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WORLD'S BILLIONAIRES

Forbes Asia

APRIL/MAY 2021

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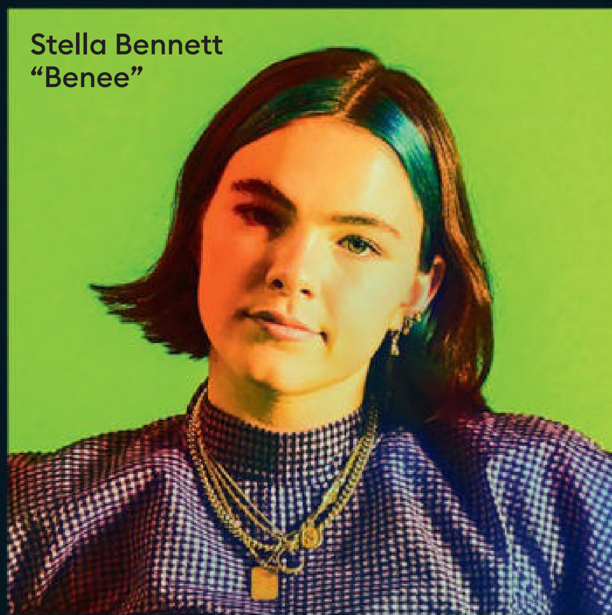

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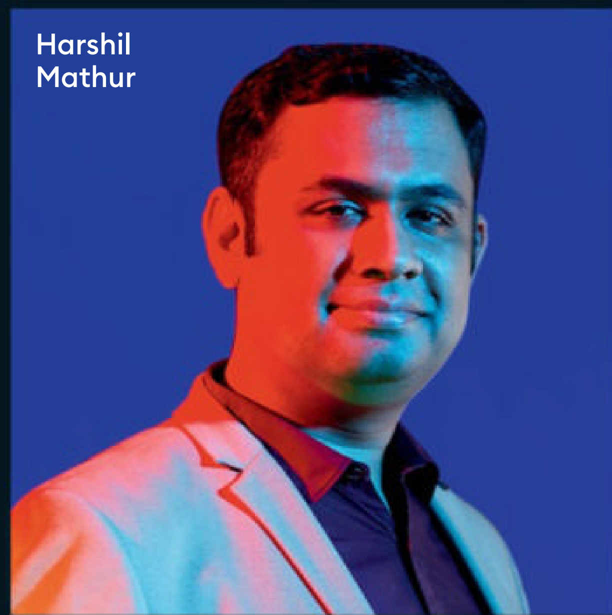

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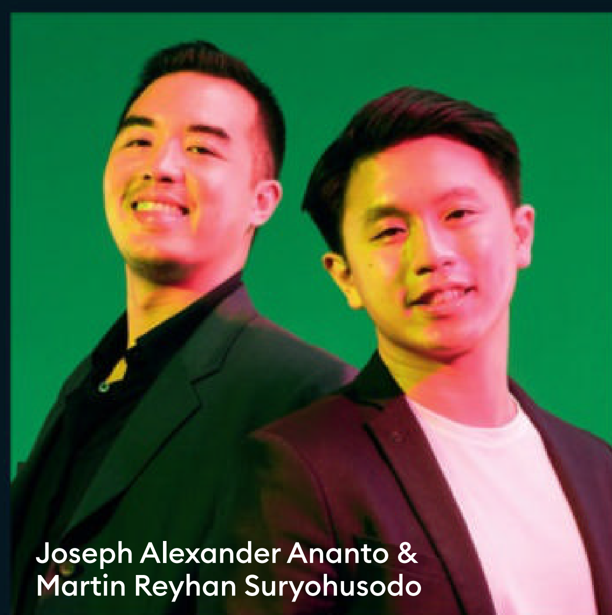
30 UNDER 30

300 INNOVATORS IN 10 INDUSTRIES

MEET THE CLASS OF 2021



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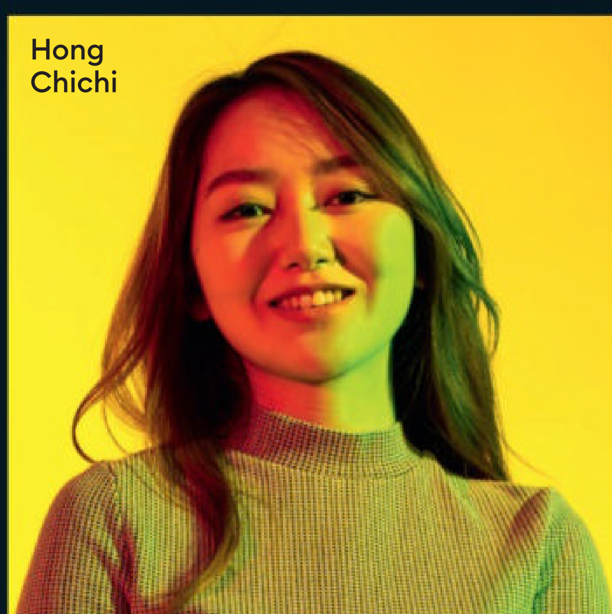

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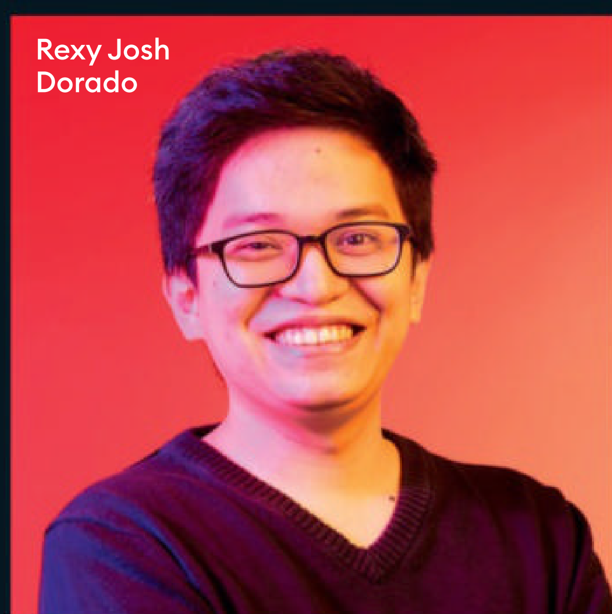

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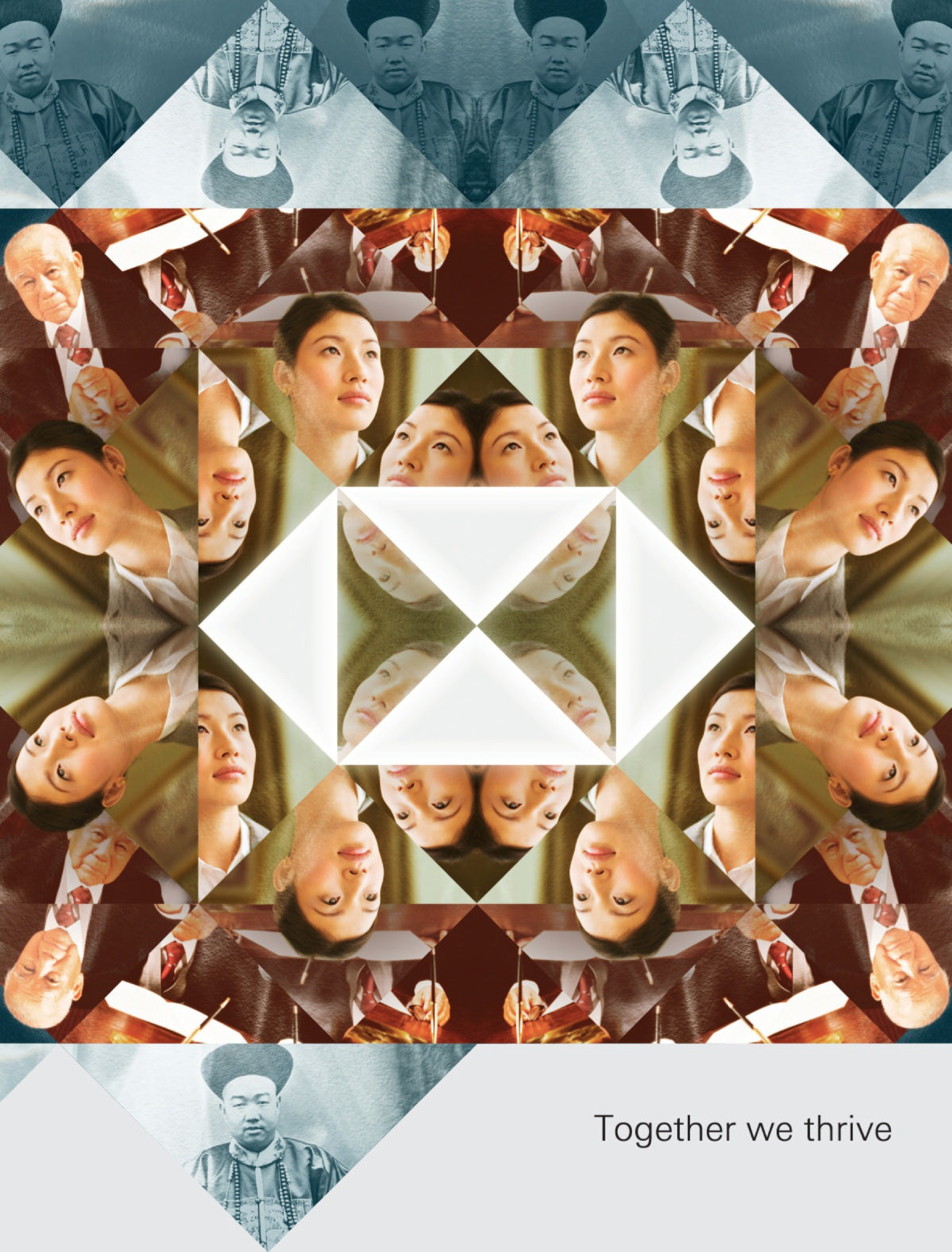

Together we thrive

Forbes Asia

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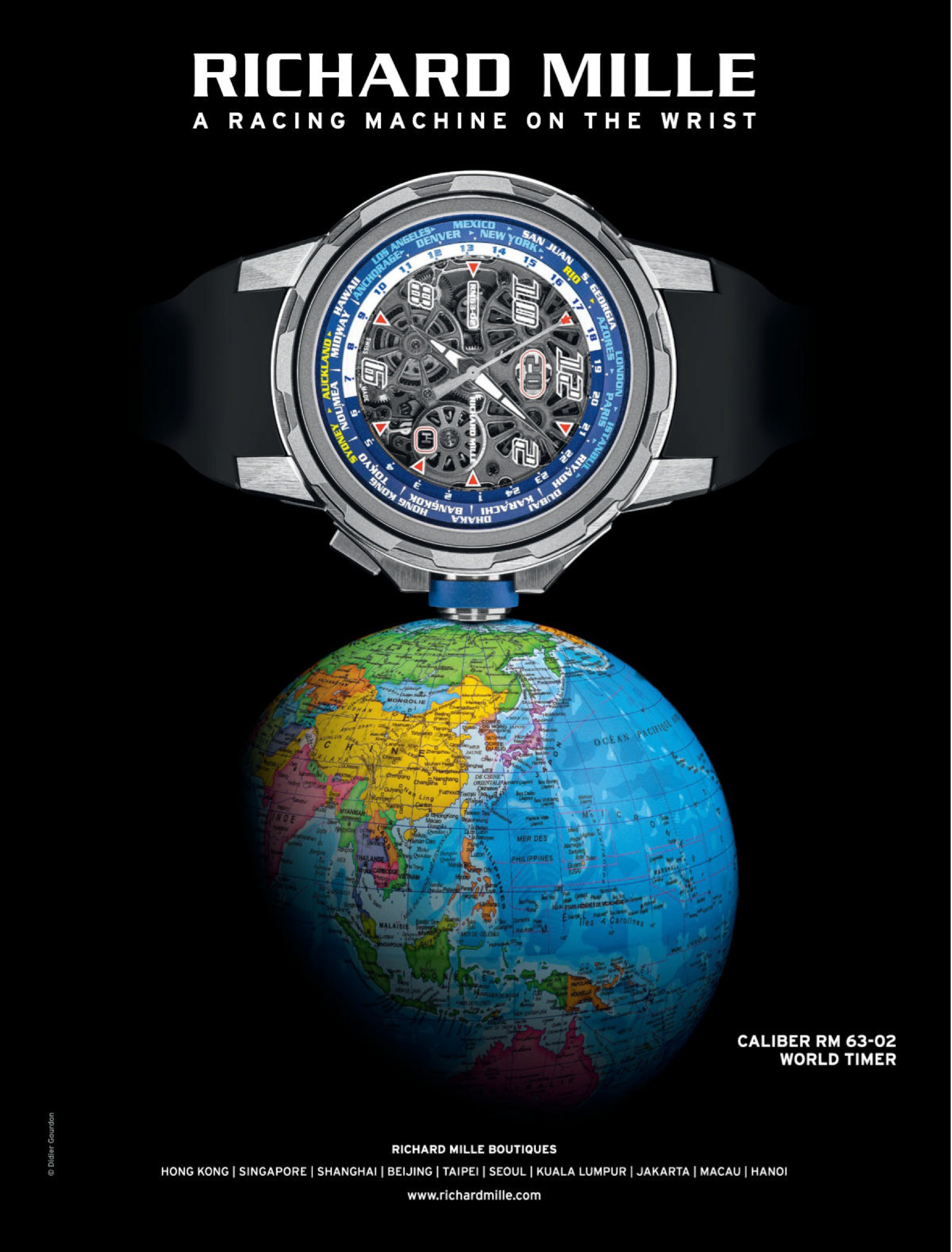

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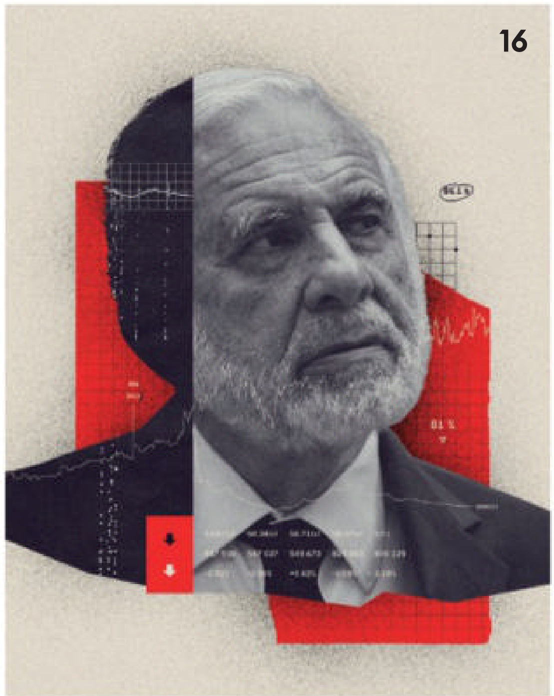
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Sidelines

Wealth Creation

A **regular column** in this magazine is called Wealth Creation. The column's idea is to explore the sources of wealth creation within an economy on a macro level, and, by extension, for those on the rich list. The column might illustrate, for example, rising consumer spending in a country, which is good news for local retail tycoons.

This issue has three lists: World's Billionaires, Japan's 50 Richest and Forbes 30 Under 30 Asia. All three illustrate something about wealth creation. The World's Billionaires list is notable this year because it tracked wealth creation over the 12 months to March 2021, while the pandemic was in full force worldwide.

Despite the havoc caused by the virus, the overall number and the total wealth of billionaires surged around the world—up 32% to a global total of 2,755 billionaires. As noted in the list's introduction: "The number of billionaires simply exploded." Moreover, their aggregate net worth rose by 64%, to $13.1 trillion.

The Asia-Pacific region is now home to 42% of the world's billionaires, more than any other location, including the U.S., which long held the pole position but now is No. 2 with 26%. On top of that, Asia-Pacific's billionaires are also wealthier, in total, than those in the U.S.—$4.7 trillion versus $4.4 trillion. To be sure, this rise in the number and wealth of the ultra-rich during a global pandemic will "engender endless amounts of consternation," notes U.S. Forbes' Chief Content Officer Randall Lane in his essay in this issue.

Yet wealth creation should, overall, be a tide that lifts many boats. Take Japan. Its years of stagnation—dubbed the "lost decades" starting in 1991—seem finally to be coming to an end. Even while the pandemic raged in Japan, economic growth is starting to show signs of a revival, and the country's stock market is posting strong year-on-year gains. A slew of new wealthy in Japan have emerged, with five new entrants making it onto this year's Japan's 50 Richest list.

Four have fortunes that are self-made. That trend is worldwide as well, with the ranks of self-made billionaires far outstripping those with inherited wealth. In other words, the global wealth creation system has tipped in favor of those who achieve it by dint of their own efforts within their lifetimes.

And then there's Forbes 30 Under 30 Asia list. It has evolved to become something of an early warning system for wealth creation, such as Forbes 30 Under 30 Asia alumna (class of 2016) Melanie Perkins from Australia, whose design-software firm Canva is now valued at $15 billion. This makes Perkins a billionaire with an estimated net worth of $2 billion.

The Forbes 30 Under 30 Asia list has many building companies, and creating wealth. Some work in areas such as the arts, healthcare or sports, where they may be driven by more than financial reward—and they too are creating value if not always wealth. All of them have qualified to be included while doing so in the midst of a pandemic.

Thus, there are manifold examples of wealth (and more broadly value) creation in this issue. They all have been adding something positive to the global community, despite the terrible and traumatic impact of the pandemic.

As always, all comments are welcome at editor@forbesasia.com.

JUSTIN DOEBELE
EDITOR, FORBES ASIA

By **Steve Forbes, Editor-in-Chief**

End the Lockdowns Now

The sweeping lockdowns imposed a little over a year ago, during the world’s worst pandemic since the Spanish flu of 1918-20, were supposed to be a short-term solution to avoid overwhelming our hospitals. Yet here we are, over a year later, with restrictions of varying degrees still with us. They’re being lifted, but at a pace that’s far too slow, which is doing unnecessary damage to schoolkids in particular and the economy in general.

Soon, almost anyone who wants a vaccine will be able to get one. Moreover, for months we’ve had highly effective therapeutics with which to fight the disease when someone who contracts a severe case of Covid-19 is hospitalized.

This is why the lockdowns should be ended right away.

It was clear by late spring of last year that the best approach was to focus efforts on the most vulnerable parts of our population—that is, the elderly and those with serious preexisting conditions. However, instead of following the science, too many politicians and health officials imposed—and continue to impose—sweeping restrictions that have been useless, capricious or counterproductive.

The country has paid and—this is outrageous—continues to pay a fearsome price. Low-income households have been disproportionately harmed, as parents haven’t been able to work because they’ve had to stay home to take care of kids who couldn’t go to school.

The biggest scandal has been the way that teachers’ unions have kept public schools closed or on a hybrid system long past the time when facts showed that kids were the least vulnerable to Covid-19 and the least likely to transmit the disease. Private schools, with proper precautions, have been open for months, with virtually no ill effects. The numbers for various forms of depression and addiction are way up, as are those for suicides and deaths from overdoses.

Compare the statistics in states that took an enlightened, scientific approach, such as Florida, with those that didn’t, such as New York. Florida, completely open today, has always been less restrictive after the initial lockdowns than New York. The Sunshine State has a lower death rate than the Empire State, even with its larger population of older people. Florida’s economy is booming, while New York’s is still struggling.

This is the blunt truth: The states that are more open are doing better in terms of health and economic performance than those that are more restrictive.

All of which makes perverse U.S. President Biden’s comment during his nationwide address in March, when he said that maybe on the Fourth of July—months from now—small family gatherings to celebrate America’s Independence Day might be safe. C’mon, Mr. President: They’re safe—today!

The president should urge state governors to immediately cease these unnecessary restrictions and fully reopen their schools and economies. The general health of the nation would be immensely better off for it.

What’s the Matter With Germany?

Germany, the world’s fourth-largest economy and the most powerful nation in Europe, seems to be pulling away from its close alliance with the U.S., a partnership that was critical in winning the Cold War against the once formidable Soviet Union.

This is good news for China and Vladimir Putin’s Russia.

Under its long-serving chancellor, Angela Merkel, Germany is going all-out to ensure the completion of the Nord Stream 2 pipeline, which will enormously increase Europe’s dependence on Russian natural gas, even though Putin has never hesitated to use the fuel as a political weapon.

A far sounder, more sensible alternative for Berlin would be to import more U.S. natural gas, which we have in abundance. Germany should also beef up its mangy military as a means of countering Moscow’s ambitions to pry Europe from Washington. Unlike Sweden, which is dramatically increasing the strength of its military because of Russia’s aggressive moves, Germany has been more hesitant. Intense pressure from the Trump administration got Berlin to boost military outlays. But German reluctance remains significant, and efforts may flag if President Biden doesn’t continue Trump-like goading.

Another recent move that bodes ill is Germany’s pushing through a China-EU investment deal that Beijing sees as a way to loosen U.S.-European ties.

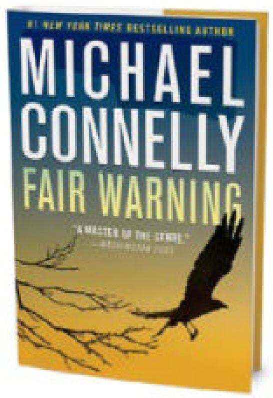
Germany, so far, has refused to work closely with Washington to keep strategic technologies from getting into the hands of Beijing, a contrast to its approach regarding the Soviet Union during the Cold War. Germany takes this tack even as China engages in major human-rights abuses and continues its highly aggressive foreign policy, such as moving to dominate the South China Sea, a critical international waterway. Instead, Chancellor Merkel seems intent on keeping Germany at some distance between Washington and Beijing.

During the Cold War, despite occasional differences, the NATO alliance—with Germany and the U.S. at its core—held fast. A critical example was how closely the two countries worked together to counter Moscow's attempts at blackmailing Germany into loosening its transatlantic ties by threatening it with intermediate-range nuclear missiles in the late 1970s. Despite fierce pressure from Moscow—including whipping up domestic opposition—Germany, under the redoubtable Chancellor Helmut Kohl, agreed to our stationing missiles on its soil. The Russian move failed, a crucial factor in the West's winning the Cold War.

The Biden administration has a big job in getting Germany to realize that close cooperation between our two countries in all areas remains absolutely crucial to preserving democracy and the free world's security in the face of growing pressures from China and Russia.

A Compelling Duo of Whodunits

This pair of mystery/thrillers by a true master of the genre, Michael Connelly, will keep you glued from beginning to end. He has a marvelous way of spinning a gripping tale with impressively precise details and excellent character development.



If you haven't yet gone to one of the DNA websites to trace your ancestry, you'll think twice about doing so after reading **Fair Warning** (Little, Brown & Co.). Despite promises of confidentiality, how truly secure is your information? Your chosen vendor may make extra bucks by selling your data to research labs or other parties. Safeguards are supposed to prevent those buyers from knowing who you are, but how good are those measures? And it may be that those buyers resell the data to others whose security is lax.

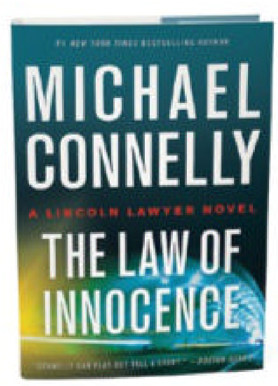
Our protagonist, Jack McEvoy, is a former investigative reporter and one-time novelist who now works for a site that focuses on consumer fraud.

One day two detectives from the L.A. Police Department pay McEvoy a visit. He's a "person of interest" in the murder of a woman with whom he'd had a one-night stand after they met at a bar.

McEvoy's DNA ultimately clears him, but his investigative instincts are irrepressibly aroused. Some ingenious sleuthing leads McEvoy to realize he's looking for a serial killer who calls himself "the Shrike," after a bird that kills its prey by breaking its neck.

Before this tale is over, McEvoy, the central character of two previous Connelly novels, reconnects with an old flame, ex-FBI agent Rachel Walling, who had been fired for leaking confidential information to him during a previous case and who now runs an agency that does background checks on potential hires for clients. Connelly fans will eagerly await future books involving this duo!

The Law of Innocence (Little, Brown & Co.) brings back a character Connelly hasn't featured in years: aggressive, smart-alecky defense lawyer Mickey Haller, who was made famous in the 2011 movie *The Lincoln Lawyer,* starring Matthew McConaughey. Haller does much of his work in the back seat of his Lincoln.



An establishment figure Haller is not. He runs ads for clients on benches. Until California's attorney-licensing agency stopped it, Haller's slogan was "Reasonable doubt for a reasonable fee." Nonetheless, Connelly makes Haller sympathetic.

On his way home from a party celebrating a big courtroom victory, Haller is stopped by a police officer. He soon finds himself under arrest for first-degree murder: There's a dead body in the trunk of his car, and forensics finds the man had been killed there. Worse, Haller knew the victim well—a scammer he represented several times before dropping him as a client. Alleged motive for murder: The guy owed Haller money.

Compounding things further, a vindictive judge sets bail at $5 million. Haller decides to defend himself, knowing well the truism that a person who does that has a fool for a client. But given the stakes—life in prison—he trusts no one else with the task. Haller also recognizes that a not-guilty verdict wouldn't suffice to save his legal reputation. He must uncover who set him up and why. As he puts it, "To prove true innocence, the guilty man must be found and exposed to the world."

More daunting, Haller has to direct things from from jail, where prisoners might kill him. Given his reputation as a hard-driving defense lawyer, Haller knows the guards and the sheriff's office wouldn't mind seeing him done in. His fears are well-placed; especially dangerous are the bus trips to the courthouse.

Haller, who needs all the help he can get, mobilizes characters familiar to fans of previous Lincoln novels, including his half-brother Harry Bosch, memorable star of Connelly's first legendary series. (By the way, Harry Bosch is the subject of a riveting television series—called *Bosch,* naturally—on Amazon Prime. Leave aside plenty of time, because once you tune in, you won't want to stop viewing, episode after episode.)

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By **Rich Karlgaard**

The New Map: China and the U.S.

In 2005, the ASEAN countries traded 50% more with the U.S. as they did with China. Now the numbers are reversed. This fact is just one of many shaping a new geopolitical map, says Daniel Yergin, author of a book published in late 2020, *The New Map: Energy, Climate and the Clash of Nations*. The book notes the rising importance of Asia in the global geopolitics of energy.


Daniel Yergin is a rare writer who can synthesize economics, energy, history, geopolitics and technology.

Yergin is best known for his bestselling and prize-winning books on oil and gas, including *The Prize and The Commanding Heights*. Global economic growth after the ruin of World War II led to energy shortages in the 1970s. That economic fact shifted the global power map to the Middle East as a new source of wealth and conflict. The Strait of Hormuz became the world's most-contested shipping lane.

But the global map has shifted again, writes Yergin. "The South China Sea is the most important body of water for the world economy—through it passes at least one-third of global trade. It is also the most dangerous body of water in the world, the place where the militaries of the United States and China could most easily collide," he says.

The root of the sea's danger is an irreconcilable legal view. Simply, China sees the South China Sea as its own sovereign territory. The U.S. and its allies, including Japan and Australia, believe the South China Sea is an "open waterway" under international law. "The standoff has many levels of complexity," says Yergin. "Singapore diplomat Tommy Koh, who led the negotiations to create the U.N.'s Law of the Sea, told me, 'the South China Sea is about law, power, and resources, and about history.'"

Yergin is a rare writer who can synthesize economics, energy, history, geopolitics and technology. That view from the "commanding heights" is very much needed these days. For example, visit Silicon Valley where I live and you'll learn how tribal it really is. You'll learn all you need to know about cloud computing, digital acceleration, and why the 2020s will be the decade of artificial intelligence and machine learning. But you'll learn little about the law of the sea, China's "century of humiliation" and the roots of China's current nationalism, and why ASEAN countries must navigate a tricky course between U.S. and Chinese interests.

Yergin's biggest worry is the risk of a South China Sea miscalculation setting off a war. He cites the origins of World War I, which led to 50 million casualties in its four years and three months, which was sparked by the assassination of Austrian-Hungarian Archduke Franz Ferdinand and his wife in Sarajevo, Yugoslavia in June 1914. This unexpected tragedy led to England and Germany—and the world—being drawn into war five weeks later.

For all his worries that a similar incident in the South China Sea might draw the U.S. and China into war, Yergin remains an optimist. The reason is technology's rapid advance and human capacity to learn. Look no further than the rapid introduction of Covid vaccines, he tells me. "Synthetic RNA was discovered in the late 1970s. But it took supercomputing modeling of the 2020s to show how mRNA could be the answer to a global pandemic," he notes.

The same story of discovery and learning is repeated throughout history, he says. The technology and unexpected success of hydraulic fracturing in the early 2000s made the U.S. energy independent. What similar surprises might occur with, say, hydrogen as a source of cheap and abundant energy? "People of all eras are consumed by their present problems. Even as other people are solving those very problems," he says. Ⓕ

Rich Karlgaard is editor at large at *Forbes*. As an author and global futurist, he has published several books, the latest of which is *Late Bloomers*, a groundbreaking exploration of what it means to be a late bloomer in a culture obsessed with SAT scores and early success. For his past columns and blogs visit our website at www.forbes.com/sites/richkarlgaard.

COURTESY OF DANIEL YERGIN

PETRONAS: ATTRACTIVE NEW UPSTREAM PROSPECTS FOR INVESTORS

Malaysia's national energy company offers low-cost, high-quality oil and gas resources to meet growing energy demand.

Malaysia Petroleum Management (MPM) has launched the Malaysia Bid Round (MBR) 2021, a platform to offer 13 new offshore exploration blocks within proven hydrocarbon basins in Malaysia to interested investors.

These 13 blocks cover nine shallow-water and four deep-water acreages, with discovered resources opportunities (DRO) included in some of the exploration blocks. MPM, on behalf of the resource owner PETRONAS, manages Malaysia's hydrocarbon assets.

Although there has been an accelerated shift toward renewables, petroleum demand is expected to remain robust in the coming years due to rising energy demand.

Thus, decarbonization of its core operations is critical in ensuring energy security, while helping countries to benefit from less emissions-intensive fuels.

To that end, there is a need to explore oil and gas in the right places and drill for what is known as "advantaged" barrels—oil that has the twin properties of being low in cost and carbon content.

PETRONAS Executive Vice President and CEO of Upstream, Adif Zulkifli, says advantaged barrels can be produced even when prices are low and when regulations are tightened, and is expected to be the source of the bulk of oil supply in the next few decades.

"For 2021, PETRONAS is offering attractive exploration blocks located within proven hydrocarbon basins. Our track record shows we have always been investment friendly as we continue to create a conducive environment to deliver value and promote sustainable development," adds Adif.

Flexible Terms

Looking to draw in agile investors, MPM is enhancing its product offering to encourage collaboration and further investment in the industry, offering three types of new production sharing contracts (PSCs) under the MBR 2021.

The first, the Enhanced Profitability PSC Terms (EPT), includes a 70% fixed-cost recovery ceiling and linear profit sharing, based on a single oil and gas pool. Under this scheme, the contractor's profit share will range between 30% and 90% depending on the asset's profitability.

The second and third PSC—called the Small Field Assets (SFA) and Late Life Assets (LLA), respectively—provide opportunities for industry players with niche capabilities to monetize discovered fields with resource size of less than 15 million barrels of oil or less than 300 billion cubic feet of gas.

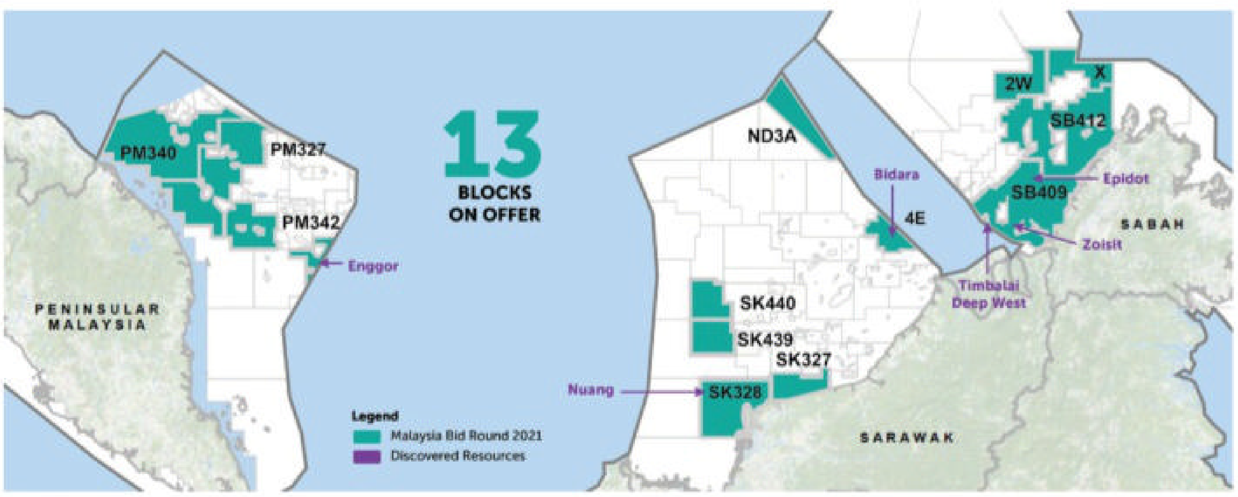
MPM also offers several nonfiscal enhancements for the exploration blocks such as larger block size, flexible bidding options, e.g. the option to merge two adjacent blocks under one PSC, transferable minimum work commitments between two adjacent PSCs and a phased exploration period.

