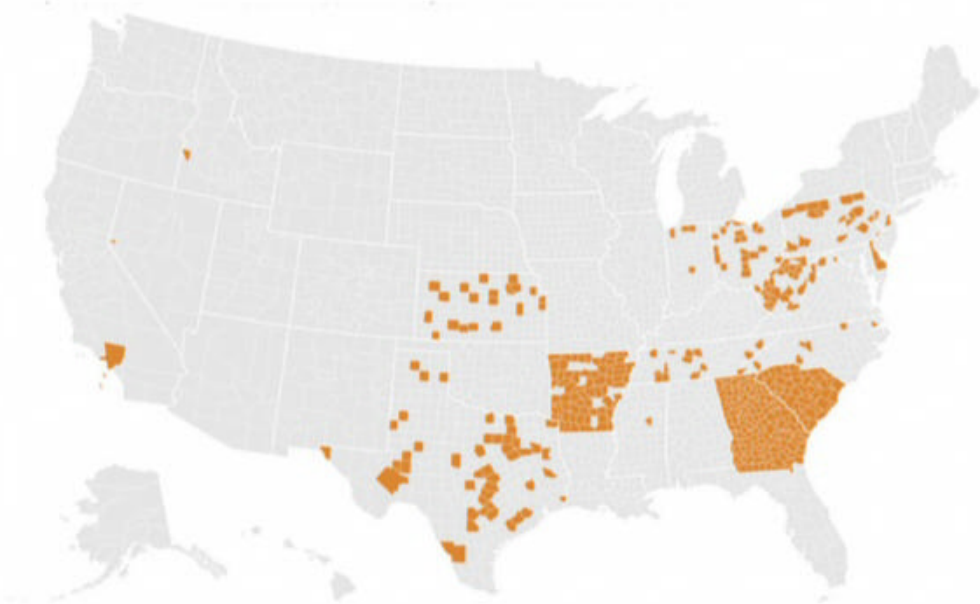
But Jones is among experts who think today's ballot-marking devices undermine the very idea of retaining a paper record that can be used in audits and recounts. It's an idea supported by a 2018 National Academies of Sciences report that favors hand-marked paper ballots tallied by optical scanners. Some 70 percent of U.S. voters used them in the past two presidential elections and will do so again in November.

One state, Colorado, is banning bar codes from ballot-marking voting machines beginning in 2021.

Election administrators who reject hand-marked paper ballots as antiquated, inconvenient or unwieldy have few options beyond ballot-marking devices. That's because the \$300 million voting equipment and services industry is so insular and entrenched.

COUNTIES USING BALLOT-MARKING DEVICES IN 2020

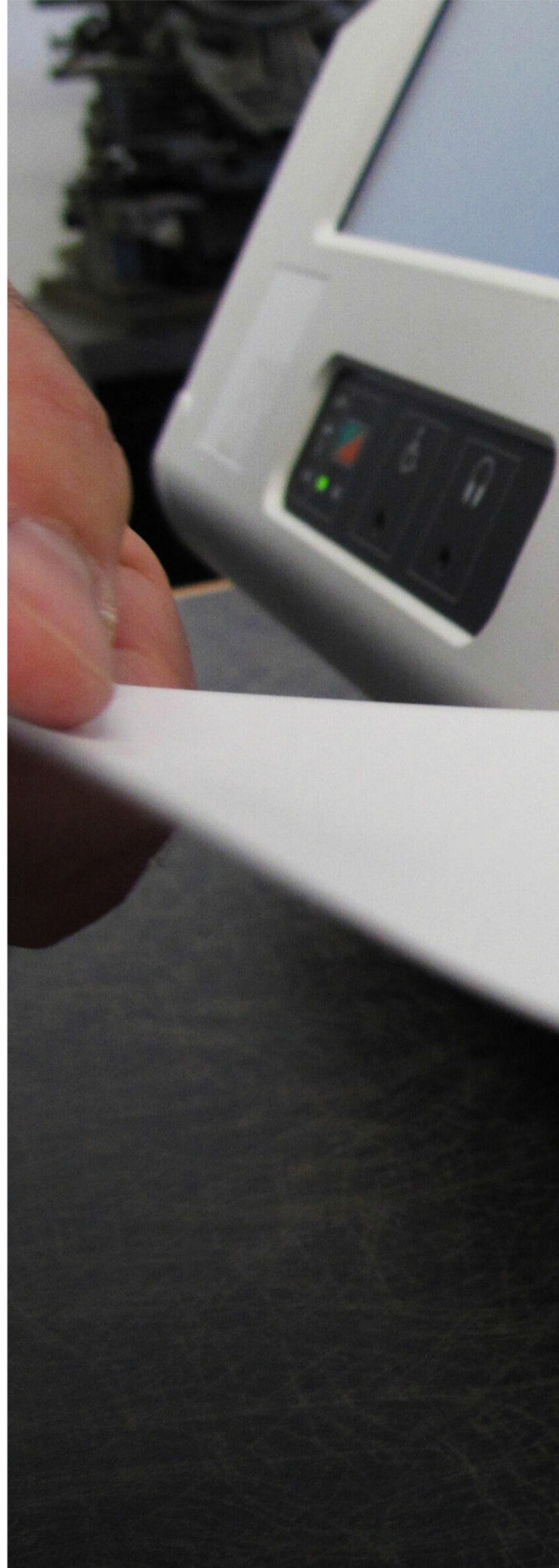
Ballot-marking devices, which voting security experts question because a computer marks the paper ballots, are being used for all voters in more than 400 counties in 16 states.



