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▲ PAGE 30

"A MAN WILL ALWAYS LOOK DOWN ON A WOMAN."

—SUPAPAN PICHAIRONARONGSONGKRAM, third-generation head of Supatra & Chao Phraya Express Boat Group, with daughter Natapree.

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▲ PAGE 78

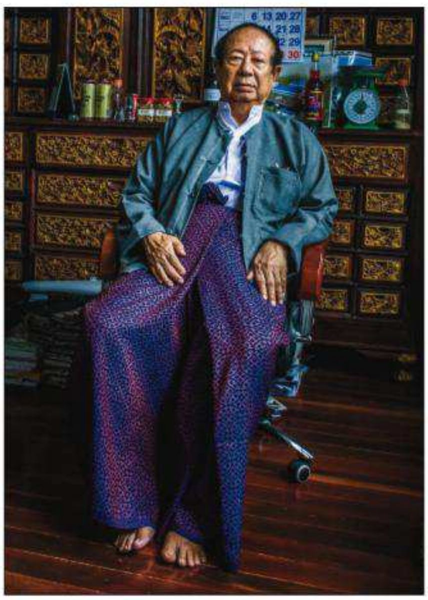
"I AM A STEP FASTER THAN THE REST."

—CHING CHIAT KWONG, head of Oxley Holdings and No. 49 on our Singapore 50 list.

▼ PAGE 22

"I WORKED HARD—WHEN YOU'RE YOUNG YOU HAVE TO TORTURE YOURSELF."

—Myanmar tycoon THEIN TUN.



Taiwan's **Test**

These are trying times for Taiwan. Intimidation by Beijing is virtually nonstop, and its target, President Tsai Ing-wen, must scramble just to keep her government's international footing. Economic and other pressures mounted as she assumed office in 2016, and there's popular unease over incomes even as such measures as the TAIEX stocks chart have pointed up.

Embattled Tsai can't just let sleeping dogs lie.

Yet a visit there is a pleasure, even when appointments in urban Taipei leave no time to enjoy most of the island's beauty. I always notice the relative absence of armed men in uniform and of obvious mass surveillance. Also the bookshops with no seeming bent for idolatry or prohibitions on speech. A clean and green mindset prevails, and the human scale (aside from the Taipei 101 tower) is relaxing.

If Asia's latest boom has greatly passed Taiwan by, that's at least left it affordable. This ought to appeal to any number of NGOs who need a landing spot in Greater China, one that also happens to allow them to operate freely. The same ought to apply to official global organizations, but of course the China veto prevents them from even admitting Taiwan, let alone taking a lease there. Big Culture—the sports and entertainment sectors—must also generally toe the PRC line, given the potential money on the line.

So Tsai's cabinet looks where it can for an edge. One intriguing outgrowth of the latest "Southbound" policy—an emphasis on engaging Southeast Asia and India, to give more breathing room from mainland China—is formation of a Taiwan-Asia Exchange Foundation. Long a brainchild of local professor Michael Hsiao, this effort will entail outreach to parties, such as young regional achievers, who share democratic values such as peace and freedom.

As for business proper, ideas include technology subsidies in areas like the Internet of Things, where Taiwan's hardware prowess (born of an earlier era of entrepreneurism) gives it a head start. The state should keep a light hand. Taiwan still does respectably on scales such as the 200 Best Under A Billion—much better than the nations in more southern latitudes *(see p. 56)*—and a new crop of IPOs could signal broader wealth opportunities. I'm rooting for these underdogs.

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SAM YEH/AFP/GETTY IMAGES

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FORBES ASIA

READERS SAY

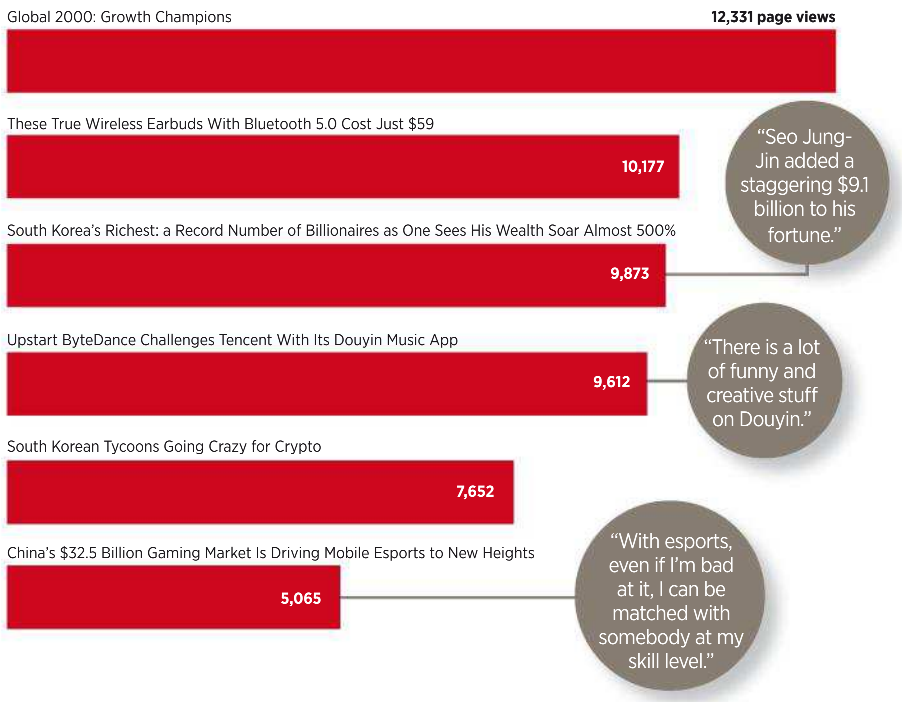
CONVERSATION

OUR STORY about video app Douyin's hold on Chinese youth ("Bytedance to the Music," *June, p. 14*) prompted this analysis from @Edourdoo: "As people spend more time on Douyin, their attention is being diverted away from WeChat—hurting Tencent's goal of keeping users for longer periods there so it can offer more services." "Crazy for Crypto" *(p. 72)*, our look at South Korean cryptocurrency investors, elicited this response from Cryptoes-Potatoes on Reddit: "Brace yourselves! Big whales are coming!"

CORRECTIONS: In "Crazy for Crypto", the new certification requirements for derivatives investors mandated training only for investors who hadn't traded in two years. Our caption for Kim Jung-Ju neglected to say that his ownership of Korbit is through his holding company, NXC. And Nexon is not investing in cryptocurrencies directly. In the caption for Lee Sang-Hyuk we said his Yello Mobile bought a stake in Moda. That deal fell through.

THE INTEREST GRAPH

Our roster of the world's biggest companies led the way with Web readers:

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IMPORT SALES TAXES DON'T MAKE U.S. RICHER

BY STEVE FORBES, EDITOR-IN-CHIEF

ONE THING TO always keep in mind about our trade battles is this: Tariff is another word for "sales tax." When you hear of a 25% tariff on steel, translate that into a 25% sales tax on steel. That clarifies the issue. Hitting American businesses and consumers with a slew of new sales taxes on their products, materials and everyday items, such as kids' clothes, hurts them. To say exporting countries will feel more pain than we do doesn't negate the truth: *We will also be hurt.* If deals are not struck, our exporters—particularly farmers—will feel the sting of retaliation. So will our companies that have facilities overseas. How many Buicks or Apple products will be sold in China next year?

Another thing to keep in mind: Even if particular companies or industries aren't directly involved in international trade, their prospects will be affected. They aren't isolated from buyers, suppliers and financiers who are more directly involved. Don't underestimate the ripple effect. Look at the 1930s. Most American enterprises weren't exporters or importers, but almost all were hit hard when the Smoot-Hawley Tariff Act of 1929–30 ended up crippling the global trade and financial system and triggered a devastating economic contraction.

Since the end of WWII, we and much of the rest of the world have been gradually reducing tariffs and other trade barriers, and we have all benefited from this process. Again, look at the 1930s to see the alternative.

To sit down and negotiate, say, a free trade agreement with the EU, the U.K. or Japan would be terrific. Ditto updating Nafta. The reason we don't instantly get a free-trade utopia, in which there are no tariffs or other barriers anywhere, is because every country has powerful political constituencies. Ask Canada about our unwillingness to let it freely export softwood lumber and other forest products to the U.S.

The U.S. has indeed been the best of the bunch when it comes to freer trade. Perhaps unilaterally imposing sales taxes at the border, instead of through the traditional way of negotiating an agreement, will ultimately lead to better trade pacts. But we shouldn't rule out the possibility that at the least some countries may conclude that, politically, honor comes before a deal.

In the meantime, even before the worst of the tariffs may or may not be imposed, all of this uncertainty will dampen investment. We have to fight Beijing's trade abuses. But forging a united front with our allies rather than acting unilaterally would have yielded more fruit more quickly.

Another, more ominous factor should be considered as well. These U.S.-instigated trade fights with everyone will, if they persist, seriously fray and perhaps undermine our carefully constructed post-WWII alliances, which have led to the longest-running period without major wars and with growing global economic prosperity.

Because of governmental economic errors, the U.S. and its allies have had nearly a generation of subpar economic growth. Thanks to President Trump's push for deregulation and the passage of a significant tax cut, the U.S. is finally starting to break out of this rut. If we experience a Reagan-era-like expansion, other countries will—as they did in the wake of President Reagan's successes—follow us and change some of their growth-stunting economic policies.

Bad policies on taxes, money and regulation were the key causes of our, as well as other nations', stagnation.

A series of escalating trade wars will abort our recovery and lead to the kind of everyone-for-himself environment that pockmarked the 1930s. An increasingly chaotic world will damage all of us and strengthen the hands of authoritarian regimes, which are the enemies of democracy.

Baseball Strikes Out on Playoffs

Here's an important change Major League Baseball (MLB) should immediately make to avoid a colossal postseason embarrassment: Increase the number of playoff games between the wild-card teams. As things stand, the top teams in each of the leagues' three divisions automatically qualify for the postseason play that leads to the World Series. The two wild-card slots go to the nondivision-winning clubs that have the best win/loss records in their respective leagues.

The problem: The wild-card playoff involves only one game. The winner then goes on to play one of the three division winners. This is particularly absurd for the game of baseball. Unlike football, in which, statistically, the best team on paper usually wins a game, baseball is different: Any team, no matter how bad, can win a single contest.

This year we could end up with two wild-card teams with an impressive 100 wins each during the regular season. To have their chances of making it to the World Series rise or fall on one game is deeply offensive and undermines fans' faith in the fairness of it all. At the least, MLB should figure out how to make this year a best-two-out-of-three contest. And beyond that MLB should shorten the regular season and add games to the playoffs. The length of the postseason period hardly needs to be as long as those for basketball and hockey. But the system needs changing to remove the current capriciousness.

AL BELLO/GETTY IMAGES

Babies Are Not Born Adults

World-changing inventions rarely arrive full-blown, having to go through any number of iterations and shakeouts before their full significance becomes glaringly obvious to all. Think of the early days of autos, when 99.9% of U.S. manufacturers failed; or the boom in personal computers in the early 1980s, which was followed by a massive wave of failures and led some to declare that PCs were no more than toys; or the spectacular dot-com bubble of the late 1990s, which led to a sensational bust that had many supposedly smart observers concluding that information, retail and social websites had no future.

Two things—one historical, the other current—recently brought all this to mind.

The first was prompted by a documentary (part of *The Great War* series on YouTube) about Germany's belated attempt to develop a battlefield tank, the A7V, near the end of World War I. Nearly two years before, in 1916, Britain had introduced the first tanks—a handful—into battle. German forces panicked, never having seen such monsters before. It's no surprise that the German high command initially went into a frenzy, ordering all-out efforts to produce a model of their own, as well as new weapons to neutralize the machines.

But almost as suddenly, these efforts were throttled. German militarists concluded that tanks were vastly overrated and not worth allocating a meaningful amount of scarce resources. The British and subsequent French tanks were all bark and little bite, as they were prone to breaking down; their speeds were snail-like, making them easy targets for artillery and even infantry grenade attacks; and they were cumbersome, getting stuck in trenches. In short, tanks were of little or no effective battlefield use.

But the learning curve in technology turns what looks messy and riven with shortcomings today into world-changing entities tomorrow. Allied tanks improved, as did the techniques for producing them en masse. By 1918 Germany realized it had made a catastrophic blunder. Too late. Sadly, Germany didn't make that mistake again.

The second example is what's currently unfolding with cryptocurrencies. This sector smells of fraud and scams. Bitcoin itself is way down from its highs. A massive shakeout, with lots of scandals, seems imminent. Governments, barely concealing their glee, are cracking down and conjuring up regulations to "protect the consumer."

The skeptics will have a field day. But their criticism and scoffing will miss what's happening: An entirely new worldwide ecosystem is emerging. Advances in blockchain technology will soon do to the global financial payments system what the internet did to traditional print media. And advances will be made in creating easy-to-use cryptocurrencies that will be genuine—and better—alternatives to the government fiat currencies we have today. F

Forbes Asia

STAYING POWER

Mori Trust's Miwako Date gears her property firm's hotel upgrades to Japan's tourism push.

BY JAMES SIMMS

Stunning gem: Mori Trust's Suiran hotel, a Marriott Luxury Collection Hotel in Kyoto.

A scion of the nearly 70-year-old real estate giant founded by the Mori family is trying to freshen up the staid building-and-hotel sector in Japan.

Miwako Date (pronounced DAH-tay), the 47-year-old president of Mori Trust, is a rarity in the conservative, male-dominated business. More unusually, she beat out two brothers, no longer at the firm founded by her grandfather, for the company's top job—in a country and region where the eldest son is the traditional choice.

While Japan's real estate sector doesn't lag behind other industrial nations in many aspects, parts of it are in a bit of a time warp. Nowhere is that more clear than in luxury hotels. Often with mid-century designs and dark hushed spaces with indifferent interiors, the nation's top hotels—notwithstanding Japan's impeccable, high-end ryokan inns—fall short of those in New York, London, Paris or Hong Kong in service and design.

For Date, who took the hotel portfolio in 2008 before becoming president in 2016, the emphasis on luxury lodging, including listing a hotel real estate investment trust last year, is part of a drive to increase the firm's revenue and profitability. Of Mori Trust's nearly $1.5 billion in revenue in the fiscal year through March 2018, one fifth came from hotels and the rest mainly from office and condo development, leasing and sales. The latter pillars are self-sustain-

ing, yet growth is slow because of a mature economy and shrinking population.

Tourism, however, is still a rapidly developing market, especially as Japan pushes to expand inbound travelers from 2017's nearly 29 million to 40 million when Tokyo hosts the 2020 Summer Olympics. Visitors have more than doubled in the past three years.

Date, who earned a graduate degree from elite Keio University, where she studied urban planning, spoke with Forbes Asia. *(The interview has been edited.)*

What's the state of Japan's hotels? And what are your plans in the sector?
Japanese hotels are many laps behind the rest of the world. Boutique and luxury hotels are finally starting in Japan. While there are a large number of hotels coming on line, about 86% of them are budget hotels, meaning there aren't that many high-end hotels. Everyone is going in the same direction. That's Japan. Compared to New York, Japan's boutique hotels are two, three or ten laps behind. Hotels with a focus on design are finally starting in Japan—but not the independent boutique hotels with a lot of character, which develop into their own brands [like Ian Schrager's Morgans hotel in New York that started the boutique movement in 1984]. We are developing hotels that have aspects of a global brand and boutique hotel.

You partnered with Marriott International and Schrager on two Edition hotels set to open in Tokyo in 2020 and are planning to further expand the Suiran luxury brand after opening a hotel in Kyoto in 2015 as part of the Marriott Luxury Collection Hotel brand.
As our strategy is targeting inbound visitors, we are planning to partner with global brands.

How do hotels fit into Mori's overall strategy?
The office-leasing business is mature, but it's stable. And we plan to continue to grow at our current pace with new developments in Toranomon, Akasaka and Mita [in central Tokyo]. Three new ones by 2027 will further strengthen our office-lease business. But we'd like to expand the hotel business to that same level of revenue by 2027 with 17 different projects.

"Japanese hotels are many laps behind the rest of the world," says Mori's Date.

As a developer, our job is to maximize the value of real estate. Understanding urban planning and thinking about the location of projects and the mix of uses for that land are part of that. When building hotels, we'll also think about which brand that should be. That will affect the value of the offices and housing. Hotels help to balance our business portfolio. With the [upward] direction of tourism, it's also a big opportunity and a pillar that we must seriously build up. Moreover, I believe that the tourism industry can help drive Japan's economy.

What about the Mori Trust Hotel REIT listed last year?
We listed the hotel REIT to try to objectively show that the value of hotels can correspond to that of offices. In general, the capitalization rate for hotels is the highest [because of the greater risk], when compared to other real estate segments in Japan. If the average of Japanese offices is about 2.8%, the average of hotel REITs is about 6%, followed by housing, distribution and commercial. The average of all domestic REITs is about 4%. Unfortunately, hotel cap rates are the highest.

Our hotel REIT cap rate, however, is around the average of all Japanese REITs at 4%. I think we are showing—with the right hotels—that they're a good investment. That's because they're in good locations—the most important factor, and not because the current conditions favor hotel investment anywhere [because of all the inbound tourism]. Good locations, good brands and good management.

What are the strong and weak points of a family-run business?
Rather than that, I think it's easier to look at the results. As a family company and as long as it's continuing and growing, chances are that you're part of the decision-making process. The company doesn't exist because you exist. If you can contribute to the growth of the company, there's meaning as a family firm. Steady growth is another thing often said about family-run companies. But if looking for expansive growth, there are some limits. When the economy was growing—with the so-called demographic bonus [of an expanding population], a corporation could grow by just showing up. But with the population shrinking, without expansion, that equals decay for family firms. Without innovation, it's just surviving. That's why a new generation must work on the next generation of business.

What about future plans, including overseas investments, like the two office buildings purchased in Boston in 2017, and your "Advance 27" strategic plan for the next decade?
We're currently looking at about Y200 billion ($1.8 billion) in overseas investment. In the Advance plan, we're looking at between Y600 billion and Y800 billion, but I think that it'll be more like between Y1 trillion and Y1.2 trillion, with overseas about 20% of that. We need to wait and see about Europe because of all the uncertainty. There's no need to rush. As for the U.S., the regulations are fairly clear, and my impression is that it's easy to invest. We're also interested in ASEAN. A few years ago, we thought there was risk, but if there are good deals, we'd be interested. F

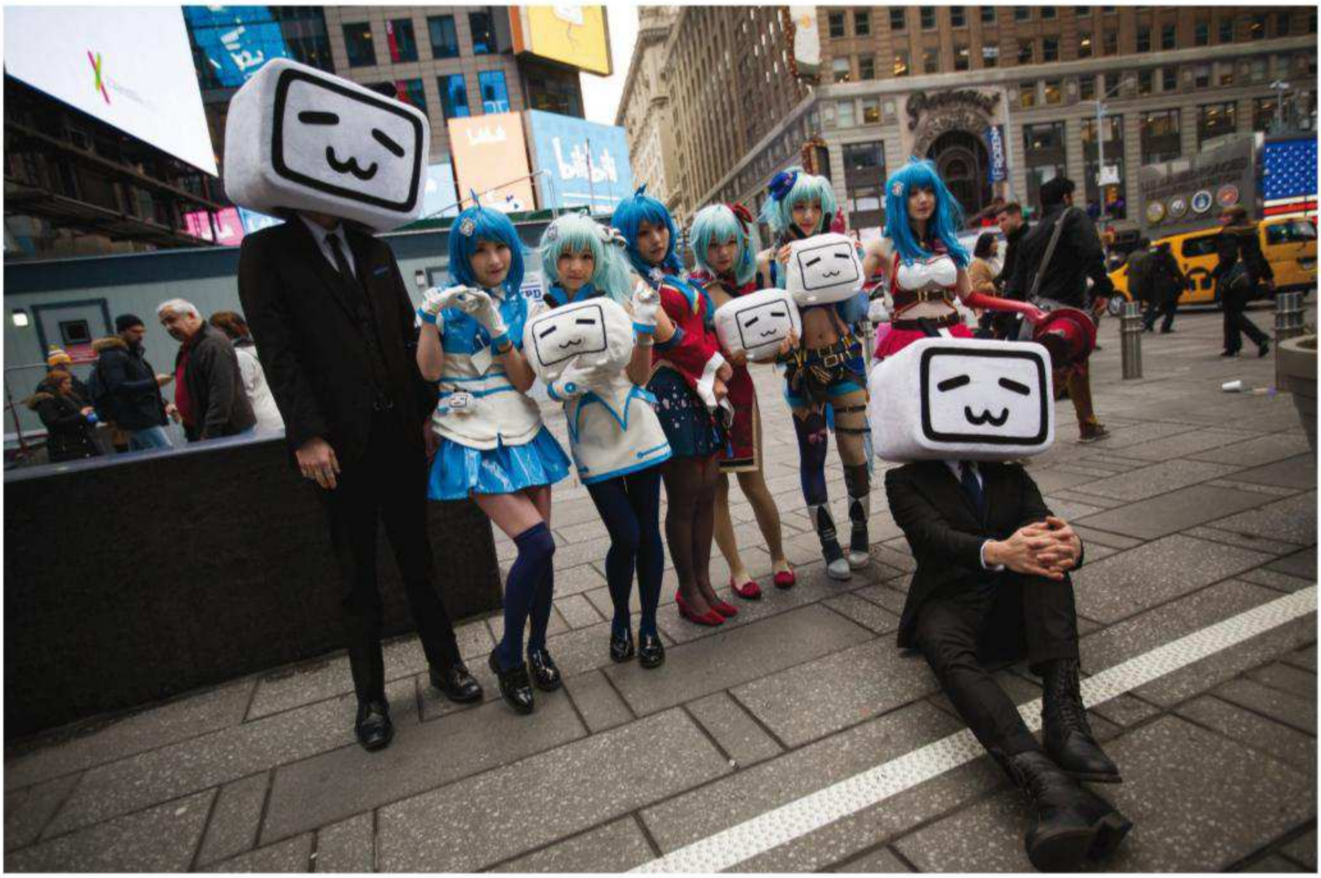
Show Me the Money

Chinese Millennials are flocking to the anime and gaming site Bilibili. But can it make a profit?

BY YUE WANG

Anime and video games have long been an obsession for Li An, but the 30-year-old IT worker from China's southern city of Shenzhen can spare only about an hour a day to indulge his interest. When he goes online to watch videos of his latest fascination, a sci-fi game about androids taking over the world, there are several platforms competing for his attention, but he's loyal to just one site. "I discovered Bilibili when I was in college," Li said. "It's still one of my favorite pastimes today."