MPM is hosting a virtual data room that is accessible now until August 6 to allow potential investors to conduct data room reviews within the bid round period. The bid evaluation exercise will take place between August and September. The contracts will be awarded to successful bidders by year-end.

PETRONAS Executive Vice President and CEO of Upstream, Adif Zulkifli

Senior Vice President of MPM, Mohamed Firouz Asnan, says, "To date, some 40 billion barrels of oil equivalent (bboe) have been discovered in Malaysia, one of the highest in the region, with 20 bboe more waiting to be unlocked. This makes Malaysia a country with great potential for growth while providing investors flexibility and choice.

"Those seeking the right opportunities will not only balance but strengthen their portfolio, and we hope to see new investors, including existing players, bidding this year," adds Firouz. ■



MBR 2021 blocks on offer

PETRONAS

For more information, please visit www.petronas.com/mpm

By **Martin Giles**

Photograph by **Christie Hemm Klok** for Forbes

The Road Less Traveled

Most tech unicorns are the product of Silicon Valley's well-oiled VC machine. Not **CLOUDINARY.** The maker of marketing software was profitable from day one and has bootstrapped its way close to a billion-dollar valuation.

I

Itai Lahan is adamant that ambitious entrepreneurs should certainly fill their coffers with venture capitalists' money if they get the chance. "The only consistent way to get to be a billion-dollar company is to go the VC route," the Cloudinary CEO declares. "That, hands down, will always win."

In a classic case of "do as I say, not as I do," though, Lahan has repeatedly turned down venture funding since launching Cloudinary in 2012. Instead, he and his fellow Israeli cofounders, Nadav Soferman and Tal Lev-Ami, have bootstrapped their Santa Clara, California–based startup to near unicorn status. The company makes software that helps the CIOs of almost 7,500 customers, including household names like Nike, Peloton and Neiman Marcus, manage their on-

Cloudinary CEO and cofounder Itai Lahan stands outside a folding door at its California headquarters, which was once leased to a Nissan R&D center. Almost a million developers now use his software.

line marketing content—think videos, logos and product photographs. Revenue grew by some 40% last year, to around $70 million, and the company is worth at least $900 million. Cloudinary has appeared on the Forbes Cloud 100 list each of the last three years.

Lahan says the company simply never needed venture money. The founders came up with the idea for the business while running a consulting firm in Israel that built technology for other startups. The clunky software they had to use to manage videos and photos convinced them to create something better. Their consulting clients were Cloudinary's first customers, which enabled it to turn a profit as soon as it opened its doors. Since then, it has generated enough money—cash flow as measured by Ebitda last year was an estimated $6 million, or about 9% of sales—to finance its growth plans every year and to build a 300-person team.

"We were lucky enough early on to grow really fast," Lahan says. "We were getting money from our customers, and it was more than enough to hit our next-year goals, which were incredibly high."

Cloudinary's software automates the drudgery of resizing and reformatting digital content for devices and web browsers, and it ensures that videos and photos load lightning-fast—a must in an era when consumers will click elsewhere upon encountering the slightest delay. Cloudinary also uses artificial intelligence to suggest the best way to present photos and videos to capture people's attention. The more digital raw material that churns through its algorithms, which currently process between 500 and 2,000 pieces of content a second, the better they get at predicting what will attract eyeballs and clicks.

It protects brands as well as promotes them. Companies like Bleacher Report use Cloudinary's software to comb through videos uploaded by people to determine if they contain pornographic images or other offensive material.

To get CIOs hooked, Cloudinary offers a free service with strict volume limits. It makes money by charging heavy users. Annual deals can reach high-single-digit millions of dollars. At the end of 2018, it managed 25 billion digital assets; by the end of last year, that figure had vaulted to 50 billion—and should keep growing even if the pandemic-fueled e-commerce boom subsides. In 2020, total U.S. online sales hit $813 billion, a 42% year-over-year increase, according to Adobe, which forecasts they'll pass $1 trillion for the first time in 2022.

Some other notable cloud companies, including project-management software maker Atlassian and Qualtrics, the Utah data analysis company that was ultimately acquired by SAP for $8 billion, bootstrapped themselves to a considerable size before going public. If cloud startups find a core group of fans early on, word-of-mouth marketing can keep costs low, says Jason Lemkin, CEO of SaaStr, a venture firm: "Once you get to a few million of revenue . . . you can be cash-flow positive because your [current] customers will create a stream of future customers for you."

Few startups are that lucky, which is why Lahan thinks nearly all entrepreneurs should take venture capital as they hunt for revenue.

"It's a numbers game," he says. "It's well thought-out. [Venture financing has] tons of pluses, an incredible amount of pluses."

There are minuses, too. Startups often have to put up with investors on boards directing them along a tight track toward a hoped-for public offering. That's not something Cloudinary's founders have had to worry about. (The company doesn't even have a board.) After the pandemic began, they pulled back on hiring but didn't fire anyone. They also cut the company's 2020 revenue target by almost $8 million to take some pressure off staff and help customers in financial distress by postponing payments and offering discounts. Lahan says he's not sure a board would have supported those moves.

"THE ONLY CONSISTENT WAY TO GET TO BE A BILLION-DOLLAR COMPANY IS TO GO THE VC ROUTE. THAT, HANDS DOWN, WILL ALWAYS WIN."

Another key advantage of not having outside investors is that the three founders still own just over half of the business. Some of the remaining equity is held by staff; Cloudinary has organized a couple of secondary transactions to let employees sell shares. That has enabled two VC firms, Bessemer Venture Partners and Salesforce Ventures, to get their fingers in the pie, although their collective holding is small.

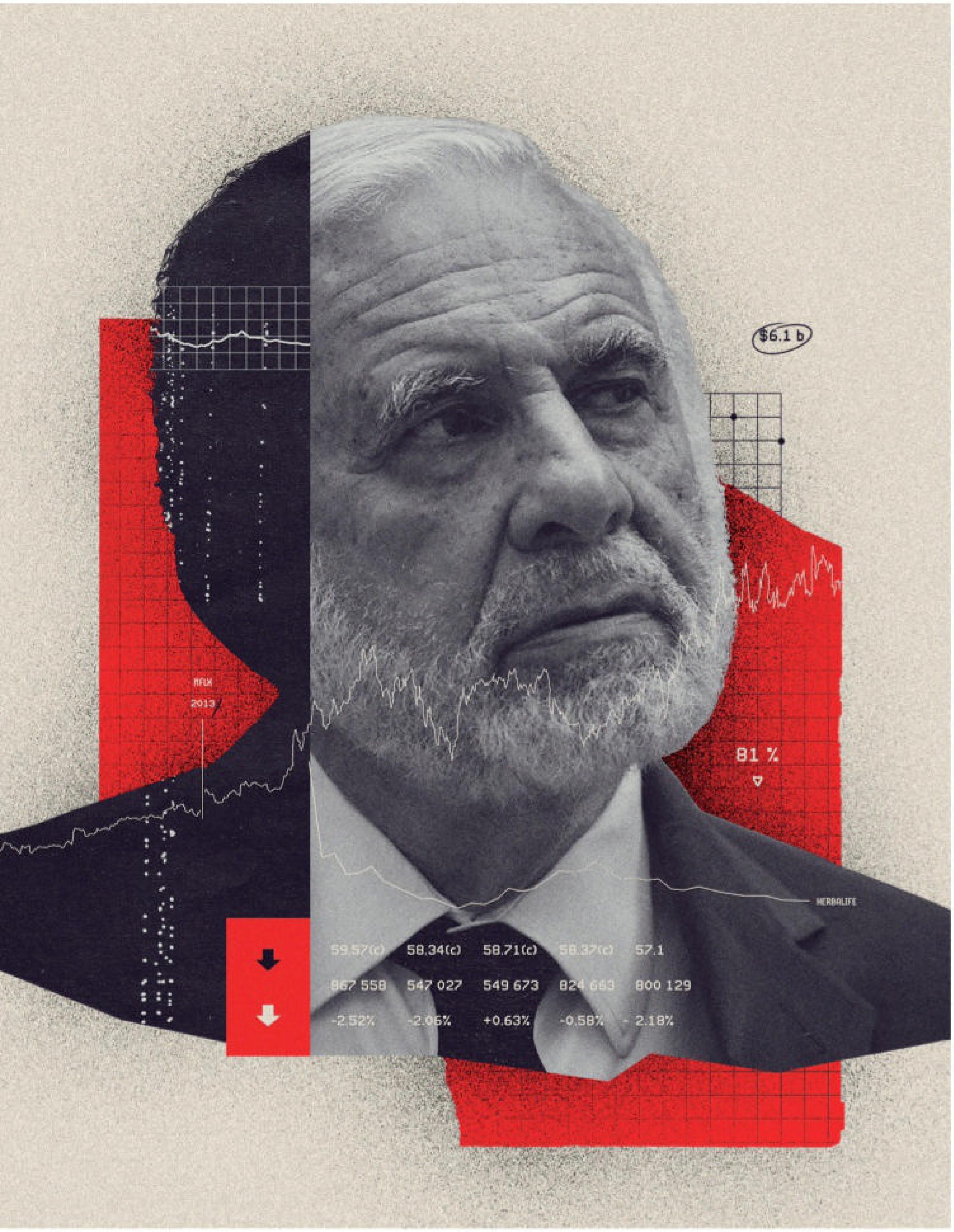
Still, Lahan might finally be willing to take his own advice. "I'm confident we will need [outside] funding," he says. "The moment we need it, if an IPO is the right way forward, we'll do an IPO." But he hints at other options, including the possibility of tapping late-stage venture funds. If Cloudinary does pursue that route, it will be a case of Lahan taking a lot of money from where his mouth has been.

By **Nathan Vardi**

Illustration by **Israel G. Vargas** for Forbes

The Teflon Trader

Wall Street legend CARL ICAHN is on a seven-year losing streak that has cost him billions, but the market still loves his stock.



In October 2013, when Carl Icahn started selling his large position in Netflix, many believed the vaunted billionaire investor had done it again. The company had successfully transitioned from a DVD-by-mail rental service to video streaming, and Icahn had made a 457% return in just 14 months.

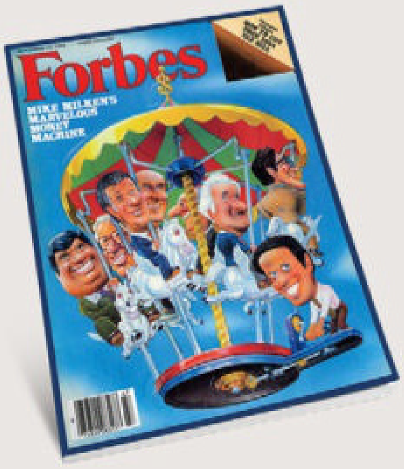
"As a hardened veteran of seven bear markets," Icahn announced, it was time for him "to take some of the chips off the table." Icahn's son, Brett, begged his father not to sell. By 2015 Icahn was out, making a tidy $2 billion profit on Netflix. But since his departure the stock has appreciated another tenfold. Had Icahn held onto it, his profit would have been $19 billion.

Icahn's Netflix miss isn't just a fluke. Last year, while the U.S. stock market returned 18% during a volatile pandemic bull market, Icahn's hedge fund plunged by 14%. In 2019, it tum-

Carl Icahn's fund has lost money in five of the last seven years. He hopes to turn things around with big bets on Occidental, Bausch Health, Cheniere Energy, Newell Brands and Xerox.

The Vault

BOND JUNKIES



By the mid-1980s, corporate raiders like Carl Icahn, Ron Perelman and T. Boone Pickens had invaded Wall Street—fueled by junk bonds issued through Drexel Burnham Lambert's Michael Milken. *Forbes* was first to shine a light on Milken's money machine and the cast of "buccaneers" it bankrolled: "Are there common threads among special Drexel customers? Only that all are aggressive, are outsiders to the conventional financial community, have a trading mentality and can make quick multimillion-dollar investments without going through a corporate bureaucracy. A conventional observer would say they tend to be buccaneers, much more interested in money than in running businesses. An admirer would call them financial entrepreneurs, redeployers of capital."

—November 19, 1984

bled by 15%. In fact, the great trader has lost more than $5 billion trading over the last seven calendar years. His hedge fund has suffered so much that its average annual return since its inception in 2004 has fallen to 3%, versus 10% for the S&P 500.

Icahn's struggles illustrate a major shift occurring on Wall Street. In the era of Amazon, Tesla, GameStop and bitcoin, growth, momentum and investor psychology are the most important drivers of success. But at 85, Icahn is sticking to fundamentals. He is one of the last remaining original corporate raiders on Wall Street, and he still likes asset- and cash-rich companies in need of a shake-up. "I am a value guy, and the activism model is still the best model if you can find a company with hidden value and the board is not taking advantage of it," Icahn insists from his new office digs in Florida. "It is still the best on a risk-reward basis, but you need a lot of patience."

Wall Street still believes. Shares in Icahn's most important asset, Nasdaq-listed Icahn Enterprises, which invests in Icahn's hedge fund and holds companies like oil refinery CVR Energy and auto-parts retailer Pep Boys, trade at around $60, up some 20% over the last 12 months. The underlying assets, as measured by net asset value, are worth only $14.70 a share. Icahn Enterprises' net asset value has tumbled from $9.1 billion at the end of 2013 to $3.5 billion. Meanwhile, Icahn has mostly been taking dividends in shares, doubling the share count.

Icahn's 92% stake in Icahn Enterprises amounts to most of his estimated $15.8 billion net worth. Had *Forbes* used IEP's net asset value for his net worth instead of its market price, Icahn would be worth $6 billion today. The rest is the Icahn premium. And in the long run it makes total sense: Icahn Enterprises' stock has returned six times more than the S&P 500 over the last 20 years.

Icahn's recent trading problems stem from being overweight energy and short the market, including growth stocks. His short positions alone have produced $7 billion of losses in five years. "I got too concentrated in some of the energy stocks—they were dirt-cheap and management was not good, and I just kept piling in," Icahn says in the unmistakable accent of someone born in Brooklyn and raised in a working-class Queens neighborhood in New York City. "The bottom fell out of the energy market. You grit your teeth and you come out of it."

Icahn also insists the net asset value of Icahn Enterprises understates the intrinsic value of his company's assets. Take Icahn Automotive Group. Icahn is quick to point to the current takeover talk surrounding Mavis Tire Express Service, which is in a similar business and has a similar number of stores. Mavis is being priced at $6 billion, nearly four times the value Icahn Automotive is listed for on Icahn Enterprises' balance sheet.

Even big energy bets like Occidental Petroleum are beginning to look more promising as the price of U.S. crude has risen from effectively less than zero during the pandemic to $60 a barrel recently. In February, Icahn took a major stake (and two board seats) in Ohio's FirstEnergy, a utility whose performance tumbled after one of its subsidiaries became embroiled in a federal racketeering case. Icahn wants it to settle quickly. Another new buy for Icahn is Canadian medical device and pharmaceutical company Bausch Health, which owns eye care and contact lens giant Bausch & Lomb. Bausch has been in the midst of a turnaround since 2013, when it went by the name Valeant Pharmaceuticals. Icahn wants to split the company in two. "In positions like Bausch Health and FirstEnergy, we are on the board and can help make a difference," he says.

Icahn is spooked by America's massive federal spending but thinks there are still opportunities in this market. "We are in uncharted waters and will pay a price for huge deficits and loose money in the future," he says, "but that time is not here yet—and while I am somewhat hedged, I am fairly bullish."

Forbes

30 UNDER 30

ASIA 2021

As Asia sees the light at the end of the Covid-19 tunnel, activists, entrepreneurs, scientists and young leaders on the Forbes 30 Under 30 Asia 2021 list are hard at work realizing the new normal. After the toughest year in their generation, these 300 Millennials and Gen Zs have persevered to survive and even thrive despite long lockdowns, restricted travel and uncertainties on all fronts. Most continued to grow their businesses and adapt to the changes brought about by the pandemic, while a few have even dared to start their ventures in the middle of crisis, spotting opportunities where others see obstacles. Selected from over 2,500 nominations and vetted by our team of reporters and a panel of A-list judges, these trailblazers are unparalleled examples of determination, hard work and innovation.

EDITED BY **RANA WEHBE WATSON**

Assistant Editor John Kang
Research and reporting Megha Bahree, John Kang, Jeanhee Kim, Ruby Leung, Jihyun Park, James Simms, Yue Wang, Jennifer Wells and David Yin.

**The birthday cutoff to make the list was Dec. 31, 1990*

KRISTINA VALDEZ

STELLA BENNETT "BENEE"

Age: 20 • Singer-songwriter • New Zealand

Stella Bennett's single "Supalonely" about breaking up with her boyfriend went viral on TikTok early last year before it exploded on global music charts. Her track has racked up 2.3 billion streams and 211 million views on YouTube. The Kiwi singer, who goes by the stage name Benee, also won Best Solo Artist at the 2020 Aotearoa Music Awards in New Zealand. While her overseas tour was canceled last year due to the pandemic, she performed virtually for U.S. talk show hosts Ellen DeGeneres and Jimmy Fallon, while her sellout Auckland show in October was globally streamed. Following the November release of her debut album *Hey U X*, Bennett is back in the studio and working on new material, she says by email. She has also launched a women-run record label called Olive. "The idea of supporting up-and-coming artists really appeals to me," she adds. "I'm always looking out for potential artists to work with."
—Jennifer Wells

JUDGES: Kuok Meng Ru, CEO, BandLab Technologies (Singapore); Teh Hua Fung, group president, One Championship (Singapore)

ENTERTAINMENT & SPORTS

Hye-jin Ahn "Hwasa," 25 South Korea
Singer

Alex Albon, 24 Thailand
F1 driver, Red Bull Racing

Maudy Ayunda, 26 Indonesia
Singer

Su-ji Bae "Suzy," 26 South Korea
Singer

Danzal Baker "Baker Boy," 24 Australia
Rapper

Komalika Bari, 18 India
Archer

Stella Bennett "Benee," 20 New Zealand
Singer-songwriter

Dutee Chand, 24 India
Sprinter

Chen Yufei, 22 China
Badminton player

Diksha Dagar, 20 India
Golfer

Sheik Farhan, 23 Singapore
Silat athlete

Eleni Glouftsis, 28 Australia
Umpire

Guendoline Rome Viray Gomez "No Rome," 23 Philippines
Musician

Sei-young Kim, 27 South Korea
Golfer

Ji-eun Lee "IU," 27 South Korea
Singer

Chen Meng, 26 China
Table tennis player

Sumire Nakamura, 11 Japan
Go player

Joo-hyuk Nam, 26 South Korea
Actor

Joshua Nanani "Jawsh 685," 18 New Zealand
Music producer

Tomoa Narasaki, 24 Japan
Climber

Deepak Punia, 27 India
Wrestler

Rishabh Seen, 24 India
Cofounder, Sitar Metal

Lin Shan, 19 China
Diver

Kiyou Shimizu, 27 Japan
Martial artist

Abdullah Siddiqui, 20 Pakistan
Musician

Gaurika Singh, 18 Nepal
Swimmer

Jackson Wang, 26 Hong Kong
Singer

Jianjiahe Wang, 18 China
Swimmer

Saku Yanagawa, 28 Japan
Standup comedian

Lalu Muhammad Zohri, 20 Indonesia
Sprinter

OSIM:

COVID-19 PUSHES MORE SINGAPOREANS TO CHOOSE HOME-BASED CARE TO MANAGE STRESS

Rejuvenate with uDream in the comfort of your home.

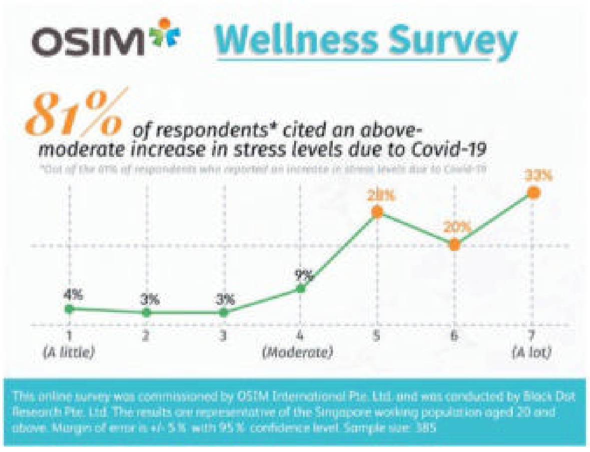
Many Singaporeans sought ways to relieve their stress at home over the past year as the Covid-19 pandemic raised their stress levels and disrupted usual methods of letting off steam. According to the inaugural OSIM Wellness Survey conducted by the health and wellness group last year, many respondents experienced heightened levels of stress as a result of the healthcare crisis. Left unchecked, chronic stress can lead to long-term health problems. According to a 2016 report by Harvard Medical School, prolonged stress can lead to a host of health problems such as high blood pressure, heart disease and diabetes. This highlights the pressing need for stress to be recognized and managed proactively.

Conducted between July and August 2020, the OSIM survey sought to assess the public's perception toward overall well-being during the pandemic, how individuals perceived their stress levels, and consequently, how they sought to manage and relieve stress. It found that 61% of the 385 respondents indicated an increase in stress levels, with 81% reporting an above-moderate increase. Most respondents were also proactive in managing stress, reflecting a growing awareness among Singaporeans about the importance of maintaining their wellness amid trying times.

"As lifestyles shift and routines continue to be disrupted by Covid-19, the survey results indicate that individuals and families increasingly prefer de-stressing and unwinding in their own homes instead of heading out," says Lynn Tan, Deputy CEO of OSIM International.

"We believe that this new normal will encourage more people to take better care of their well-being on a daily basis."

The survey also identified how Singaporeans sought to lower their stress levels during the pandemic. Due to public health and safety measures, more than 50% of respondents said their usual stress management activities had been disrupted. These included gym workouts, group sports and wellness treatments such as massages.



OSIM Wellness Survey results

uDream 5-senses well-being experience

In response, Singaporeans were more receptive toward a range of sensory therapies to relieve stress at home. Among the different options, massage therapy was selected as the most effective form of sensory therapy (85%), followed by music therapy (74%) and aromatherapy (71%).

While movement restrictions have since eased in Singapore, OSIM anticipates the growing emphasis on stress management is here to stay as individuals experiment with new therapies.

Meeting the Wellness Needs of Individuals

Against this backdrop, OSIM continues to carry out its long-standing mission of developing solutions that address the health and wellness needs of its customers. In particular, the company is committed to using innovative technology to redefine the health and wellness landscape; creating products that empower individuals to take better care of themselves.

One such innovation is uDream, the world's first 5-senses well-being chair designed to help individuals measure, monitor and manage stress levels from the comfort of home. The uDream's AI Stress BioSensors use electrocardiography and AI technology to measure and translate stress signals into insightful and easy-to-understand Body Tension Scores. Through the proprietary uDream app, individuals can track their stress levels conveniently and effortlessly.

With uDream, those seeking to de-stress at home can now decide when and how to address any spikes in their stress levels to help stave off both the immediate and long-term health effects of chronic stress. Through initiatives such as the OSIM Wellness Survey and products such as the pioneering uDream, OSIM hopes to empower people to take better care of their health, not just during this challenging period, but also in a post-Covid world. An individual's health will always be key to living better, regardless of the circumstances.

For more information, please call Customer Service Hotline: (65) 6741 1538 or visit http://www.OSIM.com

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uDream OSIM.com

JUS VUN FOR FORBES ASIA

HEALTHCARE & SCIENCE

RYUICHI ONOSE

Age: 29 • Cofounder, Craif • Japan

When his grandfather was diagnosed with cancer, Ryuichi Onose struggled to get a second opinion. The former trading company employee decided there had to be a better way, especially for another view on treatment, and approached Japanese investment fund ANRI, who introduced him to bioengineer Takao Yasui. Together, they founded Craif in 2018 to focus on early cancer detection. The Tokyo-based startup will check for cancers, including lung and ovarian, at its lab by using AI to analyze urine samples collected by its own proprietary device. "When everybody said that urine wouldn't work, that's when I thought that that was an opportunity," Onose says. Its point of differentiation: it can extract more biomarker data than others in the industry, he adds. Craif, which raised $7.5 million in funding so far, aims to launch the testing service next year. Eventually the firm hopes to broaden the range of illnesses screened, offer the best treatment options and expand in Japan and overseas. *—James Simms*

JUDGES: Nisa Leung, managing partner, Qiming Venture Partners (China); Snehal Patel, cofounder and CEO, MyDoc (Singapore); Ameera Shah, managing director, Metropolis Healthcare (India)

Somaya Faruqi, 18; Ayda Hayderpoor, 16; Elham Mansoori, 17; Florance Pouya, 15; Diana Wahabzada, 15 Afghanistan
Team members, Afghan Girls Robotic Team

Thiri Aung, 29 Myanmar
Head of operations at flagship hospital, Pun Hlaing Hospitals

Bai Rui, 28 China
Postdoctoral researcher, Westlake University

Pranav Bajaj, 29 India
Cofounder, Medulance Healthcare

Zhao Baodan, 29 China
Professor, Zhejiang University

Gaurav Bhattacharjee, 29 India
Research fellow, National University of Singapore

Serene Cai, 28 Singapore
Cofounder, Speedoc

Chen Chee Yang, 29 Singapore
Founder, Carta Genomics

Alvin Cheung, 27 Hong Kong
Cofounder, HandyRehab

Edward Christopher Dee, 28 Philippines
Researcher, Dana-Farber Cancer Institute

Ajinkya Dhariya, 25 India
Founder, PadCare Labs

Sean Hora, 27 Japan
Founder, K.K. Meetscare

Lu Kangjia, 29 Singapore
Research fellow, National University of Singapore

Gi Mihn Kim, 28 South Korea
CEO, The Carbon Studio

Shawn Li, 29 Singapore
Founder, E3A Healthcare

Xi Liu, 28 Singapore
Founder, Ferne Health

Nicole Liu, 26 Australia
Founder, Kin Fertility

Vyasaraj Manakari, 28; Gururaj Parande, 27 Singapore
Cofounders, Magloy Tech

Hiroki Matsuzaki, 27 Japan
Founder, Jmees

Gao Meng, 29 Hong Kong
Assistant professor, Hong Kong Baptist University

Ryuichi Onose, 29 Japan
Cofounder, Craif

Sun Pengming, 28 China
Cofounder, Yrobot

Kenath Priyanka Prasad, 29 Singapore
Founder, Prime Respi

Arunabha Bhattacharya, 26; Rishabh Gupta, 27; Anshul Sharma, 25 India
Cofounders, Redwing Labs

Levana Sani, 28 Singapore
Cofounder, Nalagenetics

Samarth Sindhi, 26 India
Founder, Digi-Prex

Amy Yu, 25; Edward Buijs, 26 Australia
Cofounders, Ventora Medical

Pranav Vempati, 27 India
Cofounder, Makers Hive

Heidi Walkden, 26 Australia
Postdoctoral researcher, Griffith University

You Yang, 29 China
Presidential Young Professor, National University of Singapore

Emmanuel Barbas, 25; James Hachem, 24 Australia
Cofounders, Alya Skin

Saad Jangda, 27; Hamza Jawaid, 27 Pakistan
Cofounders, Bazaar Technologies

Hoonmin Choi, 25 South Korea
Founder, TableManager

Olivia Cotes-James, 29 Hong Kong
Founder, Luüna Naturals

Zohaib Ali, 29; Muhammad Owais Qureshi, 29 Pakistan
Cofounders, Dastgyr Technologies

Chu Hin Ching, 25; Eugene Ho, 25; Patrick Tu, 25 Hong Kong
Cofounders, Dayta AI

Jade Spooner, 28; Amal Wakim, 27 Australia
Cofounders, Equalution

Ryosuke Fukuda, 24 Japan
Founder, Appify Technologies

Kento Furukawa, 27 Japan
Founder, Gigi

Wayne Goh, 28 Singapore
Cofounder, Glife Technologies

Hyeeun Bu, 29; Dojin Kim, 29 South Korea
Cofounders, Happy Moonday

Priscilla Hajiantoni, 27 Australia
Founder, Bangn Body

Kohei Hamada, 28 Japan
Founder, Monokabu

Vibha Harish, 25 India
Founder, Cosmix

Jennifer Heryanto, 29 Indonesia
Founder, SKK Jewels

Anushka Iyer, 21 India
Founder, Wiggles

Takanori Kataishi, 27 Japan
Founder, Yutori

Parag Kaushik, 27 India
Cofounder, Upakarma Ayurveda

Jessica Lin, 29 Indonesia
Cofounder, Deca Group

Natalie Khoei, 26; Shadi Kord, 27 Australia
Cofounders, Meshki

Ramanshu Mahaur, 28 India
Founder, Spinny

Takuya Moriguchi, 28 Japan
Cofounder, Mellow

Satanik Roy, 25 India
Cofounder, hyperXchange

Akshay Hegde, 29; Akash Hegde, 29 India
Cofounders, ShakeDeal

Lian Shuning, 27 China
Founder, Hangzhou Furrytail Technology

James Steinberg, 29 Hong Kong
Cofounder, ZipX

William Sunito, 28 Indonesia
Founder, TokoWahab

Morin Talukder, 27 Bangladesh
Cofounder, Pickaboo

Stefani Tan, 28 Indonesia
Cofounder, Jolie Clothing

Virendra Mishra, 29; Saurabh Shandilya, 29; Saurabh Yadav, 27 India
Cofounders, Veda Labs

JEREMY CHOH FOR FORBES ASIA

SHADI KORD & NATALIE KHOEI

Ages: 27, 26 • Cofounders, Meshki • Australia

Shadi Kord and Natalie Khoei met in 2012 and bonded over their love for fashion while each pursued B.A. degrees in architectural studies at the University of New South Wales. The next year, they cofounded Meshki initially as a small e-commerce business to sell accessories. Each invested $155 in the venture. Thanks to a loyal Instagram following, their business took off and they started designing, producing and selling a full fashion line in 2015. “We realized there was a gap in the market for pieces that are unique and luxurious yet accessible,” says Khoei. Meshki, which means black in Farsi, alludes to the cofounders’ shared heritage. It is now a fully fledged e-commerce business with over 750,000 customers worldwide and 50 employees. Its trendy, body-conscious designs have been seen on celebrities including Ariana Grande and Jennifer Lopez, and are popular with social-media influencers. As a testimony to the strength of their original social-media marketing, approximately 50% of Meshki’s sales still come from Instagram, where it has close to 2 million followers. *—Rana Wehbe Watson*

JUDGES: Mickey Mikitani, CEO, Rakuten (Japan); Kishin RK, founder and CEO, RB Capital Group (Singapore); Allan Zeman, founder and chairman, Lan Kwai Fong Group (Hong Kong)

GAYATRI GANJU FOR FORBES ASIA

HARSHIL MATHUR

Age: 29 • Cofounder, Razorpay• India

Seven years ago, Harshil Mathur quit a well-paying job as a Schlumberger field engineer and teamed up with his college buddy Shashank Kumar to set up a payments gateway for small businesses facing difficulties processing online orders.

Today, Razorpay, their fintech startup, processes over a third of all online payments in India, and handles payments through more than 50 banks and credit card companies. Last October, even as the pandemic was raging, Razorpay achieved unicorn status when it raised $100 million in a funding round co-led by Singapore's sovereign wealth fund GIC that valued it at $1 billion. A few months later in mid-April, when India was reeling under a second wave of Covid-19 infections, GIC co-led another round for $160 million, which boosted Razorpay's valuation to $3 billion.

"The unicorn status is great, but we're on a long journey here," says Mathur in a video call from his home in Bangalore, where the company is headquartered. Razorpay's growth in 2020 has been "explosive," he says. Last year, he says, Razorpay's business more than tripled, processing $35 billion in payments for 5 million businesses, such as food delivery startups Swiggy and Zomato, which were among Razorpay's early customers and are now unicorns themselves.