The industry faces virtually no federal regulation even though election technology was designated critical infrastructure in January 2017. Federal certification guidelines for voting machine design are 15 years old and voluntary. The leading vendors have resisted publicly disclosing third-party penetration testing of their systems.

"It's a self-reinforcing system that keeps it frozen in a place in the past," said Eddie Perez, a former product development director for Hart InterCivic, the No. 3 voting equipment company, now with the OSET Institute, a nonprofit that promotes reliable voting solutions. "They don't want to make any changes in the equipment unless they absolutely have to."

The Republican-controlled Senate has refused to take up bills that would, among other things, require a voter-verifiable paper trail and require



Print Vote Record



bulletproof postelection audits. Republicans say the federal government should not impinge on states' authority to oversee elections.

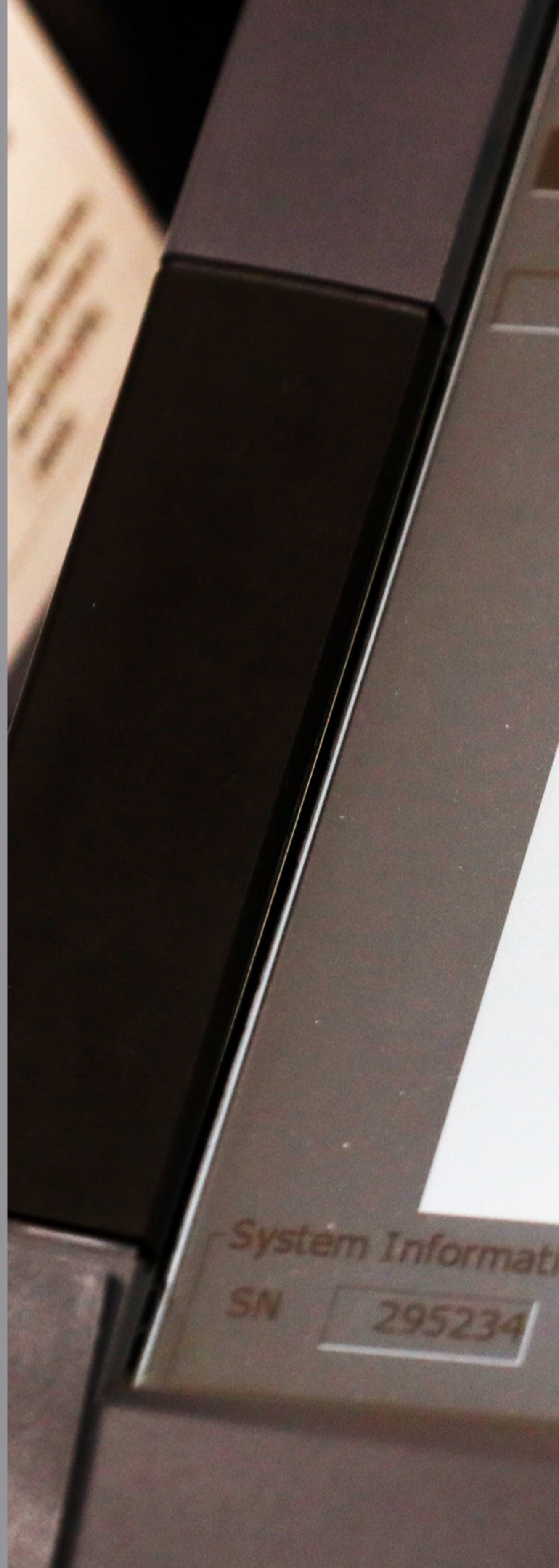
Northampton County, on Pennsylvania's eastern edge, mirrored the state's choice in 2016 by voting for Donald Trump after twice choosing Barack Obama. Last Election Day, it became ground zero in the debate over ballot-marking devices.