Li is one of more than 77 million Chinese fans watching the animation and gaming videos hosted by Bilibili every month. The Nasdaq-listed company sees that user base, which is both internet-savvy and loyal, as its biggest advantage. Chen Rui, Bilibili's chief executive, told local media recently that its strategy is to offer more online services, such as gaming and paid memberships, so it can boost revenue and start turning a profit. The company's revenues



MICHAEL NAGLE/BLOOMBERG

Attendees wearing anime costumes celebrate at the Nasdaq during Bilibili's IPO in March.

PROMOTION

QONECT AI LABO:

A SOCIAL NETWORKING INTEGRATION APPLICATION SET TO REVOLUTIONIZE ECONOMIC ACTIVITY BY USING AI AND AR TECHNOLOGY TO ACHIEVE TWO-WAY, REAL-WORLD CONNECTIONS

In this bold, new financial world of blockchain platforms, cryptocurrencies and bitcoin billionaires, companies that develop user-friendly applications like to bolster their image by referring to themselves as Laboratories. But, that is a misnomer, according to Naokuni Yoshida, chief executive officer of QONECT AI LABO.

"The term Laboratory should only be applied to those capable of revolutionizing the overall social ecosystem. QONECT is about to achieve this goal through the development of the QONECT APP and Token," he says.

Yoshida, a former corporate finance IT specialist has stepped forward with a commitment to achieve seamless connections between online and offline barriers. To achieve this pivotal connection, Yoshida has teamed up with chief operating officer Hikaru Shishido, a former restaurant professional, to establish QONECT CORP.

From the left, QONECT AI LABO COO, Hikaru Shishido, and CEO, Naokuni Yoshida.

AR Connects Online and Offline
An image of QONECT used at the start-up stage to connect online and offline information. Recommendations are displayed on a smartphone screen, along with the images from the immediate locality. Can also be used as an attribution function to achieve accurate tracking of information.

Real Connections with Computer Networks

"It is inconvenient to have boot up applications, such as Facebook, Twitter, Instagram and LINE, and post separate messages just in order to make a simple announcement," says Shishido. "That is why the QONECT APP started with an integration function that allows the user to see information posted on one SNS [social networking site] on all their other social networks."

When Shishido and his colleagues looked a little more deeply, however, they realized that it was not possible to make a seamless connection between online and offline operations. "That's when we realized the need for a new platform capable of better two-way connection between the real world and computer networks," Shishido says.

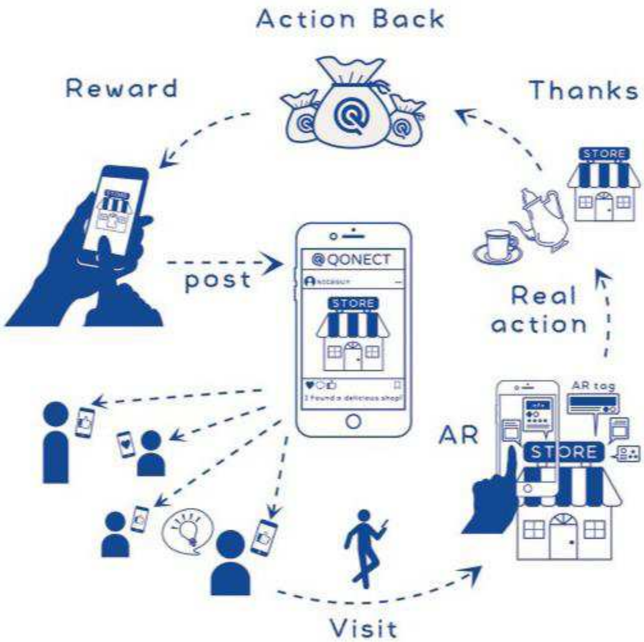
No application existed that was capable of making the connection between the actions of a user who visits a restaurant or a retail outlet after reading about it on a SNS, and the individual who made the original SNS posting about the outlet.

That is where the QONECT CORP expertise comes into play.

Yoshida knew that by using an augmented reality (AR) application function it was already possible to connect location information with internet-based

"Numerous SNS formats, including Facebook, Twitter, Instagram and LINE, play a core role in information distribution, but real-world contacts remain underdeveloped. This is about to change following the development of the QONECT APP. Originally created to unify management of SNS, the QONECT APP does more than boost user-convenience. The unique QONECT Token is based on an Ethereum blockchain technology driven by a unique combination of artificial intelligence and augmented reality. The introduction of the QONECT APP and Token are about to revolutionize the existing economic system."

— NAOKUNI YOSHIDA, CHIEF EXECUTIVE OFFICER, QONECT AI LABO



QONECT Marketing Platform Concept

QONECT is an ecosystem that realizes posting, information sharing, evaluation of updated posts and affiliate automation. Users can send the content of their posts to all SNS, merely by posting on the QONECT application. Affiliate points are awarded to the original users in cases where others who viewed the content on SNS click-through to make a purchase, or create an advertising lead. Affiliation is credited via the unique QONECT Token, and related information, such as points, is managed fairly and safely by blockchain technology.

information, and that if this was the case, then it should be possible to create a connection between that information and a SNS.

"That is why we have developed the QONECT APP as a new platform," he says.

Integrating of AI, AR, Blockchain Technology

Yoshida and Shishido are proposing the QONECT APP as both a SNS integrated application and as a platform in its own right, presenting users with an unprecedented connection experience. One example of how QONECT works is where a restaurant posts an announcement. A user seeing the announcement by confirming the AR tag with the AR function then visits the restaurant and posts their impressions on QONECT. Another user find the restaurant by using the AR function on their smartphone and eats there, then posts their own impressions on QONECT. By doing so, the AR information will be linked SNS information and it is possible to ascertain just who made the initial post and who visited the restaurant," Yoshida says.

This information will be also transmitted to the restaurant, which in turn can show its appreciation by awarding a QONECT Token to the user who helped drum up business.

AI determines whether the individual actually visited the restaurant based on their reaction, such as posting a "like" after reading a post.

QONECT aims to comprehensively cover not only location information, but also outlet-specific information, such as free wi-fi provided by restaurants and retail outlets.

"This is the omni user experience, which has been made possible via the rapid development of technology in recent years, such as AI, AR and blockchain," Yoshida says.

It is also crucial to have a secure protocol in place for dealing with such information, and to that end QONECT is planning to establish a laboratory facility in the Swiss canton of Zug in an area referred to as Crypto Valley—a global hub for state-of-the-art blockchain technologies. This has made it possible for the firm to integrate secure and speedy, smart contract technology, otherwise known as attribution automation, into the QONECT APP.

"Automatic attribution is a new form of economic activity that has not existed so far," Yoshida adds. "This makes it possible for contributors who influence and attract customers to retail outlets to be rewarded without having to go through inconvenient affiliate marketing registration. If this feeds into user motivation, then it should produce revolutionary new forms of economic activity."

Creating a New Ecosystem

Automatic attribution makes it possible to visualize the entire user SNS behavior, even if they go offline. And, by making connections to retail outlets, users can pick up gift coupons and loyalty points. "Up until now, if someone visited an outlet after using a SNS, only the outlet benefited. I don't think that's fair. A fair economic environment can only be achieved by having the store that reaps the economic benefit show its appreciation, in some format, to the person who put the train of economic events into motion," Shishido says.

Users note that at present as much as 80% of the information on computer networks is "noise," and most agree this is not an acceptable vision of the internet; the real value of the internet is in its ability to communicate real information, Shishido says.

The problem lies in the noise created by the disorderly array of affiliate information used to boost access volume.

But, QONECT is riding to the rescue, and eliminating such algorithms by using big data-driven AI. "We see this as the start of a really useful computer network," Yoshida says.

PROFILE

Naokuni Yoshida: Formerly engaged in corporate finance, retail product planning and IT strategy and planning development at Sanwa Bank. After branching out on his own, he provided hands-on support for new business launches that leveraged technology and intellectual property to help small and medium-sized independent firms engaged in mergers and acquisitions. Yoshida is currently focused on business support and management in the field of financial technology.

more than doubled to $138 million in the first quarter this year, with losses shrinking to $9.2 million.

Under the leadership of the 40-year-old Rui, a confessed anime fan as well as a serial entrepreneur, Bilibili has carved out a formidable niche while going up against internet giants like Alibaba and Tencent, which have been spending billions in a cutthroat race to dominate the country's massive online video market. Analysts say Bilibili has some unique advantages, but it remains to be seen whether the company can turn a profit while keeping all those Chinese Millennials engaged.

Bilibili has several unusual features that distinguish it from

CEO Chen Rui, serial entrepreneur and confessed anime fan.

MICHAEL NAGLE/BLOOMBERG

rival sites. In addition to providing content through exclusive partnerships with local artists and overseas studios, the platform has created a number of ways to immerse its users in the so-called "er ci yuan" culture. The term, which loosely translates as "two-dimensional space," is widely used in China to refer to the virtual world of anime, comics and games.

"Bilibili is like a community of young fans," says Tong Chen, managing director of investment firm IDG Capital, which has invested in the company. "In China there isn't any similar platform of this scale, and it is keeping users highly engaged."

One such feature allows users with site membership to gain access to more content by passing online tests with questions involving subjects that range from company history to Japanese manga artists. Members also have access to more interactive functions like "bullet-screen chatting," which allows multiple viewers to type in comments that are shown simultaneously across a streaming video, like darting bullets.

Bilibili's users spent an average of 78 minutes a day on the platform in April, up from 73 minutes in March, according to consultancy Analysys International. As Tong says, Bilibili's user base is distinctively young: More than 55% of its viewers are under 24, compared with 18% to 19% at Alibaba's Youku Tudou, Tencent Video and the Baidu-backed iQiyi, Analysys International's data shows. The rest of Bilibili's fans are mostly longtime followers like Li, who started to visit the site during his first year of university and helped spread its popularity through word of mouth.

Chen, who was a founding member of New York-listed mobile apps maker Cheetah Mobile before joining Bilibili in 2014, has an official page on the site that uses a Japanese cartoon as his profile picture. He regularly engages with users by commenting on trending clips and is a fan of popular anime series including Fate/Apocrypha and Re:Creators.

More important than Chen's online interactions has been the talent Bilibili has recruited. The company was founded in 2009 by Xu Yi, 28, who built the prototype site. He later gave control to Chen but stayed on as president to take charge of its "community culture," according to its prospectus (which also states that Chen Rui has a 21.5% ownership stake and Xu Yi 13.1%). Chen has since upgraded the company's technology, expanded its team to 2,000 and introduced more services such as anime-themed games and pay-per-view shows. "It is rare to find someone of Chen's age who understands Bilibili's youth culture and also has the right expertise to manage the firm," IDG's Tong says.

Still, Bilibili is nowhere close to achieving Chen's grand ambition. The company says in its prospectus that it has evolved into a "full-spectrum online entertainment world" covering video, live broadcasts and mobile games, but it has yet to figure out how to make money beyond gaming.

Bilibili depends on mobile games—chiefly the Fate/Grand Order and Azur Lane, both licensed from Japan—for as much as 80% of its revenue. The imbalance is a risk because it shows the company's "main operation of video streaming isn't becoming a revenue driver," says Ma Shicong, an Analysys International analyst. And this seems unlikely to change in the near future. In China, people are just starting to open their wallets for content, after years of rampant piracy that severely hindered subscription-based memberships. For Bilibili, this means that related payments are unlikely to contribute much to revenue anytime soon, says Guo Chengjie, an analyst at Beijing-based consultancy iResearch.

Meanwhile, the company's experience selling advertising—a major revenue source at other Chinese video services—sparked an online backlash. In 2016 Bilibili placed ads in several Japanese anime series, which angry users pointed out was in violation of the founder's promise of "forever no ads" in the videos on its site. Chen quickly made a public apology, and now the site carries only banner ads. In the meantime, competition has been heating up. In a bid to attract young users, iQiyi, Youku Tudou and Tencent Video are all beefing up their anime channels, with the Tencent-backed video-sharing site Kuaishou recently acquiring Bilibili rival AcFun for an undisclosed amount.

IDG's Tong remains optimistic. "Monetization is at the very early stages," he says. "If not done right, this will affect user experience. But as long as the company can keep people engaged and spend longer periods of time inside its platform, monetization is sure to happen someday." F

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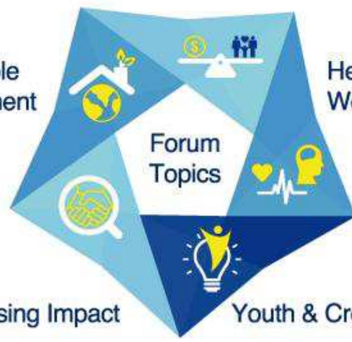

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MINZAYAR OO/PANOS PICTURES FOR FORBES

‘We Have to Worry’

Spend some time with Myanmar tycoon Thein Tun and the trials and tribulations of doing business in the crisis-torn country become quite clear.

BY JANE A. PETERSON

To enter into Thein Tun's realm is to go barefoot—as is the custom in Myanmar—and to step back in time. He flashes a warm smile as he gets up from his desk, on the second floor of Tun Commercial Bank in downtown Yangon, his seat of action. Like many local males, he's dressed in traditional attire: an ankle-length wraparound *longyi* and a *taikpon* jacket, both made popular during the British colonial era when Tun was growing up in a poor rural family. His face shows no sign of sweat, though the office is not air-conditioned on a day when the temperature outside registers 37 degrees Celsius.

On his desk, amid piles of documents and reports, are two laptops and copies of the newspaper he owns, the *Myanmar Times*. The ledge of an antique dragon cabinet is lined with bottles of the beer, water and wine he produces. In one framed photo, covered in a protective plastic wrap, Tun sits with a large group of orphans, sponsored through his Tun Foundation; in another, he's chairing an Asean Banking Council meeting in 2013. On the

Tun has filled a postcolonial void in traditional sectors such as banking.

floor, against the wall, is an artist's rendering of Domel by the Bay, part of his planned luxury island development. He takes a seat in a cluster of Chinese armchairs laced with mother of pearl.

At 82, Tun is one of the most venerable of the country's tycoons. He wears multiple hats as chairman of Myanma Golden Star Group, his sprawling family empire. Some 3,000 staff work in 17 businesses that include commodity trading, hotel management, fish farming and rubber manufacturing. He's part of Myanmar's first generation of entrepreneurs and license-holders who, after colonial rule ended, filled a vacuum in traditional sectors such as banking and property development and also captured the local franchises for multinational brands looking to expand into every last market.

Tun's privately held conglomerate also holds stakes in two joint ventures to bottle and distribute beverages, most notably Pepsi soft drinks and Carlsberg beer. Indeed, among the old guard in the Burmese business community, he's still known as Pepsi Thein Tun for his role in bringing the American brand to the country in 1990. When U.S. sanctions forced Pepsi to leave seven years later, it gave him the franchise and $15 million—enough to start his own soft-drink brand. "When the country opened to a market economy, I could use all my assets," he says, his voice competing with car horns outside.

That was in 2011. Tun estimates, rather reluctantly, that during the glory years, 2012 through 2014, his annual profits hovered around $4 million. He claims that the value of his extensive property portfolio may have put him in the billionaire ranks, though no one in Myanmar has ever made *Forbes*' annual list.

If business had continued to boom, billionaire status might have been in sight. But it didn't. The international outcry over the alleged government-led ethnic cleansing of the country's Muslim Rohingya population in northern Myanmar has led to widespread cancellations by Western tourists. The overall number of tourists fell 3% in the first three months of the year, to 920,000, though tourism from Japan, China, Thailand and South Korea rose.

Foreign direct investment also remains well off its 2015 highs. And property values, says Tun, are down 10% to 30%, compared with 2014, depending on the area. That, he says, is slowing down his proposed Yangon office tower.

Last fall Tun felt obliged to open a three-star hotel in Bagan, Myanmar's most popular tourist area, because its construction was finished. "We are losing money every month," he sighed. Occupancy hovers between 20% and 30%. "We have to build up the image of our country," he says, noting that the hospitality sector will improve if the "Rakhine" crisis is resolved. (The government has banned the word "Rohingya.")

His enterprises break even on balance, he surmises. Languishing in the red: his hotel and publishing businesses. Just two businesses turn a profit: Tun Foundation Finance, a microfinance unit that has granted loans to 30,000 customers, and Tun Commercial Bank, which boasts 25 branches, 850 employees, 40,000 customers, deposits of around $1 billion and plans to expand. The rest of his businesses, including real estate, rubber and drinks, are just treading water. Does he fear a return of international sanctions? "We have to worry," says Tun. "Our business, our people will suffer. Let the government sort it out."

Many Myanmar tycoons built empires and became rich through their connections to the generals who ran the country for decades. But Tun says he is not in that category. "I am not a crony; I am straight," he says, adding that he has never taken a bribe. He acknowledges paying them, but says none have been for a "big amount." His name has never been on a sanctions list, and he says he has no connection to the current leaders, State Counsellor Aung San Suu Kyi or President Win Myint.

On this day in late May, the tycoon is just back from a trip to Chennai, where he interviewed yet another prospective editor for his newspaper. It operates three bureaus—in Yangon, Mandalay and Nay Pyi Taw—and publishes print editions in Burmese and English as well as online. "In 2014 I did a stupid thing—I bought the *Myanmar Times*," he recalls, breaking into a peal of laughter. "I had a gut feeling to buy it, but it doesn't make money."

Running a business in Myanmar is very hard—the World Bank ranks the country at No. 171 in its ease of doing business (New Zealand is first and Singapore is second)—and Tun admits that he struggles to manage his vast range of businesses. The newspaper demands too much of his time, perhaps partly because it publishes opinion pieces with competing views of the Rakhine crisis. He also can't find enough good managers for his companies. "It's very diffi-

MINZAYAR OO/PANOS PICTURES FOR FORBES

cult to find qualified, honest people in this country," he laments, blaming much of the problem on Myanmar's inadequate education system, which he left at age 16.

His experience with foreign partners is mixed. He happily sold a 70% stake in his Pepsi and Popa Water businesses to South Korea's Lotte Group in 2013 to form the Lotte-MGS Beverage Co. While the business, which claims a book value of $114 million, doesn't turn a profit, Korean managing director Herby Hur appears unfazed. He says the business, still in a nascent phase, is growing by double digits annually, with profits expected "as the years roll on."

By contrast, Tun says he won't do business again in China. "It's never good," he concludes, recalling that Myanma Golden Star once bought six Chinese PET molding machines with a guarantee they would yield 200,000 bottles a day. After he couldn't get the machines to make that many, he asked the company to send a team to Myanmar to figure out the problem. "They could produce only half," he says. "They won't be coming back."

His wife died 25 years ago, so Tun lives alone in a home next to the Chinese Embassy, a 20-minute drive from his office. When in Yangon, the alarm rings at 5 a.m. He scans all the newspapers—part of his daily five-hour reading regimen—and by 6:30 a.m. he initiates a conference call for a cadre of 12 senior managers. After a full day at either the bank office or the Myanma Golden Star head office, he returns home to work until 11 p.m. He has soup for dinner and usually brings his lunch to the office. "No wine, no four legs, no sugar," he chuckles.

Over a takeout lunch served by his secretary at one end of a spacious boardroom table, Tun reflects on his path from the Wakema Township in the Ayeyarwaddy region. "I couldn't go to university, but I worked hard—when you're young you have to torture yourself, otherwise other people will torture you. That's my philosophy," he says, noting that his first endeavor was to produce and sell groundnut oil with the help of local farmers. "When I made money, I collected three things: land, antiques and gold coins."

Now he's embarking on the most ambitious project of his career, a luxury resort on Domel Island, off Myanmar's south coast on the Andaman Sea near Thailand. As an animated video of the project plays in the background, Tun explains that he bought the 1,400-acre plot from the government two years ago and now needs partners to help finance development costs. Just back from India, he will be traveling again the next day, to fly down to the island. Two show homes have been built, and plans call for hotels and 400 villas. Prices will begin at $200,000 to $300,000 for a three-bedroom home. The market launch, which could happen as early as November, is aimed at elite buyers in Thailand, Malaysia, Singapore and China. "This is the last project of my life," he quips. "I think it will be profitable."

By all accounts, the octogenarian holds fast to the company reins. Family members concur that only he has a complete grasp of the businesses, and he prefers to keep certain key financial details to himself, even though he insists that his two Western-educated sons will take over by his 85th birthday. The eldest, 57-year-old Thant Zin Tun, is vice chairman of Myanma Golden Star, while 55-year-old Oo Oo Tun manages Tun's trading subsidiary from Singapore and plans to move back to Yangon this summer. Daughter Mar Mar Tun, 56, his only biological daughter, works with her husband, whiskey magnate Aung Moe Kyaw of Myanmar's IBTC Group. "My father is the hands-on manager," Oo Oo explains during a phone interview. "He doesn't do things for the sake of money. Business is his hobby. He loves it." Thant Zin's daughter Fiona Tun adds: "My grandfather is in control, and things aren't done without his approval," noting that her father mainly helps close business deals.

Other family members involved in his business include three grandchildren, all Western-educated and in their 20s, who serve as junior executives: Fiona at the *Myanmar Times*, Elizabeth Tun at the bank and Daniel Tun at Carlsberg.

Tun says he wants to retire to spend more time with an adopted daughter, 4-year-old Myat Chal. He lights up as he scrolls through her photos on his mobile phone. He also wants to focus on his foundation, which operates two hospitals and one library as well as providing schooling and housing for 150 orphans. "My father has a big heart," says daughter Kyi Kyi Khine, 34, whom Tun also adopted as a child, noting that if a village needs a well, her father sends a team to dig it. "For him, success would be helping every young person in Myanmar." She holds the title of executive director at Myanma Golden Star, which she says involves doing whatever troubleshooting he assigns her. "It's hard to keep up with him, and it's hard to satisfy him," she says. "I don't believe he will ever retire. Work is what keeps him lively."

"I worked hard—when you're young you have to torture yourself."

MINZAYAR OO/PANOS PICTURES FOR FORBES

How China Out-Innovates

Alibaba's strategy chief Ming Zeng says the Web era flipped the playing field.

BY DAVID A. ANDELMAN

Seven years into his two-decades-long campaign to transform Alibaba into China's premier website for e-commerce and beyond, Jack Ma called on Ming Zeng to join as his zong canmouzhang*—director of strategic planning. Ming, 48, has assembled his thinking into a new book,* Smart Business: What Alibaba's Success Reveals About the Future of Strategy, *which will be published in September by Harvard Business School Press. He elaborated on his vision and Alibaba's in recent conversations, as edited:*

FORBES ASIA: You've talked about core aims. One of them is total transparency. That seems antithetical to what we know about China in the last 20 years.
Ming Zeng: Despite all the ups and downs, the overall theme over the last two decades has been market reform. Alibaba has benefited tremendously from that. The online market is one of the least regulated markets and maybe the most competitive in China. This is also a high-tech industry. So most of the companies value transparency and competitiveness in the marketplace. Alibaba has been proposing that type of value in China for many years. We are known in China as a company driven by mission, vision and value, and a company that aims to do good for the whole society.