Razorpay's initial success was built on offering payment services to small online businesses that were underserved by banks. "We got really good traction because no one really cared for them," says Mathur, who met Kumar when they were both engineering students at the Indian Institute of Technology Roorkee. After graduating in 2012, Kumar moved to Seattle to work at Microsoft but told Mathur they should think about starting their own business. The two kept in touch after Mathur graduated in 2013 and soon quit their respective jobs to work on what would become Razorpay.

Breaking into the business wasn't easy. It took six months and nearly 40 rejections before the duo found a bank—HDFC Bank—willing to handle their transactions, and only then after they put down a hefty security deposit. But startups like Razorpay helped meet a need that wasn't being met by the "subpar" offerings of traditional banks, says Mandar Kagade, founder of Black Dot Public Policy Advisors. The arrival in the middle of the decade of affordable smartphones and cheap broadband paved the way. And while India is still largely cash-based, digital payments got another important boost from two government policies: the 2016 "demonetization" that voided 86% of currency notes to curb illicit cash and the adoption in 2017 of a nationwide goods and services tax.

Collaboration between banks and fintech startups has been instrumental in driving digitalization and digital payments for India, says Praveena Rai, chief operating officer at National Payments Corporation of India, an umbrella organization for retail payments and settlement systems in India. That success has made fintech in India red hot. Global investors have poured roughly $10 billion into Indian fintech companies since 2016, according to a March report by Boston Consulting Group and the Federation of Indian Chambers of Commerce and Industry. Alibaba-backed digital wallet Paytm, for example, was valued at $16 billion in 2019; its founder Vijay Shekhar Sharma became India's first fintech billionaire back in 2017.

Pandemic-induced lockdowns have boosted business further as millions turned to online shopping. While large factories had to temporarily shut down or cut back, thousands of online entrepreneurs used the lockdown to start selling everything from cupcakes to online yoga classes. "This was a totally new client base for us," says Mathur.

Faced with a slew of rivals, including Naspers-owned PayU, Razorpay is hunting for new growth opportunities. It has tied up with Mumbai-headquartered RBL Bank to offer small businesses everything from credit cards and loans to insurance and payroll management.

Mathur doesn't believe expansion will blunt Razorpay's edge. "We are very clear on what not to do," he says. "We only want to build things that help businesses. Anything outside that vision is something we stay away from." *—Megha Bahree*

JUDGES: JP Gan, founding partner, INCE Capital (China); Annabelle Long, managing partner, Bertelsmann Asia Investments (China); Nicholas Nash, managing partner, Asia Partners (Singapore)

Ankush Aggarwal, 28; Tushar Mehndiratta, 28 India
Cofounders, Avail Finance

Tushar Aggarwal, 28 Singapore
Founder, Persistence One

Joshua Agusta, 29 Indonesia
Director of venture funds, Mandiri Capital Indonesia

Rajan Bajaj, 28 India
Founder, Slice

Carmina Bayombong, 27 Philippines
Cofounder, InvestEd Philippines

Alvin Cahyadi, 26 Indonesia
Vice president of investment, AC Ventures

Chia Jeng Yang, 27 Singapore
Principal, Saison Capital

Chinmay Chauhan, 29 Indonesia
Cofounder, BukuWarung

Dong Yuwen, 28 China
Vice president, Genesis Capital

Sambhav Jain, 23; Kush Taneja, 23 India
Cofounders, FamPay

Rafi Putra Arriyan, 26; Ginanjar Ibnu Solikhin, 25; Luqman Sungkar, 28 Indonesia
Cofounders, Flip

Alexandra Grigg, 29 Australia
Investment manager, Artesian Venture Partners

Guan Shanxing, 27 China
Head of Southern China, ZhenFund

Roni Hiranand, 27 Hong Kong
Venture partner, Vectr Ventures

Mai Ho, 29 Vietnam
Venture partner, Hustle Fund

Vardhan Kapoor, 28 Singapore
Head of APAC, Remitly

Prakash Koirala, 29 Nepal
Founder, Finlit Nepal

Morgan Lai, 29 Taiwan
Founder, Formulate Ventures

Tue Lam Le Han, 26 Vietnam
General manager, Nextrans

Jay Lim, 28 Singapore
Venture partner, Global Founders Capital

Harshil Mathur, 29 India
Cofounder, Razorpay

Cheongho Park, 27 South Korea
Cofounder, Product Group

Vishvesh Suriyanarayanan, 29; Dylan Tan, 28 Singapore
Cofounders, Split

Wei Shi Khai, 27 Singapore
COO, LongHash Ventures

Ishan Sinha, 28 India
Senior principal of growth investments, Human Capital

Hermanto Widjaja, 28; Henry Wirawan, 23 Indonesia
Cofounders, Topremit

Bernadus Setya Ananda Wijaya, 29 Indonesia
CEO, Sucor Sekuritas

Toshiaki Yabe, 27 Japan
Founder, Crezit Holdings

Lincoln Yin, 29 Singapore
Founder, RootAnt

Jeff Young, 28 Singapore
CEO, BitWell

MUHAMMAD FADLI FOR FORBES ASIA

INDUSTRY, MANUFACTURING & ENERGY

MARTIN REYHAN SURYO-HUSODO & JOSEPH ALEXANDER ANANTO

Ages: 23, 26 • Cofounders, Otoklix • Indonesia

In two years, Otoklix has quickly grown into a crucial player in Indonesia's large but fragmented car-repair market. The Jakarta-based startup developed a digital platform and mobile app that connects car owners with independent auto-repair shops. About 1,000 such shops are on Otoklix's platform servicing a total of 10,000 cars a month, says CEO Martin Reyhan Suryohusodo. He aims to have a total of 4,000 repair shops on the platform by June. Despite the rapid growth of service providers available on the app, Suryohusodo says business has been slow due to the pandemic. "People are working from home, so you don't travel as much," he explains, "which reduces the mileage, that reduces the frequency of service." But Suryohusodo is not too concerned. "Even with the pandemic, we managed to survive because we have quite good cash reserves," he says. In December, Otoklix announced it raised $2 million in a financing led by Surge, Sequoia Capital India's accelerator program. "So I don't need to wake up in the morning and figure out whether I will still survive tomorrow," he says. *—John Kang*

JUDGES: Tak Lo, investor (Hong Kong); Arif Rachmat, cofounder and executive chairman, TAP Group (Indonesia); Sonny Vu, founder, Alabaster (Vietnam)

Siddharth Rastogi, 28; Chaitanya Rathi, 27; Siddharth Vij, 28 India
Cofounders, Bijnis

Oh Chu Xian, 27 Singapore
Founder, Magorium

Iain Stewart, 29; Tim Stewart, 29 Australia
Cofounders, Exergenics

Huang Haiqin, 28 China
Cofounder, Yours Technologies

Mohamed Afiq, 28; Junkai Ng, 28; Nathaniel Yim, 28 Singapore
Cofounders, Janio Asia

Nitin Jayakrishnan, 27 India
Founder, Pando

Kathy Ku, 29 South Korea
Cofounder, Juni Essentials

Rendria Labde, 29 Indonesia
Founder, Magalarva

Sangmin Lee, 23 South Korea
Founder, Neubility

Jitesh Arora, 24; Abhijeet Mittal, 26; Aashna Singh, 29 India
Cofounders, MoooFarm

Liris Maduningtyas, 28 Indonesia
Cofounder, Jala Tech

Hiroya Maeda, 27 Japan
Founder, UrbanX

Nikita Baliarsingh, 23; Nishita Baliarsingh, 23 India
Cofounders, Nexus Power

Afnan Hannan, 29; Damian Veling, 29 Cambodia
Cofounders, Okra Solar

Zhu Jiannan, 28; Chi Yuhao, 28; Cheng Yuwei, 24 China
Cofounders, Orca-Tech

Joseph Alexander Ananto, 26; Martin Reyhan Suryo-husodo, 23 Indonesia
Cofounders, Otoklix

Shriti Pandey, 29 India
Cofounder, Strawcture Eco

Ilsu Park, 29 South Korea
Founder, Mars Auto

Jawwad Patel, 27 India
Founder, JP Labs

Craig Piggott, 26 New Zealand
Founder, Halter

Tanuj Jhunjhunwala, 29; Vineet Upadhyay, 28 India
Cofounders, Planys Technologies

Huang Qian, 28 China
CEO, Shanghai Sunhe Technology

Varun Raheja, 23 India
Cofounder, Raheja Solar Food Processing

Sumedh Bhoj, 28; Abhishek Shelar, 28 India
Cofounders, Spruce Up

Kenichiro Sone, 27 Japan
CEO, Koska

Shannon Speight, 29 Australia
CEO, Black Box

Kevin Susanto, 27 Indonesia
Chief green officer, enviGo!

Yu Yamashiro, 26 Japan
Cofounder, Jij

Hu Yuchen, 28 China
Cofounder, Roboticplus

Zhang Chaohui, 28 China
CEO, Youibot Robotics

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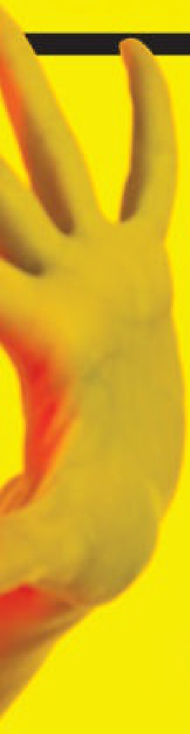
JOCELYN TAM FOR FORBES ASIA



HONG CHICHI

Age: 26 • Founder, Hey Maet • China

Pork has long been a staple of the Chinese diet, but to Hong Chichi it's high time for a change. Less than a year after launching in Shanghai, Hong's plant-based meat startup Hey Maet has already found a niche among young, health-conscious urban consumers with products like dumplings and steamed buns that use proteins from rice and soybeans. Hong, 26, won't disclose sales figures but predicts 500% revenue growth this year. "China could be faster than the West to accept plant-based meat," she says. "I hope to promote such products to mass-market consumers in the next three years."

Hong has ample reason to be optimistic. African swine fever has wiped out roughly half of China's hog population since surfacing in 2018, causing a shortage of supplies and sparking food-security concerns. Meanwhile, consumers in big cities like Beijing and Shanghai are increasingly willing to pay more for safer, protein-rich food produced in an environmentally friendly way, according to Jason Yu, Shanghai-based general manager of consultancy Kantar Worldpanel. China's market for meat substitutes stood at $11 billion last year, up 35% from $8 billion in 2015. Consultancy Euromonitor International projects that it will grow another 30% by 2025, to $14 billion.

Hey Maet isn't Hong's first venture. After graduating with a bachelor's degree in political science from Canada's Simon Fraser University, Hong got a job as an investor in the Silicon Valley office of Hong Kong-based venture capital firm Ausvic Capital. She spent the next two years investing in startups developing everything from artificial intelligence to consumer goods.

But the urge to start her own business gradually took over. A vegetarian for ten years, Hong in 2019 set her sights on developing plant-based meat. Interest in China was still limited to a small group of avant-garde consumers, but the successful listing of Beyond Meat had triggered a hunt by local investors for a China-based alternative.

Hong's first foray was with Zhen Meat, a venture she cofounded in Beijing in 2019. Differences with her cofounders over R&D and strategy prompted her to leave, however, tapping her own connections to cobble together a team of food scientists and launch Hey Maet in April last year. (Maet is an intentional misspelling of "meat" designed to emphasize how the company is helping redefine the foodstuff.)

Hong's isn't the only company looking to tap China's growing taste for meat substitutes. Starbucks, for example, already sells pasta dishes at its China locations made with a beef substitute from Nasdaq-listed plant-based meat company Beyond Meat. Hey Maet is aiming for the local palate: one of its bestsellers is plant-based *zongzi*—sticky rice dumplings—made with snack company Bai Cao Wei using Hey Maet's pork substitute for filling. Another recent collaboration is with 7 HongKong Style Cuisine, a restaurant chain established by Hong Kong singer Jordan Chan that sells beef noodles made with Hey Maet's beef substitute.

Investors can taste the potential. Hong has so far raised an undisclosed amount from Tiantu Capital, UpHonest Capital founder Guo Wei and Shanghai-listed Shuangta Food, among others. The bulk of the proceeds has gone to R&D, as Hong hopes to keep improving the texture and taste of her products.

Hey Maet and its peers face challenges to expansion, says Daisy Li, a Shanghai-based associate director at consultancy Mintel. Foremost among them is that plant-based meat is still often more expensive than meat in China, which puts it off the menu for many cost-conscious diners. Hong says she is working on a mass-market product—possibly a snack. "We are testing our new products step by step," she says. "It takes time to cultivate a new consumption habit, but we'll do more collaborations with other companies and keep exploring." *—Yue Wang*

JUDGES: Michael Xufu Huang, cofounder, X Museum (China); Jennifer Wai Fun Liu, founder and chairwoman, The Coffee Academïcs (Hong Kong); Nicole Warne, founder, Gary Pepper Girl (Australia)

Clifford Miu, 27; Linhan Zhang, 23 Hong Kong
Cofounders, Bering Pictures

Chau Bui, 23 Vietnam
Model and influencer

Zhang Chenxuan, 29 China
Founder, Jarel Zhang

Marilyn Chew, 27 Singapore
Founder, Eterate Calligraphy

Grace Ciao, 28 Singapore
Founder, Grace Ciao Studio

Yongmin Lee, 29; Hyung Su Park, 29 South Korea
Cofounders, Devotionfoods

Priyageetha Dia, 28 Singapore
Artist

Etsu Egami, 26 Japan
Artist

Shraddha Bhansali, 28; Kartik Dixit, 25 India
Cofounders, EVO Foods

Kathleen Gondoutomo, 28 Indonesia
CEO, H! Cups

Hong Chichi, 26 China
Founder, Hey Maet

Misha Japanwala, 25 Pakistan
Artist

Lang Jiaziyu, 25 China
Cofounder, Beijing Dough Figurine Lang Culture

Chetan Kanani, 26 India
Cofounder, Alpino Health Foods

Ji Young Lim, 25 South Korea
Violinist

Luo Yucheng, 25 China
Founder, Calvinluo

Annice Lyn, 28 Malaysia
Cofounder, Women Photographers Malaysia

Shubham Maheshwari, 29 India
Founder, Being Chef

Caleb Marshall, 29 Australia
Cofounder, Tropeaka

Gab Mejia, 24 Philippines
Photographer

May Nagahisa, 20 Japan
Ballerina, Mariinsky Theater

Suhani Parekh, 29 India
Founder, Misho

Grace Partridge, 28 Australia
Artistic director, Antidote Projects

Alexander Petersen, 29 China
CEO, Laiba Beverages

Charina Prinandita, 29 Indonesia
Cofounder, Eatlah

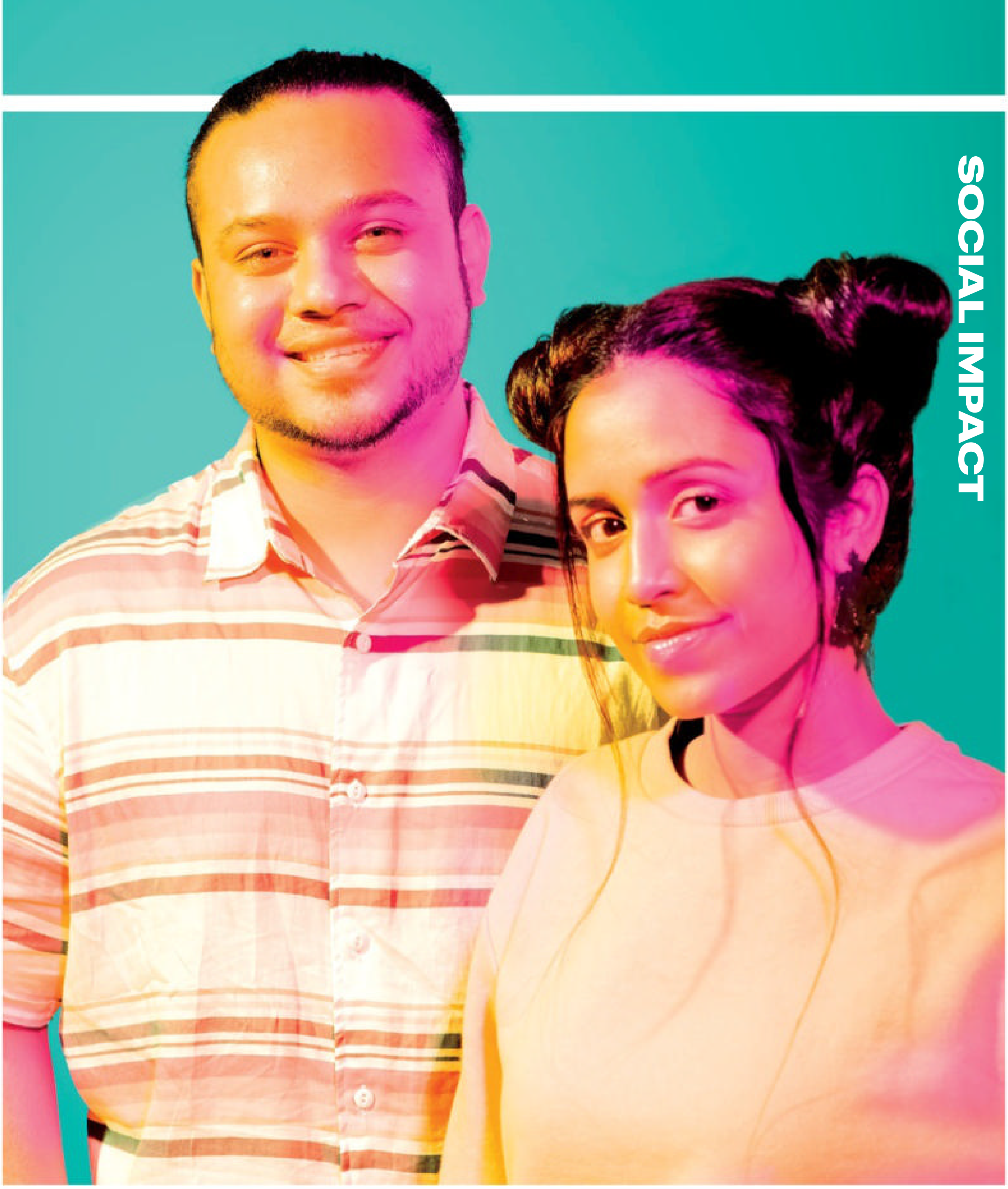
Qiu Shuting, 26 China
Founder, Shuting Qiu

Kamal Singh, 21 India
Ballet dancer, English National Ballet School

Grace Stratton, 21 New Zealand
Founder, All is for All

Liana Gonta Widjaja, 28 Indonesia
Cofounder, Greenly

Kevin Wu, 27 Malaysia
Founder, Ento



SOCIAL IMPACT

RIJVE AREFIN & SHOMY CHOWDHURY

Ages: 26, 26 • Cofounders, Awareness 360 • Bangladesh

After losing her mother in 2014 due to complications from severe diarrhea, Shomy Chowdhury took action to raise awareness about clean water, sanitation and hygiene. She and Rijve Arefin, who Chowdhury met while studying economics at Universiti Putra Malaysia, cofounded Awareness 360 to bring together young people wanting to improve the lives of others. The Kuala Lumpur-based NGO now has 1,500 volunteers in 23 countries who hold talks and workshops on handwashing, water-filtration methods and personal hygiene, among other environmental initiatives. So far, their campaigns have involved over 150,000 people. "We are helping communities come out of poverty and become sustainable and prosperous," says Chowdhury. When the pandemic hit, Awareness 360 focused on raising Covid-19 safety awareness and providing food and hygiene products to vulnerable communities such as sex workers and Rohingya refugees in Bangladesh. The duo's work has been recognized by the UN Development Programme, among other international groups. *—Rana Wehbe Watson*

JUDGES: Sally Begbie, director, Crossroads Foundation (Hong Kong); Roshni Nadar Malhotra, chairperson, HCL Technologies and trustee, Shiv Nadar Foundation (India); Paul Ronalds, CEO, Save The Children Australia (Australia)

Rijve Arefin, 26; Shomy Chowdhury, 26 Bangladesh
Cofounders, Awareness 360

Nupur Agarwal, 28 India
Founder, Kiwi Kisan Window

Bolor-Erdene Battsengel, 28 Mongolia
Chairwoman, Communication and Information Technology Authority

Rishabh Choudhary, 28; Amandeep Panwar, 27 India
Cofounders, BharatRohan

Kaoru Joho, 27; Serkan Toso, 29 Japan
Cofounders, byFood

Iman Jamall, 28; Hasib Malik, 28 Pakistan
Cofounders, CreditBook

Shubham Choudhary, 27 India
Founder, Safe Access

Madhav Datt, 24 India
Founder, Green the Gene

Angela Chen, 29; Aurelien Chu, 29 Philippines
Cofounders, Eskwelabs

Ryan Gersava, 27 Philippines
Founder, Virtualahan

Ankita Gulati, 29 India
Founder, TouchVision

Garvita Gulhati, 21 India
Founder, Why Waste?

Rizvana Hredita, 28; MD Zahin Rohan Razeen, 22 Bangladesh
Cofounders, Hydroquo+

Alexia Hilbertidou, 21 New Zealand
Founder, GirlBoss New Zealand

Sazzad Hossain, 26 Singapore
Founder, SDI Academy

Ahmed Imtiaz Jami, 26 Bangladesh
Founder, Obhizatrik Foundation

Hunter Johnson, 29 Australia
Founder, The Man Cave

Skye Kinder, 29 Australia
President, Rural Doctors Association of Victoria

Yaseen Khalid, 27; M. Saquib Malik, 28; Nabeel Siddiqui, 27 Pakistan
Cofounders, ModulusTech

Liu Jichen, 23 China
Founder, Clear Plate

Keita Matsumoto, 28 Australia
Partnership manager, Colman Foundation

Ifandi Khainur Rahim, 23 Indonesia
Founder, Satu Persen

Dhwani Shree, 25; Akshya Shree, 27 India
Cofounders, Silpakarman

Saloni Sacheti, 29 India
Founder, Baansuli

Shubham Sharma, 26 India
Founder, Nyaykarta

Tharma Pillai, 27; Qyira Yusri, 26 Malaysia
Cofounders, Undi18

Antaraa Vasudev, 27 India
Founder, Civis

Nashin Mahtani, 29 Indonesia
Director, Yayasan Peta Bencana (Disaster Map Foundation)

Anbita Nadine Siregar, 26; Tania Soerianto, 29 Indonesia
Cofounders, Yayasan Generasi Maju Berkarya (Generation Girl)

Edward Yee, 26 Singapore
Cofounder, Givfunds

SARKER PROTICK FOR FORBES ASIA

CONSUMER TECHNOLOGY

Htay Aung, 29 Singapore
Founder, Anywheel

Daeho Choi, 27 South Korea
Cofounder, Sleek

Bhaswat Agarwal, 29; Mukul Rustagi, 29 India
Cofounders, Classplus

Young Kang, 25; Yoonsoo Lee, 25 South Korea
Cofounders, Codeit

Harsh Dalal, 19 Singapore
Cofounder, Team Labs

Mikhil Raj, 28; Ishaan Singh, 28 India
Cofounders, FrontRow

Jinnan Guo, 29 China
CEO, Sincere Education & Technology

Tae Il Hwang, 28 South Korea
Founder, Glorang

Arpita Kapoor, 29 India
Cofounder, Mech Mocha

Takuya Kato, 29 Japan
CEO, Vark

Jiwon Kim, 26 South Korea
CEO, ReDWit

Chaerin Lee, 24 South Korea
Cofounder, Classum

Aditya Narang, 27 India
Founder, SafeHouse

Shogo Okada, 29 Japan
Cofounder, Progrit

Daiki Okai, 27 Japan
Founder, Luup

Abhay Pai, 29 India
Cofounder, StepSetGo

Pan Pengpeng, 28 China
Cofounder, Duliday

Shaokan Pi, 29 Taiwan
Cofounder, Seekrtech

Ashwini Purohit, 25 India
Cofounder, Winuall

Devi Sahny, 27 Singapore
Founder, Ascend Now

Nikhil Saraf, 29 India
Cofounder, Stones2Milestones

Ujjawal Chauhan, 29; Gautham Vinjamuri, 28 India
Cofounders, Skillbee

Divyansh Bordia, 27; Mihir Gupta, 28; Payoj Jain, 28; Anshuman Kumar, 26 India
Cofounders, Teachmint

Mahak Garg, 28; Karan Varshney, 25; Saumya Yadav, 29 India
Cofounders, Udayy

Thanatseth Howattanapan, 25; Intouch Marsvongpragorn, 25; Tanit Suenghataiporn, 25 Thailand
Cofounders, ViaBus

Wang Jianfei, 26; Zeng Shiran, 28 China
Cofounders, ViaX Online Education

Yong Xun Ong, 20 Malaysia
Founder, JomStudy

Dilsher Singh Malhi, 24; Siddhant Saurabh, 25 India
Cofounders, Zupee

Jason Zheng, 29 Hong Kong
Cofounder, HelloToby

Zhong Jingyi, 29 China
Cofounder, Black Unique

JULIANA TAN FOR FORBES ASIA

HARSH DALAL

Age: 19 • Cofounder, Team Labs • Singapore

When Harsh Dalal was just 13, he and four teenage app developers in Norway, Russia and the U.S. whom he met online started software company Team Labs for kicks. But the group's focus gradually became more serious. In September 2019, Team Labs raised $8 million from investors, and, though the other cofounders have moved on, Dalal serves as CEO while he earns his diploma at Singapore Polytechnic. Team Labs builds collaborative software development tools, including group chat, customer relationship managers and graphic design platforms. After redesigning its older tools, Team Labs will this year launch its full collection in a product suite called Workspace. Revenue crossed the $1 million threshold for the first time in 2020; up 250% since 2018. Last year the company raised its headcount to 120 from 80 and increased its customers to 70,000 from 5,000—including Coca-Cola, Google and Hilton. As for profitability, Dalal says, "It's there. I can see it. But we're not at that stage yet." *—Jeanhee Kim*

JUDGES: Anna Fang, CEO, ZhenFund (China); Hian Goh, partner, Openspace Ventures (Singapore); David Gowdey, managing partner, Jungle Ventures (Singapore)

SONNY THAKUR FOR FORBES ASIA

REXY JOSH DORADO

Age: 28 • Cofounder, Kumu • Philippines

Until the pandemic turbocharged his company's growth, Rexy Josh Dorado, the cofounder of Manila-based social media site Kumu, had thought 2019 was a good year. The number of monthly active users to his then two-year-old app, featuring livestreams of Filipinos, had surged 16-fold to 500,000. When Covid-19 struck, the bored and the homebound alike sought refuge in entertainment online. Its user base swelled, making Kumu the most popular homegrown social media app among Filipinos today, as ranked by its 8 million user base.

About 4.3 million have joined in the past 12 months, bringing Kumu's total monthly active users to 2 million and adding hundreds of thousands of downloads every month, says Dorado in a video interview from his home in Manila. "Most of those people would have been too busy to try it [before]," says Dorado, of the pre-Covid era.

Kumu, which is operated by Kumumedia Technologies, holds particular appeal for its most important users: overseas Filipinos. While only 30% of Kumu users are Filipinos living and working abroad, they make up half of its revenue through the app's use of virtual gifts, which are bought with real money to give to livestreamers as tips. Filipinos abroad, many made more homesick because of the pandemic, turned to the platform, explains Dorado. More than 10 million Filipinos live overseas, or about 10% of the Philippines' population, according to the Philippines' Department of Foreign Affairs.

Now, with Covid-19 vaccination rollouts underway, Dorado is focused on growing Kumu into a super-app in a post-pandemic world. "We want to make sure [the recent upturn] was not just a Covid special," he says. Dorado is considering adding offline events to its platform "to strengthen the core community," such as fan meetings with popular livestreamers and a convention inspired by Comic-Con called Kumu-Con.

Dorado knows he needs to act fast to take advantage of the momentum. "We have this one- to two-year window," he says. He points to reports that ByteDance, the Beijing-based owner of TikTok, is looking to raise about $2 billion in a fundraising round, while Kuaishou Technology, a Chinese short-video app operator, raised $5.4 billion from its IPO in Hong Kong in February. "They're not our direct competitors, but we compete on some levels, like the types of talents we're attracting," Dorado says. Last year his startup raised $5 million in a series A funding round led by Singapore-based VC firm Openspace Ventures and is finalizing a B round for additional $15 million in funding.

Longer term, Dorado hopes to expand Kumu beyond livestreaming to e-commerce and payments. "What's important is that it starts to become less driven by boredom and loneliness," he says, "and more by day-to-day necessities and also lifestyle, things like fashion and beauty, which will be more important again post-quarantine."

One thing that won't change is the firm's core focus on Filipinos. The 28-year-old was born in the city of Dumaguete in central Philippines, but moved to the U.S. when he was in middle school. He went on to study at Brown University, where he graduated magna cum laude with a degree in economics. Before starting Kumu in 2017 with his cofounder Roland Ros, Dorado founded Kaya Collaborative, a nonprofit that places Filipino-American students in internships with social enterprises and NGOs in the Philippines.