The county's new ExpressVote XLs failed doubly. First, a programming misconfiguration prevented votes cast for one of three candidates in a judge's race from registering in the bar codes used to count the vote. Only absentee ballot votes registered for the candidate, said the county executive, Lamont McClure. The other problem was miscalibrated touchscreens, which can "flip" votes or simply make it difficult to vote for one's desired candidate due to faulty screen alignment. They were on about one-third of the county's 320 machines, which cost taxpayers \$8,250 each.

One poll judge called the touch screens "garbage." Some voters, in emails obtained by the AP in a public records request, said their votes were assigned to the wrong candidates. Others worried about long lines in future elections.

Voters require triple the time on average to navigate ES&S ballot-marking machines compared to filling out hand-marked ballots and running them through scanners, according to state certification documents.

ES&S said its employees had flubbed the programming and failed to perform adequate



Vote Center

Unit

41

Version

3

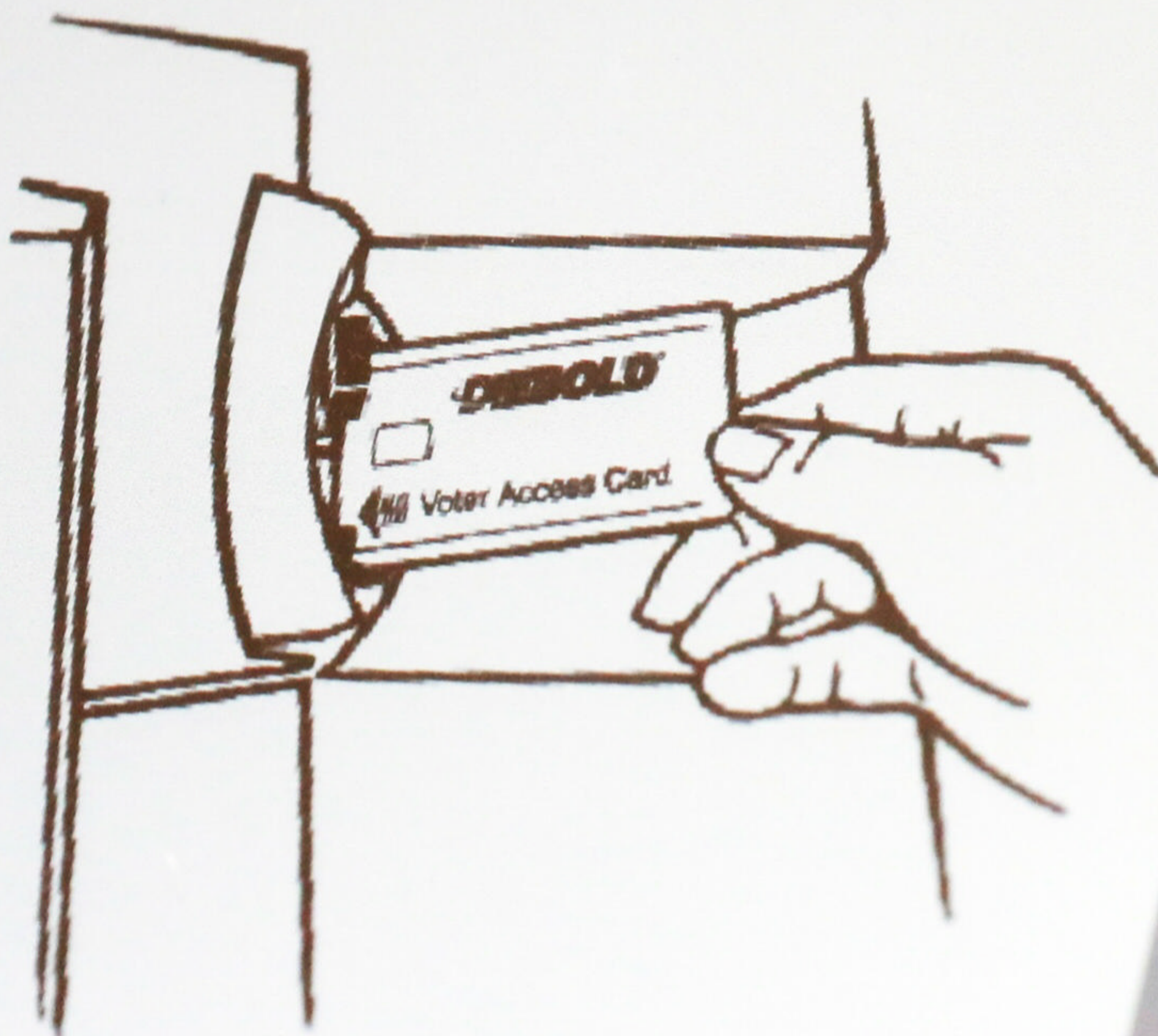
Copy

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Count

Insert card to start

Insert Card to Begin Voting



on

System Total

29316







preelection testing of the machines or adequately train election workers, which would have caught the errors.

Election commissioners were livid, but unable to return the machines for a refund because they are appointees.

“I feel like I’ve been played,” commissioner Maudeania Hornik said at a December meeting with ES&S representatives. She later told the AP she had voted for the devices believing they would be more convenient than hand-marked paper ballots, especially for seniors.