How do you see yourself as different from Tencent, apparently your biggest rival, and how will your future growth compare?
It is not that they are competing fiercely against each other. Tencent is more a typical internet company and Alibaba is quite a unique e-commerce company. Of course, in any e-commerce company of the future you have to have a social element. And also for any social networking platform, there is a certain level of e-commerce growing out of that platform. So I think both ecosystems are highly self-sufficient. Still, there are overlaps between the two ecosystems, but these two ecosystems are more or less growing independently.

Do you really need to take Alibaba to Europe or, eventually, even the U.S. to continue achieving this growth pace?
Alibaba is very interested in building an international trading platform that really benefits countries all over the world including Southeast Asia, India, Africa, in addition to Europe and the U.S. So our expansion is not primarily driven by growth but more by our mission. We have a new global trading system built on a new infrastructure of technology that will benefit tremendously enterprises all over the world.

I am interested in what you call "datafication." You gather more data on people and companies than most Western internet companies. But that seems to be accepted in China?
There is a similar standard in China and the U.S. We do pay attention to internet data privacy. We follow the same standards as Amazon and Google. People in China are also very sensitive about use of their private information. The usage of data is following the international standard of using information at the aggregate level, not selling or disclosing individual information at all.

"The organization of the future will look more like a network."

IMAGINE CHINA/NEWSCOM

In your Alipay or lending operations, you find out quite a lot about individuals and their ability to repay loans, to be responsible lending prospects. How do you convince people to give you that information?
For individuals or SMEs who have no access to lending at all, giving some information to us so we can assess their credit risk so they can get access to loans is worth some imposition.

That's how you develop huge databases of lenders and consumers as well?
That is a fundamental question in this data age: To what degree are you willing to give out your information or data so you can get much better service, including tailor-made offerings. If the concern about privacy protection or data usage is not severe, most people would opt for better customer value.

Clearly, you have to understand the culture where you are operating.
There is a certain element of culture, but also there is an aspect of fast innovation of tailor-made products and services. You can get much faster access to loans, simply because you have very good data that you can share with others.

The traditional model for corporations is that they need to stick to their core competencies. Yet you seem to be diversifying into every form of business imaginable. How did you get away from this traditional structure of core competencies to become as you are—really a huge conglomerate in many respects?
I can argue the core competence of Alibaba Group is to build the infrastructure of the future—different types of platforms or ecosystems. So we just apply our core competencies in different contexts. That's one way to answer your question. The other is that concepts such as core competence are becoming obsolete. The organization of the future will look more like a network. A network grows by different dynamics. The old, diversified conglomerate was like a complex machine of the old industrial age. It collapsed when it reached a certain complexity. But the future of business is more biological rather than mechanical. And a company like Alibaba is growing organically, with very important and inherent connections of different parts of our ecosystems. So an ecological system grows and becomes more and more sophisticated, even more robust when it becomes richer and more diverse.

You've tried to expand in other areas. For instance, Ant was trying to take over Moneygram in the U.S. And the U.S. government refused to allow that. How does a company get around those kinds of obstacles?
Any new business, while growing up, always encounters obstacles. We understand that. It is part of the cost of doing business. So we might be frustrated. But because the value we create is so

overwhelming, we will find some way to overcome that barrier. So to take this example, it might not be bad that we didn't buy Moneygram. Ant Financial just launched an international wire transfer service—an even newer, more innovative technology, based on blockchain.

That seems to be an opportunity that the U.S. government has given you that you might not have seized on your own.
Yes, they push us into a corner—we have to find more innovative ways to do things.

Do companies have to have a certain scale to take advantage of that? You are so hugely dominant in the regions and sectors where you do business. Is that equally applicable to companies that are less dominant?
We started with a very small startup. You cannot answer this question from the perspective of Alibaba today. You have to have a historical perspective. How did we get here? That's why the lessons are so valuable. Let's take this international money transfer. We are nobody in this area. There are so many other players who have larger positions. We launched a service just as another startup, and we just found a new way to push the envelope, to build new value for the customer. It's not about our size, it's about our innovation experience and our understanding of where the future goes.

It's also a suggestion of why the U.S. is never going to win in a trade war with China, because China will always have a new and innovative way of circumventing these obstacles that the U.S. or any other country is putting up.
Yes. The so-called trade dispute is also an issue of the industrial age, the old paradigm. And what determines the future is who wins in the game of smart business. Think about Apple, Google, Amazon, and Facebook and Microsoft—the only competition is who becomes the first trillion-dollar company. I would doubt if any of their CEOs spend very much time at all on the U.S.-China trade dispute.

You say that China is the "richest petri dish of innovation in the world." Washington has tagged China with stealing innovation from other countries. But you say you are developing it yourself—fostering the kind of innovation that will not necessarily need to take or borrow from other countries.
My first book ten years ago was about the fast growth of manufacturing companies in China. At that time innovation in China was mostly driven by low-cost imitation. But when we got into the internet era, like, for example, cloud computing, Alibaba developed the core technology of cloud computing all by ourselves. Also with artificial intelligence. How to apply that to real-world problems still takes tremendous innovation. We try, whenever a customer comes to our website, to show them a tailor-made Web page which will be different, even if the person logs on two hours later. It will be adjusted according to the person's browsing history for those two hours. This is only feasible using artificial intelligence technology that was developed in-house. People have to understand that at companies like Alibaba, we drive innovation, we are a high-tech powerhouse.

So what happens if a government tilts the playing field like the U.S. now seems to be doing?
For most American companies, their principal worry seems to be whether their home base in the U.S. is being destroyed. It is not about whether they can succeed globally. It's about whether their very foundation is being taken away. For example, take Walmart. Their real threat is to what degree Amazon will crush them. Amazon is getting into grocery delivery, buying Whole Foods. More and more companies are under the threat of Amazon. Can they really compete against Amazon? Companies need first to buy into the new logic of the future. They have to believe it. With internet companies, that's how they grow up. So they are living it 100%. Most traditional companies may accept such terms as mobile internet, artificial intelligence, but very few of them really understand how they actually work. So without a real understanding in the first place, it's impossible for them to start an organizational transformation. My book explains how internet companies really work and how they can gain the competitive advantage—lessons that will apply to everyone in the future. If they want to understand how to survive they have to understand and believe in these new rules. And then they have to transform their organization, to follow this new logic. It is going to be a very difficult challenge, but that is the only way to survive in the future.

There are at least three multibillion-dollar private equity funds in the U.S. that are targeting Asia, particularly China. How can companies in China especially make themselves more attractive to these potential investors, to these fund managers?
I will be quite blunt. You are asking the wrong question. You are falling into the old trap. The challenge is not for these innovative Chinese companies to look more attractive to the U.S. private equity funds. The challenge is for the U.S. equity firms to become more attractive to these innovative Chinese companies.

Okay, how do they do that then?
Globally—and it is not just about China—the balance between capital and innovative companies is shifting. The innovative companies are the scarce resources. Capital is abundant. So the game is changing from entrepreneurs trying to court capital to capital that has to court the private innovation companies. There is a generational shift. To answer your question more directly, the U.S. funds have to become much more local because they are competing against second-generation Chinese funds. The first generation of entrepreneurs not only make the money but also invest this money. So they are more attractive to the local entrepreneurs of the next generation. It is not easy for U.S.-based private capital funds to compete against this new generation of funds in China.

IPO Exercise

Hopes for six-pack flab-to-abs pumps out billionaire at Japan's MTG.

BY JAMES SIMMS

Tsuyoshi Matsushita's net worth has shaped up nicely in recent weeks.

KEVIN MAZUR/GETTY IMAGES FOR MDNA SKIN

A quick fix with no pain sounds like a dubious proposition offered by late-night infomercials when it comes to getting into shape after years of channel surfing and six-packs (the beer kind). But a million-plus shipments over the past three years of an abdominal-manipulation device and derivatives—ones with a difference, the company says—have helped Japan mint its latest billionaire.

After establishing its Sixpad electrical muscle-stimulation (EMS) machine with TV ads starring soccer phenom Cristiano Ronaldo, MTG listed on the Tokyo Stock Exchange's Mothers section in July, making founder and president Tsuyoshi Matsushita's 72% stake worth about $1.8 billion. The IPO was Japan's second largest in 2018 after online-market site Mercari's a month earlier.

Matsushita, 47, who worked for auto-parts giant Denso straight out of high school, quit that job after two years, worked for another company to save money and then opened a used-car dealership in 1994. In 1996 he moved on to beauty and fitness products, setting up MTG. Becoming an entrepreneur had been a dream since childhood.

In 2009 he scored his first hit with the ReFa handheld roller massager, which sends out a weak electrical current to stimulate circulation, and he followed up with Sixpad in 2015. Sixpad, which runs $230 for the ab-only version, sends electrical pulses to stimulate muscle movement. Other models focus on the arms, legs and torso. Over the past decade, consumers have bought 7 million of the different versions of the massager, some costing several hundred dollars.

These two lines accounted for most of the company's $404 million in fiscal-year sales through September 2017. Luxury cosmetics brand MDNA Skin, developed with singer Madonna, is a potential sales driver, and for the current fiscal year MTG forecasts about a 30% jump in revenue and profit.

In a July report its underwriter, Nomura Securities, wrote that the company has outpaced rivals in a crowded health and beauty market through aggressive marketing and branding, using science to back up its fitness claims and develop products, clamping down on knockoffs and outsourcing all manufacturing.

The brokerage reckoned that revenue and operating profit will expand by half in the next two years to $824 million and $106 million, respectively, based on MTG's expanding sales through e-commerce and electronics retailers in Japan plus overseas markets like China and Korea. Brand extensions of its two main lines, including a full-body Sixpad training device and nutritional supplements, and expansion of MDNA makeup are also critical, it said. In Tokyo's tony Daikanyama area, MTG opened in July its first fitness club featuring the EMS suit, to supposedly enable a full workout in 15 minutes. A one-time visit will run about $70. It's the first in a plan for 500 gyms in Japan and 4,500 overseas.

Helped by superstars like Ronaldo and Madonna, who've done promotional events in Japan, the company has a strong brand image. (The two celebrities each have 324,000 MTG stock options, which at an $8.26 strike price would be worth nearly $19 million apiece based on MTG's July 10 closing price.) Matsushita has said that luxury-product and service giant LVMH is inspiration for his brand management and marketing efforts.

And while EMS has been touted for decades for the rehabilitation of injured muscles and in esthetic salons to slim faces and bodies, more than a few experts have doubts over its efficacy. MTG, however, says its products are based on science and have research from Japan's top schools, like Kyoto University, to support their effectiveness. (And its ads are more polished than the body-perfect infomercials of yore.) One cited paper, which received a partial grant from MTG and had only seven test subjects, is drily titled: "Effect of electrode position of low intensity neuromuscular electrical stimulation on the evoked force in the quadriceps femoris muscle."

Though that does sound better than "Turn off the TV and get off the couch." F

THE NEXT TYCOONS
A GENERATION EMERGES

Riverboat Queens

Starting a century ago, four generations of women have run the Bangkok company that ferries people across the Chao Phraya. Now the property business is calling.

BY SUSAN CUNNINGHAM

ADAM DEAN FOR FORBES

Supapan Pichaironarongsongkram is explaining the art of managing the tough men who operate her 90-strong fleet of ferries, commuter boats and charters that ply Bangkok's Chao Phraya River. "When you work with men, you don't work as a woman and a man. A man will always look down on a woman. They probably don't think I know much. I go to them as a friend or mother. I protect them. If they know that, they will trust me. They know they will never lose a job."

Supapan, 73, represents the third generation of women at the helm of Supatra & Chao Phraya Express Boat Group. Her grandmother started the ferry service roughly a century ago—the exact year is unknown—and when she died in 1931, Supapan's mother took over at age 20 *(see box, p. 33)*. Today the group comprises ten companies and 600 employees, and the fourth generation is getting ready to take over. Supapan's 32-year-old daughter, Natapree, better known as Pim, has been building the group's advertising sales, hotel and real estate businesses for the past six years.

Supapan is petite, soft-spoken and impeccably groomed. If she hadn't felt a sense of responsibility to carry on the family business, she would have followed a more genteel line of work, perhaps using her French degree or pursuing a career as a pianist. But, says Pim, her only child, her mother's benign appearance is deceptive: "She works six days a week. She doesn't have an engineering degree, but she knows all the specifications of the boats, the materials, the buoyancy required for the boats to float, the width of the river, the depth of the river. She will act like she doesn't know much, but she knows *everything*. You cannot mess with her." Until his death in 2007, Supapan's architect husband, Pao Pichaironarongsongkram, also worked in the company's management, but the women were always the bosses.

The privately held group generates $30 million in revenue a year, but that figure is expected to soar over the next decade for two reasons: Supapan plans to replace her entire open-air wooden express fleet with sleek, high-speed, air-conditioned aluminum boats, perhaps catamarans that will skim above the water. And Pim is drawing up plans for the group's $300 million in

Two of four generations of the family business: Supapan with daughter Natapree ("Pim").

property, much of it undeveloped. The 57 Chao Phraya Express boats account for one third of the revenue. They run like public buses for 13 miles up and down the river, hauling more than 100,000 passengers a month. Their share of the group's receipts might shrink as the real estate business grows, but both mother and daughter say boats will always be their core business. "When you see the Supatra brand, you know it must be by the water," says Supapan.

Even in a region known for its family-owned companies controlled by successive generations, the Pichaironarongsongkrams may be unique. More daughters are taking over companies from their fathers throughout Asia. But a daughter taking over from her mother is rare, and a fourth generation of daughters assuming the reins is unheard of. Overall, only around 3% of new businesses worldwide will stay in the family and in the same business for three generations, studies have found.

Fortuitously, Supapan's formidable mother, Supatra Singholaka, enjoyed an unusual pastime when she wasn't building her boat company. "She loved buying land," recalls Supapan. There are plots all over Thailand waiting to be developed, from Bangkok to the coast to northern Chiang Rai Province. Pim launched Supatra Real Estate Co. in 2015, and the offshoot has already opened two riverside hotels and two mini-malls.

Pim had ideal preparation for the work. In 2004, after high school at Switzerland's Institut Le Rosey, she headed to Cornell University's School of Hotel Administration. Her mother had recently opened two riverside restaurants and a resort hotel in the coastal town of Hua Hin, fulfilling an early interest in hospitality, and Pim wanted to build and own more hotels. But studying at Cornell widened her horizons. "I wanted to build more than hotels. I wanted to be in the real estate sector, to build perhaps condos, apartment houses, maybe retail." After a year as an analyst at Colliers International in Bangkok, she returned to the U.S. to earn a master's in real estate development at Columbia University.

From the scrapbook: Supapan and young Natapree with Supapan's mother, Supatra, who loved buying real estate in her spare time.

Pim says she learned "a way of thinking about a project in 360 degrees. It preps you in the stages of development. Who are the stakeholders? The financiers? How to get financing?" Returning to Bangkok in 2011, she faced her first challenge: what to do with a prime riverside piece of property. Then serving as a parking lot, the 1.2 acres are adjacent to Supatra's Tha Chang pier, where, along with students attending two nearby universities, thousands of tourists pass through daily to visit the sights of the old royal city.

After ordering a feasibility study, Pim decided to build Tha Maharaj, a two-story shopping mall fronted by a public park along the river. "I did my own loan package, negotiated the terms, talked to architects," she says. Then she had to recruit 42 shops, kiosks, restaurants and a few office tenants to fill the space. Only 26 at the time, she could sometimes detect that her youth startled potential tenants: "Saying that I ran a sister company to Supatra always helped."

During the same period, Pim also developed three projects across the river from Bangkok in Thonburi. She transformed an apartment building into the 68-room Riva Surya hotel, built the 25-room Riva Arun boutique hotel and turned a ramshackle shopping center into the Wang Lang minimall last year. "After so much investment the past few years, Supatra Real Estate is at a loss," she says, "but the revenue is there, and it's on par with our expectations. For every business unit we expect growth, but it's different from business to business." Overall, the group makes money, she says, thanks to the steady profits of the boat business.

That business is set for a makeover. Supapan plans to spend more than $20 million on the high-speed boats for her express service, which started in 1971 and accounts for most of the boat business' revenue. To fund this ambitious upgrade, the mother-daughter pair is exploring a stock market listing, signing up a partner or both. The partner would most likely be a foreign company because experts in riverboat design are overseas. Well aware that "tourists love the wooden boats," the two quickly offer assurances that the old boats will be switched to tourist services, such as charters, hotel shuttles or additional single-pass "hop-on, hop-off" boats.

The launch of the first lines of the Skytrain in 1999 and the MRT subway in 2004 raised expectations for comfort and speed in mass transit. Once the new fleet is deployed, moving from commuter rail to boat to air-conditioned bus should be "seamless," says Pim. "We want high speed so that we can work against time," explains Supapan. "People are willing to buy time. We travel much faster than buses and we are very punctual. It will change the scene completely." What's more, the government will allow the company to raise its fares. By the end of the year, commuters will be able to use a stored-value card on both the express boats and two subway lines.

As the modernization progresses, Pim is becoming more immersed in the boat operations. "I didn't sign up for the boat business," she says, but in the past year she has

FOUR WOMEN AND THEIR FERRIES

It was around 100 years ago that the matriarch of the Supatra empire, Boonpan, started what is today the Supatra & Chao Phraya Express Boat Group. The boats were the size of sampans and were paddled by standing rowers with one leg slung around an oar.

Born in Chiang Mai, Boonpan had accompanied the famed northern princess Dara Sami downriver in 1886 on the way to becoming one of the many wives of Siamese King Chulalongkorn (Rama V). Boonpan married a Siamese official and settled on the west bank of the river (where the family's River House restaurant is today). She sent her youngest daughter, Supatra Singholaka, at age 12 to live and serve in the palace of Rama VI. Supatra later recalled six years in a gilded cage, playing tennis, billiards and bridge with two queens.

Chiang Mai-born Boonpan, the original boat lady, continued to wear a northern hairstyle in Siam.

She returned home in 1930, and soon afterward her mother died. Supatra must have somehow caught up on her studies, surmises her daughter, Supapan Pichaironarongsongkram, because she passed the examination to enroll in the inaugural class at Thammasat University in 1934. Four years later she was among only four women in her graduating law class of thousands, all the while managing the ferry operations.

Supatra gradually replaced the sampans with outboard motorboats. By the time she was interviewed by the *Bangkok Post* in 1965, Supatra Motor Launch Co. employed 300 people and had operations building and repairing boats and piers. The ferry business dropped 40% overnight when the first of ten cross-river bridges opened in 1971, but profits more than recovered after she introduced the up-and-down-river express boats shortly afterward.

A prominent advocate for the legal right of married women to buy and own property and to initiate divorce, Supatra had unconventional views of the roles of upper-class Thai women. She told the *Post* that she expected her two daughters to join the business after study overseas: "I succeeded in business and so can they." Her younger daughter, Patravadi Mejudhon, instead became an actress and theater director.

After schooling in Switzerland and England, Supapan majored in French at American University in Washington, D.C., and briefly worked for the Tourist Organization of Thailand, but soon responded to the pull of duty. Since her mother's death in 1993, she has diversified by tailoring boat services for tourists and opening restaurants and hotels. "She did not choose this job," says her daughter, Pim, "but she said, 'If you are given a responsibility, you have to do it well.'" *—S.C.*

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waded in by managing its six charters for hire. She added online booking via the likes of TripAdvisor and tour agencies to the traditional booking channels at hotels and travel agencies. She wants to add excursions beyond Bangkok, perhaps to the seaside. "I'm making us more glamorous," she says. She's also persuaded her mother to switch most managerial staff from a six-day to a five-day workweek: "It had become too hard to recruit."

In the first few years of her working life, says Pim, the most valuable thing she learned from her mother was "to be very straightforward. If something's not working, I have to confront it." In a culture that sets a premium on *krengjai*—deference, or reluctance to cause offense—it's not easy to cultivate that quality. Since Supapan also allowed her "to experience my own bad decisions," Pim learned that quick decisions and directness save time and worry in the long run.

For her part, Supapan sees that Pim has some business skills she lacks: "I think she's quite smart. What I admire about her is that she can negotiate. That's an art. Business is constant negotiation and compromise. With me, I still find fault. I still argue all the time. She is calm, yet she has principles. She doesn't say yes all the time."

To streamline the operation, Pim is striving to outsource as much as possible—whether it's to cleaning crews or professional managers—and form a tight team she can rely on. With boat services starting at dawn, shops closing at 10 p.m. and hotels open around the clock, "there are always problems" and thus text messages. She wants to reach the point where, if she and her mother are meeting potential partners in Europe or taking a vacation, as they did in Iran in May, she doesn't feel compelled to check her phone frequently.

Supapan jokes that if Pim doesn't have children, "our line will be extinct." But Pim, who lives with her mother, says she feels no pressure to marry. As for the next succession, there's no timetable, nor does Pim see a need for one. "My mom's still very quick. She gets things done much faster than people my age. In meetings she often notices things before I do. She gets to the point. I think she gets her energy from working." F

A Twisting Tower for Taipei

They wanted to bring some greenery to a city short on trees, so a father-and-son team is building high-rise apartments with lush gardens on every level.

BY RALPH JENNINGS

Taipei teems with sparkly new apartment towers, but one ritzy building headed for completion this year is naturally getting a lot of attention. The unusual corkscrew-shaped structure allows for 23,000 trees and plants to grow on the expansive balconies, giving each of the 40 apartments a woodsy private garden.

The father-and-son team that runs Taipei-based developer BES Engineering sprouted the idea for the 21-story building as a way to bring some greenery to the city of 2.7 million. Most residents live in high-rises, and the city is so densely populated that few streets are tree-lined. Pocket parks provide what little green space there is, and they're sometimes so small you can throw a ball from one end to the other.

The developers want to take Taiwan back to when it was greener, says Eliot Shen, 40, project manager for the building and a company director. When his father, Shen Ching-jing, 71, the parent company's chairman, was growing up in the hills of Taiwan's now largely industrialized Hsinchu County, "Taiwan had a simpler life, and there wasn't that much industrialization," Eliot says. "So in the mountains, along the river, nature used to be your main entertainment, your playmate." The next generation had a lot less of that nature and "so my father was considering, 'How should we do this? What can we do to help society?' " The answer: Tao Zhu Yin Yuan, the name of the Taipei tower. It translates to "the Hidden Garden of Tao Zhu."

The Shens are hoping the environmentally friendly building will boost the fortunes of their listed BES Engineering, which the Taiwan government started in 1950 and then privatized in 1994, when the elder Shen purchased a large stake. Last year the company earned $8.7 million on $322 million in revenue, higher than the year before but down sharply from 2015. But the share price has risen 57% since late 2016 and topped its 2015 high in June. In addition to a series of high-end buildings in Taipei, the company boasts a large portfolio of projects in China *(see box, p. 36)*.