Dorado says Kumu has received interest from "major players" in India, Indonesia, Malaysia and Thailand to localize Kumu for their markets, but he doesn't have immediate plans to expand elsewhere. "If it means it's distracting us from [Filipinos] significantly, then we would choose the Philippines and go with the Filipino community every time," he says. *—John Kang*

JUDGES: Chantal Abouchar, founder and CEO, The Studio (Australia); Patrick Grove, cofounder and group CEO, Catcha Group (Singapore)

MEDIA, MARKETING & ADVERTISING

Riyaz Aly, 17 India
Influencer

Minhong Lee, 29; Jungsoo Seo, 28 South Korea
Cofounders, Carpenstreet

Siu Chun Hei, 27; Edwin Wong, 29 Hong Kong
Cofounders, Cloudbreakr

Genevieve Day, 29 Australia
Founder, Day Management

Victoria Devine, 29 Australia
Founder, She's on the Money

Rexy Josh Dorado, 28 Philippines
Cofounder, Kumu

Hajime Eda, 27 Japan
YouTuber

Tan Guan Sheng, 28 Malaysia
Founder, Ittify

Bhanuka Harischandra, 26 Sri Lanka
Founder, Surge Global

Jiang Dongwei, 29 China
Founder, Xi Ping Technology

Nami Kishida, 29 Japan
Author

Ryouken Kojima, 28 Japan
Founder, Natee

Jaz Lee, 25 Malaysia
Creative director, Ogilvy

Shayan Mahmud, 29 Pakistan
Managing partner, Eikon7

Sanjana Nagesh, 24 Australia
Founder, BrownGirlGang

Rishabh Shekhar, 22; Anirudh Singla, 21 India
Cofounders, Pepper Content

Jehian Panangian Sijabat, 24; Jerome Polin Sijabat, 22 Indonesia
Cofounders, Q&A Group

Nisheeth Lahoti, 26; Ashray Malhotra, 26; Shivam Mangla, 26 India
Cofounders, Rephrase.ai

Jannat Rahmani, 19 India
Influencer

Michael Prendergast, 27; Ben Reynolds 26 New Zealand
Cofounders, Spalk

Harry Sanders, 23 Australia
Founder, StudioHawk

Arjun Satya, 28 India
Cofounder, M360

Jisu Seo, 29 South Korea
COO, Different Millions (DMIL)

Liu Siyang, 29 China
Founder, Beijing Bright Star Culture and Media

Divyanshu Damani, 25; Mohammad Hasan, 26 India
Cofounders, TagMango

Arum Tsai, 26 Taiwan
Author

Pooja Dubey, 28; Aditya Sharma, 29 India
Cofounders, Turnip Media

Nikita Upadhyay, 28 India
Author

Yudhanjaya Wijeratne, 28 Sri Lanka
Cofounder, Watchdog

Emi Wong, 28 Hong Kong
Founder, Emi Wong

ENTERPRISE TECHNOLOGY

HASEUNG JEON, MUNHWI JEON, SEYEOB KIM & HOWOOK SHIN

Ages: 26, 24, 25, 25 • Cofounders, SelectStar • South Korea

While earning his bachelor's degree in electrical engineering at the Korea Advanced Institute of Science and Technology, Seyeob Kim realized that the biggest hindrance to developing artificial intelligence is the time-consuming task of collecting and annotating vast amounts of data, which he says takes up 80% of AI developers' time. So Kim recruited three classmates—Haseung Jeon, Munhwi Jeon and Howook Shin—to launch SelectStar and fix the data problem. Its solution: Crowdsource it. Launched in 2018, SelectStar develops mobile and web applications that pay users to upload their annotated photos, which SelectStar uses to teach computers to recognize what's in the photos, a technology then marketed to companies. So far, almost 90,000 people in Korea have uploaded photos, and Kim expects about 200,000 people will be on the platform by the end of the year, while SelectStar is already selling the results to LG, Samsung, Naver and 130 other customers. The startup raised \$4 million last year from Korean VC firms, including the venture arm of internet giant Kakao, in a deal that valued it at almost \$22 million. *—John Kang*

JUDGES: Jixun Foo, managing partner, GGV Capital (China); Kaifu Lee, CEO, Sinovation Ventures (China); Akiko Naka, founder and CEO, Wantedly (Japan); S.D. Shibulal, cofounder, Infosys and Axilor Ventures (India)

Anand Agrawal, 26; Rishabh Goel, 26; Mayank Khera, 29 India
Cofounders, Credgenics

Jamie Cerexhe, 28 Australia
Cofounder, Mastt

Chang Weixi, 26 China
COO, Ensonic Tech

Theodorus Ivan Budiyanto, 26; Surya Sanjaya Halim, 26; Raymond Christopher Sitorus, 29 Indonesia
Cofounders, Delman

Shehzad Noor Taus Priyo, 24; Motasim Bir Rahman, 26 Bangladesh
Cofounders, Gaze

Mayank Agarwal, 29; Vaibhav Jain, 29 India
Cofounders, Hubilo

He Xuanbin, 28 China
Cofounder, Jina AI

Ei Hirai, 29 Japan
Founder, estie

Ricky Ho, 21 China
Cofounder, Treelab

Kei Horiguchi, 26 Japan
Founder, Japan Legal System Institute

Tanmaya Jain, 26; Varun Puri, 27 India
Cofounders, inFeedo

Akihiko Ishikawa, 28 Japan
Founder, Aidemy

Sunder Jagannathan, 29 India
Cofounder, PropVR

Seung Hwan Jeong, 28; Hyungjun Mun, 25; Junhyeong Park, 27 South Korea
Cofounders, LionRocket

Li Ruiyu, 28 China
Cofounder, SmartMore

Lin Zisen, 24 China
CEO, 4D ShoeTech

Sanjay Kumar Mahalingam, 29 India
Director of India, Clari

Taro Nakajima, 28 Japan
Founder, Roxx

Albert Okamura, 29 Japan
CEO, One Visa

Awais Ahmed, 23; Kshitij Khandelwal, 23 India
Cofounders, Pixxel

Bharath Rao, 24 India
Founder, Precily

Mir Sakib, 28 Bangladesh
Founder, Cramstack

Haseung Jeon, 26; Munhwi Jeon, 24; Seyeob Kim, 25; Howook Shin, 25 South Korea
Cofounders, SelectStar

Hiroki Shimada, 28 Japan
CEO, Lapras

Naman Agrawal, 28; Pranjal Goswami, 28 India
Cofounders, Superset

Akshay Deshraj, 26; Sourabh Gupta, 27 India
Cofounders, Vernacular.ai

Yang Xie, 24 China
CEO, Authing

Vijay Narasiman, 26; Raghav Gurumani, 26 India
Cofounders, Zuper

Yang Zhilin, 28 China
Cofounder, Recurrent AI

Hannia Zia, 27 Pakistan
Product manager, Digital Pakistan

JAE-HYUN KIM FOR FORBES ASIA


Sanna Marin
Joko Widodo
When
Big Names talk
They talk to the BBC
Sir David Attenborough
Tsai Ing Wen
BBC
WORLD
NEWS

By **Danielle Keeton-Olsen and Roel Landingin**

The Way Forward

The world is finding its way back from a pandemic both corrosive to the commercial and political order and devastating to lives and livelihoods. This second episode of the Forbes Asia CEO Webinar—The Way Forward—was held virtually on March 30 and March 31. Business leaders delved into the road to recovery, the issues at hand, and the opportunities and challenges created on the path to a new normal. Here are some key insights from those discussions.

In Conversation with Steve Forbes, chairman and editor-in-chief, Forbes Media

Tighten your seat belts, said Steve Forbes, chairman and editor-in-chief of Forbes Media, as advice to those wondering what's in store from President Joe Biden's administration. The good news is the vaccine rollout in the U.S. is faster and wider than in Europe and other places, making recovery imminent. "The economy itself is ready to roar," said Forbes in a wide-ranging talk. "Airline traffic is way up. Everyone wants to get up and do things, and so the economy should do extremely well short-term as the states finally end lockdowns."

However, he also warned there could be "a lot of turbulence" in financial markets as the new administration's massive tax and spending plans, particularly its $2 trillion infrastructure package, could trigger "inflationary pressure later this year and early next year." In turn, rising consumer prices could result in higher interest rates, he said. Already, the yield on the 10-year Treasury bond had risen to 1.7% from just 0.8% a few months ago. "I think that's just a small beginning of what you're going to see," he added.

The combination of inflationary pressures, higher taxes and other regulations on businesses that the Biden administration plans to roll out could undermine the economic recovery itself, cautioned Forbes, resulting in a backlash against Democrats at next year's midterm congressional elections. "I think we'll see the Republicans taking both houses again and perhaps we'll get more benign economic policies," he predicted. He added redistricting in U.S. states due to population changes would likely increase congressional seats in Republican states.

On U.S.-China relations, Forbes expected America's dealings with the world's most-populous country would continue to be "rather frosty." Still, he was hopeful that the two sides could firm up agreements on tariffs and other trade issues. On the other hand, he predicted other Asian countries such as Japan, India and Indonesia would move closer to the U.S.

As for U.S. equities, Forbes had some words of caution for investors. "I'm surprised [that the U.S. stock market] is as high as it is and the markets are counting on the fact—and on the hope—that the Biden administration won't be able to get through some of these very antigrowth policies, especially on taxation," he said. "When those tax increases come through, [and when] they make other changes in our voting system which would favor the Democrats," they could trigger a slump, he cautioned.

Forbes also shared his thoughts on bitcoin. While he sees a number of problems with digital currencies, ranging from excessive price volatility to government intervention slowing their adoption, Forbes was bullish about the long-term outlook. "Ultimately, I think technology will triumph in many countries despite regulators' attempts to crush it, and you will see the rise of alternative monies to those of governments—and that will be an interesting new era to say the least," he predicted, with the days of sovereign control over money "coming to an end."

From top left to bottom right: **Chew Gek Khim**, executive chairman of The Straits Trading Company; **Michael ByungJu Kim**, founder and partner of MBK Partners; **Kuok Meng Xiong**, founder and managing partner of K3 Ventures; **Danny Yong**, CEO and CIO of Dymon Asia Capital; **Wayne Arnold**, executive editor, *Forbes Asia* (moderator).

March 30 - First Panel

MONEY & INVESTING: FEVER PITCH

Leading investors agreed the global recovery from the pandemic was underway despite localized surges in infection rates. But as economic growth recovers, they were worried it would unleash fresh risks, notably an uptick in inflation and interest rates. They felt investors should expect increased market volatility, with the recent billion-dollar margin calls on Archegos Capital Management as a cautionary tale.

Michael Kim, partner of Seoul-based private equity firm MBK Partners, attributed the heightened market uncertainty to the unique character of the ongoing recovery. "This feels a little bit different. The valuations are way ahead of the recovery," he said, referring to the recent rally in tech stocks. "That's markedly different from the SARS recovery period and the Great Recession [of 2008]," he added.

Danny Yong, CEO of Singapore-based investment firm Dymon Asia Capital, highlighted another difference. He argued central banks have been consistently wrong in forecasting higher inflation over the past 12 years. This time, however, monetary authorities could be underestimating inflation in the aftermath of the pandemic. "We could actually have price pressures that overshoot, leading to it being non-transitory and with the result that [central bankers] have to catch up" with interest rate hikes, he said.

For investors with the patience and resources to withstand short-term volatility, plenty of opportunities are still available. Kuok Meng Xiong, founder and managing partner of Singapore's VC firm K3 Ventures, insisted that the tech rally, while partly driven by the huge amounts of liquidity released by the U.S. Federal Reserve and other central banks, was supported by "underlying relevance and growth." "Back in the '90s, growth rates of companies were like 18%, in 2000 they were about 28% and now we're seeing growth rates of about 38% to 50%," he said.

Yong cautioned rising interest rates could hurt some tech companies. "In the near term, tech stocks that are premised on strong earnings will continue to do well and those that are premised on future growth may take a bit of a hit," he said.

Chew Gek Khim, executive chairman of Singapore-based Straits Trading Company, made a similar point: "We all enjoyed this lower interest rate environment and what I was surprised [about], perhaps I am too old school, is the degree of leverage so that even a slight pick up in yields has a huge effect."

Chew noted that some segments of the property sector did well during the pandemic. "We see a lot of opportunity in the logistics space, particularly as people change the way they handle logistics," she said.

The panelists saw tremendous opportunity in private markets. Kim, whose MBK Partners acquired the largest car rental company in China at 5.4 times Ebitda, said such entry valuations can only be found in private deals in China.

Cryptocurrency's appeal was also discussed. The asset class had become far too important to ignore and Yong recommended that investors should consider holding at least 1% to 5% of their portfolios in bitcoin and other cryptocurrencies for diversification. It's gotten to the point that "it will become more and more feasible, and more secure, with respect to investing in that space," he said.

March 30 - Second Panel

TRAVEL & TOURISM: MOTION SICKNESS

Tourism has been one of the pandemic's biggest economic casualties. Border closures and restrictions slammed international air travel and took a massive bite out of entertainment, hospitality and restaurant revenues. The panelists, however, were optimistic that pent-up demand for travel is on the horizon.

For Lance Gokongwei, president and CEO of the Manila-based JG Summit Holdings, the strict lockdowns in the Philippines dealt the group's Cebu Pacific Air record losses. It had to rely on defensive industries in its portfolio, such as telecoms and food and beverage, that could withstand pandemic stresses, said Gokongwei. However, "for our airline, at least it's never been a question of do we survive this crisis," he added. "Rather, how prepared are we to come back when business inevitably returns."

In Hong Kong, daily arrivals plummeted from 200,000 pre-pandemic to fewer than 200. The steep decline impacted the island's economy, a hardship exacerbated by Hong Kongers' inability to get away, said Y.K. Pang, chairman of Hong Kong Tourism Board. With borders closed, the agency pivoted to promote holidays at home, and encouraged locals to make the most of the city's tourist destinations. It also supported hospitality and tourism businesses through subsidy programs and domestic travel campaigns, he added.

The key to weathering the pandemic was being "very agile in response," explained Sonia Cheng, CEO of Hong Kong's Rosewood Hotel Group. It reacted with a health and safety campaign to instil trust in the company, she said, while fast-tracking initiatives already in progress, including a wellness resort and serviced residences. She believed pandemic-driven changes are here to stay: "Some of these trends are very fitting with the strategies we already had planned for Rosewood."

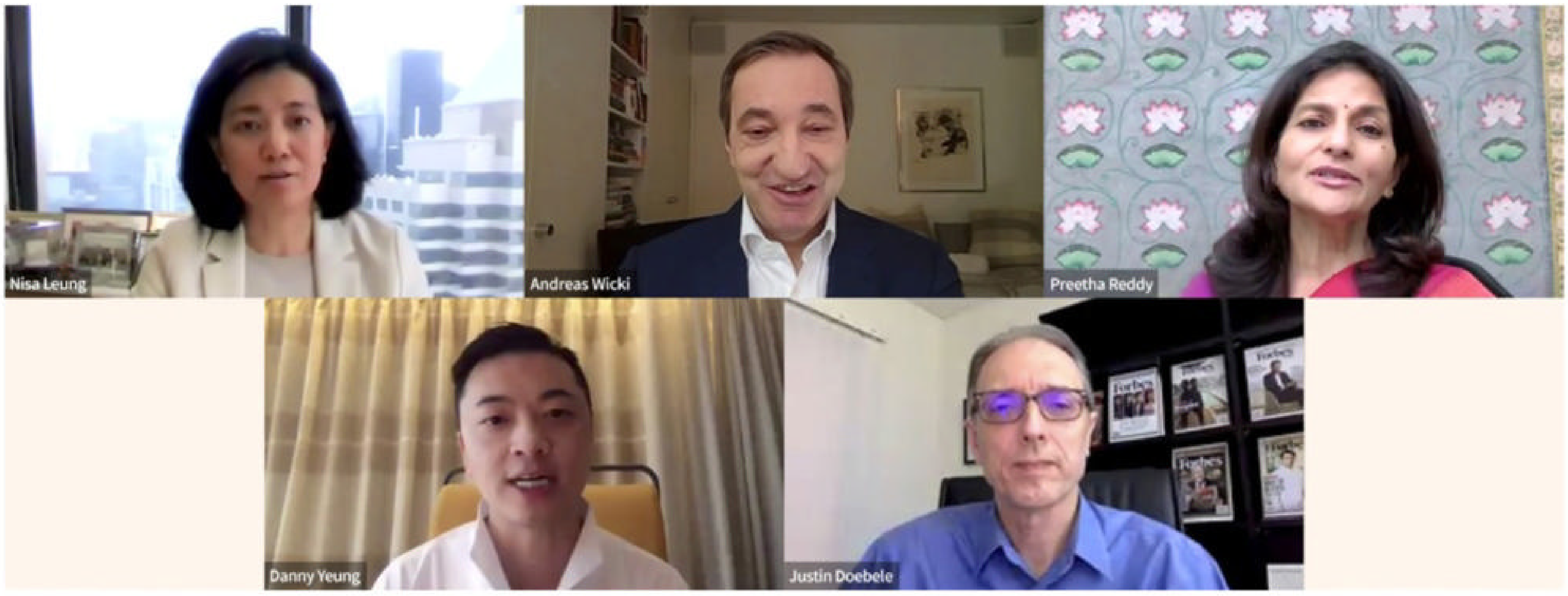
Cheng noted that China has remained relatively unscathed as its economic recovery gains steam and domestic travel resumes, with Rosewood's China properties performing better in 2020 than the previous year. She expected more regional travel bubbles to surface this year.

Whether vaccine passports would help the ailing tourism industry remained unclear and would likely need to be supplemented by other measures such as Covid-19 testing of travelers while they are in an airport. Even if a full recovery was far off—potentially as long as two years for the Philippines' airlines industry, Gokongwei said—businesses were already anticipating how travelers' needs would shift in the new normal.

Travel would be more purposeful, the panelists agreed, with "cost being an important decision point," Gokongwei predicted. The first post-pandemic travelers "will dip a toe in the water and see what it's like," Pang added, anticipating they would choose nearby countries with better health and safety records as top destinations.

People would be prepared to spend, but Cheng felt it would still be a test for businesses. Industry leaders would need to deliver not just on safety but also on factors such as sustainability and quality to stay "on the top of [customers'] minds," she said. But there was no doubt among the panelists that demand would return. Pang clarified, "Person-to-person connections are a very important part of people's lives."

From top left to bottom right: **Sonia Cheng,** CEO of Rosewood Hotel Group; **Lance Gokongwei,** president and CEO of JG Summit Holdings, president and CEO of Cebu Pacific Air; **Y.K. Pang,** chairman of Hong Kong Tourism Board; **Rana Wehbe Watson,** senior editor-special projects, *Forbes Asia* (moderator).



From top left to bottom right: **Nisa Leung**, managing partner of Qiming Venture Partners; **Andreas Wicki**, CEO of HBM Healthcare Investments; **Preetha Reddy**, executive vice chairperson of Apollo Hospitals Group; **Danny Yeung**, CEO and cofounder of Prenetics Group; **Justin Doebele**, editor and executive director-content, *Forbes Asia* (moderator).

March 30 - Third Panel

HEALTHCARE: COMMONHEALTH OF NATIONS

No industry had to step up faster under pandemic pressures than the health sector, and more than a year since the first Covid-19 cases emerged, the panel of health industry experts was realistic about the achievements and concerns.

Hospitals and healthcare workers had to change entire systems to cope with surges of patients and heightened health risks, noted Preetha Reddy, executive vice chairperson of Apollo Hospitals Group, India's largest hospital chain. "Digital [was] adopted almost overnight," she said. "Today, within the Apollo system we conduct about 5,000 tele-consults a day."

Nisa Leung, managing partner of China-based VC firm Qiming Venture Partners, said China's response to the pandemic was in sharp contrast to what happened during SARS in 2003. "Back then China didn't have the ability to develop its own diagnostics," Leung said. But over the past year the country's health companies strengthened their capability to battle the virus.

Testing is now known to be critical to breaking transmission chains, but at the pandemic's start, many countries didn't have the infrastructure to conduct large-scale testing, noted Danny Yeung, CEO and cofounder of Hong Kong's biotech company Prenetics Group. The health sector quickly transitioned from facing frequent shortages of test kits to providing rapid result tests. At the same time, significant new therapies in the healthcare sector have emerged in the fight against the disease, said Andreas Wicki, CEO of Swiss investment company HBM Healthcare Investments.

He warned of the possibility of a super-mutant coronavirus strain, which could throw global progress to stop Covid-19 off-kilter: "If we can't reduce the spread, we'll have more and more mutations forming, and we don't know what dangers new mutations can really bring." As vaccination campaigns kick off globally, the panelists agreed widespread distribution is key to returning to a "new normal." China has administered over 100 million vaccinations so far and Leung said the country's healthtech companies were considering how to further expedite distribution, such as bringing an inhalation vaccine to market.

India has distributed 60 million doses as the nation's vaccine makers ramp up production, Reddy said. Though there have been debates about the efficacy of different vaccines, she argued countries would be remiss to pass up vaccine opportunities on the basis of brand preference. "We should really make do with anything we can get, as long as it's safe, and I think the safety has been proven," she said.

Politicians will naturally try to prioritize vaccinating their own people, Wicki noted, but widespread vaccine distribution to developing nations can reduce the possibility of a deadlier, more contagious strain emerging. Reddy agreed: "I think health is a fundamental right. It should not be caught by any boundaries or geographies."

Leung said she was encouraged to see how quickly leaders in healthcare embraced new technologies, such as developing better diagnostic tests. "Even for the technology that's in the R&D stage now, [we] see how far we've come from 10 years ago," said Leung.

From top left to bottom right: **Muhamad Chatib Basri**, former finance minister of Indonesia; **Laura Cha**, chairman of Hong Kong Exchanges and Clearing; **Daniel Yergin**, vice chairman of IHS Markit, Pulitzer Prize winner; **Rich Karlgaard**, futurist and editor-at-large, Forbes Media (moderator).

March 31 - First Panel

U.S. AND ASIA: CONTRAINDICATIONS

The pandemic heightened tensions between Beijing and Washington, with Asian companies sometimes caught in the crossfire. As the Biden administration shapes its Asian policies, Hong Kong as a financial center needs to perform "a solid, sturdy and stable role," said Hong Kong Exchanges and Clearing Chairman Laura Cha. She cautioned the future remained unclear. "As the world evolves, the geopolitical tension is becoming more complex, more uncertain, and I'm afraid to say it will become the new normal," she said. "We just have to live with a lot of uncertainty."

Still, Cha said Hong Kong had economic clout in "connecting the East and West." The South China Seas dispute has further exacerbated tensions over trade and territory—an issue "not easy to see how the two sides resolve," noted Daniel Yergin, vice chairman of IHS Markit and Pulitzer Prize winner.

These challenges have significant implications for ASEAN. Muhamad Chatib Basri, Indonesia's former finance minister, posited the region must strike a balance. "On the one hand, ASEAN needs the presence of the U.S. to balance the increasing role of China in the region, but on the other hand, we realize the importance of China as one of the important trading partners in Asia," he said.

Turning to global issues, the Biden administration is expected to spearhead environmental and green issues, said Yergin. Meanwhile, a number of green energy projects are underway in China's Greater Bay Area, which is emerging as a technology hub with Hong Kong's support. "The world needs more than one capital-raising center for new economy companies," Cha said.

While China has invested heavily in Southeast Asia, Basri noted Indonesia is improving its investment frameworks. The country recently launched a sovereign wealth fund to support infrastructure projects and passed legislation last year to ease restrictions on foreign investment.

The panelists expected recovery to be uneven, with some industries, including tourism, education and fintech, facing possible continued disruption. "Inequality will rise after the pandemic and this is what the governments need to anticipate in the future," said Basri. Overall, however, the panelists were optimistic. Yergin said IHS Markit predicted global growth would shoot up to 5.1% by the end of the year, higher than the World Bank's projections in January—barring any setbacks such as a new wave of the virus. "When the [recovery] gates open, it might be a more positive surprise than people think," Yergin said.

March 31 - Second Panel

ENTREPRENEURSHIP: IMMUNE RESPONSE

From top left to bottom right: **Byju Raveendran**, founder and CEO of Byju's; **Kevin Aluwi**, Co-CEO of Gojek; **Eric Yuan**, founder and CEO of Zoom; **Rana Wehbe Watson**, senior editor-special projects, *Forbes Asia* (moderator).

The pandemic had a significant toll on the growth of even the world's strongest economies, yet tech entrepreneurs on the panel managed to turn Covid's challenges into opportunities for growth. The U.S. firm Zoom's founder and CEO Eric Yuan noted he had started the video-messaging company becaused he noticed inefficiencies with existing offerings and wanted to make something better. When the pandemic hit, Yuan's team imagined improving people's lives by virtually hosting gatherings such as online classes, yoga sessions and even weddings.

Similar to Zoom, Indonesia's Gojek was founded 11 years ago on the belief that there are "daily frictions that we can take away through a common set of capabilities," said Gojek Co-CEO Kevin Aluwi. During the pandemic, the super-app company delivered essential goods such as groceries to homebound residents.

Byju Raveendran, founder and CEO of India's online learning startup Byju's, thought that, before the pandemic, it might take years for widespread acceptance of online education. Yet the lockdowns and travel restrictions had created an eager audience and a huge pool of users to test Byju's online learning method. "We can see how students adapt to this new model of learning," he said. In order to retain the attention of students, Raveendran noted it was important to keep programs engaging without losing their effectiveness. He didn't see his company as an education technology company but rather, an education media technology company

The pandemic kicked up problems the CEOs had to solve quickly under difficult conditions. Almost overnight, Zoom's customer base changed from people working in offices to those working from home. The company made an immediate and heavy investment in remote tech support to support these homebound workers. At Gojek, corporate and support staff not only had to transition to completely virtual work, but the company's drivers faced enormous risks due to the person-to-person contact at the heart of their jobs. Aluwi said the company offset some of the strain with health checks, care packages and other support for its drivers.

The pandemic also created unexpected avenues for growth. Aluwi described how an entire new industry such as online-only restaurants and sellers popped up on Gojek's order and delivery app. He envisioned Gojek increasingly becoming a platform that nourished micro-enterprises as "a place where individuals and businesses can grow and thrive."

Raveendran felt edtech was only just realizing its possibilities. Even though in-person learning was still critical, he saw opportunities to connect talented teachers—especially among India's underemployed, largely female, workforce—to enthusiastic learners, regardless of their location. Investors appeared to see these possibilities, too; the company's latest fundraising round gave Byju's a valuation over $15 billion. Raveendran said he aimed to take Byju's public in the next 18 to 24 months.

Yuan also saw Zoom expanding its platform capabilities to support other innovations, such as enabling vivid sensory experiences that bridged the virtual gap in remote meetings. Whatever Zoom conjures up next, Yuan said his core business philosophy will stay the same. "If I make my friends, family members and employees happy, I'll be happy, and if we make our customers happy, our business will also be happy," he said.

ROBUST RISE

In a pandemic year, Japan's 50 richest saw a nearly 50% rise in their collective net worth.

BY **NAAZNEEN KARMALI**

No. 1
Masayoshi Son

After contracting nearly 5% in 2020, Japan's economy remained on course for a strong recovery thanks to a rebound in exports and the upcoming summer Olympic Games in Tokyo. The benchmark Nikkei 225 stock index was up 54% from a year ago, shrugging off lingering uncertainty after the government imposed measures in April to fight surging Covid-19 infections. Consequently, Japan's 50 richest saw their collective wealth swell to $249 billion, a 48% rise from last year. For the first time, all 50 fortunes exceed $1 billion, with minimum wealth for inclusion on the list at $1.15 billion.

It was a banner year for SoftBank founder **Masayoshi Son**, who reclaimed the No. 1 spot after more than doubling his net worth to $44.4 billion. Successful IPOs of food-delivery app DoorDash and Coupang, Korea's Amazon, sent SoftBank shares soaring, making Son this year's biggest gainer in dollar terms. Meanwhile, rising demand for Uniqlo's comfortable everyday clothing, well-suited for working from home, boosted apparel billionaire **Tadashi Yanai**'s fortune by nearly 90%. With $42 billion, Yanai is now the second richest after topping the list for the past two years.

Overall, 36 fortunes were up with a dozen listees notching gains of more than $1 billion. Five among them more than doubled their net worths, including **Shigenobu Nagamori**, founder of motor manufacturer Nidec, who enters the top five for the first time with $9 billion. The biggest percentage gainer was **Shintaro Yamada**, founder of Mercari, a used-goods marketplace site, which benefited from an online buying boom.

Despite the pandemic, Japan minted new wealth. Five new entrants make their debut on the list—four billionaires and one family fortune. They include **Taichiro Motoe**, lawmaker and founder of e-signature service bengo4.com; **Itaru Tanimura** of online medical services provider M3; **Takanori Nakamura** of cloud services firm Rakus; and **Shirou Terashita** of IR Japan, an investor relations and shareholder advisory firm. The fifth was the **Uchiyama family** of Lasertec, which makes testing equipment for the latest generation of semiconductor chips.

Three listees return to the ranks after dropping off in past years, such as **Ryuji Arai** of electronics retailer Bic Camera and **Muneaki Masuda**, founder of bookstore chain Tsutaya. Only four fortunes were down, including that of **Chang-woo Han**, founder of Maruhan, one of the country's largest operators of pachinko parlors, which took a pandemic hit. Three others in the same business, including Yoji Sato, who controls Dynam Japan Holdings with his siblings, are among the eight who dropped off.

With reporting by Anuradha Raghunathan and James Simms.

METHODOLOGY

The list was compiled using information from the individuals, stock exchanges, analysts, company filings and other sources. Private companies were valued by using financial ratios and other comparisons with similar, publicly traded companies. Fortunes often include assets owned by other family members. The list also includes foreign citizens with business and residential ties to the country. Net worths were based on stock prices and exchange rates as of the close of markets on April 5, 2021, and hence in some cases differ from the net worths that appear on the World's Billionaires list, which used stock prices from March 5, 2021.

TOMOHIRO OHSUMI/GETTY IMAGES

AKIO KON/BLOOMBERG

At Full Throttle

SHIGENOBU NAGAMORI

As more people worked from home during the pandemic, manufacturer Nidec's sales of motors for computers, hard disk drives and home appliances hummed along steadily in the past year.

Thanks to cost-cutting measures and higher shipments of lucrative miniature precision motors, which enjoy a 15.1% operating margin, the Kyoto-based company is expected to post a record net profit of $1.3 billion, on revenue of $14.7 billion, in the full fiscal year through March 2021. That performance and an aggressive push in components for electric vehicles (EV) have led Nidec shares to jump 150% in the past year, driving up the net worth of founder and CEO Shigenobu Nagamori, 76, by $5.3 billion to $9 billion.

Nagamori's strategy is to position Nidec as a key supplier of traction motors and electric drivetrains (e-axles) for EVs. As EV sales boom worldwide, Nagamori has said publicly that EV components are one pillar to achieve his goal to hit ¥10 trillion ($91 billion) in revenue by 2030. He is also banking on Nidec's R&D for new products and is using the company's $4.6 billion M&A war chest to make acquisitions.

Last year, Nidec hired ex-Nissan Motor chief operating officer Jun Seki as president for his automotive, manufacturing and global experience. In February, Nidec bought Mitsubishi Heavy Industries Machine Tool for an undisclosed price to improve gear-making capabilities for e-axle transmissions. *—James Simms*

JAPAN'S 50 RICHEST

1. MASAYOSHI SON
$44.4 BILLION ▲
SOFTBANK
AGE: 63

2. TADASHI YANAI
$42 BILLION ▲
FAST RETAILING
AGE: 72

3. TAKEMITSU TAKIZAKI
$25.8 BILLION ▲
KEYENCE
AGE: 75

4. NOBUTADA SAJI
$9.7 BILLION ▲
SUNTORY HOLDINGS
AGE: 75

5. SHIGENOBU NAGAMORI
$9 BILLION ▲
NIDEC
AGE: 76

6. TAKAHISA TAKAHARA
$8 BILLION ▲
UNICHARM
AGE: 59

7. HIROSHI MIKITANI
$7.5 BILLION ▲
RAKUTEN
AGE: 56

8. AKIO NITORI
$5.2 BILLION ▲
NITORI HOLDINGS
AGE: 77

CHANGE IN WEALTH KEY:
▲ UP ▼ DOWN ◀▶ UNCHANGED
★ NEW TO THE LIST ⮌ RETURNEE

JAPAN'S 50 RICHEST

9. **YASUMITSU SHIGETA**
$5.1 BILLION ▲
HIKARI TSUSHIN
AGE: 56

10. **HIDEYUKI BUSUJIMA**
$4.4 BILLION ▲
SANKYO
AGE: 68

11. **MASAHIRO NODA**
$4.3 BILLION ▲
OBIC
AGE: 82

12. **MASATOSHI ITO**
$4.1 BILLION ▲
SEVEN & I HOLDINGS
AGE: 96

13. **TAKAO YASUDA**
$4 BILLION ▲
PAN PACIFIC INTERNATIONAL HOLDINGS
AGE: 71

14. **AKIRA MORI**
$3.9 BILLION ◀▶
MORI TRUST
AGE: 84

15. **YOSHIO TSUCHIYA & FAMILY**
$3.8 BILLION ▲
WORKMAN
AGE: 88

16. **MASAHIRO MIKI**
$3.7 BILLION ▲
ABC-MART
AGE: 65

Makeover Mania

AKIO NITORI

Lockdowns across Japan since last spring led to a surge in sales at furniture and home decor retailer Nitori Holdings as homebound consumers snatched up items to spruce up their digs and work from home. The Tokyo-based firm reported a 29% jump in net profit to ¥92.1 billion ($853 million) on the back of a nearly 12% sales increase to ¥716.9 billion ($6.6 billion) for the fiscal year through February.

This marks the 34th year that the company has notched an increase in both earnings and revenue. Nitori's rising share price lifted founder and CEO Akio Nitori's net worth by 30% to $5.2 billion.

The company, which started as a furniture store in 1967, has in recent years expanded its store network in its home market as well as overseas while branching into new areas such as fast fashion and baby goods and investing in its distribution network. Nitori is aiming to have 3,000 stores and revenue of ¥3 trillion ($27 billion) by 2032.

In November, Nitori, in a rare unsolicited takeover in Japan, spent ¥214 billion ($1.9 billion) to acquire home-improvement chain Shimachu.

—James Simms

RODRIGO REYES MARIN/AFLO

Akio Nitori at an event in Tokyo in 2018.

Keiko Erikawa and her husband Yoichi

Playing the Market

YOICHI & KEIKO ERIKAWA

Koei Tecmo Holdings isn't just big in videogames, but also asset management: the company holds roughly $1.1 billion in assets across Hong Kong, Japan and the U.S. In a recent *Nikkei* interview, the firm's cofounder and chair, Keiko Erikawa, revealed her strategies for investing were inspired by her grandmother's advice to focus on the long term; Erikawa also said she likes to invest in companies she would like to work for or manage.