“What we worry is, what happens the next time if there’s a programming bug — or a hack or whatever — and it’s done in a way that’s not obvious?” said Daniel Lopresti, a commissioner and Lehigh University computer scientist.

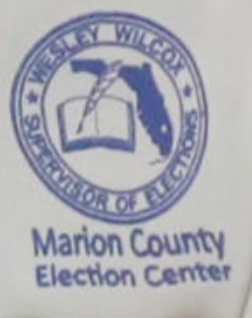
ES&S election equipment has failed elsewhere. Flawed software in ballot-marking devices delayed the vote count by 13 hours in Kansas’ largest county during the August 2018 gubernatorial primary. Another Johnson County, this one in Indiana, scrapped the company’s computerized voter check-in system after Election Day errors that same year caused long lines.

“I don’t know that we’ve ever seen an election computer — a voting computer — whose software was done to a high standard,” said Duncan Buell, a University of South Carolina computer scientist who has found errors in results produced by ES&S electronic voting machines.

Voting integrity activists have sued, seeking to prevent the further use in Pennsylvania of



Wesley Wilcox



Official Ballot for the 2018 Primary Election

Office	Ballot Number	Ballot Type	Ballot Text
Sheriff	1	Ballot 1	David J. ...
	2	Ballot 2	...
	3	Ballot 3	...
	4	Ballot 4	...
County Judge	5	Ballot 5	...
	6	Ballot 6	...
	7	Ballot 7	...
	8	Ballot 8	...
State Representative	9	Ballot 9	...
	10	Ballot 10	...
	11	Ballot 11	...
	12	Ballot 12	...



the ExpressVote XL. Grassroots organizations including Common Cause are fighting to prevent their certification in New York State.

ES&S defends the machine. In a Dec. 12 filing in a Pennsylvania lawsuit, company executive Dean Baumer said the ExpressVote XL had never been compromised and said breaches of the machine “are a practical impossibility.”

ES&S lobbied hard in Pennsylvania for the ExpressVote XL, though not always legally.