Ching-jing's takeover of BES Engineering turned out to be controversial. In his 1998 autobiography, *Breakthrough: A Corporate Warrior Who Challenges Fate—Shen Ching-jing*, he said he had bought 80% of the company's shares in 1994. That got the attention of prosecutors, who charged him with forgery and violating securities laws in connection with the purchase, but he was acquitted in 2000. The Shens won't say how much they own today, but it appears to be less than 4%, a stake worth $16 million.

Ching-jing declined *Forbes Asia*'s request

"Nature used to be your main entertainment, your playmate": Eliot Shen, a BES Engineering director.

CRAIG FERGUSON FOR FORBES

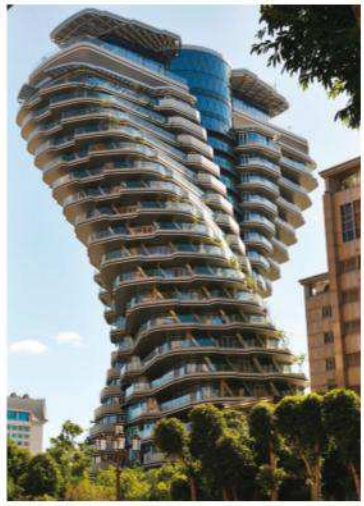
for an interview, but he has described himself as an "economic warrior." In 2002 he called Taiwan's central government a "rascal" after industrial parks that his company had built for it were losing money and shareholders demanded a $545 million payback. He's now chairman of the Core Pacific Group, which counts BES Engineering and Taiwan-listed China Petrochemical Development Corp. as subsidiaries. The petrochemical firm landed him in another skirmish in 2012. A group of shareholders tried to oust him as chairman, claiming he disregarded corporate governance standards and his fiduciary duties. He eventually left his job as chairman for health reasons, local media said in 2016. He stepped down as BES Engineering's chairman in 2016.

Eliot went to engineering school at Lehigh University in Pennsylvania. He moved to China 16 years ago to help his father's various businesses after selling movie tickets and working for a spell in the food and beverage sector. He doesn't rule out taking over more of his father's work eventually. His keenness to try new things helped seed plans for the Taipei project. The climate is tropical eight months of the year, so Taiwan can easily support such landscaping, he adds.

Buildings in Taiwan get hit by typhoons and earthquakes, so the windows are weatherproofed against severe winds, and the builders put expanded polystyrene blocks under the tower to handle a magnitude-7 temblor. The construction is expected to cost around $500 million, much more than a normal project of similar size. "We don't call ourselves developers," Eliot says. "It's not just putting up a building and then leaving."

In the final week of May, cranes swung blocks of materials over a muddy front lot to finish the project by September and begin selling units as BES Engineering staffers paced the ground in hard hats. Workers were racing particularly to get trees planted on the still largely barren balconies so the company could start applying for permits. The structure is now completely built, but amenities such as the swimming pool won't be finished until the end of the year.

The company brought in Vincent Callebaut Architectures to design the 93.2-meter-high tower, and the project broke ground in 2013. The Paris-based firm, known for oddly shaped eco-friendly superstructures, is also designing a resort with space-capsule-like rooms jutting into the ocean in the Philippines and circular wooden residential towers surrounded by food-producing farms in New Delhi. Tao Zhu Yin Yuan has already earned a U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) certification for its solar panels, recycled rainwater system and on-site composting. The structure and its landscaping are being built to absorb 130 tons of carbon dioxide a year.



The Hidden Garden of Tao Zhu will offer a garden for every apartment.

The project fits with the global trend of biophilic buildings, meaning structures marked by an enormous amount of plantings, an indoor waterfall or other features. In Singapore examples include the Parkroyal on Pickering hotel, with 15,000 square meters of plants embedded in the structure, and the School of the Arts, which was built to let in the city's breezes so students can sit outside.

The flats will probably sell to wealthy people from around Asia who care about global warming or collect unusual properties, says Erin Ting, an associate director at real estate services firm Savills Taiwan. The gardens on each balcony and the building's central Taipei location will be its main draws, she says. "The unique design," Ting says, "gives this project a good awareness not only in the local luxury residential market but also the global market. This project will bring BES a very good record and reputation."

The developer may sell units by inviting specific prospective buyers such as business owners, politicians and celebrities to see the flats first, says Jamie Chang, assistant research manager at property-management firm JLL in Taipei. Eliot won't comment on that. For now, BES Engineering is asking prospective buyers to contact it for a financial background check before viewing the apartments.

The apartments will be listed at roughly $60 million, a BES Engineering spokeswoman says, citing outside estimates. That would make them the most expensive apartments ever sold in Taipei, but less than what luxury flats in Tokyo, Hong Kong, Singapore and other major cities fetch. "The project may be well-known by its aesthetic design, ecological characteristics and the price," Chang says, but its profile will be lower because the "residential market in Taiwan is not often significant on the international level." F

CHRIS STOWERS/AFP/GETTY IMAGES

BUILDING A CITY IN CHINA

The man behind Taipei's verdant, twisting residential tower comes from Taiwan, but he's made his name largely in China. Eliot Shen's biggest project there is a 3.3-square-kilometer tract in the city of Yangzhou, a high-tech hub northwest of Shanghai. "We're taking farmland and building a city," says Shen, vice chairman and general manager of the project's developer, Yangzhou Jinghua Cheng, and a resident of China since 2002. He's also invested in Anshan in northeastern China, the Jiangsu Province county of Sihong, and Changshu, part of the city of Suzhou near Shanghai.

The partially finished Yangzhou development began in 2004; there's no official date for completing it. Apartment towers of a few floors to more than 30 will line a landscaped canal. The project will also include a boutique hotel, an eight-level shopping mall, glassy office buildings, schools and a lake, according to images and descriptions on the project's website. It will cost $330 million. *—R.J.*

A Woman of Firsts

How Theresia Gouw became America's richest female venture capitalist.

BY ANGEL AU-YEUNG

Theresia Gouw, 46, began forging a path decades ago that led her to become a top American venture capitalist. She was the first person in her high school in a small town outside of Buffalo, New York, to go to Brown University. In the 1990s she was the first female investor at Palo Alto-based venture capital firm Accel Partners. She then became the firm's first female partner and first female managing partner before leaving Accel four years ago to cofound Aspect Ventures, one of the first female-led venture investing firms in Silicon Valley.

A woman of many firsts, she makes her debut this year on *Forbes*' Self-Made Women list with an estimated net worth of $500 million, much of it linked to Accel's early investment in Facebook. At Aspect she recently oversaw the firm's first billion-dollar IPO.

Born in Jakarta to parents of Chinese descent, Gouw immigrated to America in the early 1970s with her family when she was 3. "We left in the end of the [Suharto] political revolution when ethnic Chinese people were being targeted," she says. In Indonesia her dad was a dentist and her mother was a nurse, but they were both forced to start over when they came to the U.S. "My dad got a job as a dishwasher and went back to school at SUNY Buffalo in order to get his dental certification to work in America," she says.

Bucking the trend in her high school, where only 40% of her class went on to higher education, Gouw enrolled at Brown University in 1986 and majored in engineering. During summer internships at General Motors and British Petroleum, she got hooked on business development. "I was working in a building with a thousand engineers, and I realized what I liked most was product management," she says. "But the people who moved out of frontline engineering and into [product management] roles all had M.B.A.s." So after graduating from Brown in 1990, Gouw studied for the GMAT and took a management consulting position at Bain & Co. in Boston. Then she got an M.B.A. at Stanford.

ASPECT VENTURES

"Going public is kind of like when kids graduate from college and enter the real world."

Shortly after graduating from Stanford in 1996, she teamed up with several other classmates and raised $1 million in venture funding to cofound Release Software, a company that enabled payment technologies in the software industry. "We grew into a reasonable size around 1998 to 1999, and we were getting ready to file an S-1 and go public," she says. "But at the same time, we were at our third CEO change in 12 months, so I thought that was probably not a good sign for my stock."

While searching for her next role, a Release board member pushed her toward the venture capital world. "He said to me, 'You've been part of an engineering startup. You have an engineering degree. Jump over to the dark side.'"

Jump she did, joining Accel as an investment associate in 1999. During her 15 years at Accel she led a series of highly successful investments, including real estate listing site Trulia and cybersecurity firm Imperva, both of which are now public. But the bulk of her fortune comes from her involvement in an investment that one of her Accel partners, Jim Breyer, took the lead on in 2005: the then fledgling Facebook.

"We had looked at a lot of other social media platforms before, and some of them actually had a larger number of users," Gouw says. "But we'd never seen anything like Facebook's daily active usage at the time. Two thirds of users were using it every day, and half of them were using it two hours a day. That was the thing that really stood out at the time."

Less than two years after Facebook's historic IPO in May 2012, Gouw left Accel to start her own venture capital firm, Aspect Ventures. Cofounded with fellow veteran investor Jennifer Fonstad with their own money, Aspect is an early-stage venture firm that focuses on cybersecurity, the future of work processes and digital health-and-wellness software.

Aspect has raised $350 million since its founding in 2014. The second fund, announced earlier this year at $181 million, includes Melinda Gates and Cisco CEO Chuck Robbins as investors. The firm scored its first billion-dollar exit when cybersecurity firm ForeScout listed last year. For Gouw it was the fourth IPO investment of her career. "Going public is kind of like when kids graduate from college and enter the real world," she explains. "It's always really exciting."

SINGAPORE:

A GLOBAL HUB FOR INNOVATION

The city-state's favorable business environment helps local players realize their full potential both at home and overseas.

Singapore skyline

From the threat of trade wars to continued technological disruption, businesses and investors around the world are still coping with an uncertain and volatile landscape. On a brighter note, tensions on the Korean peninsula—the main source of geopolitical risk in the region—appears to have eased following the historic summit between U.S. President Donald Trump and North Korean leader Kim Jong Un held in Singapore in June. Meanwhile, the cyclical upswing in the global economy that began in 2016 continues to become broader and stronger.

Amid this game-changing disruption, Singapore has positioned itself as a center of innovation and research and development at the heart of the world's most dynamic economic region. Government agencies such as the Economic Development Board and the Info-communications Media Development Authority are proactively supporting companies in Singapore by equipping them with resources that can help them realize their business goals.

At the enterprise level, companies across the region continue to face the challenge of new disruptive technologies. Start-ups armed with powerful digital tools are challenging incumbents across a wide swathe of industries, from healthcare to financial services.

Singapore is succeeding in creating a conducive environment to attract innovative international start-ups to its shores. Founded in Spain, artificial intelligence start-up Taiger relocated its holding company, intellectual property and key operations to Singapore to take advantage of the city-state's vibrant innovation ecosystem. Local companies such as mobile security specialist V-Key and visual search solutions provider ViSenze are also making their mark on the global stage with their homegrown solutions.

Meanwhile, companies in traditional industries such as cement manufacturer Pan-United and fish ball maker Thong Siek are adopting new technologies to stay relevant amid the digital revolution.

Beyond technology, the Singapore brand continues to resonate around the world in a broad range of industries. In the hospitality sector, The Ascott Limited continues to ramp up its global expansion to reinforce its position as one of the world's leading serviced residence owner-operators.

On the domestic front, Singapore's residential real estate sector is enjoying a revival on the back of stronger economic growth. In particular, the luxury end of the market is picking up with exciting new developments such as V on Shenton and Marina One in the city's vibrant downtown area.

Underpinning all this activity is Singapore's location at the crossroads of three of the world's economic growth engines—China, India and Southeast Asia. The city-state's continued climb up the value chain as it works toward becoming the world's first truly digitalized smart nation will put it in a good position to benefit from the region's expansion.

Global companies and investors looking to ride on the region's dynamism would do well to consider using Singapore as a springboard to the rest of Asia and beyond.

THRIVING AT THE HEART OF THE WORLD'S GROWTH ENGINE

As Asia's economic expansion accelerates rapidly, the region is fast-becoming the key growth engine for many industries around the world.

Singapore pursues its vision to become Asia's innovation playground, where companies can testbed new solutions for global markets.

According to the World Bank, Asia's emerging markets are expected to account for about 41% of global growth in 2018, and more than 45% by 2020. Much of this expansion will be driven by rising consumption from Asia's burgeoning middle class. Within Southeast Asia, rapid urbanization and industrialization are driving demand for solutions in areas such as e-commerce, robotics and Internet-of-things.

Sitting at the heart of this dynamic region, Singapore-based companies are well-positioned to ride on Asia's growth.

Over the past few decades, the country has established itself as a hub for innovation and research and development (R&D), offering companies around the world a robust platform to grow their businesses in the region and beyond.

Singapore's innovation ecosystem—made up of high-quality infrastructure, a growing pool of dynamic start-ups, well-trained talent and strong government support—is a key attraction for global businesses.

These attributes have made Singapore one of the most innovative places to do business. It was ranked number one for innovation among Asian nations, according to the annual Global Innovation Index 2017, and also held the top global position for innovation input, where quality of human capital and research was a key pillar. The Index, which was co-published by Cornell University, INSEAD and the World Intellectual Property Organization, surveyed around 130 economies. Bloomberg's Innovation Index 2018 also ranked Singapore as the third most innovative city in the world.

Meanwhile, Singapore's size and strategic location make it an ideal hub to testbed new products and services before rolling them out to the rest of Asia and beyond.

Experiment Easily, Create Confidently

Singapore's success in fostering innovation can partly be attributed to its strong commitment to R&D, driven by support from the government and its partnerships with the private sector. Under the government's Research, Innovation and Enterprise Plan (RIE 2020), S$19 billion (US$13.9 billion) will be invested in the country's R&D capabilities, enterprise innovation and entrepreneurship over the next five years.

Such support is focused on strategic sectors that are seen as high-growth areas for the economy. These include advanced manufacturing and engineering, health and biomedical sciences, urban solutions and sustainability, services and digital economy.

Singapore also supports the development of newer sectors such as financial technology, or fintech, by giving players in these areas the room to experiment with new business models in a lightly regulated environment. This "regulatory sandbox" approach ensures that businesses are empowered to take risks without being hampered by too many rules. The Monetary Authority of Singapore's (MAS) fintech strategy is already producing results. Current participants in the program include AI-based advisory firm Kristal Advisors and currency exchange Thin Margin.

Over the years, a close-knit entrepreneurial community of start-ups, accelerators and venture capitalists has also emerged in dedicated innovation hubs such as Blocks 71, 73 and 79. These communities are part of JTC LaunchPad@ one-north, a 6.5-hectare site that was set up in 2015 to provide a conducive environment for start-ups to grow. The area is located close to public and private research institutes and tertiary institutions to facilitate collaboration between academia and industry.

Recognizing that security will be a key enabler in a digital economy, the country's first integrated regional cyber security hub, the Innovation Cyber Security ecosystem, was set up earlier this year at Block 71 to support start-ups, entrepreneurs and academics from around the world in this increasingly important field.

To imbue businesses with the confidence to invest and innovate from Singapore, the government has also put in place robust measures to protect intellectual property (IP). As a result, the country was ranked first in Asia for Best Protection of IP in the Global Competitiveness Report 2015-2016. Reflecting the standing of Singapore's IP regime, the World Intellectual Property Office (WIPO) set up its first Asian office in the country in 2005.

Singapore's first illuminated bus featuring eLumiNex, a breakthrough large-format backlit film technology made possible by local SME, Film Screen, and the Singapore Institute of Manufacturing Technology, a research institute under A*STAR.

Breeding Innovation — From Singapore, for the World

The various efforts undertaken by Singapore to develop its innovation ecosystem are bearing fruit—according to Startup Genome's Global Ecosystem Ranking Report 2017, Singapore has overtaken Silicon Valley as the top place for start-up talent. The number of tech start-ups has also blossomed in recent years, surging by more than 50% from 2,800 in 2003 to 4,300 in 2016, according to data from the Singapore Department of Statistics.

Meanwhile, the World Economic Forum's Readiness for the Future of Production Report 2018 cited Singapore as being one of only 25 countries well-positioned to benefit from next-generation manufacturing technologies.

This growing vibrancy has not gone unnoticed as more multinational corporations are setting up their regional innovation centers in Singapore, with many partnering local institutions. One such example is the Visa Singapore Innovation Centre, a collaborative space where partners can work with the payments company in co-creating payment and commerce solutions for mobile and digital platforms. The center, which is Visa's first in Asia, functions as a commercial gateway, helping Visa's partners extend their service offerings into Asia and beyond.

Technology giant Philips has also established an innovation facility in Singapore that allows related stakeholders to collaborate on solutions in the healthcare sector. Known as the Health Continuum Space, the first-of-its-kind innovation facility for Philips globally brings to life different medical scenarios, such as a home setting, an ambulance and emergency and recovery rooms, as well as an intensive care unit.

Meanwhile, local companies are leveraging Singapore's innovation ecosystem to make their mark on the global stage. Some of these businesses are working with public sector research performers like A*STAR and National Research Foundation, to develop groundbreaking solutions, in R&D and manufacturing hubs such as Fusionopolis, Biopolis, CleanTech Park, Tuas Biomedical Park, and Singapore Science Park.

For instance, the Singapore Institute of Manufacturing Technology (SIMTech), a research institute under A*STAR, collaborated with local firm Film Screen to develop a world-first, printed lighting technology to be used on bus advertising. This has allowed Film Screen to be a first-mover in the untapped market for large-sized, illuminated advertising.

Others, such as tech start-up ViSenze, are already selling their solutions internationally. The company has pioneered an image-recognition solution that is being used by global retailers such as ASOS, Rakuten, and Uniqlo.

And it is not just tech companies that are making waves. Singapore companies in traditional industries are also riding the fourth industrial revolution, commonly described as the coming together of physical and digital technologies, to stay relevant in a fast-changing environment. Food manufacturer and distributor Thong Siek Food Industry, which was established in the 1970s as a family-run, backyard business, is one such company that has adopted advanced manufacturing technologies to improve efficiency and grow its operations.

In the following pages, you will read about how some of these companies have leveraged innovation opportunities in Singapore to make their mark on the region and the rest of the world.

Made possible by: SG Singapore

Brought to you by: EDB Singapore

ViSenze: Transforming the Online Shopping Experience

Singapore-based tech start-up ViSenze is changing the way that consumers shop online. The company is a pioneer in developing advanced visual-search and image-recognition solutions to help businesses in e-commerce, retail and content publishing.

The company has signed up global retailers such as Rakuten, Uniqlo and ASOS. These retailers use ViSenze to convert images into product-search opportunities that can improve their conversion rates. For instance, when a customer uploads a picture of a product to an e-commerce website, ViSenze can recommend similar items in that retailer's inventory.

ViSenze was established in 2012 through a research collaboration between the National University of Singapore and China's Tsinghua University. The company's founders saw a gap for visual searches in the e-commerce space, which they sought to fill.

ViSenze Co-Founder and Chief Executive Officer, Oliver Tan

An example of ViSenze's visual-search technology

"One of the technologies we focused on was computer vision, because we found that the web is very visual. Yet we found that people were searching the web using keywords. The challenge was how could we search the visual web using keywords, because there is language difficulty and mismatch in products taxonomies," said Oliver Tan, Co-founder and Chief Executive Officer of ViSenze.

Right from the start, ViSenze's founders had their eye on the global market. "We didn't bother starting small. From the get-go, we wanted to test our technology at a regional scale," said Tan. The company has offices in the U.S., the U.K., India, China and Singapore.

"Most Singapore companies who have overseas business start from day one being international. Very naturally our networking capabilities, our facility with languages and cultures are very important traits that companies like ViSenze have," he added.

In India, for instance, ViSenze has tied up with fashion e-retailer Myntra to help its six million users navigate its store through image recognition.

The company also continues to roll out new innovative product offerings. Earlier this year, it unveiled a tool called Shoppable User Generated Content, which understands and tags user-generated content, making items within images easy to discover, search and purchase. The tool also offers retailers insights into how their products are being used through images shared online.

"There is growing evidence that consumers no longer desire perfectly polished visuals, and instead, are drawn to authentic user-generated content," said Tan.

He added Singapore's robust intellectual property (IP) regime has helped the company with its innovation efforts. "For us, having IP sitting on a shelf is of no relevance to us. We need to monetize and translate all these IPs sitting on a shelf into practical solutions that can be used."

Pan-United Corporation Ltd: Innovating Beyond Bricks and Mortar

It may be a 60-year-old company dealing, literally, in bricks and mortar, but Pan-United Corporation has in recent years embraced the digital revolution with open arms.

In 2012, the Singapore-listed company opened an Innovation Centre to research new raw materials and develop customized sustainable concrete products to meet the evolving needs of its customers. For instance, it is the only company in Southeast Asia to offer radiation-shielding concrete that can be used in facilities such as hospitals and nuclear power plants. Its special concrete allows walls of a proton therapy room to be just 1.6-meters thick, down from the conventional six meters. This results in significant space and cost savings for its customers.

May Ng, Chief Executive Officer, Pan-United Corporation Ltd

Beyond new products, the company started to digitalize its operations in 2012 to optimize its production, operations and supply-chain effectiveness. Two years later, a Command Centre was launched to oversee these digitalization efforts.

"Although there is significant infrastructural development in the region, we expect market conditions to remain highly competitive. So we must continue to be relevant. That is why we have transitioned from being simply a brick-and-mortar concrete

Pan-United's Innovation Centre has created more than 300 specialized concrete products that have made the company a global leader in concrete technologies.

supplier to a technology company in concrete and logistics," said May Ng, Pan-United's Chief Executive Officer. "We're nuts about concrete," she quipped.

Pan-United's investment in R&D and innovation has been supported by its partnerships with government agencies. In addition, it has also received support for its internationalization activities from Enterprise Singapore, through the government agency's Global Company Partnership.

"We intend to further transform our business model, to find new revenue streams that are of scale and reshape our industry. We will continue to invest and build our capabilities as a technology company," Ng said.

Seedly: Balancing the Books

Fintech company Seedly's budgeting app is helping more than 50,000 users make smarter financial decisions. Users can use the app to sync their bank accounts and credit cards, as well as get reports about their spending habits to better manage their cash flow.

Last year, Seedly introduced a new community feature that allows users to crowd-source knowledge from peers before making a financial decision. "Our app helps our users better understand their lifestyle expenditure," said Kenneth Lou, a co-founder at Singapore-based Seedly.

Seedly is looking to fast-track its expansion after being acquired earlier this year by ShopBack, another Singapore-based start-up that offers an online product comparison and rewards platform.

Sync up to 7 bank accounts and cards on Seedly to manage your finances in one place.

Seedly Co-founders, Tee-Ming Chew (L) and Kenneth Lou (R)

"Both our teams believe in helping our users make smarter decisions in consumer spending and personal finance for digital consumers in the Southeast Asia market. By joining forces, Seedly will gain access to international markets and resources to grow. Meanwhile, ShopBack gains Seedly's expertise in developing the personal finance vertical," explained Tee-Ming Chew, Seedly's Chief Technology Officer and Co-founder.