Koei Tecmo's shares have more than doubled in the past year as the firm has forecast an over 60% jump in net profit, to ¥25 billion ($231 million) for the year ended March, on rising demand for its games from those homebound by the pandemic. One Nintendo Switch game, Hyrule Warriors: Age of Calamity, globally sold more than 3.5 million units in the fourth quarter of 2020, just over a month after its release last November. Erikawa's net worth, which she shares with her husband Yoichi, was up 144% to $3.3 billion. *—James Simms*

COURTESY OF KOEI TECMO HOLDINGS

17. KOBAYASHI BROTHERS

$3.6 BILLION ▲
KOSE CORP

18. YOICHI & KEIKO ERIKAWA

$3.3 BILLION ▲
KOEI TECMO HOLDINGS
AGES: 70, 72

19. MASATERU UNO

$3.2 BILLION ▲
COSMOS PHARMACEUTICAL
AGE: 74

20. YUJI OTSUKA

$3.1 BILLION ▼
OTSUKA CORP
AGE: 67

21. KINOSHITA FAMILY

$2.6 BILLION ▲
ACOM

22. KATSUMI TADA

$2.31 BILLION ▼
DAISHO GROUP
AGE: 75

23. MASAAKI ARAI

$2.3 BILLION ▲
OPEN HOUSE
AGE: 55

24. EIICHI KURIWADA

$2.25 BILLION ▲
SG HOLDINGS
AGE: 74

25. SHINTARO YAMADA

$2.2 BILLION ▲
MERCARI
AGE: 43

CHANGE IN WEALTH KEY:
▲ UP ▼ DOWN ◀▶ UNCHANGED
★ NEW TO THE LIST ⮌ RETURNEE

26. **YASUHIRO FUKUSHIMA**
$2.1 BILLION ▲
SQUARE ENIX HOLDINGS
AGE: 73

27. **UCHIYAMA FAMILY**
$2.05 BILLION ★
LASERTEC

28. **TADA BROTHERS**
$2 BILLION ▲
SUNDRUG

29. **HIROKO TAKEI**
$1.91 BILLION ▲
TAKEFUJI
AGE: 67

30. **YUSAKU MAEZAWA**
$1.9 BILLION ◀▶
ZOZO
AGE: 45

31. **KAZUO OKADA**
$1.88 BILLION ▲
UNIVERSAL ENTERTAINMENT
AGE: 78

32. **KAZUMI IIDA**
$1.85 BILLION ▲
IIDA GROUP HOLDINGS
AGE: 81

33. **SUSUMU FUJITA**
$1.8 BILLION ▲
CYBERAGENT
AGE: 47

34. **KENTARO OGAWA**
$1.7 BILLION ▲
ZENSHO HOLDINGS
AGE: 72

Wealth Creation

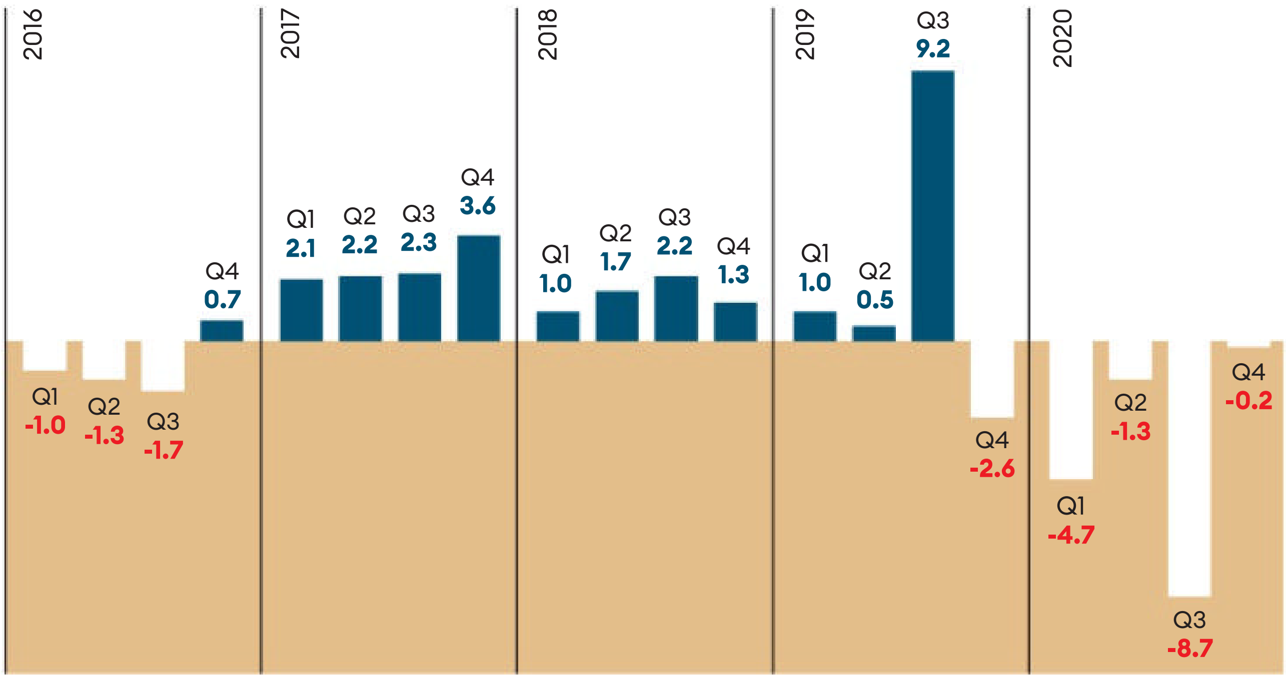
Steering Through

To lead the world's third-largest economy through the pandemic, Japan authorized about $3 trillion in stimulus to counter negative trends such as in consumer spending, which plummeted in 2020. Despite these measures, the economy shrank nearly 5% for the year. Investors have been optimistic, however, and have pushed stocks up to 30-year highs—up 78% since the pandemic low roughly 12 months ago. —*Jeanhee Kim*

Watching Pennies

Consumer sales were holding steady from 2017 until the 2019 introduction of a higher sales tax. A spike ocurred just before the tax started, followed by a decline.

(QUARTERLY CHANGE IN RETAIL SALES, YEAR-ON-YEAR, NOT SEASONALLY ADJUSTED)

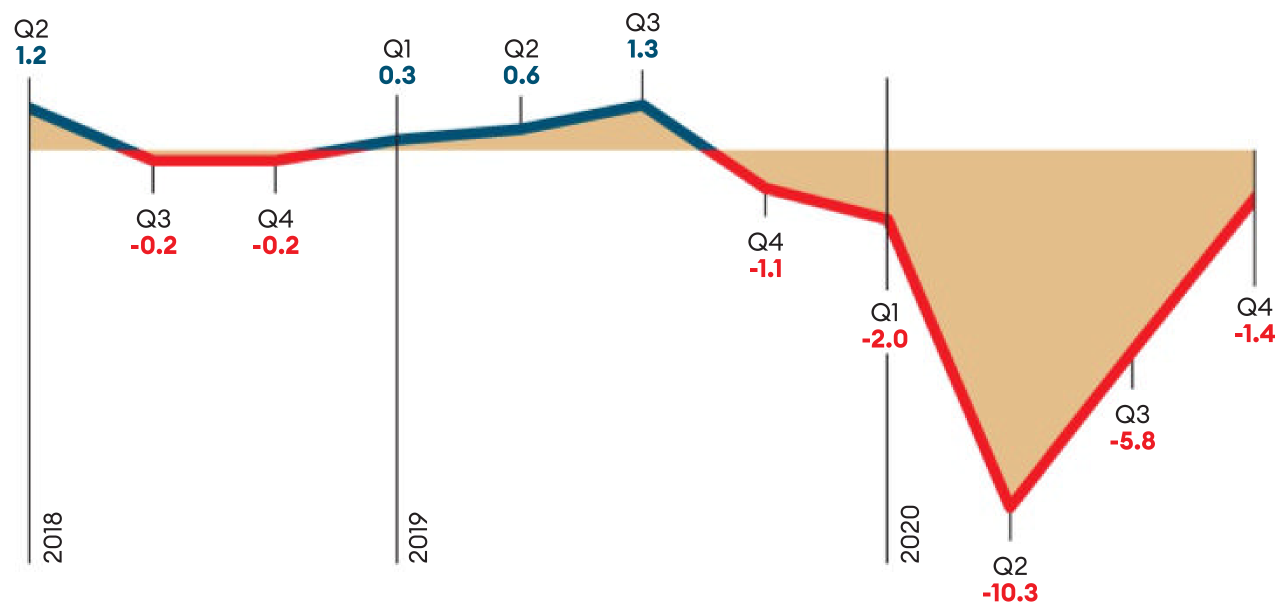


Source: Bloomberg

Right Direction

Japan's economy is recovering, helped by a $700 billion stimulus package announced in December.

(QUARTERLY REAL GDP % GROWTH, YEAR-ON-YEAR, NOT SEASONALLY ADJUSTED)

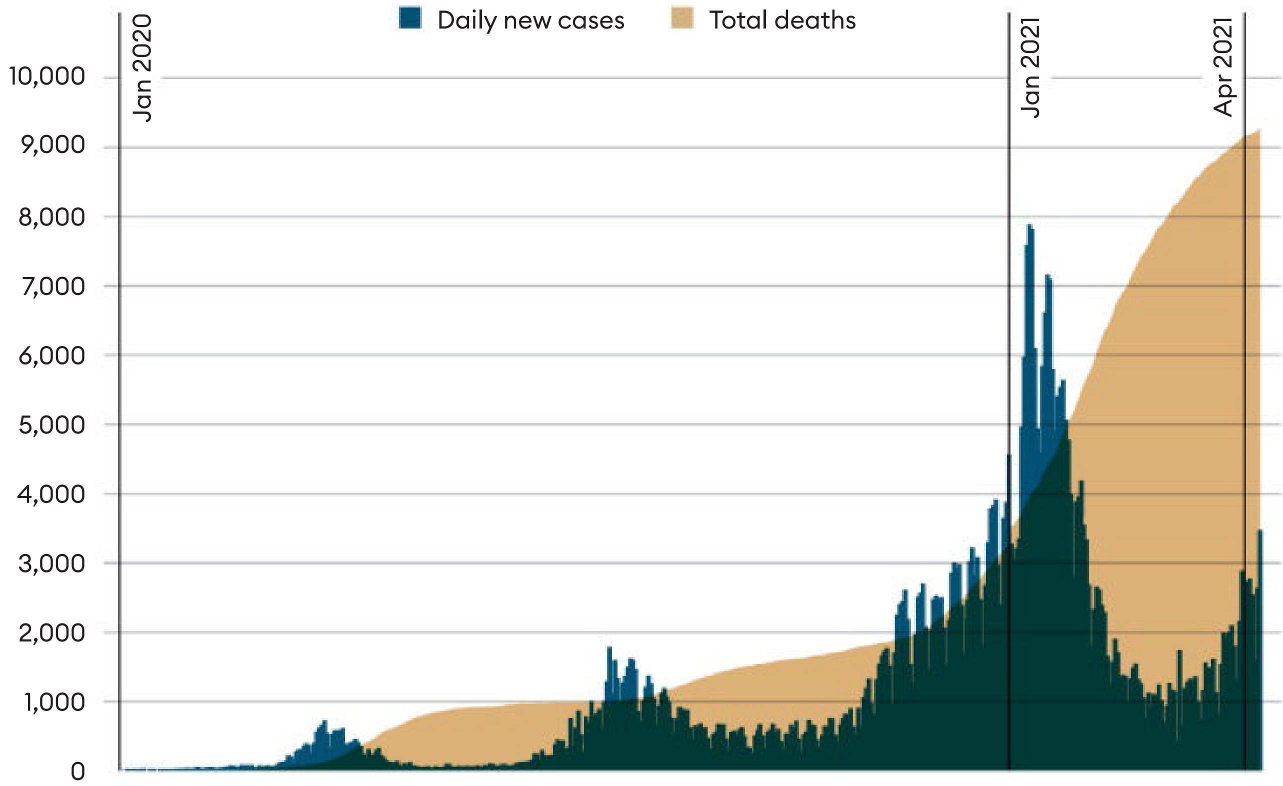


Source: Economic and Social Research Institute of Japan

Contrary to Expectation

Japan has had relatively few infections and total deaths of less than 10,000 in a population of 126 million, although those death spiked up this year.

(JAN. 23 TO APR. 7)

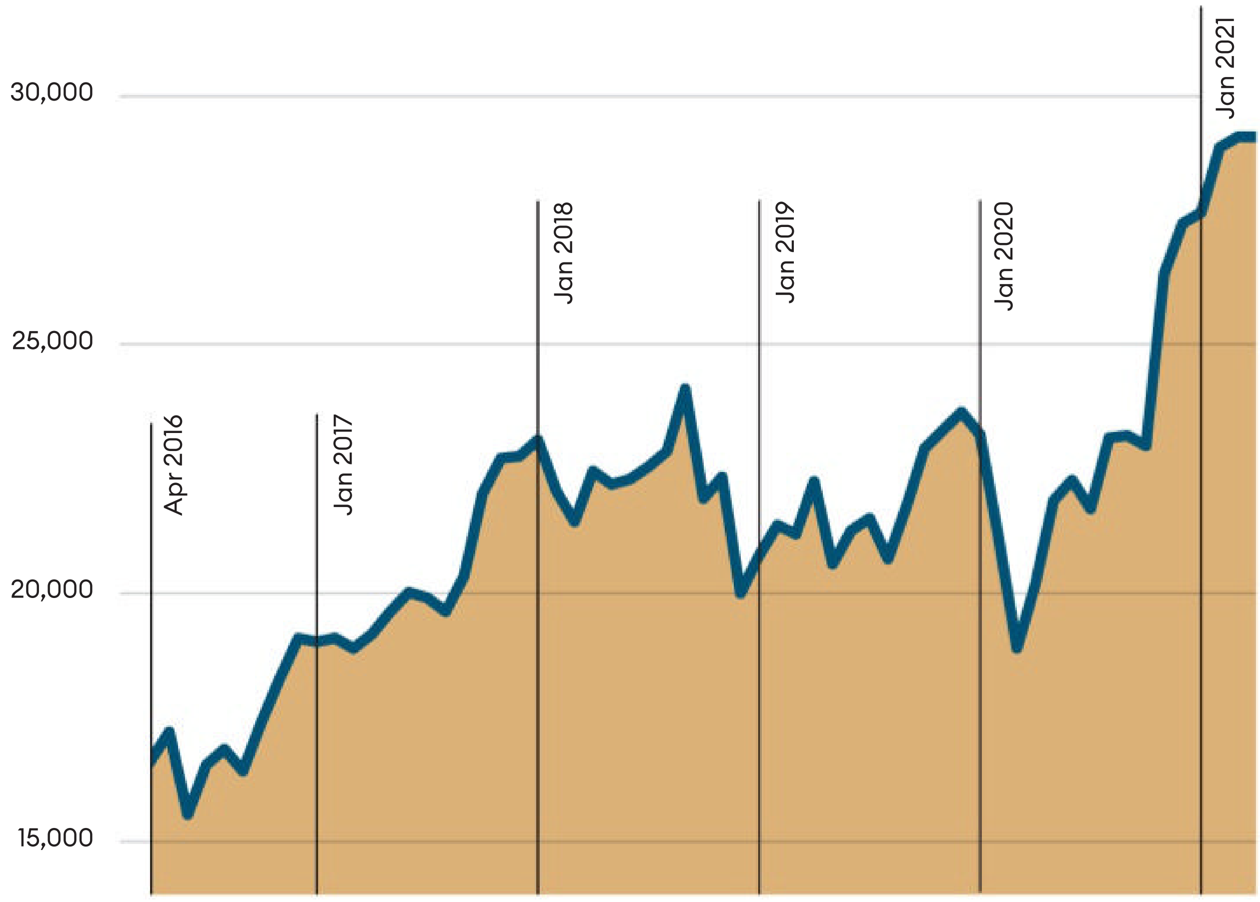


Source: Our World in Data

Power of Positive Thinking

Despite negative GDP growth year-on-year, investors have lifted stocks to 30-year highs from a pandemic low about a year ago.

(NIKKEI 225 INDEX, LAST PRICE OF MONTH IN YEN, APR. 30, 2016 TO MAR. 31, 2021)



Source: Bloomberg

INFOGRAPHIC BY CANNY SUTANTO FOR FORBES ASIA

35. CHANG-WOO HAN
$1.69 BILLION ▼
MARUHAN
AGE: 90

36. KAGEMASA KOZUKI
$1.65 BILLION ▲
KONAMI HOLDINGS
AGE: 80

37. NOBUTOSHI SHIMAMURA
$1.6 BILLION
SHIMAMURA CO.
AGE: 95

38. CHIZUKO & MICHIO MATSUI
$1.58 BILLION ▲
MATSUI SECURITIES

39. SHIGEFUMI WADA
$1.55 BILLION ▲
OBIC BUSINESS CONSULTANTS
AGE: 68

40. ITARU TANIMURA
$1.42 BILLION ★
M3
AGE: 56

41. HIROKAZU SUGIURA
$1.41 BILLION ▲
SUGI HOLDINGS
AGE: 70

42. SATOSHI SUZUKI
$1.4 BILLION ▲
POLA ORBIS HOLDINGS
AGE: 67

CHANGE IN WEALTH KEY:
▲ UP ▼ DOWN ◀▶ UNCHANGED
★ NEW TO THE LIST RETURNEE

JAPAN'S 50 RICHEST

43. RYUJI ARAI
$1.3 BILLION
BIC CAMERA
AGE: 74

44. YOSHIKO MORI
$1.29 BILLION
MORI BUILDING
AGE: 80

45. TAKANORI NAKAMURA
$1.26 BILLION
RAKUS
AGE: 48

46. MASARU WASAMI
$1.25 BILLION
MARUWA UNYU KIKAN
AGE: 75

47. SHIROU TERASHITA
$1.24 BILLION
IR JAPAN HOLDINGS
AGE: 62

48. MUNEAKI MASUDA
$1.22 BILLION
CULTURE CONVENIENCE CLUB
AGE: 70

49. TAICHIRO MOTOE
$1.2 BILLION
BENGO4.COM
AGE: 45

50. HAJIME SATOMI
$1.15 BILLION
SEGA SAMMY HOLDINGS
AGE: 79

FOR MORE INFO, GO TO FORBES.COM/JAPAN

CHANGE IN WEALTH KEY:
UP DOWN UNCHANGED
NEW TO THE LIST RETURNEE

Newcomers

The Land of Rising Billionaires

In a pandemic year, Japan has minted billionaires at an unprecedented pace. The five new faces who feature among Japan's 50 richest this year all own businesses that successfully addressed the needs of a world under lockdown.

As more Japanese companies moved to replace traditional stamped paper documents with digital contracts, shares in **Taichiro Motoe**'s Bengo4.com, which offers an e-signature service, rose 65% in the past year. Based on his majority stake in the company that he founded 15 years ago, Motoe's net worth stands at $1.2 billion.

Former McKinsey consultant **Itaru Tanimura**'s online medical services business M3 helps pharmaceuticals, doctors and their patients access information online over its platforms, eliminating the need for in-person visits. The company netted profits of ¥30 billion ($285 million) for the nine months ending December, up 59% from a year earlier, on ¥123 billion in revenue. M3 shares more than doubled over the past year, boosting Tanimura's fortune to $1.42 billion.

Shirou Terashita

Taichiro Motoe

The **Uchiyama family**'s Lasertec reported record first-half results in December. The semiconductor-equipment maker is the world's only supplier of a semiconductor testing machine used by Taiwan Semiconductor Manufacturing to make chips for iPhones. Net profit shot up 50% to ¥8 million on a 60% rise in sales as people stuck at home fueled demand for game consoles, laptops and smartphones, driving knock-on growth for the chipmaking industry. A doubling in shares ratcheted up the family's net worth to $2.05 billion.

Shirou Terashita's IR Japan, an investor relations and shareholder advisory firm, saw its stock price jump as rising shareholder activism during the pandemic pushed up demand for its advisory services. For the nine months ended December, IR Japan's net profit rose 20% to ¥1.9 billion from a year earlier on an 18% increase in sales to ¥6 billion.

A surge in demand for its cloud services more than doubled the share price of Tokyo-listed Rakus in the past year, making founder **Takanori Nakamura** a billionaire. Nakamura, who studied business at Kobe University, is aiming to make Rakus, best known for its expense management software, Rakuraku Seisan, one of the 100 most valuable companies in Japan by 2030. *—Megha Bahree*

TERASHITA COURTESY OF IR JAPAN; MOTOE COURTESY OF BENGO4.COM

BUILDING ON A GLOBAL RECOVERY

After a lackluster 2020, the real estate outlook in key Asia-Pacific markets reveals strong growth ahead.

As the global economy begins to emerge from the depths of the pandemic, real estate markets across Asia-Pacific are poised for a strong recovery in 2021. In particular, the expected easing of border and travel restrictions this year should see investors return to key growth markets such as Hong Kong, Singapore and Sydney.

According to a recent report by global real estate services firm Cushman & Wakefield, total real estate investment volumes (excluding development sites) in Asia-Pacific are expected to bounce back in 2021 to around US$165 billion, or 90% of the level in 2019.

"This rebound in investment activity in the region is supported by greater investor confidence as Asia-Pacific leads the economic recovery across the world. The region is also riding on the positive momentum off the back of a surge in investments in the last quarter of 2020," the report said.

In terms of asset classes, investors are expected to favor residential properties. Consultancy Knight Frank estimates 17 out of 22 prime markets in the residential segment will see stable to moderate price growth in 2021.

In Singapore, the residential market continues to be robust, with private condominium prices rising for the seventh straight month in February. Home buyers can look forward to high-profile luxury projects being launched in the city-state this year. One such development is the upcoming Park Nova in Singapore's prime Orchard Road district.

The maiden project by Hong Kong-listed developer Shun Tak Holdings, Park Nova will include 51 luxurious units and three penthouses in a 21-story residential tower. The development, nestled amid a lush vertical garden, features a unique biophilic design.

In Hong Kong, the luxury development 8 Deep Water Bay Drive by Nan Fung Group also offers a premium green living experience to residents of the bustling metropolis. Nature is a key highlight of this development, with the surrounding greenery sculpted into multilevel green spaces within the grounds.

Meanwhile, office properties are another highly sought after asset class, especially those in prime locations. As companies adjust their office occupancy needs to take into account remote working arrangements, the office market should see some increase in momentum in the second half of this year, according to Cushman & Wakefield.

One upcoming prime office development that is catering to flexible working needs is CapitaSpring, located in the heart of Singapore's Central Business District. The development features hybrid workplace solutions that offer fully integrated workspace options—including hot desks, meeting facilities, private offices and large enterprise suites—in one building. Tenants can maintain a core office for key operations and choose from a host of flexible workspace options when required.

After a subdued 2020, projects such as Park Nova, 8 Deep Water Bay and CapitaSpring are set to excite investors once again as real estate markets ride the global economic recovery in 2021.

PARK NOVA:
A STUNNING SINGAPORE DEBUT FOR SHUN TAK HOLDINGS

Park Nova (Artist's impression)

With a 60-year track record of success in China's Greater Bay Area, Hong Kong-listed Shun Tak Holdings is leveraging its expertise in real estate development and hospitality to make an indelible mark on Singapore's luxury segment.

Shun Tak boasts a prestigious portfolio of commercial, hospitality and residential projects across Asia, and has attracted funds from governments and renowned institutions around the world including the Abu Dhabi Investment Authority, Lujiazui Group and China Resources Land Limited. In recent years, the group has expanded into top-tier cities across mainland China as well as Singapore, with a vision of curating new living concepts for residents in these markets.

Committed to Singapore

As Shun Tak's first development destination in Asia, Singapore is a key long-term market for the group. In addition to redeveloping the 111 Somerset Road mixed-use project and transforming No. 9 Cuscaden Road into a five-star luxury hotel, the group recently invested in two upmarket residential properties, demonstrating its long-term commitment to the metropolis.

The two unique residential offerings are Park Nova, comprised of 51 luxurious units and three penthouses in a 21-story residential tower, and Les Maisons Nassim, consisting of 14 bespoke residences with high collectible value.

"We have been exploring investment opportunities beyond our home base, Greater China, and the acquisition of two residential projects and one commercial development, as well as a five-star hotel on Cuscaden Road in the pipeline, reaffirms our confidence in the Singapore market and paves the way for future developments," says Pansy Ho, Executive Chairman and Managing Director of Shun Tak Holdings.

A Premium Address

Park Nova will be Shun Tak's first project launched in Singapore. Located near Orchard Boulevard in the city-state's prime District 10, the ultra luxury development reflects the developer's philosophy of combining its expertise in hospitality and sustainability to create an unparalleled living experience.

"For our Singapore debut, we are excited to introduce a new residential concept that offers the best of nature in a vibrant metropolis. Park Nova, a one-of-a-kind luxury residence refined by Shun Tak's expertise in hospitality and tourism, is redefining the notion of urban living," says Ho.

The freehold development is a three-minute walk away from the upcoming Orchard Boulevard MRT Station and is close to a host of premium lifestyle attractions, from luxury retail shops and fine dining restaurants to deluxe hotels and urban landmarks along Orchard Road.

Park Nova—the name also harks back to Nova, a collection of luxury residences Shun Tak first launched in Macau over 20 years ago;

A 25-meter lap pool (Artist's impression)

Garden Pavilion (Artist's impression)

a name that suggests the birth of a new star, the dawn of a new mindset, and a new way of living with the promise of sustainability.

A Vision of Green Living

Park Nova is designed to be a living and breathing urban garden that brings nature closer to the residents of its 54 exclusive units. Its distinctive biophilic design features a lush vertical garden, copious outdoor space, abundant natural light, verdant communal planters and high-end club facilities for residents' health and wellbeing.

Each floor is surrounded by lush greenery that improves natural ventilation, cooling and residents' health. Residents will also be able to enjoy stunning, unobstructed views past the colorful urban garden to bustling Orchard Road and the iconic Botanic Gardens, the first UNESCO Heritage Site in Singapore.

Park Nova's biophilic architecture is the brain child of PLP Architecture, an award-winning studio behind some of the world's greenest and most intelligent designs.

The Epitome of Luxury Living

Park Nova residents can choose from a range of homes—from 2-bedrooms with study to 4-bedroom residences and penthouses—that cater to singles, couples and a variety of family types. Each unit comes with interiors of the highest quality as well as fittings and accessories from world-leading luxury brands such as Molteni&C, Vola and Laufen.

Residents can choose to unwind amid nature at a 25-meter pool and hot spa that sit in the heart of the garden. A Sky Lounge will also be available for hosting exclusive parties and private soirees in an intimate setting that boasts stunning views of the city.

Reflecting Shun Tak's rich heritage in hospitality, Park Nova comes with a host of exclusive services, including a concierge service that caters to the needs of residents.

Whether for investment or as a luxury home, Park Nova is a one-of-a-kind green urban experience embedded in a bustling city, perfectly capturing the essence of Singapore's cosmopolitan allure.

Living room (Artist's impression)

PARK NOVA

- *Minutes away from the premium lifestyle belt of Orchard Road*
- *A range of residences from 2-bedrooms with study (1,432 square feet), 3-bedrooms with study (2,207 square feet), 4-bedrooms (2,899 to 2,906 square feet) to 4-bedroom penthouses (3,229 to 5,899 square feet)*
- *Surrounded by lush greenery and boasting unobstructed views of Singapore's Botanic Gardens*
- *Close to elite local and international educational institutions*
- *Two adjacent MRT stations provide convenient connectivity to the rest of the island*

信德集團
SHUN TAK HOLDINGS

Learn more
+65 6555 1010
www.parknova.com

A BOLD VISION OF THE FUTURE OF WORK

CapitaSpring in Singapore's central business district is ready to meet the needs of companies in a post-Covid world.

More than a year after the pandemic forced many office workers to operate out of their homes, the jury is still out on what the workplace will look like in a post-Covid-19 world.

While some benefits to working from home have been identified, the experience also comes with certain drawbacks. These include the lack of social interaction, reduced productivity and the blurring of boundaries between work and personal time.

Since early April, workers have started streaming back to the office as the Singapore government eased restrictions and allowed 75% of a firm's employees to be at the workplace at any one time, up from 50% previously.

As such, companies are likely to adopt a hybrid model that offer various workspace options for employees, with the office remaining a crucial part of workplace strategy.

Mr Chew Peet Mun,
Managing Director, Workspace and Residential, CapitaLand Singapore

Developer of the Future

CapitaLand, one of Asia's biggest real estate groups, has a bold vision of what the future of work will look like.

"Previously the conversation always centered around trying to squeeze more people into the same workplace, which should not be the main thrust of workspace planning. The pandemic has now shifted the conversation in the right direction, which is 'How do we make our workspace more productive,'" says Chew Peet Mun, Managing Director, Workspace and Residential, CapitaLand Singapore.

"While you can work anywhere, the growing realization as we talk to our tenants is that the office is most effective as a meeting point for collaboration, brainstorming and idea generation," Chew says.

"As a developer, our vision for the future is to create a robust CapitaLand ecosystem for our tenants, where a productive workspace is no longer just measured in physical square footage, but seen as portals within a hub, designed to bridge integral partnerships within an extended business network," he adds.

CapitaLand's upcoming premium Grade A integrated development, CapitaSpring, is the latest example of a future-proof building. It is mapped out with this ecosystem in mind, ensuring that its spatial design and programs respond to the current and future needs of tenants.

CapitaSpring, an iconic 51-story integrated development.

Community Builds Commercial Success

CapitaSpring will leverage its resources and those of the wider CapitaLand group to foster a community that benefits its tenants in a variety of ways. For instance, tenants can easily tap shared social activities and spaces in the building through the group's CapitaStar@Work app.

"We have all seen the negative effects of working in isolation during the pandemic. When you participate in activities inside our CapitaLand ecosystem, the network effect will multiply your efforts in a way that you won't be able to do if you are working at home or in silo," says Chew.

As part of its efforts to build an inclusive community, CapitaSpring will also have a dedicated Community Manager to actively foster partnerships and collaboration among the CapitaSpring community and curate unique activities tailored to the needs of tenants.

These programs will afford tenants new insight in areas such as sustainability and fintech, as well as offer a platform for serendipitous meetings between tenants and across CapitaLand's workspace portfolio for collaboration and new growth opportunities.

Enterprise suites on levels 39 and 40, managed by The Work Project.

City Room, a plaza designed for placemaking activities.

Choose Your Workspace

CapitaSpring's people-centric design was created with workplace flexibility in mind, allowing tenants to seamlessly work anywhere in the building.

Equipped with the latest WiFi 6 technology across the entire development and ample power points, employees can choose to plug-and-work at shared flexible work and social spaces throughout the building.

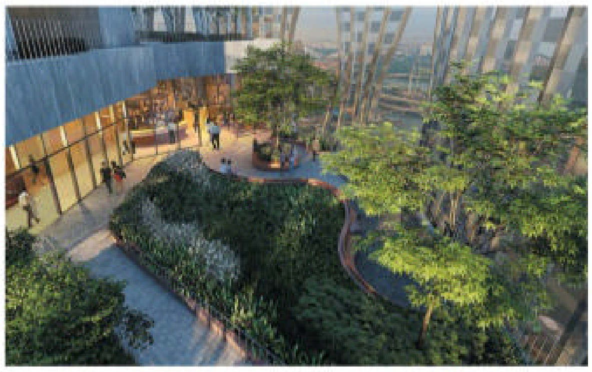
"Some individuals may find that some of these spaces are better suited to the way they work and collaborate, and they will also be closer to their main offices and the building's wider ecosystem. With these options, some people may find that working from home may not be the best choice for them," says Chew.

Core and Flex

One of CapitaLand's key strategies to help tenants future-proof their businesses is the "Core-Flex" workspace model, which has been deployed at CapitaSpring.

The Core-Flex workspace model refers to fully integrated solutions—from hot desks, meeting facilities, private offices to large enterprise suites—all in one building. Under this model, tenants can have the option to refine traditional office space (Core) with a host of flexible workspace options (Flex) in a lease according to their needs.

Around 10% of CapitaSpring's office net lettable area will be set aside for flexible workspaces, allowing companies to be more nimble and transform their workspaces efficiently in the face of a fast-changing business environment.



Rooftop Sky Garden, with Singapore's highest urban farm.

Through the Core-Flex model, CapitaSpring can more effectively support new and flexible requirements of conventional office tenants, as well as cater to the expansion needs of small and midsized enterprises. "The Core-Flex strategy gives tenants the flexibility to resize their workspaces to fit their changing requirements," explains Chew.

Leveraging Technology

Even before the Covid-19 pandemic, CapitaLand had planned to deploy advanced building technology aimed at improving user-experience, beefing up security and enhancing workplace wellness.

Features such as facial recognition access, a contactless destination control system and pre-registration for guests via CapitaStar@Work app serve to provide convenience, minimize contact and safeguard businesses for pandemic readiness.

CapitaSpring will also roll out a long-range wide area backbone network, a future-proof flexible approach that allows for swift deployment of IoT sensors in accordance to future market demand. Tenants will not only enjoy these services across the building's common spaces, but can choose to have them in individual offices.

Branding Still Matters

The relevance and importance of office spaces for the reputation and branding of businesses remain undisputed despite the work-from-home trend. While not all employees will return to a traditional office space in the short term, having a prestigious office space and location can still add a premium to a company's brand.

"The traditional office will remain an important space for staff engagement, fostering of workplace culture and building of social bonds; a place where serendipitous meetings can happen," says Chew. "We also believe that this is a time for new traditions to be forged for companies to succeed in this volatile climate. This is why we are confident CapitaSpring is the first important step in achieving our vision of the workspace of the future."