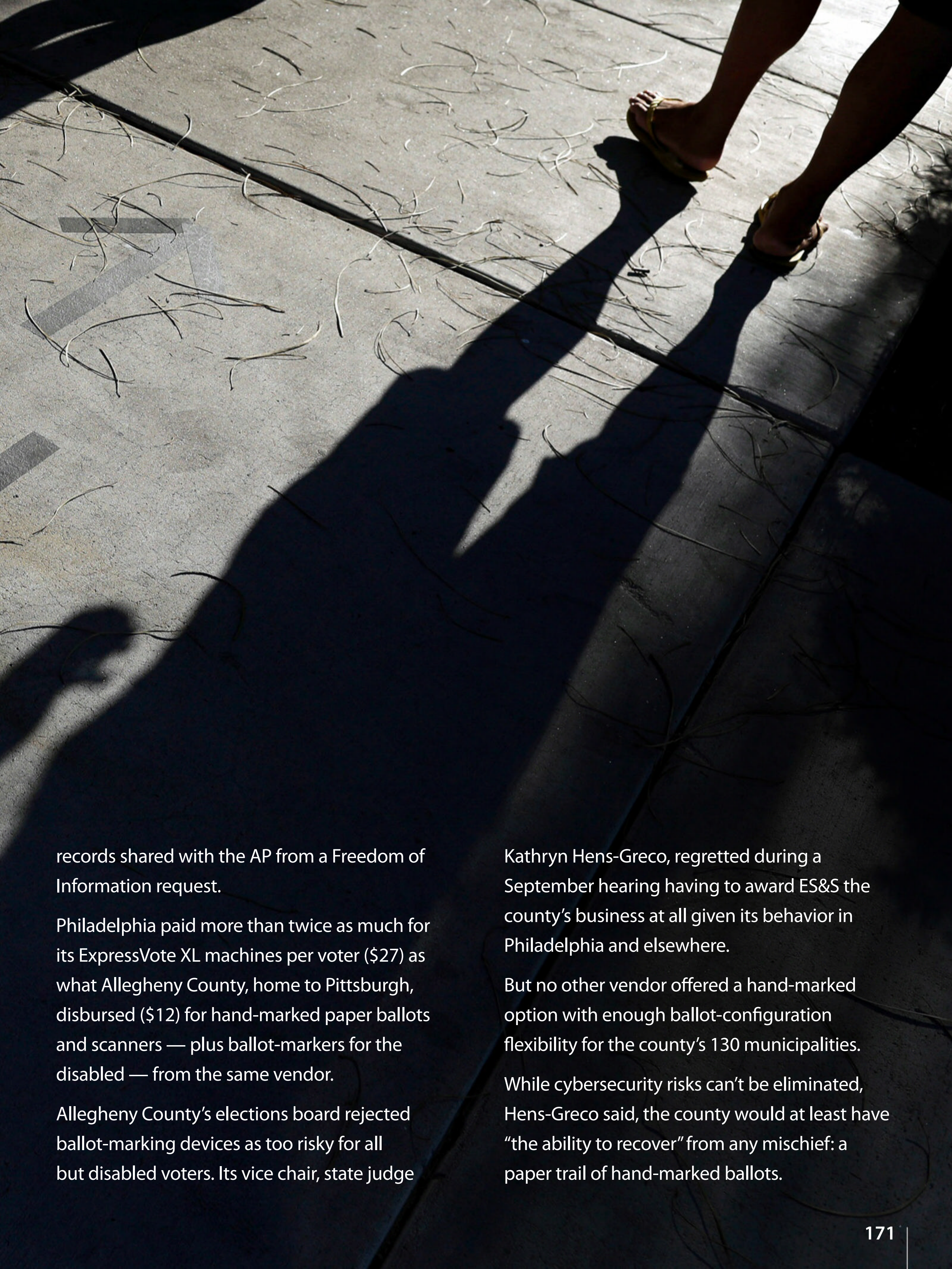
After ES&S won a \$29 million contract in Philadelphia last year in a hasty procurement, that city’s controller did some digging. She determined that ES&S’ vice president of finance had failed to disclose, in a mandatory campaign contribution form, activities of consultants who spent more than \$400,000, including making campaign contributions to two commissioners involved in awarding the contract. ES&S agreed to pay a record \$2.9 million penalty as a result. It said the executive’s failure to disclose was “inadvertent.”