By being based in Singapore, Seedly is able to leverage the country's robust innovation ecosystem to access the latest trends in the region through online and offline communities, meetups and events. The company also benefits from the pool of regional talent that is attracted to Singapore's position as a gateway to the region.

The company is now focused on cementing its position in the personal finance market in Singapore, before expanding to neighboring countries. "Another big boost will come with our parent company's support and know-how to reach into the markets it operates in," Lou said.

Thong Siek: Creating a New Recipe With Innovation

Traditional fish ball maker Thong Siek is working to leverage advance manufacturing technologies to optimize its operations and scale its business. To kick-start its digitalization journey, the company tapped the Singapore Smart Industry Readiness Index, a tool which was developed by TÜV SÜD and Singapore Economic Development Board (EDB) to help companies implement next-generation, or Industry 4.0, manufacturing solutions.

"Thong Siek has always been interested in the newest technologies and we thought the index would be a good opportunity for us to learn more about Industry 4.0 and smart factories," said Fayy Lim, Deputy Chief Operating Officer (product development) at Thong Siek.

"We believe that as a company, we cannot always do things the same way. We have to always think of ways to do things better, cheaper and faster in order to remain competitive," she added.

Worker operating bowl cutter with programmable recipe-management system.

Thong Siek completed the assessment process for the readiness index in April and is currently selecting vendors to implement its projects. The company tapped government assistance schemes to support its innovation and productivity improvement plans.

Looking ahead, the firm aims to digitize its production floor, logistics and other enterprise processes to improve productivity and enjoy cost savings, said Lim.

"With better process control and visibility of our processes, we will be able to manage our costs better and keep our price competitive in the market," she said.

SINGAPORE:

REVVING UP FOR A DIGITAL FUTURE

The government is working hard to ensure its innovation ecosystem will be a global leader as disruptive technologies further transform industry.

U.S.-based, deep technology firm DataRobot plans to invest US$11 million into Singapore as part of its expansion plans in the region. Artificial intelligence (AI) specialist Taiger has also sealed a US$5.8 million funding deal to push Singapore's AI capabilities forward.

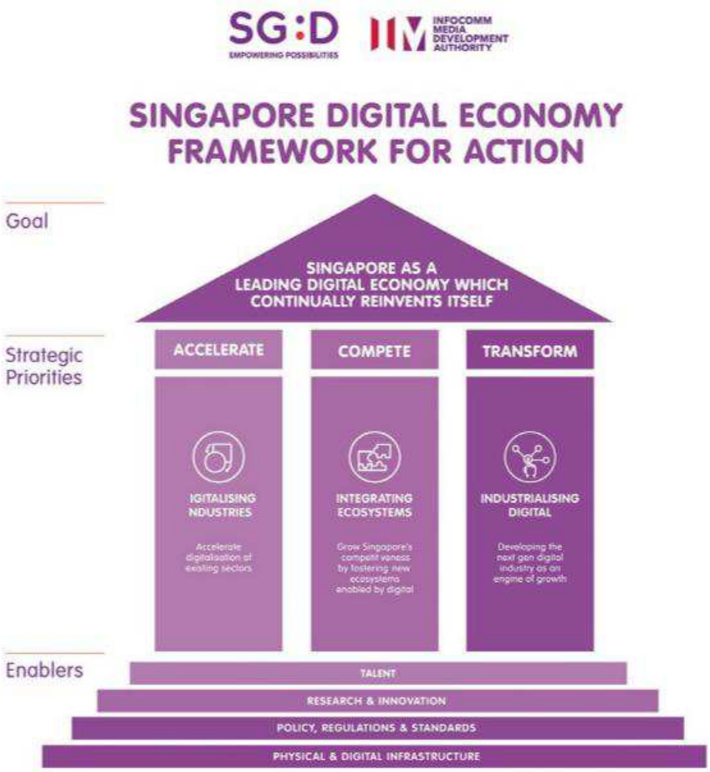
DataRobot and Taiger are among several international start-ups setting up operations in Singapore to take advantage of the country's vibrant innovation ecosystem to develop solutions for a global audience.

AI company DataRobot exhibiting at the inaugural Singapore Digital Industry Day in May.

With its robust infrastructure, progressive regulatory frameworks and plans to attract and grow its talent pool, Singapore is the ideal springboard for technology companies seeking to expand into Asia and the rest of the world.

To develop Singapore's digital economy, Info-communications Media Development Authority (IMDA), the key government agency for Singapore's digital transformation, has put into place the Singapore Digital (SG:D) Framework for Action. The framework, coupled with specific programs, aims to grow the country's status as a global innovation and technology hub to attract the next generation of disruptors to its shores.

The country's technology space is set to become even more dynamic in the coming years as a government plan to transform the infocomm media (ICM) sector gains traction. Launched last year, the Industry Transformation Map aims to grow the ICM industry's value-add by about 6% annually; this is almost twice as fast as the overall economy, which grew by 3.6% in 2017.



Employment will also receive a boost, with the ICM sector expected to employ more than 210,000 workers by 2020, up from approximately 194,000 workers in 2016. With demand rising for skilled ICM professionals in order to transform industries across Singapore, the city is aiming to attract global specialists with tech expertise in niche digital domains, including artificial intelligence and cybersecurity, while remaining committed to grooming the pool of local talent.

Infrastructure: A Solid Foundation for Growth

Singapore's robust and resilient technology infrastructure investment is the foundation on which its digital economy ambitions are built. Its nationwide broadband network allows users to subscribe to fiber broadband plans of up to 10Gbps from any address in Singapore. These plans are also affordable—with 1Gbps plans starting from US$25 a month—because competition among internet service providers has been allowed to flourish.

Meanwhile, around 20 international subsea cables connect through Singapore, with more in the pipeline. Singapore-based telco Singtel was part of a consortium that signed an agreement with Japan's NEC Corp. earlier this year to build a cable connecting Singapore, Thailand, Cambodia, Vietnam, Hong Kong, Taiwan, mainland China, South Korea and Japan. According to Singtel, the new cable will support the requirements of advanced technologies such as the internet of things (IoT), robotics, data analytics, artificial intelligence and virtual reality applications.

Trade participant experiencing immersive media at SG Digital Industry Day.

Manpower: Grooming Talent for the Future

Recognizing that there is a global shortage of skills around deep technology—breakthrough science and engineering innovations—Singapore has been working hard to equip its workers with core competencies that are relevant to the future economy.

In 2016, IMDA and its stakeholder partners introduced the TechSkills Accelerator (TeSA) initiative to build a skilled Information and communication technology (ICT) workforce for the local economy. As the demand for skilled ICT professionals accelerates in the midst of rapid disruption and transformation, TeSA will scale up its efforts to prepare more local talent for the roles that will be needed in the digital age.

In particular, IMDA is pushing to grow the local industry's pool of skilled professionals in the key emerging areas of AI, data analytics, cybersecurity, immersive media and IoT, even as it welcomes global experts in these spaces to Singapore.

Info-communications Media Development Authority sharing the Singapore Digital Economy Framework for Action with more than 2,000 attendees at SG Digital Industry Day.

Collectively, these various efforts to develop Singapore's technology sector will ensure that it remains relevant over the long term and provides an attractive base for innovative companies to realize their global ambitions.

Pillars of Technology

Furthermore, Singapore is developing competencies in key technology pillars that can be filtered down to the local ecosystem and help strengthen manpower capabilities. Among other initiatives, the authorities have implemented strong research and innovation programs in AI, IoT, cybersecurity and immersive media.

Earlier this year, for instance, the region's first cybersecurity start-up hub—Innovation Cybersecurity Ecosystem at Block 71— was established to strengthen Singapore's growing security ecosystem. The center aims to achieve this by developing capabilities and deep technologies to help mitigate cybersecurity risks in the region.

On the ground, IMDA is working to help tech entrepreneurs scale their businesses through a range of assistance schemes that provide financial, technical and marketing support. One of these programs is Accreditation@SG Digital, which helps accelerate the growth of Singapore-based tech start-ups so they can more quickly develop a global footprint (see page 8).

Preparing a New Generation of AI Professionals

Run by Info-communications Media Development Authority (IMDA), the TechSkills Accelerator (TeSA) initiative aims to develop the skills of information and communication technology professionals.

Under TeSA, a training program in artificial intelligence was launched to train 200 apprentices in the field over the next three years. Jointly developed by IMDA and AI Singapore, this apprenticeship program will equip professionals with critical AI skills, such as machine and deep learning, and prepare them in deploying the technology. The AI Apprentice Programme was designed by industry practitioners with a focus on the following key aspects:

- Data collection, cleansing and feature engineering
- Selection, training and tuning of machine learning and deep learning algorithms
- Designing, implementing and managing a scalable and high-performance computing (HPC) infrastructure to enable reproducible AI workflows to be built
- Apprentices will be mentored by experienced AI, big data and HPC professionals

The program is just one example of how Singapore is working to ensure that its technology sector is prepared to tackle the challenges of a digital future.

ACCREDITATION@SG DIGITAL:

ACCELERATING THE GROWTH OF DISRUPTIVE COMPANIES

Taiger, a SG:D accredited company, receiving the 2017 Citi FinTech Challenge Grand Award.

As part of its efforts to be an innovation hub for the region, Singapore provides significant support to innovative technology companies that are based here.

One program run by government agency Info-communications Media Development Authority (IMDA) helps these companies to accelerate their growth as well as more effectively penetrate local and international markets.

Known as Accreditation@SG Digital, the initiative offers new business opportunities to companies by matching them with government agencies and potential private sector customers. It also helps streamline the procurement process for public sector projects.

Accredited companies are given access to a network of investors, mentors and enterprise partners to assist in their expansion. These measures help companies to quickly build their track record in Singapore, creating a springboard for regional expansion later on.

To date, 27 Singapore-based companies offering a range of innovative solutions have been accredited, with more currently undergoing the rigorous process. Government and enterprise project opportunities valued at more than US$147 million have been created. Meanwhile, 15 companies have raised more than S$100 million (US$73 million) to fuel their growth during and after accreditation.

Accreditation@SG Digital differs from other start-up support schemes in the breadth of its assistance; it extends beyond financial and technology support to the business and financial aspects of a company.

"What we really appreciated about the accreditation process was that it set a bar for companies to show that their products, processes and financial position were strong enough to bid for projects in the government and private sectors," said Joseph Gan, Co-Founder and President of V-Key, which has been accredited by IMDA.

Founded in Singapore in 2011, V-Key develops solutions that secure mobile devices. Being SG:D accredited helped the company secure government projects at a much faster pace. V-Key is collaborating with selected local government agencies on national strategic projects.

At the same time, two of Singapore's local banks are utilizing V-Key's solutions for their mobile banking strategies, integrated with the DBS Digibank and the UOB Mighty mobile banking and payment apps. Because of its track record built in Singapore, the company's solution has since been deployed in both regional and international banks.

The Accreditation@SG Digital team was also instrumental in artificial intelligence start-up Taiger moving their intellectual property and key operations to Singapore in 2015. The company was established in Spain in 2009 and has now become a global champion in knowledge worker automation.

The team introduced the company to local investors and provided advice to Taiger on working with investors, which helped Taiger secure US$5.9 million in a recent Series A funding round.

"The accreditation scheme is very special. If IMDA takes you on board, you are not just getting a seal of approval but also support for funding, talent acquisition and marketing," said Sinuhe Arroyo, Taiger's Chief Executive Officer.

He added: "IMDA is very plugged into the ecosystem here and we know that the partners they introduce us to can be trusted, which is especially important when you are new to a country. If not for IMDA's accreditation we would not have achieved what we have so far."

V-Key, a SG:D accredited company, showcasing its digital identity for mobile at the Cloud and Cyber Security Expo 2018 in Hong Kong.

V ON SHENTON:

AN EXCITING VISION OF URBAN LIVING

From the nature-inspired architecture to the extensive range of amenities on offer, Singapore's newest residential tower has something for everyone.

A newly completed development is set to revitalize the heart of Singapore's financial district. Developed by United Industrial Corporation (UIC) Limited, it comprises a 54-story residential tower, V on Shenton, and a 23-story office tower, UIC Building.

The development stands on the site previously occupied by the UIC Building on Shenton Way, which historically has been home to Singapore's vibrant financial sector. The UIC Building first appeared on Shenton Way in the 1970s, and was the tallest of the "three sisters" on the south side of this famous road.

V on Shenton builds on that proud heritage with a groundbreaking development designed by world-renowned architect Ben van Berkel of UNStudio, working in conjunction with leading local architectural firm architects61.

V on Shenton and UIC Building located at 5 & 5A Shenton Way

Featuring organic structures inspired by nature, the shape of the hexagon is the dominant design element of V on Shenton. The geometric panels provide texture and cohesion to the development, reflecting light while pocketing shade. The end result is a structure that is alive and constantly changing.

Live, Work and Play in the Heart of Marina Bay

V on Shenton offers a cosmopolitan lifestyle for work and play in Singapore's vibrant downtown area. For those looking to unwind after a day in the office, V on Shenton sits amid the buzz of the city, with a host of entertainment, cultural and lifestyle offerings. Singapore's signature attractions, from the Singapore Flyer and the Esplanade to the Chinatown Heritage Centre, Gardens by the Bay and Marina Bay Waterfront Promenade, are nearby.

Arts lovers can choose from a wide range of world-class performances and museum spaces, while foodies will be surrounded by some of the world's best culinary offerings.

Getting to V on Shenton will also be a breeze, with Tanjong Pagar, Marina Bay and Raffles Place MRT stations located nearby. The upcoming Shenton Way MRT station will sit just next to the development when it opens in 2021.

Meanwhile, V on Shenton provides a range of premium options to meet your lifestyle needs. Residents can choose from studio, one-, two- and three-bedroom units that range from 474 to 1,765 square feet.

They will also get to enjoy three dedicated levels of lush sky gardens that offer sweeping views of the city below. The facilities at these exclusive spaces include outdoor dining, garden lounges, relax pods and outdoor fitness areas. Come here to get away from the daily grind of work, unwind with some exercise or entertain guests. For fitness fanatics, a gymnasium on the 35th level means a workout with a sea view to inspire you.

From the stunning architectural design to its prime location and premium amenities, V on Shenton offers an exciting vision of urban living that will satisfy all your lifestyle aspirations.

Living room with amazing view

UIC Limited

www.v-on-shenton.com.sg

For enquiries, please call +65 6220 1352

AT THE PULSE OF SINGAPORE'S FINANCIAL DISTRICT

A fine selection of stunning apartments overlooking Singapore's **Marina Bay Financial District**, the twin tower comprising a 23-storey office tower (UIC Building) and a **54-storey residential tower** (V on Shenton) with easy access to amenities in the business district and upcoming **Shenton Way MRT** at your doorstep.

IMMEDIATE OCCUPATION
New Release of High Floor Choice Units

An Iconic skycraper crafted by world renowned architect, **Ben Van Berkel** of **UNStudio**

Spacious layout with quality finishes and **Gaggenau appliances**

Close proximity to **Marina Bay Sands**, **Sentosa**, **Gardens by the Bay** and **Marina Bay Link Mall**

Choice of **Studio, 1-, 2-, 3-bedroom units** (sizes from **474 to 1,765 sqft**)

Wide array of **facilities across 4 levels** including pool and sea view facing gym

Situated next to upcoming **Shenton Way MRT** (U/C)

Direct access to OUE Downtown Gallery for **F&B and retail therapy**


Living room with unblocked sea view


Spacious bedroom with city view

IN-SITU UNITS ARE AVAILABLE FOR VIEWING BY APPOINTMENT ONLY.
TO ARRANGE A PRIVATE VIEWING, PLEASE CALL 8811 7690.

Developer – UIC Investments (Properties) Pte Ltd (Co. Reg. No. – 198700217C) • Developer's License No. – C0911 • Tenure of Land – 99 years wef 29 November 2011 • Location – Lot 00080T TS 30 at 5 Shenton Way • Date of T.O.P. – 20 October 2017 • Expected Date of Legal Completion – 31 December 2021

UIC Limited

ARA ASSET MANAGEMENT:

SINGAPORE-BORN REAL ASSETS FUND MANAGER MAKES ITS MARK ON THE GLOBAL STAGE

The ARA Group has expanded rapidly over the past year with strategic stakes in power players in Japan and Europe while pursuing organic growth opportunities across Asia.

Just over a year after its privatization, ARA Asset Management Limited is making great strides in realizing its vision of becoming a premier global integrated real assets fund manager.

Group Chief Executive Officer John Lim, who led the privatization exercise, said the move was necessary to enable the group to grow bigger, faster. Indeed, he has made good on his word. Today, the gross assets managed by ARA Group and its Associates total US$57.7 billion, double its US$25.8 billion in assets under management (AUM) before privatization. The group has also expanded its footprint to 62 cities across 20 countries. Then there are its new formidable shareholders, which include U.S. private equity firm Warburg Pincus and China's AVIC Trust, in addition to its longstanding partners, CK Asset Holdings Limited and The Straits Trading Company Limited.

ARA has expanded rapidly in the past year. In 2017, it acquired a strategic stake in Japan's Kenedix, Inc. followed by Australia-based Cromwell Property Group in June this year.

"Cromwell is significant as it not only deepens ARA's presence in Australia, but also provides a beachhead for the group's expansion into Europe, our first venture beyond Asia Pacific," says Lim. "We are set to grow our business quickly, leveraging our Europe desk and our partner's established foothold in the region." Cromwell has a large presence in Europe with about US$4.6 billion in AUM across 12 countries in the region.

Meanwhile, ARA's Japan desk, which was set up in June 2017, has made good progress in accessing the Japanese market for both inbound and outbound capital through its partnership with Kenedix, the largest listed real estate asset management company in Japan with about US$18.6 billion in AUM.

Considering ARA's humble beginnings with an AUM of US$458 million a year after its formation in 2003, its achievements has been nothing short of phenomenal. Growth aside, ARA's keen focus on strong corporate governance, business integrity and risk management has also garnered the company more than 350 prestigious industry awards and accolades over the years.

ARA Group CEO, John Lim

Organic Growth Remains Key

ARA has also been growing its operations organically in Asia Pacific, particularly in Greater China, even as it expands its global

PORTFOLIO & PRESENCE

US$57.7 billion in Gross Assets Managed by ARA Group and its Associates

20 countries

62 cities

PRODUCTS & SERVICES

21 REITs

>70 Private Real Estate Funds

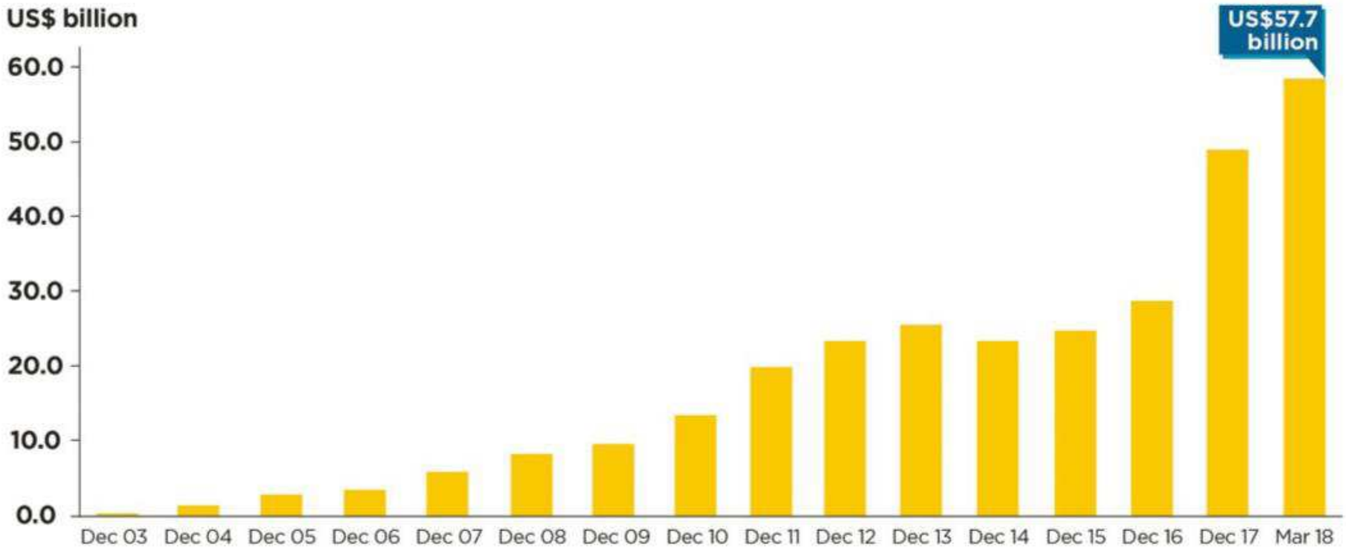
Country Desks

Real Estate Management Services

Infrastructure

Integrated multiproduct global fund management platform

GROSS ASSETS MANAGED BY ARA GROUP AND ITS ASSOCIATES[1]



(1) Includes assets under management as reported by the group's associates and joint ventures, which includes reported assets under management of the Cromwell Property Group as at December 31, 2017

presence and product offerings. Earlier this year, it established Shanghai AVICT-ARA Fund Management, a joint venture with AVIC Trust to capitalize on China's fast-growing real estate fund management market. AVICT-ARA will develop RMB-based fund products, including private equity and mezzanine debt funds, as well as explore opportunities in the quasi-REITs market and other potential real estate investment trust initiatives in China.

To ride on investors' growing demand for infrastructure investment, ARA launched its new infrastructure business earlier this year. According to the Asian Development Bank, Asia alone requires US$1.7 trillion in infrastructure investment a year until 2030 to maintain the region's growth momentum, tackle poverty and respond to climate change.

"We have been seeing strong demand from our investors for infrastructure investment, especially as the Belt and Road Initiative gains momentum and governments in rapidly developing economies in Asia and Europe open up to private investment. The opportunities are tremendous and just capturing a small piece of that US$1.7 trillion pie will be beneficial to ARA," says Lim.

ARA Shareholders - Warburg Pincus, John Lim, CK Asset Holdings Limited, The Straits Trading Company Limited and AVIC Trust

What's Next

Looking ahead, ARA will continue to pursue robust growth both organically and through new strategic initiatives, including merger and acquisitions and joint ventures. Says Lim: "Our investment approach is investor-led. We go where our investors want to invest and develop products and services across our full suite of investment management, asset management and property management services to address their needs."

The group is also mindful that growth will not come at the expense of the quality and integrity of its work, which has to remain of the highest standard. According to Lim, three "Ps"—Partners, People, Passion—used to form the cornerstone of ARA's success. Today, he has added one more "P"—Processes—to the mix.

"As the group expands, we need to ensure that we have good systems and processes in place to support our growth and to uphold the integrity of the business. Otherwise, our race toward global expansion will be in vain," he says.

http://www.ara-asia.com/


OUE
OUE

THE ASCOTT LIMITED:

GROWING ITS WORLD-CLASS SERVICED RESIDENCES GLOBALLY

The group's expanding portfolio of awarding-winning accommodation and services meets travellers' diverse needs and it continues to attract sterling partners.