NEXT-GENERATION WORKSPACES

CapitaSpring will house a range of activity-based spaces that facilitate conversations, connections, creations and collaborations:

- *City Room, a plaza at ground level that blends into a public park and is equipped to support placemaking activities*
- *Green Oasis, a four-story botanical promenade interspersed with meeting and collaborative spaces, provides a respite from urban life*
- *Social spaces such as a yoga alcove and a show kitchen that facilitates bonding and fosters a sense of community*

Under the building's Core-Flex model, tenants can also utilize flexible shared amenities such as a digitally enabled auditorium and meeting facilities.

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NESTLED AMID NATURE

Hong Kong's latest residential development echoes its verdant surroundings to offer the ultimate in luxury green living.

Images
Adam Kuehl

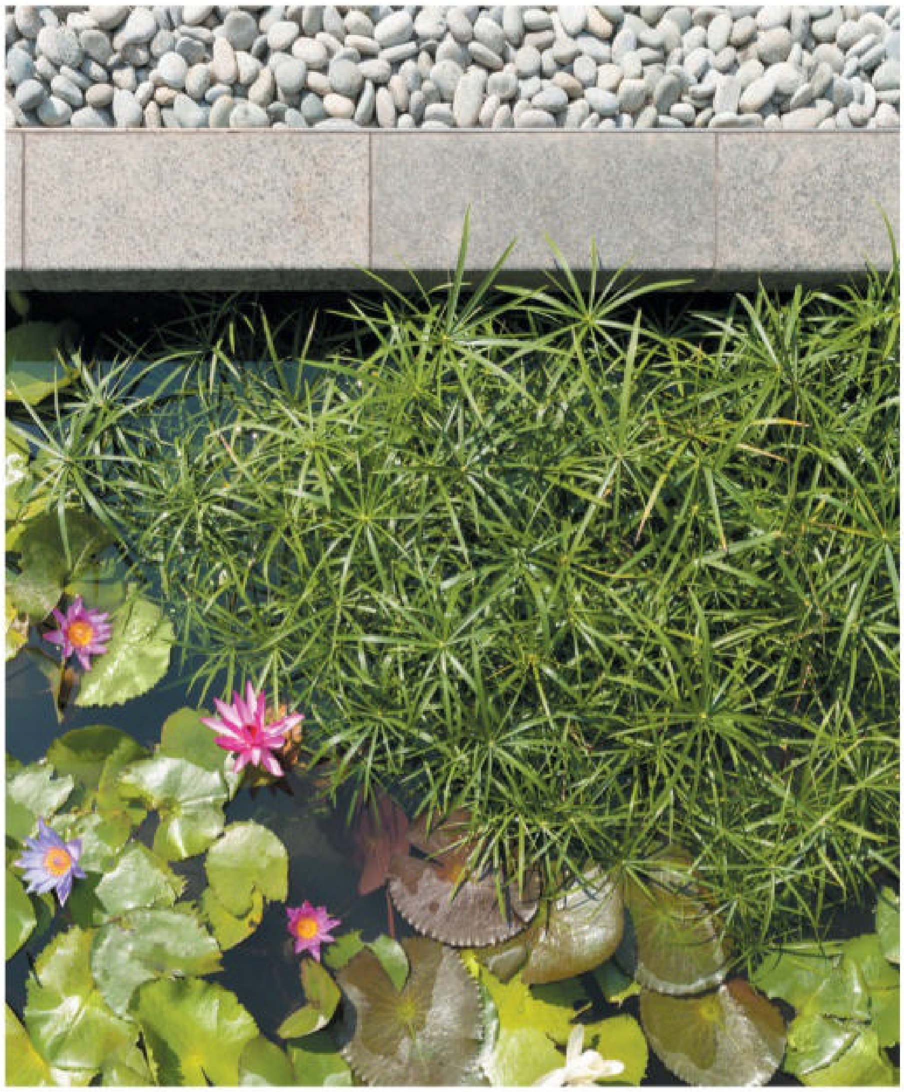
This page
At 8 Deep Water Bay Drive, nature is an intrinsic part of the design. Relaxing grounds are complemented by sensitive interventions such as the interconnected indoor and outdoor swimming pools.

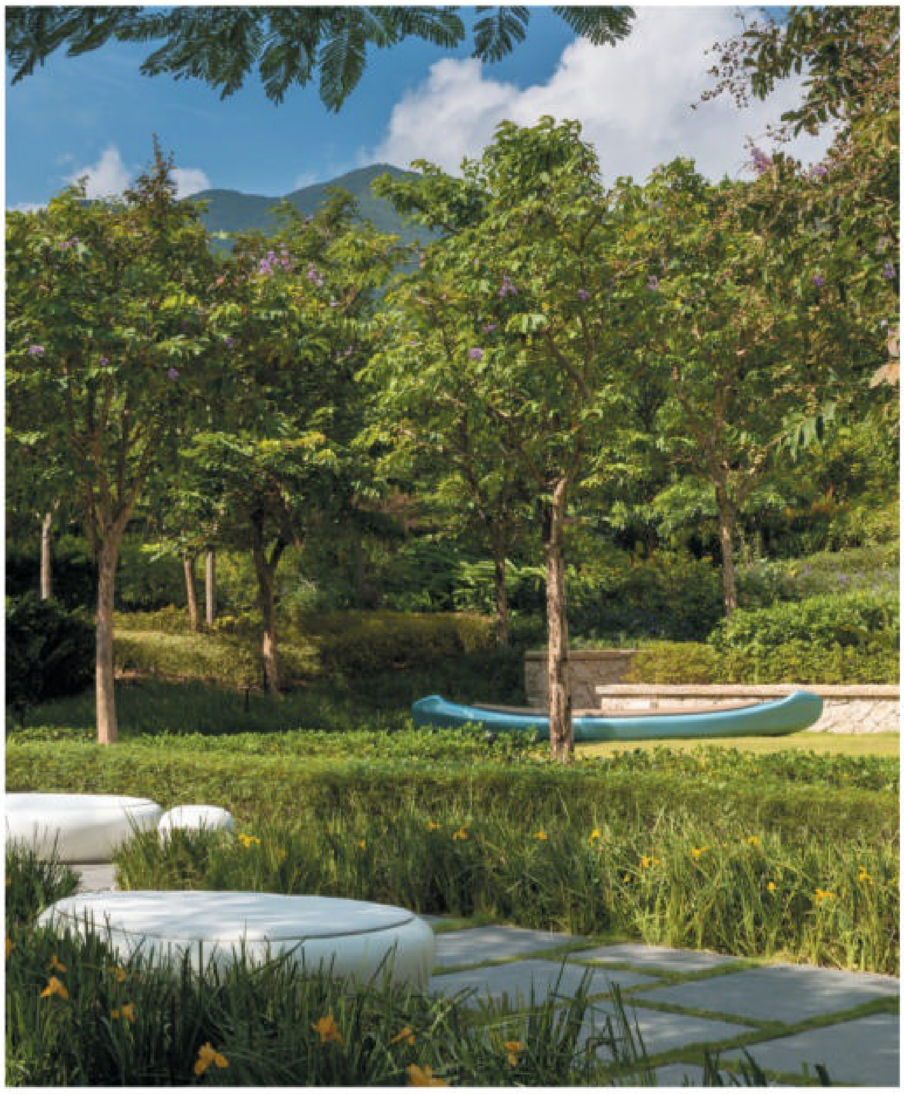
Facing page
The indoor and outdoor spaces connect and blend seamlessly, such as the Aura Point (top right) and the finely choreographed walking paths linking the thematic gardens, ponds and meditative spaces.

Sensitivity to context has always been a fundamental part of architecture but is often overlooked in favor of optimizing floor area. Occasionally, however, a partnership between developer and architect demonstrates the type of understanding of the surroundings that can elevate a building to something that imparts a more profound experience.

That is precisely what Nan Fung Group and Vervain Resources aimed to create at 8 Deep Water Bay Drive. The site is nestled amid Hong Kong's verdant and hilly southern side with outlooks toward Tai Tam to the east and Mount Cameron to the northwest. Architects from P&T Group designed along the contour of the hill, helping to make the entrance more approachable, rather than greeting residents with monolithic podium walls.

Nature has also been a critical part of the planning, in which the surrounding greenery translates to sculpted, multilevel green spaces within the grounds and openness to nature for each of the 52 apartments. Strolling past the expansive tower lobbies and through the clubhouse gallery path takes you to the development's centerpiece: the Metta Garden, a spiritual journey unveiling the beauty of flora by layers as an extension of each private living space. The grounds' grand entrance opens into the parterre, a gravel courtyard ringed by low stone walls and punctuated by the Iris Garden and Lily Pond on both sides. Trees flank the Sylvan Walk to create a romantic allée, complemented by an open lawn connecting the space with its surroundings. This is echoed by a green expanse called the Farm which seamlessly blends green living from the surrounding natural beauty with the interiors into a single transcendent whole. Listening, observing and responding authentically to the landscape immerses you in grace, a journey that can be completed through meditation or yoga at the Aura Point. Those who prefer more active relaxation are catered for by the interconnected 20-square-meter indoor and 25-square-meter outdoor pools—or just indulge yourself in the outdoor Jacuzzi.





Learn more
8deepwaterbaydrive.com

TOP 50 BILLIONAIRES

THE LIST

It's been a year like no other, and we aren't talking about the pandemic. There were rapid-fire public offerings, surging cryptocurrencies and skyrocketing stock prices. The number of billionaires simply exploded. *Forbes* found an unprecedented 2,755 around the world—660 more than a year ago. A staggering 86% are richer than they were then. Altogether they're worth $13.1 trillion, up from $8 trillion in 2020; their average net worth is $4.7 billion, $900 million more than last year. The U.S. still has the most billionaires, with 724, followed by Greater China with 698. We used stock prices and exchange rates from March 5, 2021, to calculate net worths. For the full list of the world's billionaires and our methodology, please visit **forbes.com/billionaires**.

1. Jeff Bezos ➤
$177 BIL ↑ • SOURCE: AMAZON
AGE: 57 • CITIZENSHIP: U.S.
Bezos' $64 billion jump keeps the Amazon founder, who is stepping down as CEO later in 2021, in the top spot for a fourth consecutive year.

2. Elon Musk ➤
$151 BIL ↑ • TESLA, SPACEX
AGE: 49 • U.S.
Musk's fortune rocketed $126 billion since March 2020 as Tesla shares soared; he briefly overtook Bezos as the world's wealthiest in January.

3. Bernard Arnault & family
$150 BIL ↑ • LVMH
AGE: 72 • FRANCE
The richest person in Europe closed several major deals, most notably LVMH's long-delayed acquisition of iconic jeweler Tiffany for a reduced price of $16 billion in January.

4. Bill Gates
$124 BIL ↑ • MICROSOFT
AGE: 65 • U.S.
The Microsoft cofounder, who left its board last year, is wealthier than he's ever been, buoyed in part by the software firm's surging stock.

5. Mark Zuckerberg
$97 BIL ↑ • FACEBOOK
AGE: 36 • U.S.
Continued U.S. congressional scrutiny has yet to dent Zuckerberg's fortune. Facebook shares are near record highs.

6. Warren Buffett
$96 BIL ↑ • BERKSHIRE HATHAWAY
AGE: 90 • U.S.
Berkshire Hathaway bought Dominion Energy's natural-gas pipelines for $8 billion in July, but the Oracle of Omaha has otherwise been relatively quiet during the pandemic.

7. Larry Ellison
$93 BIL ↑ • SOFTWARE
AGE: 76 • U.S.
The Silicon Valley titan reportedly moved to Hawaii during the pandemic. Oracle, meanwhile, which he cofounded in 1977, has relocated its headquarters from the San Francisco Bay Area to Texas.

8. Larry Page
$91.5 BIL ↑ • GOOGLE
AGE: 48 • U.S.

9. Sergey Brin
$89 BIL ↑ • GOOGLE
AGE: 47 • U.S.
The Google cofounders still serve on the board of Alphabet but otherwise maintain low profiles. Google has been under fire in Australia recently for what critics say is the search engine's role in weakening the media there.

10. Mukesh Ambani
$84.5 BIL ↑ • DIVERSIFIED
AGE: 63 • INDIA
Ambani reclaims his spot as Asia's richest person, adding nearly $48 billion to his fortune over the past year as shares of his conglomerate, Reliance Industries, have increased significantly.

11. Amancio Ortega
$77 BIL ↑ • ZARA
AGE: 85 • SPAIN
The founder of clothing giant Inditex–best known for its Zara retail chain–weathered the storm: Sales fell by nearly 30% in 2020 but its stock is up 34% over the year.

12. Françoise Bettencourt Meyers & family
$73.6 BIL ↑ • L'ORÉAL
AGE: 67 • FRANCE
The granddaughter of cosmetics giant L'Oréal's founder benefited from a 38% jump in the company's stock despite the fact that profits fell 6% in 2020.


WESLEY BEDROSIAN FOR FORBES

CHANGE IN WEALTH KEY: ↑ UP ↓ DOWN ↔ UNCHANGED ↻ RETURNEE ✦ NEW

THE SKY'S NO LIMIT

Jeff Bezos and Elon Musk saw their fortunes reach the stratosphere in the past year—with each rocket man amassing more than $150 billion as they battled to be the wealthiest person in the galaxy.

13. Zhong Shanshan

$68.9 BIL • BEVERAGES
AGE: 66 • CHINA

The September 2020 IPO of his bottled-water firm, Nongfu Spring, drove up his fortune by 3,345%, making him the year's biggest percentage gainer and China's new richest person.

14. Steve Ballmer

$68.7 BIL • MICROSOFT
AGE: 65 • U.S.

The former Microsoft CEO, who is worth $16 billion more since last year amid a 67% surge in the software firm's stock price, donated $54 million in 2020 to Covid-related causes such as vaccine testing and child care for essential workers.

15. Ma Huateng

$65.8 BIL • INTERNET MEDIA
AGE: 49 • CHINA

His web-media giant, Tencent, which owns stakes in Tesla and Snap, notched another win with the February public offering of video-sharing app Kuaishou. Tencent owns 18% of the firm.

16. Carlos Slim Helú & family

$62.8 BIL • TELECOM
AGE: 81 • MEXICO

The telecom mogul was briefly hospitalized with Covid-19 in January. His pan-Latin American wireless firm, América Móvil, ended 2020 with 287 million subscribers, up 3% in a year.

17. Alice Walton

$61.8 BIL • WALMART
AGE: 71 • U.S.

18. Jim Walton

$60.2 BIL • WALMART
AGE: 72 • U.S.

19. Rob Walton

$59.5 BIL • WALMART
AGE: 76 • U.S.

The children of Walmart founder Sam Walton own, with other family members, about half of the world's largest retailer. Walmart introduced free delivery as part of an Amazon Prime-like membership program, helping boost online sales 69% in the year through January.

20. Michael Bloomberg

$59 BIL • BLOOMBERG LP
AGE: 79 • U.S.

He smashed political spending records last year, pouring more than $1 billion into his own U.S. presidential campaign and $150 million to support other Democrats.

21. Colin Zheng Huang

$55.3 BIL • E-COMMERCE
AGE: 41 • CHINA

The founder of online discounter Pinduoduo stepped down as its chairman in March to pursue research in food and life sciences; he gave up his CEO role in July.

22. MacKenzie Scott
$53 BIL ↑ • AMAZON
AGE: 50 • U.S.
Jeff Bezos' ex-wife rocked the philanthropy world in 2020 with nearly $6 billion in grants to 500 nonprofits across the U.S., including Puerto Rico. She recently remarried.

23. Daniel Gilbert
$51.9 BIL ↑ • QUICKEN LOANS
AGE: 59 • U.S.
His Rocket Companies–America's largest mortgage lender–went public in August, boosting Gilbert's net worth by $38 billion in one day.

24. Gautam Adani & family
$50.5 BIL ↑ • INFRASTRUCTURE, COMMODITIES • AGE: 58 • INDIA
The infrastructure tycoon is nearly $42 billion richer than a year ago as shares of five publicly traded companies in his Adani Group hit their all-time highs.

25. Phil Knight & family
$49.9 BIL ↑ • NIKE
AGE: 83 • U.S.
The latest philanthropic effort from Nike's retired founder is a luxe, newly renovated track stadium at his alma mater, the University of Oregon.

26. Jack Ma
$48.4 BIL ↑ • E-COMMERCE
AGE: 56 • CHINA
The Alibaba cofounder has been lying low since the dual listing of his fintech giant, Ant Group, was halted by Chinese regulators in November.

27. Charles Koch
$46.4 BIL ↑ • KOCH INDUSTRIES
AGE: 85 • U.S.

27. Julia Koch & family
$46.4 BIL ↑ • KOCH INDUSTRIES
AGE: 58 • U.S.
Koch Industries, which Charles chairs, topped Cargill to become America's largest private company (as measured by revenue); the conglomerate hauled in $115 billion in sales in 2019. He and the family of Julia, the widow of his younger brother David (d. 2019), each have a 42% stake in the business.

29. Masayoshi Son
$45.4 BIL ↑ • INTERNET, TELECOM
AGE: 63 • JAPAN
After his SoftBank Vision Fund suffered a very public blow from its fraught WeWork investment, Son came roaring back with wins including IPOs for food-delivery app DoorDash and Korean e-commerce company Coupang.

30. Michael Dell
$45.1 BIL ↑ • COMPUTERS
AGE: 56 • U.S.
His fortune nearly doubled as shares of Dell Technologies hit an all-time high, thanks in part to record sales of $94.2 billion.

31. Tadashi Yanai & family
$44.1 BIL ↑ • FASHION RETAIL
AGE: 72 • JAPAN
The net worth of the Japanese apparel billionaire more than doubled as demand for Uniqlo's comfortable everyday clothes and its triple-layer masks surged during the pandemic.

32. François Pinault & family
$42.3 BIL ↑ • LUXURY GOODS
AGE: 84 • FRANCE
The founder of luxury conglomerate Kering is finally opening his long-awaited art museum in the 19th-century Bourse de Commerce building in Paris this year.

33. David Thomson & family
$41.8 BIL ↑ • MEDIA
AGE: 63 • CANADA
Canada's richest person is the chairman of publicly traded media giant Thomson Reuters, whose shares are up 16% in the past year.

34. Beate Heister & Karl Albrecht Jr.
$39.2 BIL ↑ • SUPERMARKETS
GERMANY
The siblings inherited the discount retailer Aldi Sued. During the pandemic, its stores began using 3D sensors to measure customer traffic and regulate access.

35. Wang Wei
$39 BIL ↑ • PACKAGE DELIVERY
AGE: 50 • CHINA
Revenue of his S.F. Express–the "FedEx of China"–rose 37% in 2020 as e-commerce boomed during China's Covid-19 lockdowns.

36. Miriam Adelson
$38.2 BIL ✦ • CASINOS
AGE: 75 • U.S.
The widow of Sheldon Adelson (d. January 2021) now controls 56% of casino operator Las Vegas Sands, which is cashing out of Vegas to focus on Asia.

37. He Xiangjian
$37.7 BIL ↑ • HOME APPLIANCES
AGE: 78 • CHINA
The cofounder of electric-appliance maker Midea Group reportedly escaped a kidnapping attempt last June, when several men tried to break into his home using explosives.

38. Dieter Schwarz
$36.9 BIL ↑ • RETAIL
AGE: 81 • GERMANY
Sales of the Schwarz Group, owner of Kaufland and Lidl discount supermarkets, are expected to have risen 23%, to $170 billion, in the year through February 2021.

39. Zhang Yiming
$35.6 BIL ↑ • TIKTOK
AGE: 37 • CHINA
Zhang founded ByteDance, creator of popular short-video app TikTok, in a four-bedroom apartment in 2012. Its December funding round valued the unicorn at $180 billion.

40. Giovanni Ferrero
$35.1 BIL ↑ • NUTELLA, CHOCOLATES • AGE: 56 • ITALY
The chairman of the Ferrero Group, known for its Nutella, Tic Tac and Kinder brands, added a stake in Britain's Fox's Biscuits to his chocolate and confectionery empire.

41. Alain Wertheimer
$34.5 BIL ↑ • CHANEL
AGE: 72 • FRANCE

41. Gerard Wertheimer
$34.5 BIL ↑ • CHANEL
AGE: 70 • FRANCE
The brothers–grandsons of Chanel cofounder Pierre Wertheimer–are each $17 billion richer than last year amid a rebound in the luxury sector.

43. Li Ka-shing
$33.7 BIL ↑ • DIVERSIFIED
AGE: 92 • HONG KONG
Hong Kong's richest person gained $12 billion, thanks to his holdings overseas, including stakes in videoconference firm Zoom and energy-drink maker Celsius.

44. Qin Yinglin & family
$33.5 BIL ↑ • PIG BREEDING
AGE: 55 • CHINA
Qin founded China's top hog producer in 1992 with wife Qian Ying and just 22 pigs. He's still the chairman; she sits on the board.

45. William Lei Ding
$33 BIL ↑ • ONLINE GAMES
AGE: 49 • CHINA
Revenue at his Nasdaq-listed NetEase rose 24% in 2020 as pandemic lockdowns drove demand for its online-gaming and remote-learning products.

46. Len Blavatnik
$32 BIL ↑ • MUSIC, CHEMICALS
AGE: 63 • U.S.
Blavatnik's Warner Music is worth nearly $18 billion after going public in June 2020, more than five times what the mogul paid for it in 2011.

47. Lee Shau Kee
$31.7 BIL ↑ • REAL ESTATE
AGE: 93 • HONG KONG
Shares of his Henderson Land seesawed during the pandemic but ended up for the year, though still well off their all-time high.

48. Jacqueline Mars
$31.3 BIL ↑ • CANDY, PET FOOD
AGE: 81 • U.S.

48. John Mars
$31.3 BIL ↑ • CANDY, PET FOOD
AGE: 85 • U.S.
Each of the Mars siblings owns an estimated one-third of the $40 billion (sales) candy, pet care and food company. Best known for M&M's and Skittles, Mars Inc. acquired snack bar maker Kind in November 2020, three years after it took a minority stake.

50. Yang Huiyan & family
$29.6 BIL ↑ • REAL ESTATE
AGE: 39 • CHINA
The heiress is the largest shareholder of real estate developer Country Garden Holdings; she also chairs U.S.-listed education firm Bright Scholar Education Holdings.

JAVIER ROJAS/NEWSCOM; VGC/GETTY IMAGES

CHANGE IN WEALTH KEY: ↑ UP ↓ DOWN ↔ UNCHANGED ↻ RETURNEE ✦ NEW

Deceased

LEFT THEIR MARK

Twenty-three billionaires from 15 countries died in the past year, including the list's two centenarians, Chang Yun Chung and Marcel Adams.

By Hank Tucker

Sheldon Adelson

AGE: 87

The casino magnate and GOP megadonor built Las Vegas Sands into an empire, amassing a $35 billion fortune, and made bold gambles to rescue the company from near-failure during the Great Recession.

Lee Kun-hee

AGE: 78

Lee inherited Samsung Group in 1987 from his father, founder Lee Byung-chull, and built it into South Korea's biggest conglomerate. Twice pardoned for bribery and tax charges, he had been in a coma since 2014.

Joseph Safra

AGE: 82

The world's richest banker, worth $23 billion, he owned three banks on three continents, London's Gherkin skyscraper and 50% of banana producer Chiquita.

Benjamin de Rothschild

AGE 57

The heir to Edmond de Rothschild, the European bank founded in 1953 by his father, he died of a heart attack in January. His widow, Ariane de Rothschild, has been chair of the bank since 2015.

IN MEMORIAM

Marcel Adams
AGE: 100 • Real estate

Edmund Ansin
84 • Television

Jeronimo Arango
94 • Retail

David Barclay
86 • Media, retail

Stephen Bechtel Jr.
95 • Construction

Dmitry Bosov
52 • Coal mining

Chang Yun Chung
102 • Shipping

Eduardo Cojuangco
85 • Food, drinks

Olivier Dassault
69 • Diversified

Aloysio de Andrade Faria
99 • Banking

Manuel Jove
78 • Real estate

Suna Kirac
79 • Diversified

Manuel Moroun
93 • Transportation

Park Yeon-cha
74 • Sneakers

Sumner Redstone
97 • Media

Randall Rollins
88 • Pest control

Sheldon Solow
92 • Real estate

Heinz Hermann Thiele
79 • Brakes

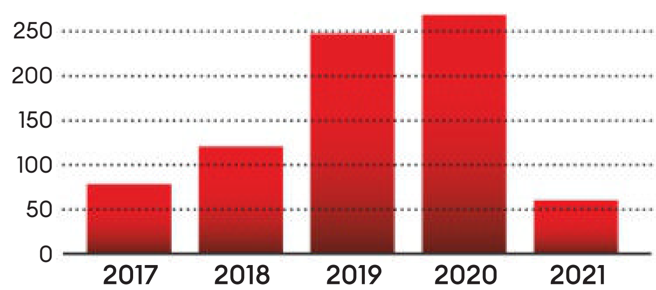
Arne Wilhelmsen
90 • Cruise ships

Drop-offs

KYLIE'S FANTASTICAL FORTUNE

Just 61 of last year's billionaires fell out of the ranks due to fortunes that dropped below $1 billion. That's one-fourth as many as in 2020 and the lowest number in a decade. One noteworthy departure: Kylie Jenner, gone after Coty's filings revealed that revenues for Kylie Cosmetics were less than half of what her team trumpeted to inflate her net worth.

Number of billionaire drop-offs (excluding deceased)



MARTIN SCHOELLER FOR FORBES; LEE JIN-MAN/AP; NEWSCOM; GARI GARAIALDE/GETTY IMAGES; JAMEL TOPPIN FOR FORBES

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Private Bank

A BILLIONAIRE A DAY

THIS YEAR, *FORBES* TRACKED DOWN A RECORD 493 NEW BILLIONAIRES—ROUGHLY ONE EVERY 17 HOURS. JUST OVER 40% HAIL FROM CHINA; 20% FROM THE U.S. PROMINENT ROUTES TO NEW RICHES: IPOs, SPACs, CRYPTOCURRENCIES AND COVID-RELATED HEALTH CARE.

THE LIST

IPOs

Since mid-March 2020, 1,489 IPOs (including SPACs) raised $314 billion globally. More than half went public in the U.S., where they raised $277 billion. These 10 billionaires land on the list as a result of such public offerings.

Pan Dong
$8.3 billion • Consumer goods • Canada
The richest woman new to this year's list, she chairs laundry detergent maker Blue Moon Group Holdings, which listed in Hong Kong in December. Her husband, Luo Qiuping, is the company's CEO.

Vyacheslav Kim
$3.3 billion • Fintech • Kazakhstan
Mikhail Lomtadze
$3.2 billion • Fintech • Georgia
CEO Lomtadze and chairman Kim have steered Kaspi–a payments, e-commerce and mobile-banking app used in Kazakhstan–from a small-time retail bank to a London public listing. Half of Kazakhstan's 18 million people use the service.

Pablo Legorreta
$2.9 billion • Investments • U.S.
The former investment banker founded private equity firm Royalty Pharma in 1996 to buy future revenue streams of pharmaceuticals. He took it public on the Nasdaq in June.

Matt Moulding
$2.9 billion • E-commerce • U.K.
His e-commerce empire, The Hut Group, went public in London in September. Two months later he got a $1 billion share bonus that the board had approved.

Tony Xu
$2.8 billion • Food delivery service • U.S.
Xu is cofounder and CEO of food delivery company DoorDash, which listed on the NYSE in December. It delivers meals from 390,000 restaurants in the United States, Canada and Australia.

Jared Isaacman
$2.3 billion • Payment processing • U.S.
Isaacman, 38, founded payment processing firm Shift4 Payments in his parents' basement at age 19 and took it public on the NYSE in June. He flies fighter jets for fun, including a Soviet-era MiG-29.

Bang Shi-hyuk
$2.3 billion • Entertainment • South Korea
Founder of music label and agency Big Hit Entertainment, which represents the wildly popular K-pop band BTS, he took the company public on the Korea Exchange in October.

Gong Yingying
$2.1 billion • Health IT • China
She is CEO, chair and founder of healthcare analytics firm Yidu Tech, which listed its shares in Hong Kong in January.

David Helgason
$1 billion • Software • Iceland
Helgason cofounded video-game software developer Unity Software in Denmark in 2004 and served as CEO until 2014; the company listed on the NYSE in September.

JAMEL TOPPIN FOR FORBES

WHITNEY WOLFE HERD

$1.3 billion • Dating app • U.S.

Wolfe Herd, 31, took her woman-centric dating app, Bumble, public in February—becoming the world's youngest self-made female billionaire. The $582 million (revenue) company has 42 million customers in 150 countries. She cofounded dating app Tinder in 2012. That relationship turned sour, and she settled a sexual-harassment lawsuit with Tinder in 2014. Andrey Andreev, the Russian founder of dating site Badoo, offered Wolfe Herd a $10 million investment and Badoo's infrastructure, and the duo launched Bumble in 2014. In late 2019, Andreev sold his majority stake to investment firm Blackstone, four months after a *Forbes* investigation revealed a toxic work culture at its London offices. Badoo denied the allegations.

AUSTIN RUSSELL

$2.4 billion • Sensors • U.S.

Russell, 26, spent his teens doing research at the University of California at Irvine's Beckman Laser Institute. The entrepreneur dropped out of Stanford in 2012 to found laser lidar (an acronym for *light, detection and ranging*) startup Luminar Technologies after getting a $100,000 fellowship from billionaire tech investor Peter Thiel. Its sensors now help self-driving cars of customers such as Volvo, Toyota and Intel's Mobileye see in 3D by bouncing laser beams off nearby objects and vehicles' surroundings. The company listed on the Nasdaq via a SPAC merger with Gores Metropoulos in December 2020. Russell, who owns about one-third of it, became the world's youngest self-made billionaire overnight.

SPACs

Special purpose acquisition companies, or SPACs, have become all the rage. More than 500 of these "blank-check" companies have gone public in the U.S. in the past year, nearly seven times the number in the previous year. But only a handful minted new billionaires.

Mat Ishbia
$9.7 billion • Mortgage lending • U.S.

Justin Ishbia
$3 billion • Mortgage lending • U.S.

The Ishbias' father, Jeff, launched a mortgage firm in 1986. Mat joined the mom-and-pop outfit in 2003. He and his brother Justin, a private equity investor, eventually bought most of their dad's stake in United Wholesale Mortgage. Now the nation's second-largest mortgage lender, UWM merged with the Gores Holdings IV SPAC in January; Mat is CEO and Justin is a board member.

Andrew Paradise
$2.3 billion • Mobile games • U.S.

Skillz, the e-sports company Paradise cofounded in 2012, provides a mobile platform for developers to host daily tournaments of games like solitaire and bingo. Its $230 million in revenue comes from its cut of users' entry fees.

William Foley
$1.9 billion • Financial services • U.S.

The former insurance tycoon was quick to capitalize on the SPAC boom, sponsoring six blank-check companies to date. Two have recently announced mergers—with cloud-based software provider Alight Solutions and digital-payments platform Paysafe—in deals valued at just over $7 billion and $9 billion, respectively.

Shalom Meckenzie
$1.7 billion • Sports betting • Israel

His gambling-technology provider, SBTech, merged with sports betting site DraftKings and went public via a SPAC in April 2020. He serves on the board and is one of DraftKings' largest shareholders, with a nearly 6% stake.

Geeta Gupta-Fisker
$1.6 billion • Electric vehicles • U.K.

Henrik Fisker
$1.6 billion • Electric vehicles • U.S.

Famed car designer Henrik Fisker and his wife, Geeta, who has a Ph.D. in biotech, took their eponymous EV maker public in October; production of its first vehicle, a midsize SUV, is planned to start in late 2022.

Trevor Milton
$1.4 billion • Electric vehicles • U.S.

His hydrogen-electric truck startup, Nikola, went public via a SPAC in June 2020. He resigned as chairman in September after allegations by a short seller that he lied about Nikola's technology to investors, spurring a review by the SEC.

Chamath Palihapitiya
$1.2 billion • Facebook, venture capital • U.S.

After helping open the SPAC floodgates by taking Richard Branson's space tourism company, Virgin Galactic, public in 2019, SPAC sponsor and venture capitalist Palihapitiya acquired two more firms via SPACs in the past year: home-buying marketplace Opendoor and insurance company Clover Health.

MICHAEL PRINCE FOR FORBES

CHINA

The world's most populous nation boasts a record 626 billionaires (excluding Hong Kong and Macau); its red-hot stock market helped mint 205 new ten-figure fortunes, with half coming from manufacturing or tech. All but two were self-made. Here are 11 standouts.

Chen Zhiping
$15.9 billion • E-cigarettes
The founder of the world's largest manufacturer of vaping devices, Smoore International, Chen took the firm public on the Hong Kong Stock Exchange last July.

Li Hua
$7.1 billion • Financial services
An early employee at Tencent, Li founded Nasdaq-listed online brokerage Futu Holdings in 2007. The Robinhood-style fintech boasts nearly 12 million users.