The Philadelphia episode contradicts claims by ES&S officials, including by CEO Tom Burt in Jan. 8 testimony to a congressional committee, that the company does not make campaign contributions.

Public records show ES&S contributed \$25,000 from 2014-2016 to the Republican State Leadership Committee which seeks GOP control of state legislatures.

ES&S has also paid for trips to Las Vegas of an “advisory board” of top elections officials, including from South Carolina, New York City and Dallas County, Texas, according to





records shared with the AP from a Freedom of Information request.

Philadelphia paid more than twice as much for its ExpressVote XL machines per voter (\$27) as what Allegheny County, home to Pittsburgh, disbursed (\$12) for hand-marked paper ballots and scanners — plus ballot-markers for the disabled — from the same vendor.

Allegheny County's elections board rejected ballot-marking devices as too risky for all but disabled voters. Its vice chair, state judge

Kathryn Hens-Greco, regretted during a September hearing having to award ES&S the county's business at all given its behavior in Philadelphia and elsewhere.

But no other vendor offered a hand-marked option with enough ballot-configuration flexibility for the county's 130 municipalities.

While cybersecurity risks can't be eliminated, Hens-Greco said, the county would at least have "the ability to recover" from any mischief: a paper trail of hand-marked ballots.

INDIANA SENATE ENDORSES BAN ON DRIVERS USING HANDHELD PHONES

A proposal that would ban motorists from using handheld cellphones on Indiana roads appears on its way to becoming law.

The Indiana Senate voted 43-4 Tuesday in favor of the bill that supporters say is aimed at making roadways safer by combating distracted driving. House members endorsed last month a similar version of the bill that would permits cellphone use only with hands-free or voice-operated technology, except in emergencies.

The measure would broaden the state's current ban on texting while driving that officials say is unenforceable and doesn't include actions such as emailing and using Snapchat or other apps.

Republican Sen. Michael Crider of Greenfield, the bill sponsor, said 21 other states with similar laws have seen reductions in the number of crashes.



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"This is the right thing to do," Crider said. "I can't think of a single phone call that is important enough for anybody to take the chance on taking a life."

Distracted driving was to blame in at least 860 injury crashes and 48 crashes with deaths across Indiana last year, according to state police.

Republican Sen. Jean Leising of Oldenburg argued the tougher law would unfairly effect those who drive older vehicles without hands-free technology and that the maximum potential \$500 fine was excessive.

"We have so much government, folks," she said. "This is another layer."

The House must still give final approval to the bill before it goes to Republican Gov. Eric Holcomb, who has endorsed it.