One of the leading international serviced residence owner-operators, The Ascott Limited (Ascott) has ramped up its global expansion in recent years as it seeks to offer its award-winning accommodation and services in more cities around the world.

The group's network of serviced residences comprises more than 74,000 units across more than 130 cities and over 30 countries in the Americas, Asia-Pacific, Europe, the Middle East and Africa. From Ascott's heartfelt services that keep guests coming back to its thoughtfully designed apartments and wide range of curated residents' activities, Ascott's serviced residences cater to the increasing demand from travellers on both extended stay and short stay.

In the first half of 2018, Ascott secured 20 properties with about 5,000 units in markets including Indonesia, Japan, Malaysia, the Philippines and Thailand, while making inroads into new cities such as Malacca, Malaysia, and Davao, Philippines. To fast-track its expansion, Ascott announced its joint venture with one of China's leading hotel operators and apartment rental firms, and it also formed strategic alliances with top developers in China, Japan and Thailand.

Kevin Goh, Ascott's Chief Executive Officer, said: "Having some of the biggest industry players choose to partner with us speaks volume of Ascott's reputation and expertise in managing world-class serviced residences globally for over 30 years. Leveraging Ascott's global network of close to 100,000 corporate clients, we create significant cross-marketing opportunities across the globe for our properties to maximize returns for our partners. We are confident of surpassing Ascott's global target of 80,000 units this year, and doubling our portfolio to 160,000 units by 2023."

The company's brands include Ascott, Citadines, Somerset, Quest, The Crest Collection and lyf, each designed with a different traveller in mind.

Ascott Orchard Singapore

Ascott The Residence

At Ascott The Residence, there is no holding back when it comes to lavishing guests with plush and prestige pampering. Located in prime districts across the Asia-Pacific, the Middle East and Africa, travellers will be able to mix business with leisure in refined surroundings and enjoy unparalleled personal service.

Citadines Apart'hotel

For those seeking a more authentic experience, Citadines Apart'hotel offers guests the chance to live like a local in the heart of a bustling metropolis. Enjoy a dynamic stay while indulging in all the comforts and business connectivity of a modern serviced apartment.

Somerset Serviced Residence

Somerset Serviced Residence welcomes you with homely warmth that combines comfort, convenience and cultural charms. Amid a stylish setting, choose to feel the pulse of the city, or retreat to a more tranquil space for a private experience.

Quest Apartment Hotels

Be it business trip or vacation, Quest Apartment Hotels provides spacious serviced apartments that are ideal for short or long stays. Quest Apartment Hotels has a strong presence in Australia, New Zealand and Fiji, with properties located in central business districts, suburban and regional areas close to head offices, business centers and key tourist destinations.

The Crest Collection

Infused with heritage and modern luxury, The Crest Collection was created with the luxury jetsetter in mind. This handpicked selection of elegantly designed serviced residences celebrates modernity and premium comfort, offering both contemporary design and European-style grandeur.

lyf

Designed and managed by millennials, lyf (pronounced "life") is a co-living concept that connects like-minded travellers through a fresh take on community living and working. Guests can bond in an array of social spaces and experience a new way of community living.

For more information, visit **the-ascott.com** or call **+65 6272 7272**.

SINGAPORE:

ON THE FAST TRACK TO THE FUTURE

The city-state's focus on innovation and globalization will ensure the country's central position on the world stage.

Singapore skyline after dark

In the face of a fast-changing global environment, Singapore is working hard to future-proof its economy. The city-state has earned a reputation for moving with the times, and never have the times moved as fast as they are now.

With technology disrupting businesses at an unprecedented rate and an uncertain geopolitical situation, getting the economic formula right is more difficult than ever before. To navigate the road ahead, the government is banking on innovation and globalization to fuel the country's long-term growth.

After establishing a blueprint for the transformation of its economy a few years back, the authorities have moved into the implementation phase. The government-led Future Economy Council was set up last year to implement earlier recommendations by the Committee on the Future Economy, which had been tasked to chart a new course for Singapore.

Much of their efforts will center on fostering innovation and upgrading the skills of the workforce to meet the changing needs of businesses and consumers. Singapore will also continue to lure both multinational corporations and promising start-ups to its shores, even as it supports the growth of its own small and medium enterprises.

Already, we are seeing a growing number of local enterprises make a name for themselves globally. Earlier this year, Toyota announced plans to invest US$1 billion in Singapore-based, ride-hailing company Grab, valuing the company at more than US$10 billion, according to Bloomberg.

On the trade front, Singapore continues to champion the free flow of goods and services across borders in the face of rising protectionism around the world. In July, the trade ministers of Singapore and 15 other countries—including the 10-nation ASEAN bloc as well as Australia, China, India, Japan, New Zealand and South Korea—reaffirmed their resolve for a regional trade deal that will benefit the economies involved.

The ASEAN-led Regional Comprehensive Economic Partnership is an ambitious trade deal that Singapore's Minister for Trade and Industry Chan Chun Sing has said is on track for a substantial agreement by the end of 2018.

Despite these encouraging signs, there are challenges ahead for Singapore. The threat of a global trade war persists, as does the tremendous stress that rapid technological change places on companies and governments.

But with its commitment to transform itself to adapt to changing conditions, Singapore has shown time and again that it is up to the task of reinventing itself to meet new challenges. Businesses and investors who have disregarded the tiny nation in the past have been proven wrong time and again. It would be unwise to count Singapore out this time around. Singapore instead is on the fast track to the future.

Stocks and Crops

A securities pioneer in Vietnam keeps one eye on agricultural opportunities.

BY LAN ANH NGUYEN

Nguyen Duy Hung founded and runs Saigon Securities (SSI), by market share and market value the biggest brokerage firm in Vietnam. He also has used M&A to build Pan Group, a holding company tapping into Vietnam's expanding agriculture businesses.

Financial services, including banking, insurance, investment and stock brokerage, continue to grow fast in Vietnam from a low base. One of Vietnam's first three brokerages, SSI was founded in 1999 with $420,000 in registered capital. It now controls close to a fifth of its sector and last year reported nearly $130 million in revenues and $50 million net profit.

Riding on the growth of the stock exchange of Vietnam, which has a total market capitalization near $150 billion, SSI added an asset-management firm, which hopes to invest some of its nearly $800 million in domestic startups.

Nguyen, the eldest of four siblings, won a scholarship in 1980 to study in what was then East Germany. While there he turned his attention to trading goods between the two countries. One summer, he brought a dozen suitcases full of photographic paper back to Vietnam. The bulk of it didn't get through customs. Nguyen was disciplined and couldn't finish his overseas studies. No matter. With a local degree, he began connecting foreign direct investors through a business he called Pan Pacific and, when Vietnam's capital market opened up, set up SSI in 1999.

But Nguyen, now 58, wasn't satisfied just being an investment middleman. Five years ago he started ramping up the remnant of Pan Pacific to create a circle in agriculture that he calls "Farm–Food–Family." Under the new name Pan Group, it raised nearly $100 million and took majority stakes in a dozen small and medium-size enterprises that either provide seeds or produce harvests. These range from rice to cashew nuts, seafood and flowers.

Saigon Securities Founder Nguyen Duy Hung,

MAIKA ELAN

More than 40% of Vietnam's workforce remains in agriculture. Most of the output comes from individual farmers rather than organized, sizable businesses. In the last few years, Vietnam has started seeing corporate investment. CP Group of Thailand has the biggest share in Vietnam's animal feed market.

Vietnamese entrepreneurs see opportunities here, especially with government incentives in the form of favorable loan rates. But scaling up often requires acquiring precious land. Nguyen sees a chance to align small companies into a farm-business ecosystem. Revenues at Pan Group, which he also chairs, last year grew 47% to $177 million, and he says they can approach $400 million this year.

"Vietnam, with 90 million people, is a big market. All of what we are doing is aimed at providing to the domestic market," he says. Neighboring China is also a potential market, but only if Vietnam can provide produce that is seasonally unavailable there. A priority for Pan in any case is a better distribution system.

Meanwhile, back at SSI, his firm has advised and underwritten major deals in Vietnam recently, including the listing of Vincom Retail and Vinhomes from the local giant Vingroup. SSI also raised $230 million for steelmaker Hoa Phat Group, helped sell a state stake in Vinamilk and brought forward smaller IPOs.

Hung's 15% stake in SSI and 25% in Pan Group put his net worth at $116 million. Unlike most tycoons in Vietnam, who would rather stay low-profile, Hung doesn't shy away from expressing his opinions publicly. He often posts on his personal Facebook page.

Adapted from Forbes Vietnam, *a licensee of Forbes Media.*

200 Best Under A $ Billion

Our annual list highlights 200 top-performing Asia-Pacific public companies with less than $1 billion in sales. Their revenue grew an average 62% last year. China, Hong Kong and Taiwan account for over half, with 108 entries—the majority (84) being newcomers. We screened 24,000 companies. These ranked highest for growth in sales, profits and return on equity.

BY CHRISTINA SETTIMI

FLOWER KING ECO-ENGINEERING CHINA

The landscape design and construction firm debuts with sales more than doubling. Its eco-tourism-site work tripled in 2017, accounting for 28% of revenues. The Jiangsu company was Flower King Horticulture until last year.

TAO IMAGES LIMITED / ALAMY STOCK PHOTO

	U.S. $MIL		
	LATEST FISCAL YEAR		
	SALES	NET INCOME	MARKET VALUE
AUSTRALIA			
APPEN speech & search technology	$128	$11	$979
CODAN high-frequency & satellite radio	171	33	378
NORTHERN STAR RESOURCES mineral resources	641	142	3,279
OVER THE WIRE telecommunications, cloud & IT	26	3	117
WEBJET online travel booking	150	40	1,143
CHINA / HONG KONG			
3SBIO biopharmaceutical products *(see story, p. 64)*	553	138	5,725
ADVANCED FIBER RESOURCES ZHUHAI optical network & fiber-sensing components	34	9	624
AIER EYE HOSPITAL ophthalmic medical centers	880	110	12,257
ANHUI KORRUN backpacks, laptop cases, luggage	171	20	1,338
ANXIN TRUST financial trusts	950	543	5,207
ANYSOFT INFORMATION TECHNOLOGY mobile internet phone applications	134	14	1,229
AUTEK CHINA contact lenses	45	22	1,412
AUTOBIO DIAGNOSTICS clinical diagnostic products	204	66	5,150
BEIJING FOREVER TECHNOLOGY software products	126	28	1,258
BEIJING SINNET TECHNOLOGY internet services	599	64	3,166
CHINA EVERBRIGHT GREENTECH biomass, hazardous-waste treatment, solar & wind electric generation	588	122	2,014

ALL FIGURES ARE IN U.S. DOLLARS. DATA AS OF JULY 17, 2018. *SOURCES: FACTSET; FORBES.*
GREEN = REPEATS; RED = RETURNEES

	U.S. $MIL		
	LATEST FISCAL YEAR		
	SALES	NET INCOME	MARKET VALUE
CHINA NEW HIGHER EDUCATION applied-sciences higher education	$61	$35	$1,475
CHONG SING HOLDINGS FINTECH GROUP investment holding company & consultancy service	718	119	2,239
DEHUA TB NEW DECORATION MATERIAL artificial-wood boards	607	54	977
DESAY SV AUTOMOTIVE automotive parts	883	91	2,404
EVE ENERGY lithium batteries	438	60	2,166
FLOWER KING ECO-ENGINEERING flower seedlings & landscaping	152	25	557
FUJIAN NEBULA ELECTRONICS lithium-battery-tester equipment	45	9	566
G-BITS NETWORK TECHNOLOGY online games	211	90	1,362
GENUINE NEW MATERIALS printing & packaging materials	34	15	794
GIGADEVICE SEMICONDUCTOR nonvolatile memory devices	300	59	5,013
GUANGDONG SHIRONGZHAOYE medical instruments & related equipment	403	135	1,580
GUANGDONG TOPSTAR TECHNOLOGY industrial robots, chillers, conveyers, mold-heating systems	113	20	1,007
GUANGDONG YIZUMI PRECISION MACHINERY molding machines	294	41	550
GUANGDONG ZHENGYE TECHNOLOGY electronic equipment	186	29	700
GUANGZHOU GREAT POWER ENERGY & TECHNOLOGY portable power products	309	37	838
GUANGZHOU WONDFO BIOTECH biochemical reagents, medical products & diagnostic test kits	169	31	2,199
HAILIR PESTICIDES & CHEMICALS agrochemicals	234	42	701
HAINAN POLY PHARM pharmaceuticals, nutraceuticals & cosmeceuticals	47	15	2,240
HANGZHOU XZB TECH valve-train systems & parts	40	16	466
HOLIKE CREATIVE HOME household furniture	272	51	1,178
HONGLI ZHIHUI LED devices & related products	544	52	1,095
HONGTEO TECHNOLOGY aluminum-alloy die castings & gravity castings	432	73	2,124
HYPEBEAST advertising services	49	6	125
JASON FURNITURE sofas, beds, mattresses	976	122	4,221
JIANG & ASSOCIATES CREATIVE DESIGN interior & architectural design	37	9	402
JIANGSHAN OUPAI DOOR INDUSTRY wooden doors	148	20	314
JUMPCAN PHARMACEUTICAL pharmaceutical products	819	181	6,272
JUPAI management services	252	61	546
KANGTAI BIOLOGICAL PRODUCTS biological pharmaceutical products	171	32	6,609

LONGMA ENVIRONMENTAL SANITATION EQUIPMENT CHINA

It makes specialty vehicles such as garbage and sprinkler trucks, some of which now use alternative fuels. Set up in 2007 in Fujian Province, the company makes its first appearance after expanding into urban-sanitation service contracts in 2015. Following on a push into Jakarta, it looks to partner with cities along China's Belt & Road routes.

HOLIKE CREATIVE HOME CHINA

China's housing boom in smaller cities (where it has 1,300 of its 1,500 outlets) and the rising middle class led to debut of the 16-year-old custom furnishings maker. Closets made up nearly all its sales, although it broadened its portfolio earlier this year with kitchen cabinets and doors. It also secured French architect Paul Andreu, designer of Paris' Charles de Gaulle Airport, as its chief design consultant.

BEST UNDER A BILLION — THE LIST

HYPEBEAST CHINA/HONG KONG

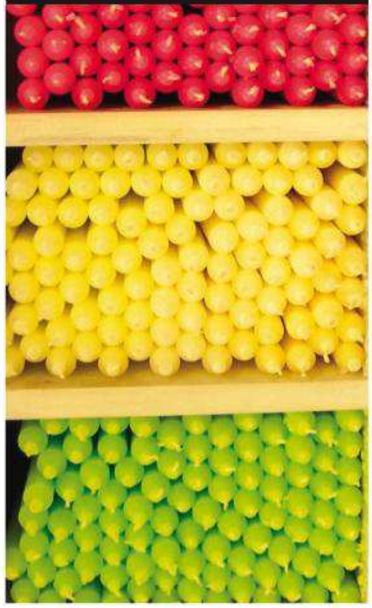
Its name slang for obsessed trend chaser, the fashion and entertainment company was founded in 2005 as a men's sneakers and streetwear blog by Kevin Ma, now chief executive. Today it ranges from media—including one for children's wear—and branding to online retail, catering to Millennials. The company makes its debut on the list after a 77% jump in revenue last year, much from its e-commerce unit HBX carrying various brands such as Prada, Adidas and streetwear label MM6. In 2017 the company opened its first brick-and-mortar store, near its Hong Kong headquarters, and this February set up a skateboarding site with The Berrics, a U.S. icon in the segment.

	U.S. $MIL		
	LATEST FISCAL YEAR		
	SALES	NET INCOME	MARKET VALUE
KDT MACHINERY panel machinery	$120	$35	$959
KERSEN SCIENCE & TECHNOLOGY precision metallic components	319	33	895
KUNLUN TECH online hosting services & games	507	148	3,316
LEYARD OPTOELECTRONIC digital displays, video walls & visualization products	953	179	4,911
LIER CHEMICAL agrochemical products	455	59	1,622
LONGMA ENVIRONMENTAL SANITATION EQUIPMENT garbage-removal vehicles & equipment	454	38	1,013
MINKAVE TECHNOLOGY LED-lighting equipment	101	26	1,093
NINGBO BAOSI ENERGY EQUIPMENT screw compressors	164	22	895
NINGBO GAOFA AUTOMOTIVE CONTROL SYSTEM gearshift controls, cables & electronic accelerators	177	34	859
PLOVER BAY TECHNOLOGIES telecommunication network services	37	9	144
QINGDAO KINGKING APPLIED CHEMISTRY polymer-based compounded wax	690	60	986
REF HOLDINGS printing services	30	8	44
RIANLON polymer additives	168	19	724
RONGSHENG ENVIRONMENTAL PROTECTION PAPER recycled paper products	298	59	573
SANCHAO ADVANCED MATERIALS gold plating & diamond grinding services	42	13	479
SANQI INTERACTIVE ENTERTAINMENT NETWORK TECHNOLOGY online games	912	240	3,760
SHANGHAI HUACE NAVIGATION TECHNOLOGY GPS & GNSS receivers & sensors	100	19	842
SHANXI YONGDONG CHEMISTRY INDUSTRY carbon black for tires	293	35	755
SHENZHEN ELLASSAY FASHION women's fashion	300	45	1,108
SHENZHEN ENVICOOL TECHNOLOGY environmental-control equipment	116	13	528
SHENZHEN HUIDING TECHNOLOGY fingerprint sensor, touch controller for mobile phones & tablets	540	131	4,575
SHENZHEN SUNWAY COMMUNICATION telecommunication equipment	504	132	5,070
SHENZHEN WENKE LANDSCAPE landscape architecture	378	36	589
SHENZHEN YSSTECH INFORMATION TECHNOLOGY financial-industry software	78	31	1,579
SICHUAN GOLDSTONE ORIENT NEW MATERIAL EQUIPMENT plastic-composite pipe technology & machinery	101	17	913
SINOCERA FUNCTIONAL MATERIAL barium titanate & ceramic powder	178	36	2,056
SUOFEIYA HOME COLLECTION office furniture	902	134	4,120
TELLGEN molecular diagnostic products	44	19	767
TIANQI LITHIUM INDUSTRIES lithium products & batteries	801	317	8,788

ALL FIGURES ARE IN U.S. DOLLARS. DATA AS OF JULY 17, 2018. *SOURCES: FACTSET; FORBES.*
GREEN = REPEATS; RED = RETURNEES

	U.S. $MIL		
	LATEST FISCAL YEAR		
	SALES	NET INCOME	MARKET VALUE
UNILUMIN LED displays & lighting	$445	$42	$1,156
UNION MEDICAL HEALTHCARE aesthetic, chiropractic & dental services	167	36	655
VALUE PARTNERS asset management & investment services	532	268	1,452
WEAVER NETWORK computer & Web-based information-management software	103	13	1,379
WISDOM EDUCATION INTERNATIONAL educational services	144	29	1,798
WUHAN JINGCE ELECTRONIC flat-panel-display software products	131	25	1,894
WUXI BIOLOGICS biologics development & manufacturing	240	37	12,240
WUXI LEAD INTELLIGENT EQUIPMENT equipment for use in lithium-ion batteries, photovoltaics & capacitors	319	80	4,209
XIAMEN GOLDENHOME kitchen cabinets	211	25	939
XIN POINT automotive plastic electroplated components	278	58	635
XINJIANG SAILING INFORMATION TECHNOLOGY software development	118	12	320
YANTAI EDDIE PRECISION MACHINERY construction machinery	94	21	1,082
YEALINK NETWORK TECHNOLOGY unified communication (UC) terminals	203	87	3,098
YICHANG HEC CHANGJIANG PHARMACEUTICAL pharmaceutical products	237	96	2,523
YIFAN PHARMACEUTICAL medicines, pharmaceuticals & biochemical products	638	193	3,003
YIHAI INTERNATIONAL condiments manufacturer	244	39	2,137
YONGLI BELTING light-duty conveyor belts	455	43	624
ZBOM CABINETS kitchen cabinets	316	35	1,025
ZHEJIANG DINGLI MACHINERY electric aerial work platform & material handling equipment	167	42	1,787
ZHEJIANG JIEMEI ELECTRONIC & TECHNOLOGY electronic components	146	29	1,609
ZHEJIANG MEIDA INDUSTRIAL kitchen appliances	150	45	1,729
ZHEJIANG XIANTONG RUBBER & PLASTIC automotive seals, decorative parts & roll parts	107	25	501
INDIA			
8K MILES SOFTWARE cloud computing	80	16	157
BLS INTERNATIONAL visa & passport application outsourcing services	122	15	261
G.M. BREWERIES distiller of Santra, Doctor & Limbu Punch lines of alcohol	66	11	190
GRAPHITE INDIA graphite electrodes	507	160	2,753
INDONESIA			
WICAKSANA OVERSEAS INTERNATIONAL cigarettes, food & beverages	74	13	46
JAPAN			
AKATSUKI online mobile games	198	55	511

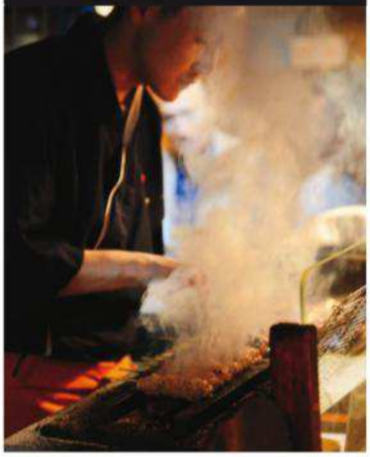
QINGDAO KINGKING APPLIED CHEMISTRY CHINA



The list newcomer bills itself as the world's largest candle maker, with products found at Walmart, IKEA and other major outlets across 50 countries. It nearly doubled its revenue to $690 million last year. With plants in its headquarters city Qingdao, Shandong and Vietnam, the company also has a cosmetics arm and took over the domestic e-commerce site UCO.com for such products.

BEST UNDER A BILLION — THE LIST

SYNCHRO FOOD JAPAN



BOAZ ROTTEM / ALAMY STOCK PHOTO

One-stop B2B Web shop for operators of restaurants and those planning to open—personnel, supplies, locations, even PR. The 15-year-old company, run by founder and dominant shareholder Shinichi Fujishiro, briefly enjoyed a pre-summer rally in its share price after a decline by better than half earlier in the year.