Wang Junlin
$6.3 billion • Liquor
The turnaround artist revived two state-owned companies before arriving at struggling liquor producer Sichuan Langjiu in 2001. It now churns out more than 40,000 tons of alcohol a year.

Wang Ning
$6.3 billion • Toys
In December, Wang took public his toymaker, Pop Mart, which is known for concealing the identity of its figurines in "blind boxes."

Jian Jun
$5.6 billion • Biomedical products
Her Shenzhen-listed Imeik Technology Development makes medical cosmetic products like skin fillers and facial implant threads, as well as face and neck masks.

Cao Renxian
$5.3 billion • Solar power
A university professor, Cao founded Sungrow Power Supply in 1997. Its products, used in 150 countries, convert direct-current electricity from solar panels into alternating current for the power grid.

Steven Meng Yang
$4.2 billion • Electronics
A former Google engineer, he founded popular Amazon seller Anker Innovations Technology, known for its battery packs, phone chargers and other electronic accessories.

Liu Fangyi
$4.2 billion • Medical equipment
Stock of his Intco Medical Technology, which makes disposable medical products like masks and gloves, shot up 650% in the past year amid the pandemic.

Li Xiang
$4 billion • Electric vehicles
The 39-year-old founded NYSE-listed online car dealer Autohome before creating electric vehicle startup Li Auto, which debuted on the Nasdaq last July.

Jin Baofang
$3.9 billion • Solar panels
Jin is founder and chair of JA Solar, a Beijing-based solar panel producer that boasts 33,000 clients in 135 countries and regions.

STEFEN CHOW FOR FORBES

KATE WANG

$5 billion • E-cigarettes

One of the world's youngest self-made female billionaires, Wang, 39, is CEO of Chinese vaping company RLX Technology. The Columbia Business School grad got the idea for the company in 2017, when she was trying to persuade her father to quit smoking. "I tried out all the [vaping] products. Most of them were terrible," she tells *Forbes*. RLX posted $324 million in sales in the first nine months of 2020 and listed on the New York Stock Exchange in January. Wang has a 20% stake. Shares fell 54% over three days in late March (after *Forbes* measured net worths for the Billionaires list) in response to Chinese authorities publishing draft rules that would regulate e-cigarettes as tobacco products.

VIRGILE SIMON BERTRAND FOR FORBES

SAM BANKMAN-FRIED

$8.7 billion • U.S.

An MIT grad and former Wall Street trader, Bankman-Fried, 29, is the founder and CEO of quantitative crypto trading firm Alameda, which manages $32 billion in bitcoin and other major cryptocurrencies as well as their derivatives. He also founded Hong Kong–based crypto exchange FTX, which achieved unicorn status in January 2020, less than a year after its May 2019 launch. The exchange will soon replace American Airlines as the naming-rights sponsor of the home arena of U.S. basketball team Miami Heat. The vast majority of Bankman-Fried's wealth is in FTX's equity and FTT tokens, the native cryptocurrency of FTX. In 2020, he gave $5 million to a pro-Biden super PAC, making him one of the U.S. president's biggest donors.

CRYPTO

Boom times (again) in cryptocurrency—bitcoin has skyrocketed 800% since the middle of March 2020 and Ripple's XRP is up 200%—have landed these nine fresh faces on the list.

Cameron Winklevoss
$3 billion • U.S.

Tyler Winklevoss
$3 billion • U.S.

The twin brothers own an estimated 70,000 bitcoin, plus the crypto exchange Gemini, which processes about $200 million a day in trades.

Michael Saylor
$2.3 billion • U.S.

The CEO of software firm MicroStrategy made, and lost, a fortune during the first dot-com bust. He debuts now after snapping up bitcoin ahead of the boom–for both himself and his company–pushing its stock up.

Jed McCaleb
$2 billion • U.S.

He created Mt. Gox, the first major bitcoin exchange, before cofounding Ripple in 2012. He soon left due to reported disagreements with fellow founders but still holds an estimated 3.4 billion XRP, Ripple's token.

Fred Ehrsam
$1.9 billion • U.S.

The former Goldman Sachs trader owns 6% of crypto exchange Coinbase, which he cofounded in 2012 and which is poised to go public on the Nasdaq; he remains a board member.

Barry Silbert
$1.6 billion • U.S.

His Digital Currency Group, a conglomerate of five blockchain-focused companies, includes crypto asset manager Grayscale, which oversees some $44 billion worth of bitcoin, ether and other assets.

Tim Draper
$1.5 billion • U.S.

The Silicon Valley VC bought $18.7 million worth of bitcoin confiscated by U.S. Marshals from the shuttered Silk Road black market in 2014. They are now worth $1.5 billion.

Matthew Roszak
$1.5 billion • U.S.

A longtime crypto evangelist, Roszak worked in venture capital and as an entrepreneur before amassing a portfolio of bitcoin, ether and other cryptocurrencies starting in 2012.

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COVID-19

At least 40 new billionaires join the list this year thanks to their involvement in the global effort to fight the Covid-19 pandemic. Some made their fortunes developing new vaccines and promising antibody treatments, while others sell much-needed diagnostic tests and personal protective equipment.

Stéphane Bancel
$4.3 billion • Biotech • France
Shares of Moderna, where he has been CEO since 2011 and whose Covid-19 vaccine was approved in the U.S. in December, rose 319% in the past year.

Uğur Şahin
$4 billion • Biotech • Germany
The Turkish-born physician cofounded BioNTech, which developed a Covid-19 vaccine in partnership with Pfizer; his wife, Özlem Türeci, is chief medical officer. The stock doubled since mid March 2020.

Yuan Liping
$3.6 billion • Pharmaceuticals • Canada
Yuan got a 24% stake in Chinese vaccine producer Shenzhen Kangtai Biological Products after her divorce from the company's chairman (and fellow billionaire), Du Weimin, last year.

Hu Kun
$2.5 billion • Medical devices • China
Chairman of newly public Contec Medical Systems, which makes pulse oximeters and devices used to check lung conditions.

Noubar Afeyan
$1.9 billion • Biotech • U.S.
The founder of life-sciences VC firm Flagship Pioneering, through which he owns shares in a dozen publicly traded biotech companies, is also chairman of Moderna.

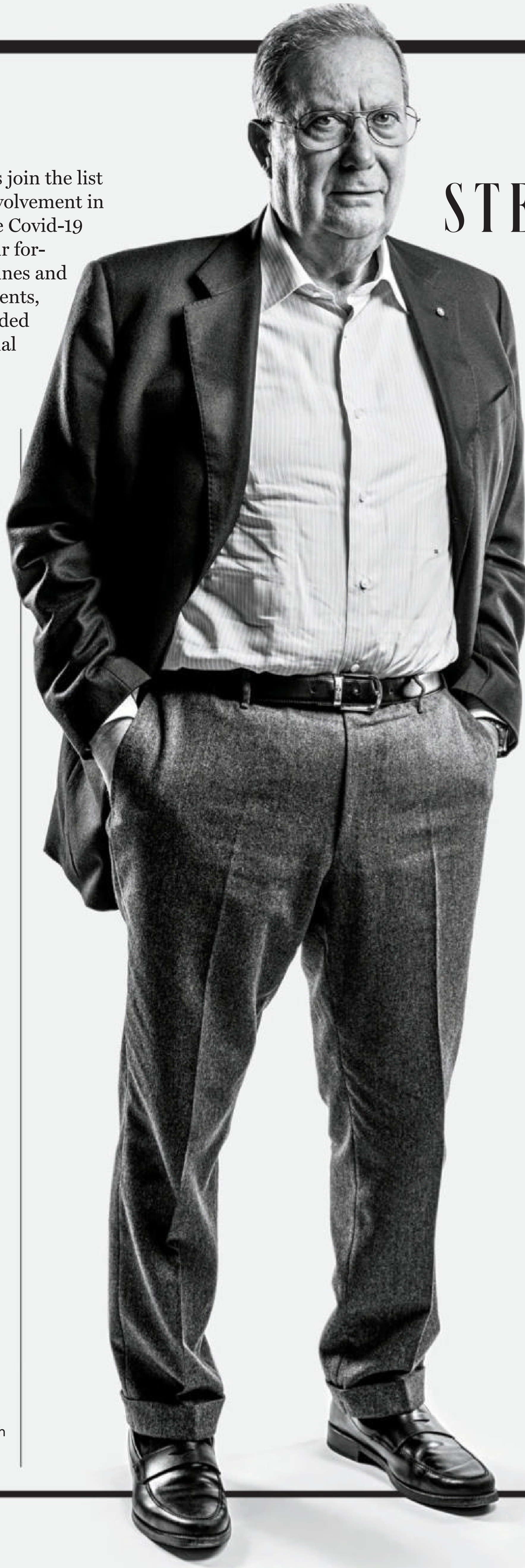
Carl Hansen
$1.8 billion • Biotech • Canada
Former college professor cofounded AbCellera Biologics to identify antibody treatments; it partnered with Eli Lilly, which led to an FDA-authorized Covid-19 therapy.

Robert Langer
$1.6 billion • Biotech • U.S.
One of four new Moderna billionaires, the MIT professor dubbed "the Edison of Medicine" owns a 3% stake in the company, which he helped start in 2010.

Arvind Lal
$1.5 billion • Laboratories • India
Shares of his listed diagnostics chain, Dr. Lal PathLabs, soared 57% amid the pandemic as it ramped up testing for Covid-19.

Prathap Reddy
$1.5 billion • Hospitals • India
A doctor, he runs publicly traded hospital chain Apollo Hospitals Enterprise. Shares doubled in the past year amid the hospitals' focus on treating and diagnosing Covid-19.

Jack Schuler
$1.1 billion • Diagnostics • U.S.
Former Abbott Labs president, now a biotech investor, he owns 7% of diagnostics firm Quidel Corp., which makes Covid-19 tests.



STEVANATO GROUP

SERGIO STEVANATO

$1.9 billion • Medical packaging • Italy

Covid-19 vaccines are housed in tiny glass vials—many of them made by the family-owned Stevanato Group, where Stevanato, 78, is the chairman of the board emeritus. Stevanato Group is supplying vials for about 15% of the Covid-19 vaccines tracked by the World Health Organization. That includes 100 million vials shipped to a Gates Foundation–backed group that's helping to scale 10 different vaccines, including those from Moderna and AstraZeneca. Founded on the outskirts of Venice in 1949 by Sergio's father, Giovanni, the Stevanato Group started out making glass bottles for wine before pivoting to the pharmaceutical industry in the 1960s. Sergio stepped down as CEO in 2010 but still owns a 68% stake in the company; his son Franco is executive chairman.

AMTD | IDEA

We Innovate We Build

AMTD Group is a comprehensive conglomerate in Asia, with businesses to span across investment banking, institutional asset management, digital solutions, real estate and hospitality, and education. AMTD Group is a global Strategic Partner Associate of the World Economic Forum. AMTD International (NYSE: HKIB; SGX: HKB), a subsidiary of AMTD Group, is a leading independent investment bank in Asia. AMTD Group has created a unique "AMTD SpiderNet" ecosystem to maximize the ecological network effect and enable knowledge exchange, synergized collaboration, and value creation. AMTD Charity Foundation has been established to promote technological development and talent cultivation, serve global charities and undertake corporate social responsibility.

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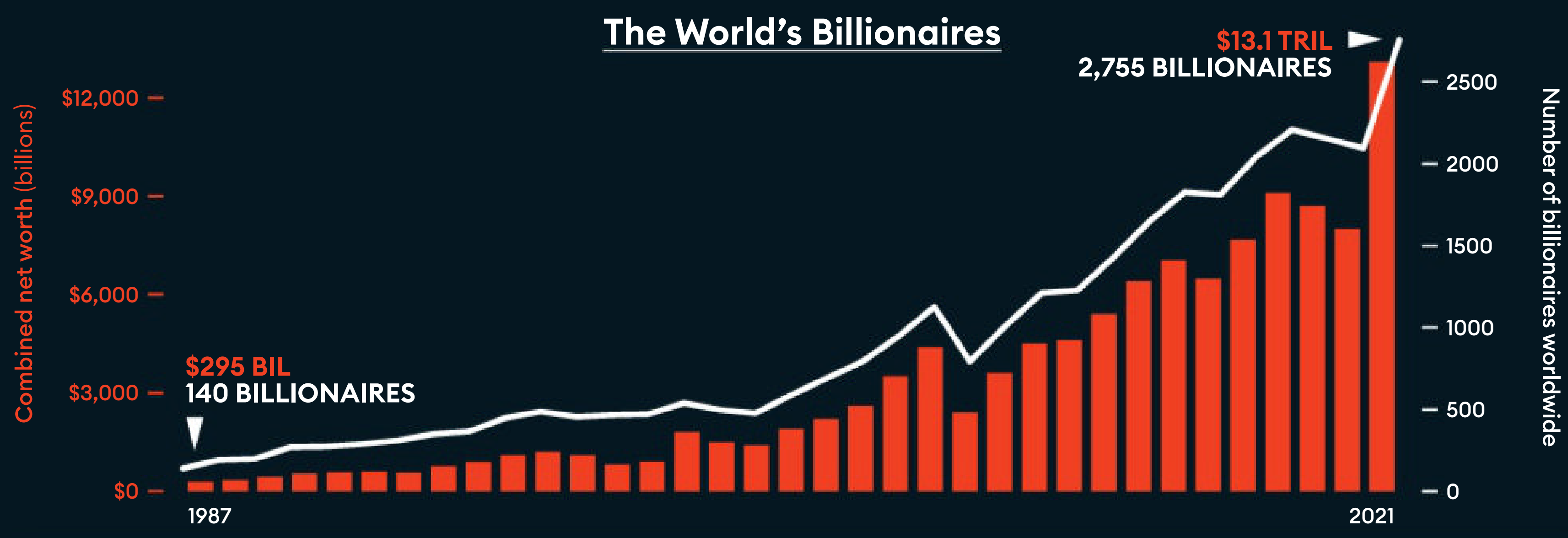
Glocalisation — Global Connectors, Local Leaders

"More international than local,
more local than international." — Calvin Choi

OPER WEALTH

Covid-19 brought terrible suffering, economic pain, geopolitical tension—and the greatest acceleration of wealth in human history. Why this pandemic paradox could become a cause for celebration, not concern.

ATION SPEED



BY **RANDALL LANE**

On March 18, 2020, the United States registered its 150th coronavirus-related death while trying to gauge, along with most of the world, just what was happening. Major market indices fell 5% after jumping 6% the previous day. University students on spring break partied blithely in Florida while U.S. officials decided to close the border with Canada. And a statistical team at *Forbes* locked the numbers for our 34th annual ranking of the world's billionaires, unwittingly creating a snapshot of global wealth at the precise moment the world lurched into its most disruptive 12 months since World War II.

Over the ensuing year, those 150 U.S. deaths swelled to 550,000; some 3 million souls were lost worldwide. Tens of millions of jobs evaporated, along with hundreds of thousands of small businesses. Remote work went from exotic to standard. The suburbs went from dull to desired. The death of George Floyd, an African-American man killed during an arrest in Minneapolis, triggered a reckoning concerning race and social justice. The U.S. presidential election tested democratic norms. Simultaneously, though, many individuals, industries and investments thrived.

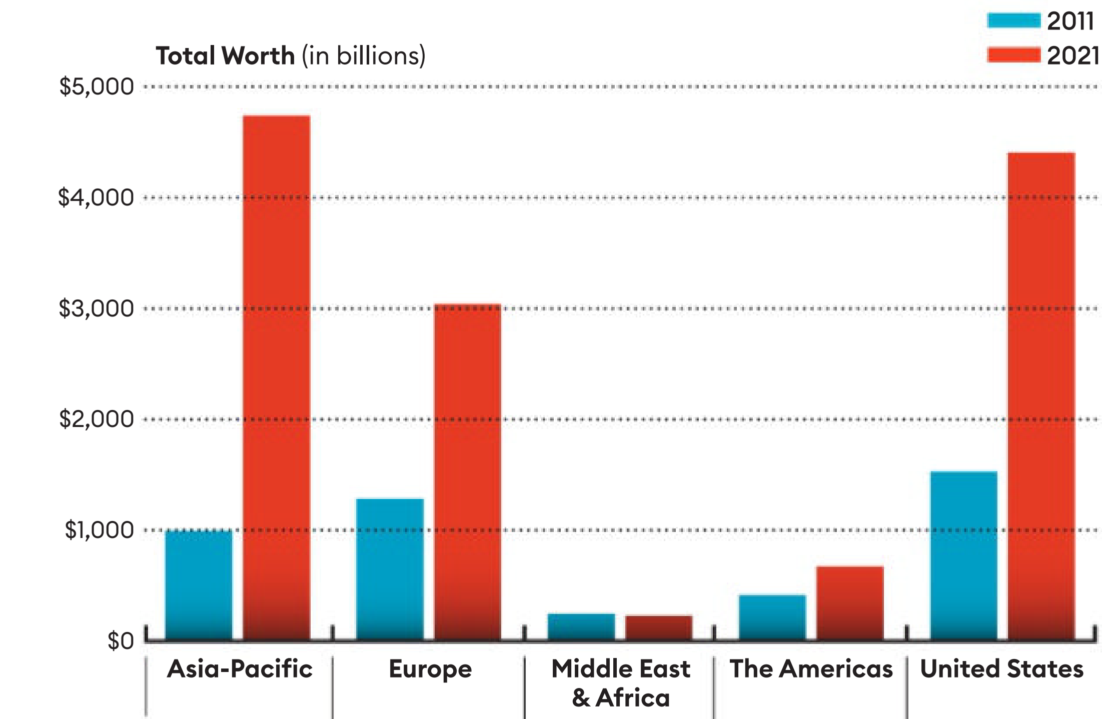
One year after that fortuitously timed snapshot, we repeated our March billionaires audit, taking the measure, at the point of the pyramid, of the past year's seismic changes. The results defy hyperbole. Over the past 12 months, 493 people worldwide joined the *Forbes* list—a newly minted billionaire every 17 hours. Rising asset prices vaulted another 250 previous drop-offs back over the ten-digit mark. Amid widespread economic insecurity, precious few billionaires fared worse financially: Just 61 dropped off the list for reasons other than death, representing the lowest percentage of drop-offs for any year on record. All told, *Forbes* estimates that there are now 2,755 billionaires globally, up from 2,095 last year, and the notion that the rich get richer has never been more apt: They're worth, in aggregate, $13.1 trillion—a staggering $5.1 trillion more than at the start of the pandemic.

These figures will engender endless amounts of consternation, most of it justified. There's no getting around a collective $5 trillion wealth surge during a pandemic, when most of the world felt scared, sick, besieged. Capitalism, the greatest system ever for generating prosperity, rests upon a social compact of expansion, unequal by design, ultimately lifting all boats. The Covid-19 economy has strained that concept; yawning economic disparity poses arguably the greatest threat to modern social order.

But as miraculous vaccines chart a course back to normalcy, the factors driving these numbers conjure a different emotion: *optimism.* The pandemic's most enduring positive legacy will turn out to be as an accelerant, compressing decades of change into one year. And the newly super-rich, proxies for opportunity, or lack thereof, have never felt more different, looked more different or acted more different. It's worth spending some time to deduce why.

We're at that rarest of inflection points—the kind that's apparent even as it happens. Vaccines will wash across the planet at the same time the global economy seems primed to roar back. And while the initial reaction to the billionaire surge of 2021, a newcomer tally 70% larger than any we've logged before, will lean toward outrage, the underlying trends offer a road map to greater prosperity for all. Like anything else salvaged from a once-a-century plague, we just need to be brave enough to harness it.

Asia Ascendant



Profile Count	Asia-Pacific	Europe	Middle East & Africa	The Americas	United States
2011	332	299	89	76	413
2021	1,149	628	85	169	724

For pretty much all of human history, wealth has been dynastic. The John D. Rockefellers and Henry Fords of a century ago launched the first era of entrepreneurship, but even those successes turned into entrenched family wealth. The very first Forbes 400 list of the richest Americans, in 1982, remained chock-full of their progeny, as well as plenty of Mellons, DuPonts and the like—some 63% of that inaugural Rich List pretty much inherited it. Many of the rest had a background that involved starting life on first, second or third base, in the mold of Rupert Murdoch or Donald Trump.

The technology revolution changed that dynamic, here and around the world. By 2002, a slim majority, 52%, of the *Forbes* global billionaires were self-made, including 59% of Americans. Ten years ago, that total had jumped to 69% globally.

The 493 new members of the Covid Newcomers of 2021, however, are in a class by themselves: 84% of them are self-made (including 90% of Americans), swelling the figure among billionaires overall to 72%—a record in each case. People like Whitney Wolfe Herd, who flipped the script on dating apps by empowering women; Tyler Perry, who started producing his own movies and television shows in Atlanta because no one would give him a break in Hollywood; and Uğur Şahin, the Turkish immigrant to Germany whose BioNTech helped produce a Covid-19 vaccine in months rather than years—all embody economic dynamism, not bloodline dynasties.

Opportunity stems from this dynamism, as these new billionaires illustrate. A decade ago, the median length of time it took a new billionaire in America to create his or her fortune, according to our data, was 18 years. Historically speaking, that's extraordinarily fast. Among this year's 88 new self-made Americans, that number has decreased drastically, to 13 years. The ability to rapidly translate ideas into riches helps level the playing field. Code (intellectual resources) trumps capital (accumulated resources), with the latter desperate for the former. A generation ago, fortunes went to those with the luck or pluck to secure funding; today, a good concept chooses which funding to accept.

John Arnold, "Give While You Live"

"The real joy isn't putting money into a foundation," says the billionaire, who wants his peers to give away at least 5% of their wealth each year. "It's putting in money to make the world better."

BRENT HUMPHRIES

That increased opportunity has in turn changed what a billionaire looks like. While women continue to have a far harder time getting good ideas funded than men, they've nonetheless steadily nudged up the tables and now encompass 11% of global billionaires, 12% of American billionaires and 13% of new billionaires, all high-water marks. More importantly, female entrepreneurs now account for 4% of all billionaires, more than double the percentage even five years ago.

And while in America extreme success remains disproportionately white, the global business aristocracy increasingly reflects the world itself. China alone, including Hong Kong, added a staggering 210 billionaires this past year. Factor in 19 new faces from India, 14 from Japan and multiple debuts from seven other Asian countries, and those from the Asia-Pacific made up a majority of new billionaires worldwide.

How do these more meritocratic, more dynamic, more diverse billionaires run their companies? In ways that are better for all of us. *Forbes* contracted with our partners at JUST Capital, which measures corporate citizenship, to gauge the civic performance of the 88 new self-made U.S. billionaires. We took the companies that drove each billion-dollar fortune and, leaning on industry averages, calculated each score based on how they treat their workers, their customers and the environment, among other factors. The net result: Not only did these new billionaires found or run companies that rank above average in terms of the three factors mentioned above, but they've also improved in each of these categories when measured against the new billionaires of 10 years ago.

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BANG & OLUFSEN

Take Chris Britt, who in eight years has built Chime into one of the world's largest digital banks. In a fee-based industry that's often adversarial to those who need it most, Britt grabbed market share during the pandemic with low-risk, customer-centric gestures. "We're on the front line," he says. "We see how Americans are stressed out." Leveraging customer records, Chime comfortably advanced people against their U.S. government stimulus checks at no cost, and offered overdraft protection via a program called SpotMe. (By comparison, payday-loan companies lend against things like stimulus checks at usurious interest rates as high as 650%.) Such customer-friendly policies, Britt says, help him recruit better employees—his payroll has tripled to 800 in a year—which leads to better returns. "You get those pieces right, with a good business model, the equity shareholders will manage just fine." Apparently so. As of September, Chime was valued by venture capital investors at $14.5 billion, with Britt's stake worth $1.3 billion.

Still more new billionaires are taking steps to support their employees. Mat Ishbia, the 41-year-old CEO of United Wholesale Mortgage, had an incredible past 12 months, as millions changed where they lived or refinanced with record-low interest rates. Equally incredibly, he'd never taken on partners or investors, so he and his family owned 100% of the company going into the pandemic. When he took the company public this January through a SPAC, pushing his net worth at the time to $12.6 billion, he carved out $35 million in stock for his 8,000 workers.

"We all won together as a company," says the former Michigan State basketball player. Well, to some degree. Throwing your employees about one-quarter of 1%—an average payout of about $4,000—when you're sitting on 99.7% and almost 11 digits seems exceedingly paltry. But it's also progress. Go back to that original Forbes 400 list from 1982, and you'll find hundreds of tycoons who didn't think of their employees as much more than a cost or liability.

Others took stands for their hometowns, including Jeff Lawson, the cofounder of surging cloud communications business Twilio, who hit the list this year at a cool $2.2 billion. Silicon Valley saw many companies and leaders decamp from the Bay Area, Elon Musk and Larry Ellison most notably. Lawson felt that he had an obligation to his community, which is another factor measured by JUST Capital. So he publicly declared in January that his company would stay in San Francisco. Another civic booster, Rocket Mortgage founder Dan Gilbert, whose net worth exploded past $50 billion over the last year, recent-

Sam Bankman-Fried, "Effective Altruism"

"I want to figure out how I can have the most positive impact on the world," says the 29-year-old, who has promised to put virtually all of his $8.7 billion fortune into causes he believes in.

VIRGILE SIMON BERTRAND FOR FORBES

Founding Fortunes

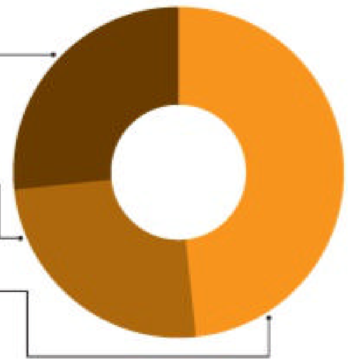
2001

Total worth: **$1.8 trillion**
Total number of billionaires: **565**

INHERITED: **$489.9B** **140** billionaires

INHERITED & GROWING: **$452.5B** **147** billionaires

SELF-MADE: **$881.3B** **278** billionaires



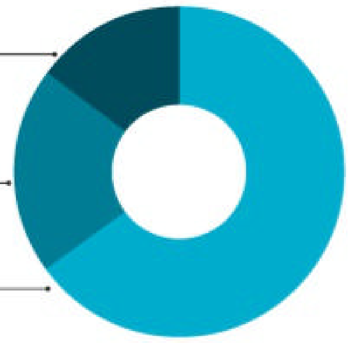
2011

Total worth: **$4.5 trillion**
Total number of billionaires: **1,209**

INHERITED: **$669.7B** **160** billionaires

INHERITED & GROWING: **$904.6B** **220** billionaires

SELF-MADE: **$2.92T** **829** billionaires



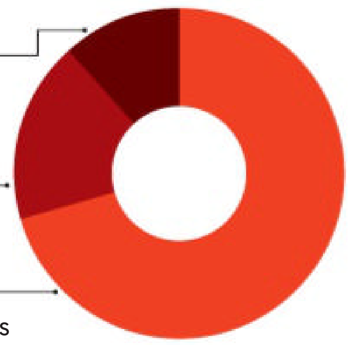
2021

Total worth: **$13.1 trillion**
Total number of billionaires: **2,755**

INHERITED: **$1.56T** **281** billionaires

INHERITED & GROWING: **$2.33T** **499** billionaires

SELF-MADE: **$9.20T** **1,975** billionaires



18+

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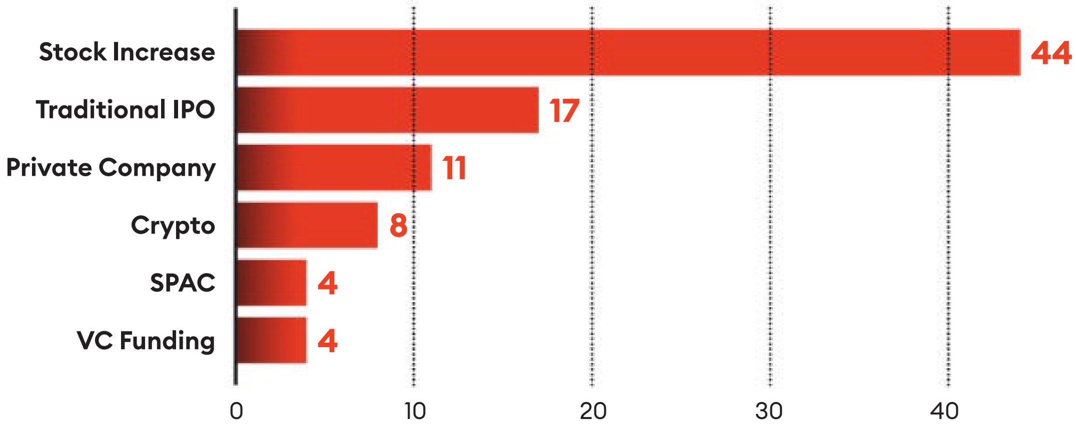
Routes to Riches

How the 88 new self-made American billionaires got on the list.



ly committed $500 million from his company and his personal foundation to bolster low-income residents of Detroit, where he's headquartered, which included wiping out the property-tax debt of 20,000 homeowners. "Our commitment to Detroit is absolute," Gilbert tells *Forbes*.

All this acceleration comes with a heightened realization among those at the very top about the obligations that come with extreme success—and the possible repercussions, from confiscatory tax regimes to social unrest, that could follow inaction. It's not hard to read the tea leaves—altruism, in this case, mirrors self-interest. Speaking with a half-dozen members of the newcomers of 2021, along with a handful of younger billionaires, the post-pandemic attitude change is palpable.

John Arnold sensed a shift as the pandemic approached. While the path he took to his estimated $3.3 billion fortune—trading energy contracts for disgraced and defunct Enron—won't earn him any Nobel laurels, he and his wife, Laura, have spent the past decade creating a plan to maximize their impact—"the benefit," he says, "of looking at 100 years of great wealth in America." Alarmed at the state and standing of philanthropy in the U.S. today, he convened a handful of philanthropists, academics and foundation heads in New York in January 2020, posing a question: How can we get those sitting on trillions of dollars to take bigger, faster action, with more accountability?

That group evolved into the Initiative to Accelerate Charitable Giving. Its primary targets: the $142 billion in donor-advised funds, or DAFs, which allow donors in the U.S. to take upfront tax deductions for parking money in community foundations or financial-services firms, even if there's no mandate or visibility for when or how the money goes to the public good; and perpetual foundations that try to end-run annual minimal giving requirements by sliding in expenses when they report.

RATHER THAN ENDOW A FOUNDATION, SCOTT GOT DATA ON WHERE HER MONEY HELPS THE MOST PEOPLE RIGHT NOW.

But Arnold also feels the super-rich need to go further individually. So he became the first billionaire to get behind a new "Give While You Live" promise—a public commitment to grant at least 5% of his personal net worth to good causes each year—which is being organized by the advocacy group Global Citizen. (Disclosure: I'm a board member at Global Citizen.) Merely holding money in a DAF or a foundation doesn't cut it, nor does the excuse that rich people are better off compounding their money and giving it away later. "Problems compound too," Arnold says in his first interview about this initiative. "Let this generation handle this generation's problems."

The Give While You Live concept is a more time-urgent spin on the Giving Pledge, which has admirably pushed billionaires to publicly commit to give away half of their wealth while they're still alive—or after they die. "It hasn't necessarily spurred giving in the short term," says Arnold, a Giving Pledge signatory. Pretty much every new billionaire *Forbes* spoke to, while expressing general support for the Giving Pledge and an openness to committing to it, focused instead on what they can do immediately.

Over the past 12 months, the world's third-richest woman, MacKenzie Scott, who joined the *Forbes* Billionaires list last year after divorcing Amazon's Jeff Bezos, went on a giving spree as notable as anything in recent philanthropic history. Rather than endow a foundation, Scott enlisted advisors to generate data on the ways her money can help the most people now. Then, in July and December, she transparently wrote 500 checks, totaling $5.8 billion, no strings attached, to grantees in all 50 U.S. states, many of whom were utterly surprised when the money arrived.

"The pandemic has been a wrecking ball in the lives of Americans already struggling," Scott wrote in a public statement. (She hasn't given an interview since the divorce.) "Meanwhile, it has substantially increased the wealth of billionaires."

It certainly increased the wealth of Jared Isaacman, CEO of Shift4 Payments, a Square competitor that focuses on restaurants and hotels. His roller-coaster year took him from preparing for a public offering to worrying if his customers—and his company—would survive, to becoming an indispensable tool for his clientele, to pulling off an IPO after all.