MANAGING REMOTE WORKERS? IT TAKES MORE THAN THE LATEST APPS

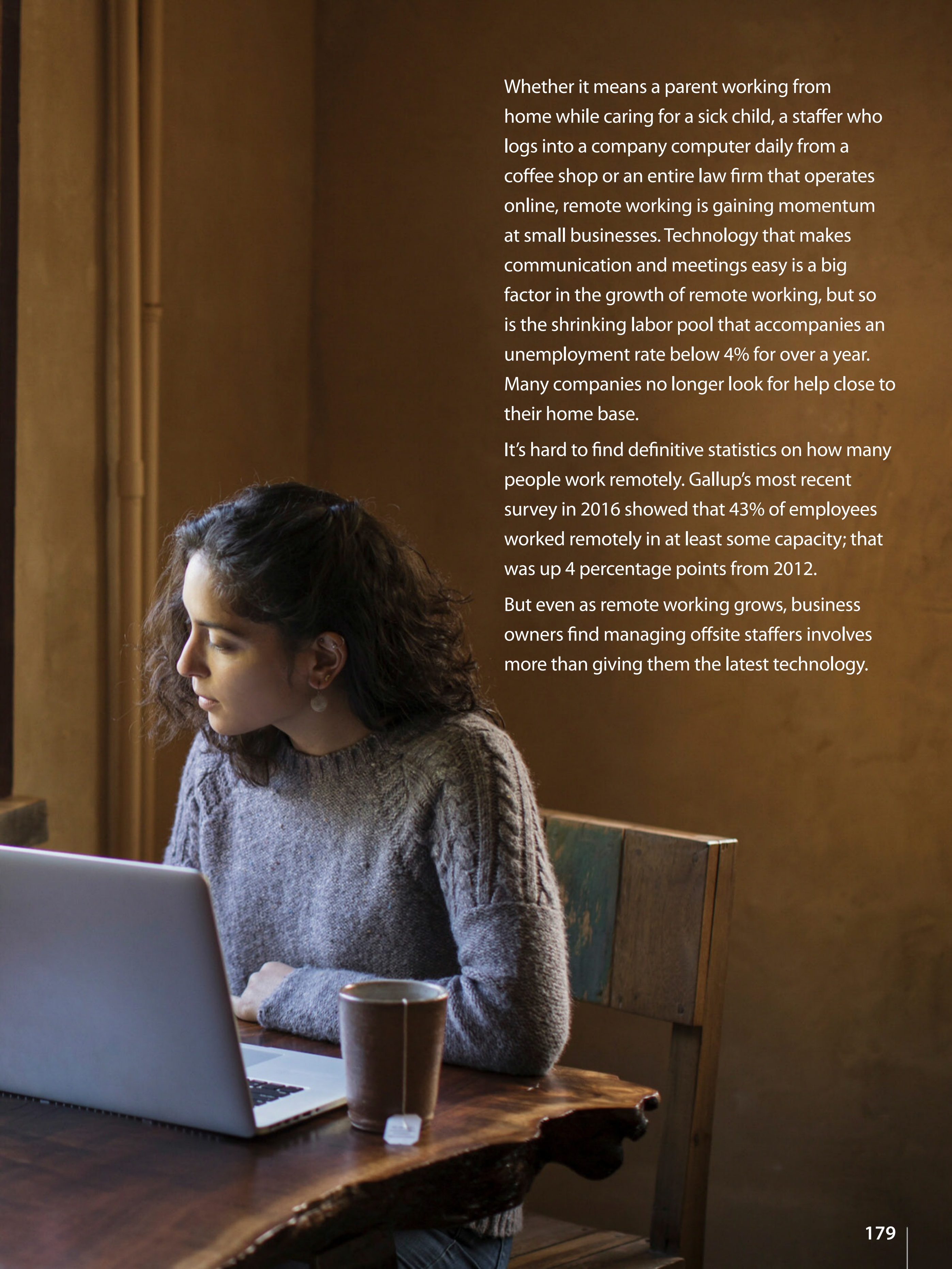


Nicolas Vandenberghe's company has 42 staffers scattered among 36 cities in 15 countries. As technology makes it possible for people to be in constant touch while working remotely, businesses like Chili Piper are becoming the norm.

"We have Zoom, Slack, and a myriad of other collaborative tools — do we really need the in-person water cooler meetings?" asks Vandenberghe, whose business makes software to help companies manage meetings. Vandenberghe himself is continually remote, splitting his time between Brooklyn, New York; Los Angeles and France.







Whether it means a parent working from home while caring for a sick child, a staffer who logs into a company computer daily from a coffee shop or an entire law firm that operates online, remote working is gaining momentum at small businesses. Technology that makes communication and meetings easy is a big factor in the growth of remote working, but so is the shrinking labor pool that accompanies an unemployment rate below 4% for over a year. Many companies no longer look for help close to their home base.

It's hard to find definitive statistics on how many people work remotely. Gallup's most recent survey in 2016 showed that 43% of employees worked remotely in at least some capacity; that was up 4 percentage points from 2012.

But even as remote working grows, business owners find managing offsite staffers involves more than giving them the latest technology.



 **SYNERGY**
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Saili Gosula
Executive Director



Communication, for example, can't be left solely to videoconferencing and messaging apps like Slack. Three of Jazmine Valencia's seven staffers are in her Los Angeles office, three are in New York and one is in Chicago. Her company, JV Agency, does marketing for the music industry. Valencia's remote staffers can feel left out when the onsite team discusses issues.

"I have to over-communicate and make sure everyone is on the same page. This might mean more one-on-ones, more calls and sometimes just being constantly emailing or private messaging the remote team," Valencia says. "I need to give them a sense of security."