		U.S. $MIL		
		LATEST FISCAL YEAR		
COMPANY	BUSINESS	SALES	NET INCOME	MARKET VALUE
ARTRA	acupuncture & orthopedic support services	$34	$3	$58
ATEAM	computer programming services	315	24	402
ATRAE	job information services	16	4	300
BAYCURRENT CONSULTING	business-management consultation services	183	26	415
CERES	media & advertising services	48	6	156
COMTURE	computer system design, building, maintenance & operation	148	13	392
DESIGNONE JAPAN	internet media business	19	4	141
DIP	online job-information services	342	68	1,530
E-GUARDIAN	website security services	46	5	245
EN-JAPAN	online job-information services	367	57	2,206
EVOLABLE ASIA	online travel agency	50	4	430
FIRSTLOGIC	online real estate portal	16	5	67
GRACE TECHNOLOGY	maintains technical e-documents	12	3	316
HAMEE	mobile-phone accessories	85	8	220
HATENA	content platform, marketing & technology	17	2	43
IBJ	online wedding planning	84	9	225
INSOURCE	human resource development resources	32	4	371
IRIDGE	online-to-offline marketing solutions	14	1	107
JAPAN MATERIAL	specialized gases & graphic products	251	37	1,493
JIG-SAW	Internet of Things big-data system management	12	2	176
KAMAKURA SHINSHO	online funeral planning & research services	15	2	
343 KITANOTATSUJIN	online health foods, cosmetics & sundry products	47	9	937
LINKBAL	website & event-site management services	24	3	101
M&A CAPITAL PARTNERS	management consulting, equity-financing advisory services	75	23	1,375
MARUMAE	precision machinery & equipment	27	5	135
NEXYZ.GROUP	advertising, marketing & business support services	144	16	181
NIHON M&A CENTER	merger & acquisition advisory, brokerage & support services	222	73	4,766
PR TIMES	media promotional services	15	2	170
RAKUS	cloud-based software	58	8	752

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GREEN = REPEATS; RED = RETURNEES

	U.S. $MIL		
	LATEST FISCAL YEAR		
	SALES	NET INCOME	MARKET VALUE
RS TECHNOLOGIES silicon-wafer reclamation & wafer-oxide film-coating services	$98	$20	$687
SOCIALWIRE news information & press release distribution agency	25	2	70
SPARX GROUP securities investment & advisory services	120	42	451
STRIKE M&A consulting services	28	7	673
SYNCHRO FOOD online restaurant planning, management & support services	12	3	207
TOKYO BASE clothing & general merchandise retail stores	115	10	287
V-TECHNOLOGY LCD & plasma display components	596	71	876
ZIGEXN online search-engine sites	93	20	972
MALAYSIA			
MY E.G. SERVICES online e-government services	87	47	900
PENTAMASTER automated, semiautomated machines	66	8	210
SERBA DINAMIK engineering services	633	72	1,281
NEW ZEALAND			
SUMMERSET GROUP retirement villages & aged-care facilities	78	159	1,180
PAKISTAN			
GHANDHARA INDUSTRIES motor vehicles & related products	103	8	110
MILLAT TRACTORS tractors, farm equipment & related spare parts	302	43	360
SEARLE pharmaceutical products	127	22	422
SINGAPORE			
BEST WORLD INTERNATIONAL health & lifestyle products	160	40	534
IGG online games *(see story, p. 72)*	607	156	1,759
MM2 ASIA motion picture, video & television programs	142	19	376
SOUTH KOREA			
CHONGKUNDANG pharmaceutical operations	399	42	297
CYMECHS automation tools & robots for semiconductor manufacturing	145	16	102
DSC INVESTMENT financial investment activities	6	2	76
DY POWER hydraulic cylinders & heavy duty equipment	287	27	195
ELP mobile flat-panel-display test & inspection equipment	40	14	88
HANA MATERIALS silicon rings & cathodes for semiconductors	91	17	373
HB TECHNOLOGY semiconductor inspection equipment	252	33	180
HUGEL antiaging beauty products	161	64	1,936

SUMMERSET GROUP NEW ZEALAND

Operates 23 old folks' "villages" for nearly 5,000 Kiwis. Founded in 1994 by a property developer unhappy with his grandmother's rest home. One sizable holder of the company's ASX-traded shares: the New Zealand Superannuation Fund.

PHOTOGRAPHEE.EU/SHUTTERSTOCK

BEST UNDER A BILLION — THE LIST

MEDYTOX SOUTH KOREA

Medytox dominates the domestic Botox market with a 40% share and is poised to expand its presence overseas. It formed a licensing partnership with Western giant Allergan in 2013 and sold the development and commercial rights of its Innotox, the world's first liquid injectable Botox. In May, Allergan confirmed it would begin Phase III clinical trials of the drug, signaling a foray into the U.S. Medytox is expected to receive approval to market Neuronox, another Botox product, in China, a $90 million market with a growth rate of 15%. Medytox was founded in 2000 by Jung Hyun-Ho, 55, who holds a doctorate in molecular biology.

	U.S. $MIL		
	LATEST FISCAL YEAR		
	SALES	NET INCOME	MARKET VALUE
HYVISION SYSTEM automation testing & measuring equipment	$149	$18	$201
JASTECH semiconductor & laser equipment	505	66	123
KOMICO precision cleaning & special coating of semiconductors	111	16	233
KOREA ASSET IN TRUST real estate trust services	195	111	471
LOT VACUUM semiconductor vacuum pumps	178	22	142
MEDYTOX botulinum toxin-based injections	160	65	3,753
MINWISE information security services	71	13	263
NASMEDIA digital advertising	106	22	403
NEOPHARM cosmetics & pharmaceutical products	47	10	361
NEW POWER PLASMA semiconductor machinery	92	16	138
SANGSANGIN information-technology network services	352	89	900
SURPLUSGLOBAL secondary equipment trading in semiconductor industry	99	17	145
SYSTEMS TECHNOLOGY semiconductor manufacturing machinery	254	22	240
TES semiconductor & solar cell equipment	244	48	434
UNION SEMICONDUCTOR EQUIPMENT semiconductor equipment	185	21	200
UNITEST test equipment for semiconductor devices	149	21	369
WONIK TERA SEMICON equipment for manufacturing semiconductors	319	38	151
YEST semiconductor equipment & products	133	15	171
YMC flat-panel display boards & components	136	15	184
SRI LANKA			
UNION ASSURANCE life & general insurance	89	48	125
TAIWAN			
ASMEDIA TECHNOLOGY integrated circuits	98	14	1,025
ASPEED TECHNOLOGY integrated-circuit management	62	17	814
CHANG WAH TECHNOLOGY LED wire-frame packaging materials	247	14	465
CHUNGHWA PRECISION TEST TECH printed circuit boards for automatic semiconductor testers	102	24	798
CONCRAFT HOLDING electronic connector products	173	36	1,075
EAST TENDER OPTOELECTRONICS optical film filters	15	5	55
FOXSEMICON INTEGRATED TECHNOLOGY semiconductor equipment & system assemblies	268	35	494
KMC INTERNATIONAL bicycle & motorcycle chains & sprockets	166	34	511

ALL FIGURES ARE IN U.S. DOLLARS. DATA AS OF JULY 17, 2018. *SOURCES: FACTSET; FORBES.*
GREEN = REPEATS; RED = RETURNEES

NIKOLAY LITOV/SHUTTERSTOCK

	SALES (U.S. $MIL, LATEST FISCAL YEAR)	NET INCOME (U.S. $MIL, LATEST FISCAL YEAR)	MARKET VALUE (U.S. $MIL)
MACHVISION printed circuit board inspection equipment	$47	$15	$534
MERRY ELECTRONICS electroacoustics products	877	119	846
MIKOBEAUTE INTERNATIONAL beauty care products	33	5	76
NOVA TECHNOLOGY industrial machinery & engineering services to semiconductor plants	110	15	201
PEGAVISION soft contact lens & medical products	72	10	399
POWER WIND HEALTH INDUSTRY sports & fitness centers	75	9	356
SILERGY analog integrated circuits	283	59	1,939
TCI nutraceuticals & cosmetics	134	23	1,536
TEKOM TECHNOLOGIES digital still cameras & mobile phone cameras	26	7	87
THAILAND			
BEAUTY COMMUNITY cosmetics & skin care products	109	36	668
SIAM WELLNESS spa chains	28	5	240
TAPACO plastic parts & assembly for electrical & electronic products	68	6	102
VIETNAM			
BINH DUONG MINERAL & CONSTRUCTION mining & processing of minerals for construction	48	10	64
POWER ENGINEERING CONSULTING 2 engineering consulting services	81	9	55
VICOSTONE compound tiles for construction & interior design	192	47	643

ALL FIGURES ARE IN U.S. DOLLARS. DATA AS OF JULY 17, 2018. *SOURCES: FACTSET; FORBES.*
GREEN = REPEATS; RED = RETURNEES

VICOSTONE VIETNAM

Company says it is among the four leading producers of quartz-based engineered stone for the North American market, which accounts for 65% of revenues. Sales and net income grew 35% and 66%, respectively, in 2017. Vicostone's domestic plants, using Italian technology, make kitchen and bathroom counters and wall paneling for sale in 40 countries. Chairman Ho Xuan Nang controls the company through his Phenikaa Group. Vicostone targets 20% topline growth but faces rising input costs for oil, chemicals and stone.

NAMES BEHIND THE COMPANIES

THE BIGGEST SHARE POSITIONS AMONG THE BEST UNDER A BILLION.

IMAGINECHINA; VCG VIA GETTY IMAGES; SHAWN KOH FOR FORBES

RANK	SHAREHOLDER NAME	COMPANY/COUNTRY	HOLDINGS ($MIL)
1	CAO LONGXIANG	JUMPCAN PHARMACEUTICAL / CHINA / HONG KONG	$4,393
2	JIANG WEIPING	TIANQI LITHIUM INDUSTRIES / CHINA / HONG KONG	2,943
3	LOU JING	3SBIO / CHINA / HONG KONG	1,480
4	GENG DIANGEN	BEIJING SINNET TECHNOLOGY / CHINA / HONG KONG	1,099
5	GAO TIANGUO	ANXIN TRUST / CHINA / HONG KONG	992
6	ZHANG FAMILY	AUTOBIO DIAGNOSTICS / CHINA / HONG KONG	890
7	ZHANG YONG FAMILY	YIHAI INTERNATIONAL / CHINA / HONG KONG	864
8	LIANG SHEZENG	GUANGDONG SHIRONGZHAOYE / CHINA / HONG KONG	858
9	LIU XUEBIN	WISDOM EDUCATION INTERNATIONAL / CHINA / HONG KONG	818
10	JUNG HYUN-HO	MEDYTOX / SOUTH KOREA	747

HOLDINGS MAY VARY FROM FORBES WEALTH ESTIMATIONS BECAUSE OF BORROWINGS AGAINST SHARES, OR STOCK HELD IN OTHERS' NAMES. *SOURCE: FACTSET.*

Bio Burst

Lou Jing's drugmaker has gotten a big foothold in China and wants future breakthroughs to be global.

BY JANE HO

It's much more comfortable without the tie," says 55-year-old Lou Jing after posing for a photographer. "I still haven't got used to it." The chairman and chief executive of 3SBio, one of China's largest biopharmaceutical firms, is more at ease in just his lab coat.

No wonder: He headed the research of two of the company's market-leader drugs, Tpiao for low blood-platelet count in oncology patients, with a 51% share in China, the world's only commercialized recombinant drug of its kind, and EPO—or biotech blood-cell boosting—drug Epiao for kidney-induced anemia, with a 34% share.

On the backs of those two medicines, 3SBio's revenue last year surged by a third to $553 million. Both drugs were developed at the Shenyang company's U.S. research center near Washington, D.C., set up by Lou in 1995 after a two-year postdoc at the National Institutes of Health in Maryland. That followed a Ph.D. in molecular and cell biology from New York's Fordham University.

Although 3SBio reflects a sectoral surge in China—half a dozen other Chinese drug or biotech companies join it on this year's 200 Best Under A Billion list, and the government made the industry part of its "2025" quest for world economic leadership—its success has been 25 years in the making. Lou's father, Lou Dan, an army medic turned researcher *(see box, p. 69)*, founded state-affiliated Shenyang Sunshine Pharmaceutical in 1993. As it soon privatized, his son's U.S. academic work led to the lab opening there.

Lou Jing moved the U.S. research center to Shenyang in 2001 and shifted his focus to finance and management when the exchange of resources between China and the U.S. got increasingly difficult after 9/11. Having worked for over a decade alongside his father, he fully took over day-to-day management when Lou Dan retired in 2012. (He died this past March.)

Sunshine started with an interferon drug, less challenging in development, and launched it in 1995 when the son came on board as research director. Within a few years the drug's price was lowered to 60% below market, generating cash flow to finance research on Epiao and Tpiao, launched, respectively, in 1998 and 2005.

But Lou Dan wasn't waiting for drug breakthroughs—he knew marketing mattered. In 1997 he hired a former China sales vice president at U.S. giant Schering-Plough. The sales team spent $2.5 million in the first year, going to conferences at five-star hotels for networking. "At the time our annual revenue was only $1 million," says Lou Jing. "Even overseas pharma companies thought we were over the top."

Today 3SBio has a 2,500-strong sales force out of a 4,000 total employee head count, with some of the original sales team still in service. Its portfolio of 30-plus drugs is sold to 14,000 hospitals and medical institutions in China. "American doctors enjoy meeting new [salespeople], which to them means new information and new opportunities, but Chinese doctors prefer

"American doctors enjoy meeting new [salespeople], but Chinese doctors prefer a familiar face," says Lou, head of 3SBio.

SHAWN KOH FOR FORBES

a familiar face, someone that they know wouldn't screw them up," says Lou.

The company was renamed 3SBio and went public on Nasdaq in 2007 as the exchange's first Chinese biopharma firm. It met a lukewarm capital market, however. The company's revenue and profit grew some 30% annually, but its stock price kept dropping. "We were too small for a pharmaceutical firm," he recalls. "All the big long funds were looking at companies with $500 million revenue or above, but we only made $60 million. Nobody cared about what we were doing." The company was taken private in 2013 and relisted on the Hong Kong Stock Exchange in 2015 with an IPO-day market capitalization of $2.2 billion, nearly seven times its delisting valuation.

Today that market cap is $5.7 billion, and Lou and his wife own nearly a quarter.

He still spends 30% of his time getting acquainted with research trends and the rest on managerial duties, traveling from 3SBio's headquarters in Liaoning Province to four other production or lab sites in Shanghai, Hangzhou, Shenzhen and Como, Italy.

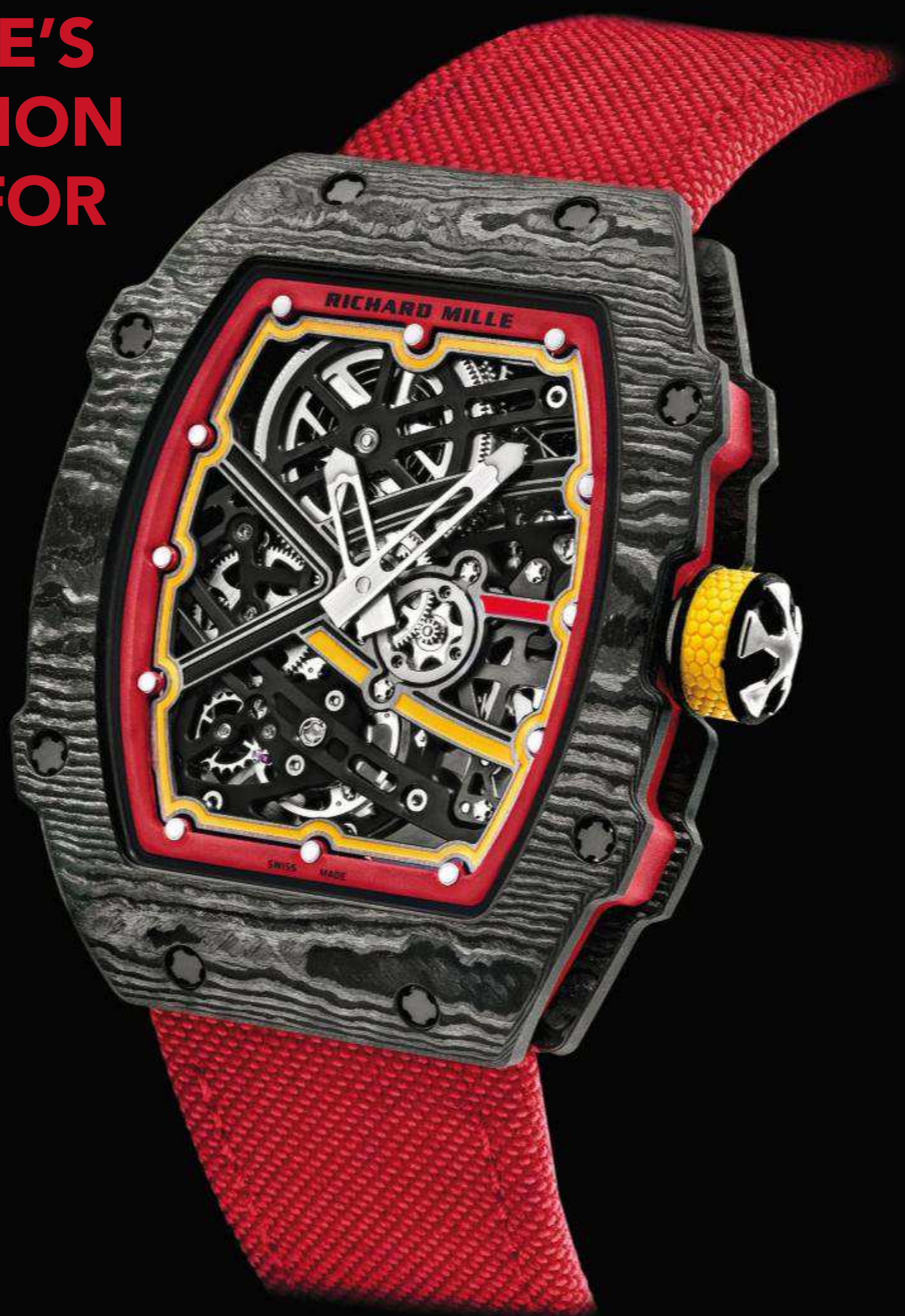
Since 2014 3SBio has been on a buying spree. It acquired Italian contract drugmaker Sirton; a lower-end EPO drugmaker in Shenzhen with an 8% China market share; and a biopharma firm in Shanghai, now called Sunshine Guojian, whose autoimmune drug Yisaipu has a 60% share in the country. (It also licensed the China rights to two diabetes drugs from pharma giants AstraZeneca and Eli Lilly.)

"Yisaipu was the first [of its kind] on the market, ahead of the then Wyeth [now Pfizer] contender product by multiple years," says Helen Chen, head of China and Asia life sciences at U.S. consulting firm LEK in its Shanghai office. "It was and is competitively priced to the multinational corporations' products as well as other domestic follow-ons."

THE RM 67-02:

RICHARD MILLE'S LATEST CREATION IS DESIGNED FOR WORLD-CLASS SPORTSMEN

The ultralight timepiece upholds the brand's sterling reputation for watches that marry technical excellence with a sporting identity at the highest levels of the game.



Whether they are worn when returning a tennis ball, sprinting more than 100 meters or navigating a bend in a Formula One race car, Richard Mille's timepieces have been part of some of the world's greatest sporting achievements.

As the lightest automatic timepiece in the Richard Mille collection, the elegant RM 67-02 automatic carries on this proud tradition, having been created to withstand the rigors of sporting endeavors of the highest levels.

Significantly, Richard Mille has designed its latest model for use in a range of competitive sports. This is reflected in the breadth of sportsmen who have worn the RM 67-02 on their way to glory. These include luminaries such as sprinter Wayde van Niekerk, high jumper Mutaz Essa Barshim, tennis player Alexander Zverev, skier Alexis Pinturault and F1 driver Fernando Alonso.

These are no ordinary sportsmen. Olympic Gold medalist and world-record holder for the 300 and 400 meters, Wayde van Niekerk, is the only sprinter to have run the 100 meters in under 10 seconds, the 200 meters in less than 20 seconds, the 300 meters in less than 31 seconds and the 400 meters in under 44 seconds. Alexander Zverev, meanwhile, won his third Masters 1000 title of his career in Madrid earlier this year, keeping his ATP World No. 3 ranking in the process.

A Long Association

Richard Mille has had a long association with the sporting world, having collaborated with brand partners at the peak of their disciplines. As early as 2013, the brand worked with Jamaican sprinter Yohan Blake on a tourbillon watch made of a carbon-nanotube composite featuring revolutionary ergonomics in the form of an asymmetrical shape.

Indeed, among the more than 70 models in the RM collection to date, there are watches designed for specific sports, such as regattas, or produced specially for a single sportsman, such as rally driver Sébastien Loeb or polo player Pablo Mac Donough. Over the years, the brand has built up a reputation for combining technical excellence with a sporting identity.

Pushing Boundaries

Richard Mille's sporting partners have amassed a stunning record of performances while wearing the brand's watches over the past decade. This success has come about in no small part because the timepieces are designed to fit like a second skin, working as one with the wearer. As such, ergonomics and wearer comfort have always been key priorities for the brand.

The RM 67-02 Automatic is the latest manifestation of this philosophy. For this timepiece, Richard Mille has introduced a sporting quality to the ultrathin RM 67-01. In particular, the watch was created to perform for the athlete under the grueling demands of his sporting activity.

To achieve this, the RM 67-02 has the distinction of being the lightest automatic timepiece in the Richard Mille collection, weighing just 32 grams. The extreme lightness is made possible by the watch's exclusive composite materials, thinness and ergonomic design. Meanwhile, the in-house caliber housed within is able to handle any situation in top-level sport.

The CRMA7 caliber is protected by a case made of the ultra-lightweight Carbon TPT® and Quartz TPT®, which ensures exceptional resistance to shocks despite the watch's slim profile measuring a mere 7.80 millimeters. Crafted from Carbon TPT®, the filigree rotor and white gold drives the grade 5 titanium movement. The baseplate and bridges are crafted from the same robust material and given a black and grey DLC coating.

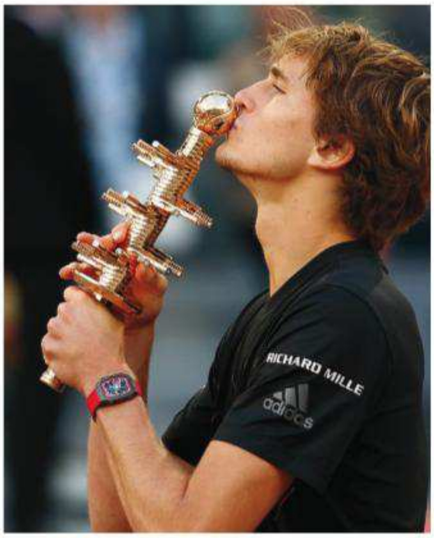
Reflecting the complexity of the design, a minimum of two hours of milling is required to create the extreme skeletonization of a single baseplate. Several hundred hours are also required to program and calibrate the machines. The teeth of the movement's gears utilize a highly original involute profiling that guarantees optimal transmission of power from the barrel to the variable-inertia balance wheel throughout the watch's 50-hour running time.