After ringing the bell at the New York Stock Exchange, which gave him a $1.4 billion net worth, Isaacman, 38, wrote a $100 million check to St. Jude Children's Research Hospital in Memphis. His motivations mimicked Scott's. He gave immediately after coming into immense wealth. Rather than set up a foundation, he steered money to people already doing good work. He did so transparently. And he did it with scale, after his business' brief near-death experience underscored for him how many people were hurting. "If you had asked me before the pandemic, 'Could you imagine writing a $100 million check?', I never would have expected it."

Then Isaacman, who owns and flies his own MiG fighter jet, applied some leverage. He announced he would lead the first all-civilian mission to space, in partnership with Elon Musk's SpaceX. He would bring a St. Jude frontline worker—as well as a random St. Jude donor, a stunt he hopes will raise another $200 million for the hospital, which he publicized through a U.S. Super Bowl commercial. He even got Musk, a charitable skinflint to date, to commit to St. Jude.

Immunologist Tim Springer's coronavirus epiphany has been a matter of scale. Twenty years ago, he netted $100 million founding a biotech company, and in turn he made the kinds of donations you might see from people at that wealth level, endowing chairs at Harvard Medical School and Boston Children's Hospital. He also put about $5 million into a little startup called Moderna—a stake that brings him onto the Billionaires list this year with a net worth of $2.2 billion.

Springer has already put forth $30 million to establish the Institute for Protein Innovation, a nonprofit that creates tools and provides expertise for biotech researchers and entrepreneurs. But the urgency of the moment has him rethinking things philanthropically—later this year, he says, he'll announce a bigger donation. He's coy about it, though he does say he'll likely be "adding another zero." And that's just the beginning. "I want to give more money. That's my motivator to start companies now," he says. "If I'm successful, as I think I could be, [with] the scale of things, we could add yet another zero."

And if starting businesses designed specifically to create billion-dollar charitable windfalls sounds far-fetched, meet 29-year-old Sam Bankman-Fried, who's already doing exactly that. Perhaps the most interesting new billionaire in the world, Bankman-Fried started the FTX cryptocurrency exchange two years ago, making a bigger fortune—$8.7 billion—more quickly than anyone under 30 ever has, Mark Zuckerberg included.

From Carnegie to Rockefeller, Gates to Buffett, philanthropy was always the byproduct of entrepreneurship. Bankman-Fried is surely the first billionaire for whom entrepreneurship was the byproduct of philanthropy. He embraces a philosophy called Effective Altruism, which has cropped up over the last decade and applies rational logic to maximizing good. "It's for people who like math and people who like giving," Bankman-Fried says. Effective Altruists try to quantify things like lives saved per dollar. Or whether it's more urgent to quell malaria or potentially malevolent technologies. Or whether a brilliant MIT student named Sam should follow his dream and become an animal-rights activist. "Honestly, you should go to Wall Street and give it to us," Bankman-Fried remembers hearing from one of the Ethical Altruism movement's leaders, 34-year-old Oxford professor William MacAskill. "You're not the best leafleter we've found."

Mission accomplished. Bankman-Fried, in pursuing a vocation less than noble—a zero-sum, notoriously cutthroat exchange in which newcomers face a slew of sharp-elbowed pros—has created a massive source of wealth that he promises to deploy almost entirely for what he sees as the public good. (He says he will keep only a few percentage points for himself, and even that might prove too much. "If it's used to justify buying a few yachts, that's pretty bad.") And while he's already placing bets, backstopping a few charitable initiatives and giving $5 million to help get Joe Biden elected (Effective Altruists like Bankman-Fried don't differentiate much between nonprofits and politics; they merely look at outcome ROIs), he anticipates accelerated scale starting in five years, when he's more liquid.

The only reason he won't give it all away as fast as possible is so that he can keep some powder dry for the moment, sooner rather than later, when he sees an "outlier opportunity."

"When you find one of those, everyone tends to go too small," Bankman-Fried says. "F--king go all in."

We're at an all-in moment in history, actually, and those at the top have raised their own stakes to a level that's unfathomable considering the year we've all experienced. Changes are upon us faster than we could possibly have conceived last March. Now is not the time for the world's billionaires, or any of us, to go small. F

Speed to Wealth

The median number of years after starting their company that individuals appeared as a newcomer on the Billionaires list.

2011	2021
18	13

Rising Grades

How new U.S. billionaires' companies rank (as a percentile) in JUST Capital's categories of corporate citizenship.

	2011	2021
Overall Score	49th	55th
Workers	53rd	57th
Environment	52nd	61st
Customers	42nd	52nd
Communities	49th	49th
Shareholders	45th	47th


WHILE NO ONE KNOWS WHAT THE FUTURE HOLDS, SOME PEOPLE HAVE A PRETTY GOOD IDEA
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FUTURE
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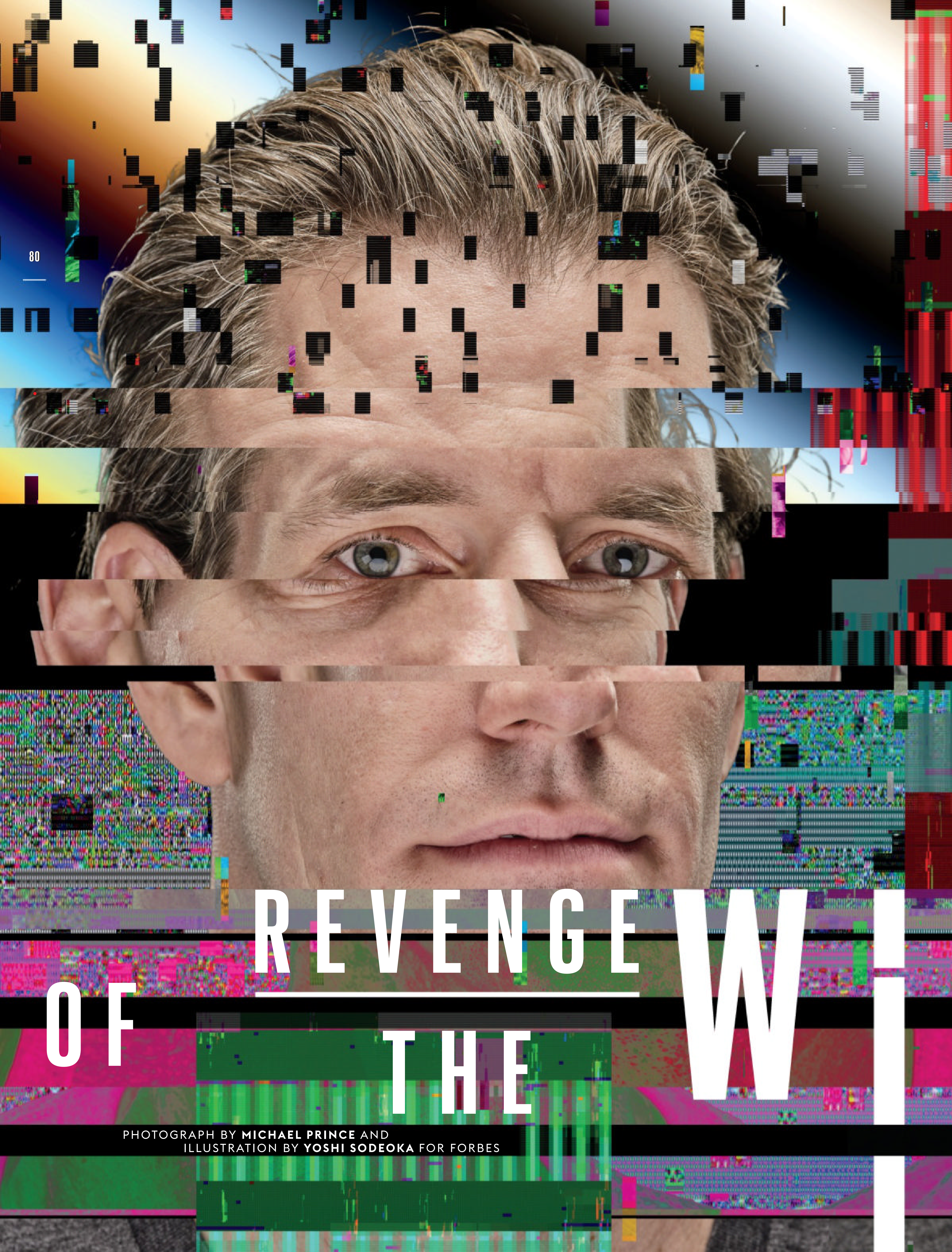


REVENGE OF THE Wi

PHOTOGRAPH BY **MICHAEL PRINCE** AND ILLUSTRATION BY **YOSHI SODEOKA** FOR FORBES

BY
MICHAEL DEL CASTILLO, SUSAN ADAMS AND ANTOINE GARA

NKLEVII

After losing an epic battle with Mark Zuckerberg over ownership of Facebook and being shunned in Silicon Valley, CAMERON and TYLER WINKLEVOSS are back—this time as budding bitcoin billionaires at the center of the future of money, the creative economy and quite possibly a new operating model for Big Tech itself.

IDENTICAL TWIN

billionaires Cameron and Tyler Winklevoss saunter into their empty 17th-floor offices in Manhattan's Flatiron district wearing designer high-tops, black jeans and matching sweatshirts made by the high-end streetwear brand Heron Preston. The sweatshirts—Cameron's is red, Tyler's white—are emblazoned with a NASA logo, which the twins picked because it echoes the space-exploration theme behind the brand of their seven-year-old cryptocurrency trading operation, Gemini. In addition to being the Zodiac sign symbolized by twins, it was the name of NASA's second space mission—the one just prior to Apollo 11, which put the first man on the moon.

"We actually call our employees astronauts," Cameron says. "We're all astronauts building on the frontier of money and the frontier of art and the frontier of finance." Accustomed to finishing his brother's thoughts, Tyler chimes in: "We feel like we're on a spaceship, exploring a new frontier."

On this sunny March day, the spaceship is hitting warp speed. The price of bitcoin is about to reach an all-time high of $58,000 (it sold for $8 in 2012 when the brothers began investing some $10 million in the digital currency), rocketing their combined net worth to $6 billion. Their latest investment, fast-growing bitcoin lending giant BlockFi, just announced it has raised $350 million, valuing the company at $3 billion.

And the 39-year-old brothers' hottest venture, digital art auction platform Nifty Gateway, is basking in the glow of a sale at Christie's, where the gavel is about to fall on the 255-year-old auction house's first-ever sale of a non-fungible token (NFT) artwork, a one-of-a-kind computer file tracked on a digital ledger known as a blockchain. Nifty Gateway put the artist, Mike Winkelmann, who goes by Beeple, on the map through a series of "drops" starting last year. Before the day ends, Gemini's custodial business, which houses digital assets securely, will receive a $69 million cryptocurrency payment for Beeple on behalf of Christie's, making his "Everydays: The First 5,000 Days" the third-most-expensive work sold by a living artist, after Jeff Koons and David Hockney.

Much of the world still thinks of the 1.9-meter twins as the crew-rowing chumps played by Armie Hammer in *The Social Network*, the hit 2010 movie about Facebook. At Harvard, classmate Mark Zuckerberg had swiped their idea for a social networking site, building an empire with 2.8 billion worldwide users and a personal fortune now worth $97 billion. A dozen years after they settled with Zuckerberg for $65 million in Facebook stock and cash, the Winklevii, as they are widely known, have emerged as leaders of a technological movement whose core operating principle involves digitizing the records of all assets globally, decentralizing control and cutting out gatekeepers—including Facebook.

Blockchain, the technology underlying bitcoin and other cryptocurrencies, is already disrupting money and banking, as giant financial firms such as PayPal, Square, JPMorgan, Fidelity and Northern Trust embrace bitcoin and jockey for position in a future awash in digital assets. At the same time, big companies including Boeing, Samsung, Tesla and Novartis are using the new technology to improve their supply chains, share customer data and speed up business processes. In some cases they're adding bitcoin to their balance sheets. In 2020, bitcoin returned more than 300%, against 18% for the S&P 500.

The Winklevii say they're just getting started. Through their holding company, Gemini Space Station, which owns their crypto exchange and Nifty Gateway, and via investments made by their family office, Winklevoss Capital, the duo have invested in no fewer than 25 digital-asset startups. These fledgling companies are laying the foundation for what the brothers hope will be a new virtual world that they and others call the "metaverse," in which digital assets like art, music, real estate and even entire businesses are created, bought and sold—and, most importantly, governed—by the blockchain. Many of the companies they're backing are positioned to thrive in this three-dimensional version of the internet ruled via peer-to-peer computer networks, where participants rather than powerful companies profit.

"The idea of a centralized social network is just not going to exist five or ten years in the future," Tyler predicts, when asked about Facebook. "There's a chasm between the old world and this new crypto-native universe."

Within 24 hours of meeting with the Winklevoss twins in 2019, Griffin (*left*) and Duncan Cock Foster had received an overture from Gemini to buy Nifty Gateway. The NFT auction house was recently valued at $1 billion.

MICHAEL PRINCE FOR FORBES

"The idea of a centralized social network is just not going to exist five or 10 years in the future," Tyler predicts when asked about Facebook. "There's a membrane or a chasm between the old world and this new crypto-native universe. And we're the conduit helping people transcend the offline into the online."

The fact that two Greenwich, Connecticut–raised men of Harvard, both former Olympians, find themselves at the center of an antiestablishment movement whose most notable use case to date has been a thriving online bazaar selling illegal drugs speaks volumes about how far the Winklevii have come from their days in Cambridge, Massachusetts, grappling with Mark Zuckerberg.

After settling their arbitration with Facebook and competing in the 2008 Olympics in Beijing, the Winklevoss brothers headed to Oxford University to earn their M.B.A.s in 2010 and then formed Winklevoss Capital to make venture investments. Eager to join the cadre of firms on Sand Hill Road funding today's great technology companies, the twins soon realized that they were effectively shunned in Silicon Valley. Startup after startup, fearful of reprisals from juggernaut Facebook and its growing network, refused to take their capital.

As recounted in Ben Mezrich's 2019 book *Bitcoin Billionaires,* it was during a vacation on the Mediterranean resort isle of Ibiza in June 2012 that the twins were first introduced to bitcoin by early adopters who, like the Winklevii, were traditional-tech outsiders. The notion that money was the ultimate social network, and that bitcoin was free from central-bank control and backed by mathematical certainty, appealed to the highly disciplined athletes.

After the brothers returned to New York, they began using their Facebook money to buy up bitcoin. "We found the community super-welcoming," says Tyler, who tends to be the more analytical twin. (Cameron is the more creative.)

In May 2013, they invested $1.5 million in a Brooklyn-based exchange called BitInstant, which charged people a fee to exchange dollars for bitcoin in just minutes. The business grew rapidly—reportedly accounting for 30% of all bitcoin purchases. Unfortunately, some of those purchases were laundering money for drug dealers selling on the dark-web drug bazaar Silk Road, and by the end of the year the site was shuttered. Its computer-genius CEO, Charlie Shrem, whom the Winklevii embraced, was arrested and spent a year in U.S. federal prison for running an unlicensed operation.

Facing another brush with ignominy, the brothers decided that if they were going to succeed in this nascent marketplace they needed to be hands-on—and, more importantly, they needed to bring order to a chaotic, unregulated industry. In 2014, they founded their own cryptocurrency exchange, Gemini.

In the early days, Gemini was little more than a place to buy and sell bitcoin, but today it offers trading and custody for 33 cryptocurrencies, including ether, a coin equipped with a native computer language that lets developers build applications without central servers; zcash, a privacy-protecting token based on bitcoin; and mana, the native cryptocurrency of a virtual-reality world called Decentraland. The twins also have their own ethereum-based token called Gemini Dollar, which is pegged to the value of the U.S. dollar and therefore stable.

A poster on the wall of their office from Gemini's recent New York subway marketing campaign depicts the Founding Fathers of the United States with the words THE REVOLUTION NEEDS RULES.

Among crypto exchanges (there are now more than 300), Gemini became, in October 2015, one of the first bitcoin-focused financial institutions to be designated a trust bank by the New York State Department of Financial Services. This meant it was subject to the same regulatory requirements as banks like State Street and Northern Trust and enabled it to take deposits in all 50 U.S. states.

Though Gemini's trading volume ($29 billion in the last 12 months) is much lower than that of giants like Binance and Coinbase, it rivals them in industry "trust" scores, which carry considerable weight in a market where ex-

BEEPLE-COLLECT.COM (2)

NFTs by graphic designer Beeple from early 2020: "tom hanks beating the shit out of coronavirus" and "SPONGEBOB HILLARYPANTS," which sold for $107,000 and $55,000, respectively. In February 2021, one of his NFT singles traded for $6.6 million. Warns Beeple, "This is not some magical money fountain."

changes are often hacked and fake trading volume is commonplace. Given the current environment of nosebleed valuations like Coinbase's $68 billion, Gemini could likely fetch $5 billion if it ever needed outside funding.

While Facebook's early corporate mantra was "move fast and break things," the Winklevii, who famously asked then–Harvard president Larry Summers to enforce the college's "Standards of Conduct" against Zuckerberg, have always operated under an "ask permission first, not forgiveness later" ethos. A poster on the wall of their office from Gemini's recent New York subway marketing campaign depicts the Founding Fathers of the United States with the words THE REVOLUTION NEEDS RULES.

Heavily promoting its operation as the "regulated" crypto exchange, Gemini is positioning itself to profit when the Securities and Exchange Commission finally approves crypto exchange-traded funds, which have already been approved in Canada and overseas. Starting in 2013, the Winklevii began applying to the SEC to launch a bitcoin ETF. So far they've been turned down twice, the last time in 2018, with the SEC citing the immaturity of the industry.

Today, there are six crypto ETF applications pending at the SEC from the likes of Wisdom Tree, Van Eck, Fidelity, First Trust and Anthony Scaramucci's Skybridge Financial. Gemini, which now offers customers a bitcoin rewards credit card and a savings account that pays 7% interest on crypto deposits, has an application pending with the SEC to open an alternative marketplace for trading stocks and other securities issued on a blockchain.

"Gemini is the bridge where people can migrate away from centralized finance, from their current bank, and into this new world," Cameron says. "Our business model is not based on information or monetizing privacy. It's based on marketplaces and trading fees."

Among the twins' growing collection of crypto-focused startups, none is getting more buzz and showing more potential than its NFT marketplace, auction platform Nifty Gateway.

The company was founded in November 2018 by Duncan and Griffin Cock Foster, 26, also identical twins and rowers, who say they took up the sport after watching *The Social Network* in high school. Both had just graduated from college in 2017—Duncan from Washington University in St. Louis with a degree in computer science and Griffin from Emory in mathematics. During his senior year, Duncan began dabbling in CryptoKitties, a digital craze similar to the decades-ago mania for Beanie Babies, only one in which users create, collect and trade unique animated felines, registering each using a non-fungible token on the ethereum blockchain.

"Everyone had the same complaint," Duncan said in a 2019 interview. "Buying NFTs was too complicated. We started Nifty Gateway to solve access issues, and we will not rest until 1 billion people are collecting NFTs."

At first the Cock Fosters designed Nifty Gateway not as an NFT auction platform but simply as a way to buy NFTs with Mastercards and Visas instead of going through the arduous process of purchasing them with ether. In fact, the Winklevii first stumbled upon Nifty Gateway in July 2019 at the Contemporary and Digital Art Fair in New York. A work called "CryptoPunk 4530," featuring a woman with a mohawk smoking a cigarette, rendered in the blocky style of an old-fashioned video game, had caught Tyler's eye. The image was one of 10,000 similar but unique portraits created by Google veterans Matt Hall and John Watkinson and initially given away free. The price was $5,000. Tyler used his phone to create an account on Nifty Gateway, paying with his credit card.

As soon as the Winklevii returned to their office, Gemini's vice president of engineering, Eric Winer, told them he had been keeping an eye on Nifty Gateway, which had just emerged from Adam Draper's BoostVC accelerator boot camp. A month later, Gemini struck a deal to buy the seven-month-old startup. The Cock Fosters moved to an Airbnb in Brooklyn and worked with Gemini's engineers to build what is now the world's most exclusive digital-art platform. While numerous

digital platforms operate more like eBay and are open to all creators, Nifty Gateway selectively curates its artists and sells their works in "drops," taking a page from fashion brands like Nike and Supreme.

The NFT art market has exploded. In February, Nifty Gateway accounted for $75 million of the $91 million in NFT art auctioned on the top seven online platforms, according to data compiled by CryptoArt.io. As of late March, it had sold $132 million of the $188 million worth of such work bought by collectors. When the Cock Fosters launched Nifty Gateway a year ago, monthly sales were less than $100,000.

No NFT artist has gotten richer off the craze than Mike Winkelmann, a.k.a. Beeple_Crap, a 39-year-old father of two in Charleston, South Carolina, who earned a computer science degree at Purdue University in Indiana and studied no art past high school. He uses 3D-graphics software to generate artwork that is outrageous and often revolting. One piece depicts a naked Donald Trump eating a hamburger while sitting atop a train wreck that's being consumed by giant coronavirus particles. Another shows Kim Jong-un dressed as *Toy Story*'s Buzz Lightyear with fake breasts.

As a hobby, Beeple created a digital image every day for more than ten years, posting his provocative "Everydays," depicting dystopian visions of pop culture and politics, to social media sites like Facebook and Instagram. The work earned him a cult following on the internet, but he couldn't monetize the digital medium, which was as easy to copy as simply right-clicking a mouse.

"We very much saw ourselves in Duncan and Griffin (*far right*)," says Tyler (*second from right*) of the Cock Foster twins. "These guys had this passion, this conviction, and everyone around them was saying they were crazy. That's how we felt our whole life."

Last fall, Nifty Gateway began reaching out to artists, trying to populate its new exclusive platform with interesting and valuable digital art. Given Beeple's 1 million Instagram followers, he was an obvious choice. After educating Winkelmann about NFTs, engineers at Nifty Gateway explained how he could program art to be dynamic, changing at different points in time, or based on a given outcome. He was already touching on political themes in his "Everydays" and saw the 2020 election as his opportunity to make a mark.

If Trump were reelected, Beeple's "Crossroad" NFT would transform into a naked, sweaty, muscular strongman walking menacingly through fire. If he lost, the NFT would turn into a looping video of Trump lying face-down beneath a rainbow, with words like *loser* painted on his naked body, as a bird styled after Twitter's logo chirped away. On October 31, "Crossroad" became the hottest ticket on Nifty Gateway, selling for $66,666.66 to a 32-year-old Miami-based digital-asset speculator with a Columbia M.B.A. The buyer put the work back up for sale on Nifty Gateway and sold it in February for $6.6 million, making a 90-fold profit. Beeple earned about $660,000 due to the platform's fee structure, which invites artists to collect a 10% royalty on all aftermarket sales.

Drops Beeple auctioned for $1 each now trade for

MICHAEL PRINCE FOR FORBES

hundreds of thousands of dollars, earning him at least $10,000 per transaction. His various NFTs sold for a total of $10 million on Nifty Gateway in the weeks before his $69 million sale on March 11. The Winklevii's NFT platform, which charges artists 15%, has been a life-changer for Winkelmann. It has also created a booming business for Nifty Gateway.

"We're doing $4 million in five minutes now," says Cameron of drops that a year ago would have brought $50,000 on a good day. Adds Tyler: "Basically, the entire art world, the entire entertainment world, is knocking down the door."

The gold rush in digital art and collectibles being minted and sold on Nifty Gateway and other NFT platforms like NBA Top Shot won't last forever. But just as some dot-com-bubble companies like Amazon survived and eventually thrived, the Winklevii are building Nifty Gateway and Gemini for the long run as a marketplace and custodian for all manner of assets, including property deeds, passports, commodities, collectibles, video-game characters, movies, music and event tickets.

"You want to pick that niche where there's real market uptake," Cameron says. "You don't want to boil the ocean."

Ultimately, the twins see their two marketplaces, Gemini and Nifty Gateway, integrated into a single dashboard where NFTs will be used as collateral for loans, enabling owners to tap their digital assets for funding without having to sell them. Tyler and Cameron also envision a future in which the due diligence they perform to verify a user's identity could be issued as an NFT, letting users prove they've passed strict requirements—think Facebook, but with irrefutable identity confirmation.

"It's almost like compliance as a service could be baked into an NFT token that Gemini issued," Tyler says.

Another major area of investment for the Winklevii is blockchain-based applications that support decentralization—the idea that tech companies like Google, Facebook and Microsoft will no longer be necessary because web services and applications will be created, operated and governed by users.

Back in 2014, Winklevoss Capital joined forces with San Francisco's open-source developer Protocol Labs, investing in a seed round to finance various projects that would create a new internet infrastructure that doesn't rely on centralized servers. One of its efforts, Filecoin, is intended to power a network for computer storage in which users around the world rent out their unused hard-drive space and in return receive ethereum blockchain–based tokens called filecoins as payment. There are already 250,000 such computers, or "nodes," linked into a decentralized cloud computer. Filecoin has recently been on a tear: Its tokens have surged 350% so far this year, and it has a market capitalization in excess of $6 billion.

In June, Protocol Labs is hosting a workshop to build decentralized versions of Amazon, Google and Facebook that instead of relying on revenue from advertising targeting their users' personal information will reward them with filecoin tokens. One day filecoin-connected computers could rival the cloud services of these tech giants.

Oasis Labs, based in San Francisco, is another promising Winklevii-owned startup. Run by a security and artificial-intelligence professor at the University of California at Berkeley, the company specializes in ultrasensitive data like human genome codes. The idea is that users will control their own data and be compensated for its use by corporations.

Winklevoss Capital portfolio member Stacks supports multiple projects aimed squarely at challenging centralized control by Big Tech. Boom is its decentralized wallet for creating and sending NFTs; Pravica is a decentralized communication platform that integrates email, chat and video into a single place; Sigle is a decentralized version of WordPress for making websites.

"Within the next decade, you're going to see social protocols take off and people building decentralized forms of these services," Tyler says.

The twins' most recent investment, Artie, builds video games that don't need to be downloaded and in-game digital assets that can be exported, traded on open markets and even imported into competing games. Artie's "appless" games use assets issued on the ethereum blockchain and can stream from anywhere, similar to how YouTube embed codes allow its videos to be played on any website.

Billionaire Zynga founder and CEO Mark Pincus is among the investors in Artie, as is YouTube cofounder Chad Hurley. "We're seeing that consumers want to break down these walled gardens," says Artie cofounder Armando Kirwin. "They want more choices, they don't want monopolies, they want a return to the free and open web. And that's the last sanctuary that we have."

Of course, the irony of any serious effort to build a decentralized metaverse is that its chief architects will ultimately become unnecessary. Tyler and Cameron Winklevoss seem unconcerned. Goldman Sachs recently predicted that the price of bitcoin could easily climb to $300,000 in the next five years.

"Decentralization is a spectrum," says Cameron, looking out his window toward New York's Chrysler Building. "Our goal was not to be the gatekeepers."

It's still early days in the blockchain revolution. Mark Zuckerberg, take note.

"We're doing $4 million in five minutes now," says Cameron of drops that a year ago would bring $50,000 on a good day. "Basically the entire art world, the entire entertainment world, is knocking down the door," Tyler adds.

Ownership

"Freedom begins the moment you realize someone else has been writing your story and it's time you took the pen from his hand and started writing it yourself."
—Bill Moyers

"Ownership is the only way to influence decisions—the right decisions."
—Geeta Gupta Fisker

"That's what makes [the land] ours: being born on it, working on it, dying on it. That makes ownership, not a paper with numbers on it."
—John Steinbeck

"We own what belongs to us whether we claim it or not."
—Sarah M. Broom

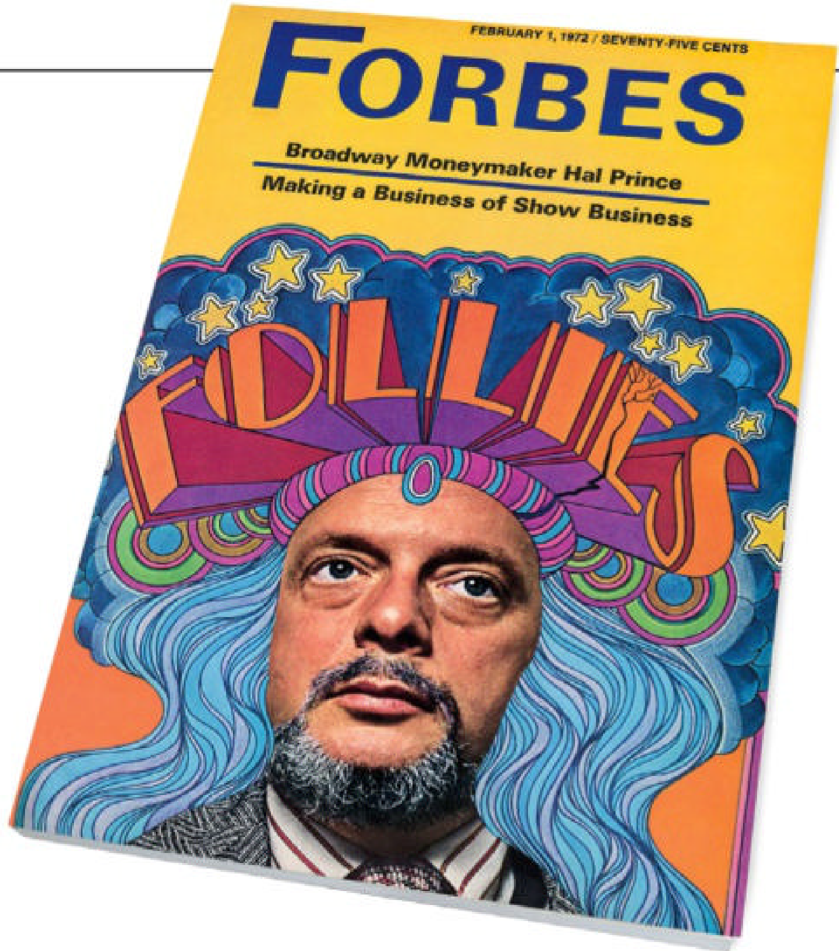
"When you own your story, you get to write the ending."
—Brené Brown

"What you really value in life is ownership, not money. If ever there is a choice—more money or more responsibility—you must always opt for the latter."
—50 Cent

"Our business in every generation is to reclaim a little more land, to add something to the extent and solidity of our possessions."
—Thomas Henry Huxley

"You own your own body, and with it your own voice—and that's the most revolutionary insight of all."
—Erica Jong

"By what right can anyone whatever appropriate the least morsel of this immense whole and say, 'This is mine, not yours'?"
—Pyotr Kropotkin



King of Broadway

February 1, 1972

Fiddler on the Roof debuted in September 1964, and over the next eight years proved a bona-fide blockbuster. It cost only $375,000 ($3.2 million in current dollars) to stage and took in close to $60 million (nearly $450 million today) at the box office. That performance made it the second-most-profitable musical ever at that point, behind only *My Fair Lady*. "I didn't see how it could fail," said Hal Prince, *Fiddler*'s producer. "There are at least 3 million Jews in New York, and I thought that should be enough to keep the show running." Prince, who was the driving force behind such hits as *West Side Story* and *Cabaret,* had his share of flops too, including *Baker Street,* a Sherlock Holmes musical that premiered in 1965. But he needn't have worried too much about his investors. **"Show business offers psychic returns no oil well can match,"** as *Forbes* put it, **"and for many investors it may almost be enough to be able to say, 'Oh yes, I own a piece of that show.'"**

SOURCES: PREDICTABLY IRRATIONAL, BY DAN ARIELY; THE GRAPES OF WRATH, BY JOHN STEINBECK; THE YELLOW HOUSE, BY SARAH M. BROOM; THE 50TH LAW, BY 50 CENT; THE CONQUEST OF BREAD, BY PYOTR KROPOTKIN; INTUITION, BY OSHO; ALL THE LITTLE LIVE THINGS, BY WALLACE STEGNER; MY LIFE AT THE LIMIT, BY REINHOLD MESSNER; WHAT HE'S POISED TO DO, BY BEN GREENMAN; ON THE SHORTNESS OF LIFE, BY SENECA.

"You can have it all, but don't expect to have it at exactly the same time."
—Jane Fraser

"The stupid mind thinks only in terms of possession. The man of insight thinks of utility."
—Osho

"To have so little, and it of so little value, is to be quaintly free."
—Wallace Stegner

"Once you have something—knowledge, skills, possessions—or have achieved something—climbing Mount Everest, for example—it becomes banal."
—Reinhold Messner

"I felt lonely, and in full possession of my loneliness. It was the first time I had owned anything of value."
—Ben Greenman

"Whatever is best for a human being lies outside human control. It can be neither given nor taken away."
—Seneca

"Wealth and honor come from you; you are the ruler of all things. In your hands are strength and power to exalt and give strength to all."
—1 Chronicles 29:12

FINAL THOUGHT

"If you have it, you make it."
—Malcolm Forbes

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