Owners say a remote operation can't work without trust between a boss and staffers, especially because it can be difficult for an owner to know what an employee is doing during a workday. Tyler Forte recalls that when he first managed staffers remotely, "it was me checking on them probably too frequently." He worried about staffers at his real estate brokerage spending time on social media.

But, "over time, you develop trust with the employee, that we're all working toward the same goal," says Forte, CEO of Felix Homes, based in Nashville, Tennessee. The company has staffers in Los Angeles. "Even if I'm not overseeing every move, I believe they are doing their best to advance the goals of the company." Forte has found project management software, an aid many owners use, helps him keep track of what everyone is doing.

Sometimes the problem is very different from staffers goofing off.





“People have this idea that if you have a remote team, they won’t work,” says Emma Rose Cohen, CEO of Final Straw, a maker of reusable straws that has a hub in Seattle. “It’s the opposite — if you hire the right people, they’re self-starters, and self-starters are often people who work too much.”

She’s alert to signs that any of her 15 staffers are spending too much time on the job, and when they tell her they feel burned out, tired, or stressed, Cohen says it’s time to take a break. And she’s very public about the fact she blocks off time for non-work things she needs to do.

One reason why employees take remote jobs is their bosses give them flextime; they can make their own hours, take time off for children’s activities or to go to the gym or walk the dog. That perk can help a small business attract and retain staffers.

But remote work is a bad fit for some employees because it often is isolating; staffers can feel disconnected and even alienated from co-workers. That can be countered to some extent through messaging channels that allow everyone to chime in on a fun discussion. Cohen has gone further, creating channels devoted to specific topics like pets or podcasts.

When Andrew DeBell hires remote staffers, he flies them to his company’s home base for interviews; that’s one way to increase the odds they’ll work well with the team at Water Bear Learning, a Ventura, California-based company that creates educational materials.

Some owners find remote work can have a stifling effect on a team’s creativity — there’s no light-bulb moments as staffers pass each other in the hallway, no riffing in a meeting, no break room chats that are unexpectedly productive.





"You're able to feed off each other and brainstorm ideas better in person than when you've got several people on the phone," DeBell says. His company has one staffer in Denver and two in Ventura. It also has a network of freelancers in the eastern U.S.

Vandenberghe encourages staffers to go to coworking spaces so they can avoid isolation. When he needs a brainstorming session, he flies staffers to where he is so they can meet in person.

Saili Gosula has a remote administrative staffer and several onsite employees at her Synergy HomeCare franchise in San Mateo, California, and all of her caregivers work out in the field. Gosula has some of the same issues as owners whose work is computer-based; she does a lot of communicating and informing, trying to be sure that all her office staff is on the same page.

As it turns out, Gosula uses some of the same skills with her caregivers, who are all working in sensitive, emotional situations as they care for elderly or sick people.

"We talk to them often, ask them how it's going," Gosula says. "We ask them questions every time we interact with them."

JAPAN'S ANA ORDERS 20 MORE BOEING 787 DREAMLINERS

Japanese carrier ANA is ordering 20 Boeing 787 Dreamliner jets, bringing its fleet of the planes to 103 by 2025.

The latest order will consist of 11 787-10 aircraft, set to go into service for Japan routes sometime between 2022 and 2024, ANA Holdings Inc. said.

That jet seats more than 330 passengers.

Nine 787-9 models, for international services, seating about 300 passengers, will begin services fiscal 2024 and 2025, it said.





A price for the deal was not given.

“Boeing’s 787s have served ANA with distinction, and we are proud to expand our fleet by adding more of these technologically advanced aircraft,” ANA Executive Vice President Yutaka Ito said.

Seventy-one of the aircraft is already in service with the airline, said ANA, or All Nippon Airways.

The ordered planes will use engines made by GE Aviation, it said.

They will replace the Boeing 777 series now in operation, a move that will reduce noise and emissions, it said.

The announcement comes at a time when ANA has been slashing flights to China and back because of travel restrictions and consumer worries over the new virus that started spreading from China late last year, causing COVID-19 illnesses.

ANA has long been one of the world’s main customers for Boeing products. It was the first carrier in Japan to fly Boeing 787-10 on domestic routes.





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