The lines of the movement are complemented by the dial, which is machined from a sheet of titanium just four tenths of a millimeter thick and finished with a black DLC coating. To add another layer of personalization, the dial is painted by hand in colors representing the sportsman's home country.

A Strap for Extreme Comfort

Sportsmen have been at the heart of Richard Mille's research and development efforts since the start. Among the other insights gained is the importance of a strap that affords extreme comfort while having the ability to withstand the most punishing conditions.

The search for new levels of wearer comfort is the driving force behind a new comfort band for the RM 67-02. The strap is Richard Mille's answer to all expectations of maximum comfort demanded of by high-level sportsmen as they compete in the most trying



Alexander Zverev

Sebastien Ogier

Fernando Alonso

circumstances. To meet this challenge, the engineers studied the footwear worn by sportsmen.

The study of shoes yielded critical information regarding lightness, support and the transmission of sensation. These insights formed the basis of the innovation seen in the RM 67-02 timepiece's seamless woven bracelet that requires no buckle for closure.

The non-slip and hyperelastic qualities of the strap allows it to adapt perfectly to an individual's wrist. The strap's unprecedented lightness also contributes to the RM 67-02 being the lightest automatic watch made by Richard Mille.

The RM 67-02 continues Richard Mille's proud tradition of timepieces produced for sporting excellence. With its extreme lightness, ultrathin profile and a strap that fits like a second skin, this stunning creation will surely be part of many sporting conquests for years to come.

BREAKING DOWN THE RM 67-02

CASE IN CARBON TPT® AND CASEBAND IN QUARTZ TPT®

Quartz TPT® is composed of more than 600 layers of parallel filaments obtained from separating silica threads. These layers, no thicker than 45 microns, are saturated in a new crimson resin then inserted between layers using an automatic positioning system that changes the orientation of the fiber between each layer by 45°.

GEAR TEETH PROFILE

The entire going train of the CRMA7 caliber utilizes a special profiling for the teeth of the wheels that produces a 20° pressure angle. This provides an excellent transmission of torque to the balance wheel, thus ensuring excellent chronometric performance.

DYNAMIC CASE

The crenations on the case are characteristic of Richard Mille sports pieces, distinguishing them from the lifestyle models while strengthening their structure.

COMFORT STRAP

The brand developed a new elastic strap, known as a "comfort" band, especially for watches worn by the sportsman of the Richard Mille family. It offers an alternative to Velcro® for even more lightness. The reinforced elasticity of this entirely seamless and non-slip strap allows it to perfectly fit the contours of each wrist, adapting to individual morphology, improving comfort even further.

CALIBER CRMA7

The seventh in-house designed Richard Mille caliber is machined in grade 5 titanium. Every aspect of this mechanism was subjected to separate and extensive validation tests to ensure optimal strength.

DAD'S LEGACY

Lou Dan, father of Lou Jing, started Shenyang Sunshine Pharmaceutical, precursor of 3SBio.

Born in northeast China's Harbin, Lou Dan joined the army at age 15 at the beginning of the Korean War in 1950. He became a medic and furthered his training after the war, assigned to epidemic prevention for the military. Dan spent years doing field research along the Sino-Soviet border in Heilongjiang, trapping rats, badgers and other critters in search of any connection between microorganisms they carry and epidemics among the troops.

"It was quite dangerous," says his son Lou Jing. "The winter nights are freezing, and if you got lost in the dark and crossed the border, you might be considered a traitor when escorted back." On this hazardous duty Lou Dan identified a new bacterial strain, gaining prestige and rising to major general. He relocated to Shenyang, where Lou Jing was born, to work at a military medical institute.

Dad was well situated enough to get his only son to America for an advanced degree. And when changes to military policies curbed his own ambitions, Lou Dan set up Shenyang Sunshine Pharmaceutical in 1993. The government-backed precursor of 3SBio became a private-sector joint venture in 1995 with Lou Jing pulling together $550,000 with help from friends in the U.S. "It was an astronomical number for us," he says.

"We had a U.S. Big Pharma [which he declines to name] interested, but when they came [to China] and went to dinner with us, two dozen government officials from irrelevant departments showed up," Lou Jing remembers. "They got startled and canceled the deal." *—J.H.*

For all its early gains at home, however, 3SBio faces struggles as a Chinese drugmaker abroad. Lou says he wants half its sales to be abroad in ten years. Right now, that share is only 2%.

Last year 3SBio planned to absorb a Canadian contract manufacturer, but the deal failed to obtain approval from authorities there. Lou hopes Sirton will open a window into Europe, and he'll keep looking for another North American outpost. "The current international situation is not so favorable, but it's temporary," he avers. "It has nothing to do with [biopharma] technology and won't affect us in the long run."

The company has been conducting clinical trials for Epiao in Russia and Thailand, and Yisaipu, contributing to 27% of 3SBio's sales in 2017, has been approved in 11 countries and is in the registration process in 19. Since 2016 both Tpiao and Epiao have received marketing authorization in Ukraine, which belongs to a regulatory network of 50-odd nations on medical products' manufacturing practices. Lou believes the breakthrough there will facilitate reviews by other members, such as Thailand, supercharging growth.

China is not yet in that circuit but has joined other international organizations such as one harmonizing pharma registration requirements, syncing its domestic standards with those in the U.S. and Europe. However, its execution still lags, notes Carrie Chen, Deloitte's China partner sitting on its global life sciences and healthcare committee, and registration of drugs abroad is a taxing process.

Sunshine Guojian plays another role in Lou's master plan. With the largest plant in China for monoclonal antibodies, an important component for bio drugs in autoimmune and other areas, Guojian will supply 3SBio's contract manufacturers when overseas market approvals are in place. Today 3SBio has 31 drug candidates in the pipeline; 7 have passed Phase III, the last clinical trial under China's FDA.

But 3SBio still sees a vast untapped China market for bio drugs. An example: Only 500,000 of China's 9 million kidney-induced anemia patients are using EPO drugs, the rest taking chemical compounds or traditional Chinese medicine. "Biopharmaceutics are more long-lasting and have less severe side effects. It should be the patients' first choice," Lou says. "But with China banning direct-to-consumer advertising [on prescription medicine], you can only count on the doctors to make this clear to the patients."

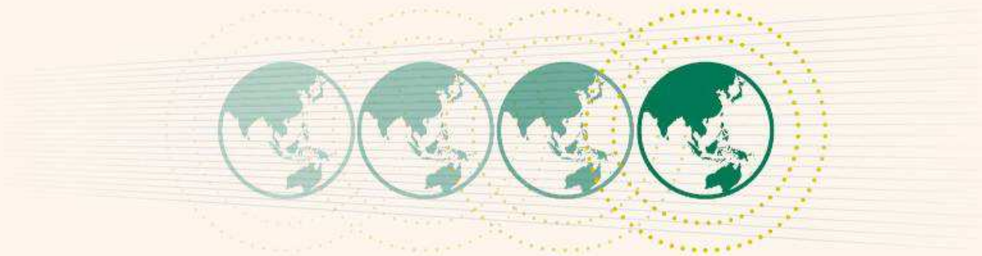
LEK's Chen balks at the claim on duration and side effects, but does expect biologics to represent 12% of China's prescription pharma market in value in five years, up from 7% last year. That market, second only to the U.S., was pegged at $123 billion last year and expected to reach $160 billion by 2022. However, Chen figures a quarter of the overall market will be biopharma's ceiling: "There will always continue to be usage of chemical drugs and also Chinese medicine, even without government encouragement."

One hurdle is cost. Tpiao and Yisaipu only became reimbursable drugs under China's national healthcare plan last year, although not for all their indications, and Epiao still hasn't made the list. "Biologics are also injected, not oral, and more likely need to be kept temperature-controlled. It would be less convenient for the patients," adds Chen.

Lou's prognosis is bullish, though, as China is committed to revisit the reimbursement list annually—the last time it was amended before 2017 was nine years ago. "Overseas expansion is one way to hedge the risks as we grow bigger," he says. "China will always be our home base."

Meantime, the American-trained scientist hasn't forgotten U.S. pharma's appreciation for marketing. "A professional background sure has its merits, but it could [make an executive] focus too much on the product," he says. "There's more to commercial success than just good products."

Forbes CEO



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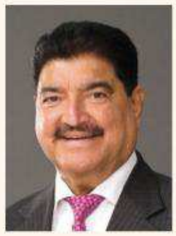

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Best Under A Billion

Mobile Lords

In Singapore, Fuzhou or wherever games are developed, IGG battles for its piece of the gaming action.

BY ANURADHA RAGHUNATHAN

It was November 2012, and the $13 billion mobile gaming market was all the rage in Silicon Valley. But there was no sense of that urgency at Singapore gaming company IGG (I Got Games), which was into desktop, browser and Facebook games.

From his base in Silicon Valley, IGG's cofounder and chief operating officer Kevin (Yuan) Xu wasn't happy with the disconnect. He called for a meeting with IGG's founder Zongjian Cai and two other cofounders as well as key investors at the gaming outfit's development hub in Fuzhou in southern China. "I wanted the company to move 100% to mobile games," says 43-year-old Xu, who has a Ph.D. in electrical engineering from the University of Santa Cruz. "I convinced them—over two days of discussions—that there was a humongous opportunity in front of us, and if we caught it we'd be a $1 billion company."

Cai, IGG's reclusive 40-year-old chief executive and chairman from Fuzhou, who has a 14% stake (the largest among the founding group), instantly endorsed Xu's strategy. IGG pivoted to mobile gaming. The 200 or so developers at that time were retrained. They worked 14-hour days to roll out IGG'S first mobile strategy game, Castle Clash, which involves the defense of a tower. The game raked in millions of dollars in the first year. In 2016 IGG released Lords Mobile, a blockbuster war-strategy game. It's now bringing in $58 million a month.

Revenues, which are mostly from in-game purchases, have risen from $322 million in calendar year 2016 to $607 million for the year ended December 31, 2017. Profits have soared from $72 million to $156 million in the same period. Also, IGG has free cash of $222 million. This performance has earned it a spot on *Forbes Asia*'s Best Under A Billion list for a second year in a row, one of six game outfits so honored in 2018.

And there's more growth to come at the $1.8 billion (market cap) company, as the mobile gaming market is projected to rise from $56 billion in calendar 2017 to $70 billion in 2018 to $106 billion in 2021. The Asia-Pacific region, which accounts for nearly two thirds of the global mobile gaming spend, is expected to spur growth with China and Japan leading the charge *(see chart)*.

"There's obviously a disproportionate number of people in the region, but the growth is also because of the prevalence of smartphones and mobile infrastructure," says Tom Wijman, market analyst at Newzoo, which provides insights on the gaming, mobile and esports industries.

TOP MOBILE GAMING COUNTRIES IN THE APAC REGION

	2018 REVENUES ($BIL)
CHINA	$23.0
JAPAN	12.9
SOUTH KOREA	3.1
INDIA	1.1
INDONESIA	0.8

SOURCE: NEWZOO.

IGG cofounder and COO Kevin Xu: "I wanted the company to move 100% to mobile games—there was a humongous opportunity in front of us." (IGG's Singapore office, above.)

"For many consumers in the region, the smartphone is the first and only device that gives them access to the internet and to gaming."

For IGG, too, the Asia-Pacific region is a big contributor, accounting for 49% of 2017 sales. The company, which operates in the strategy-games niche, is listed on the Hong Kong stock exchange and counts China, Vietnam and Indonesia as key markets for its flagship game, Lords Mobile—in addition to the U.S. But IGG still ranks only No. 20 in the region in terms of gaming revenues because it fields intense competition from gaming biggies like Japan's Bandai Namco, Mixi, Konami, Square Enix, Gung Ho and CyberAgent; China's NetEase and Tencent; and South Korea's Netmarble and NCSoft.

IGG—founded in 2006 by Cai, Xu, Hong Zhang (who's the chief technology officer) and Yuan Chi (who's a nonexecutive director)—chose to situate its headquarters in Singapore in 2009 because the government gave it a concessional corporate tax rate. Also, when the company raised its second round of funding, Vertex—an arm of the Singapore government's investment company, Temasek—took a stake. (Vertex has since exited.)

IGG has 100 employees in Singapore. Thirty are into game development, and they work with more than 750 game developers across the globe. China has the largest contingent with 400 gamers. The Singapore team coordinates with China through videoconferencing. Developers get a revenue share if a game does well, a critical incentive in an industry that sees attrition rates as high as 40%.

IGG is looking to launch eight games this year. This comes on the heels of the December launch of Sweet Maker in the same genre as the hugely popular Candy Crush from America's Activision Blizzard. Cai, who is said to spend ten hours a day gaming, oversees the developers who work across the globe. IGG has also developed long-term relationships with Google, Apple, Microsoft and Amazon. It's constantly working on increasing its appeal—through worldwide premieres of its games. It has roped in Hollywood composer Klaus Bedelt (of *Pirates of the Caribbean* fame) and the London Symphony Orchestra to produce game soundtracks for Lords Mobile.

But the threat of competition looms large with thousands of companies and developers churning out games.

As Newzoo's Wijman puts it: "Games are getting more immersive, competitive and complex." F

Numbers Crunch

BUB alums are hit as Indian auditors are spooked.

BY ANURADHA RAGHUNATHAN

Listed companies in India are in the throes of an audit crisis. In the first half of 2018, auditors at 30 listed entities quit midterm. Two former Best Under A Billion companies faced abrupt auditor resignations in the last few months—sinking their stocks and founder fortunes.

Deloitte Haskins & Sells—which had audited fruit juice maker Manpasand Beverages for the last eight years—bailed a few days before a board meeting in May intended for the release of its fiscal year-end results, saying in a letter to the board that the company didn't provide "significant information."

Manpasand, which debuted on BUB in 2017, countered to the stock exchanges that "we have been providing all required information as and when required by them." The company further added that "while there could have been some delays" it has "never denied sharing any information with them ever." Subsequently, the juice company, which sells primarily to rural and semi-urban India, appointed a new auditor and released results in June reporting a 34% uptick in revenues to $151 million and a 36% surge in profits to $15 million for the year ended March 31. But the damage was done. Manpasand's stock—which crashed 70% in the weeks after the resignation—is still yo-yoing. Founder Dhirendra Singh, with a 44% stake, feels that pain.

Deloitte said it was "unable to comment on client-specific matters" as it was "bound by confidentiality obligations." In the second instance, Price Waterhouse resigned as auditor of tech services firm Vakrangee in April, citing lack of information about some businesses. This was the firm's first audit of the Mumbai company, which appeared on BUB in 2015. Vakrangee provides e-governance, banking, insurance, e-commerce and logistics for rural and semi-urban consumers.

In its resignation letter, Price Waterhouse said that it had requested information relating to Vakrangee's "election books" (as part of its e-governance segment) and the "bullion and jewellery" business (as part of its e-commerce business). While the management had responded, the answers were "inadequate" or "contradicting earlier explanations," Price Waterhouse said in its resignation letter to the board.

Manpasand's Singh saw his fortune crash after an auditor's resignation.

ANU RAGHUNATHAN

After the resignation, Vakrangee responded in a statement to the exchange that it "has provided all the information with respect to business and affairs of the company to the Auditor and the Audit committee." Vakrangee then appointed a new auditor and announced year-end results in June of $1 billion in revenues—up from $618 million last year—and net of $105 million.

However, founder Dinesh Nandwana, who debuted on India's richest last year with a net worth of $1.72 billion, saw his fortune plunge 85% in recent months. (Vakrangee's stock already had taken a hit in February over published rumors of price and volume manipulation. The company said that they were "completely baseless and factually incorrect.")

The spotlight is on auditors. "When an auditor or independent board member resigns, it's a red flag for investors," says Pranav Haldea, managing director of New Delhi's Prime Database, which tracks listed companies."They don't know what to expect, and the market doesn't like uncertainty because you don't know the depth of the issue." F

GERMANY
A Global Connector

As Europe's leading economic powerhouse and the world's fourth-largest economy, Germany has shown the world its winning formula: strong investment, low interest rates and high consumer spending. At the heart of that strength is Frankfurt, which is positioning itself as Europe's next financial capital to replace London in the post-Brexit era.

"We have close partnerships with financial sectors across Asia, including close and cordial working relationships with Tokyo and Singapore. And that is something which we are very happy about because we believe the future belongs to Asia," **Frankfurt Main Finance Managing Director Hubertus Väth** said.

Aside from Frankfurt, the federal state of Bavaria, home to some of the world's biggest global brands, continues to assert its dominance over the German economy.

"The GDP per capita of Munich is 72,000 euro, while Germany's is 40,000 euro. And if you look at the figures from the south of the country, this part of the Germany has become synonymous to Bavaria," said **Bavarian Chamber of Commerce and Industry President Eberhard Sasse**.

To maintain its leadership in Germany and the world, the public and private sectors in the region must work much closely together, according to Sasse.

In fact, Munich has already begun to diversify its economy beyond its traditional industrial sector and has ventured beyond Germany's national borders.

"Business and success should always be people driven and not just technology driven. Locally and globally, communication, transparency, respect and care is key to everything. Doing cross-border business and building global companies requires passion, partnerships and most of all, people," **CM-Equity Founder and CEO Michael Kott** said.

Over the past decades, German engineering has become the benchmark across the globe. Many have attributed this competitive edge to the ability of German companies to adapt quickly to market requirements and their openness to customer feedback.

ChipGlobe, a German consulting company in the semiconductor industry, embodies this strategic and logical approach and combines it with a commitment to the success of its customers.

Founded by **Volker Frisch** in Munich in 2014, ChipGlobe hires highly experienced engineers who can design completely customizable solutions for its clients. This mission forms ChipGlobe's corporate culture and is the foundation of its success.

"You can only be successful if you have the right vision and value system," stressed **Business Development Director Dieter Rudolf.**

Detecting growth opportunities in Asia early on, ChipGlobe set up a subsidiary in Singapore in 2015. And after opening an outsource design center (ODC) in Belgrade in 2017, the company has begun construction of a new ODC in Ho Chi Minh City, Vietnam.

"We combine the strengths of German and Asian systems of quality, culture and values. If you look at the large companies in Germany, they try to reduce costs, sometimes through offshoring. If you look at places like Serbia, you have a lower cost structure but still have quality talent. The same applies to Vietnam. The long-term trend is to focus on Asia and that's why we're opening a new ODC and investing there," Rudolf added.

Software giant **SAP** is another southern German company that recognizes that its success came only by prioritizing its customers.

"We aim to look at business challenges through the eyes of our customers first and how they are doing in servicing their own customers," explained **CEO Bill McDermott**.

With experience across 25 industries and operations in 193 countries, SAP closes the gap between the application of innovative technologies, such as machine learning and artificial intelligence, and the availability of predictive applications, process and insights that are in value chains to drive up productivity.

"SAP is the one company that can put it all together in a highly coherent, altruistic, purpose-driven way," McDermott said.

Looking ahead, Germany will continue to set the pace of European growth and develop closer ties with the Asia–Pacific. With its robust financial sector, political stability and well-developed infrastructure, the country will continue to be an ideal destination for Asian investment. ■

From Small-Scale PV to Utility 2.0

Look at the numbers: In 2017, new solar power projects around the world reached a total of 98 gigawatts. That was more than the net addition from coal, gas and nuclear plants combined. Many of these new projects were small-scale photovoltaic (PV) installations, which are increasing because of lower prices, cheaper equipment, government subsidies and power purchase agreements (PPAs). Take Germany for example. A mature market, the average cost-per-watt has fallen below $1.68. With all of these incentives, shouldn't every roof have a PV system by now?

ENVIRIA CEO and Co-founder Melchior Schulze Brock points out that current arrangements are flawed: "They target owners of surfaces suitable for PV projects, such as real estate funds, agricultural or manufacturing companies. But the return on investment is low. On top of that, the complexity involved—buying the technology, outsourcing installment and operating the system—simply doesn't justify such a non-core investment."

On the other hand, there are private and institutional investors who are looking for safe ways to invest their money but do not own a space or structure to place a PV system.

"Those types of investors appreciate low yields because cash flows are often guaranteed by the government or a large rated utility. You have different entities with complimentary wishes and objectives, and that's a lot of untapped potential," explained Partner Ronny Thorenz.

Using their investment banking expertise, Schulze Brock and Thorenz set up ENVIRIA to bridge that gap. Their revolutionary concept rests on a specialized solar investment manager, who leases a space from the property owner for a fee—typically over a 20-year period—and installs the technology at their own cost, supplies the owner with electricity, while feeding excess power into the grid and making a return.

Under the arrangement, the property owner reaps the benefits without the hassle. All liability lies with the operator, who takes care of the entire process, installs state-of-the-art PV and energy storage systems, delivers ancillary services, such as operation and management solutions, and provides comprehensive insurance for all systems.

In 2014, Schulze Brock and Thorenz founded ENVIRIA's predecessor, MeinSolarKonzept. With its innovative approach, the company was adept at securing commercial rooftop space and attracting investments from banks and private investors. Last year, they incorporated their preferred engineering, procurement and construction subcontractor and formed ENVIRIA, based in downtown Frankfurt, Germany.

ENVIRIA founders Ronny Thorenz (left) and Melchior Schulze Brock (right). ENVIRIA's Müllheim 1 Project in southern Germany.

With an established residential portfolio in Germany, Austria and Switzerland, ENVIRIA propelled itself to become an industry powerhouse, with more than 3,000 completed rooftop projects that are generating a total of more than 25 megawatts since the incorporation with its subcontractor last year.

As Germany prepares to shift away from a subsidized feed-in tariff, Schulze Brock and Thorenz are making sure to stay ahead of the game and are expanding abroad to countries where solar deployment is booming. Having opened its new office in Hong Kong last year, ENVIRIA is setting its sights on other countries, such as the U.S., Australia and the Philippines.

In Australia, which has seen a three-fold increase in renewable energy investment and a surge in PV projects in recent years, the firm is in talks with large corporations and city councils attracted by its investment-driven model, and is offering them a pipeline of 10 megawatts worth of projects ready for a quick rollout.

Constantly looking for innovative ways to streamline the business, the two entrepreneurs keep thinking ahead. The firm's rapid expansion of small scale solar systems, most of which have the capacity to store energy, has a far-reaching goal.

Coupling technology with financial expertise, Schulze Brock and Thorenz aim to transform ENVIRIA into a utility in its own right. Their vision is to facilitate direct green energy trade among its customers. They call it "Utility 2.0," a decentralized system that combines production and storage where customer-to-customer transactions are enabled through blockchain technology.

Within the system, daily electricity surplus produced can be saved for individual future use or directly sold to other ENVIRIA customers. This will create a more efficient electricity marketplace as it provides an individualized solution that allows flexibility based on consumption needs.

Later this year, Schulze Brock and Thorenz are releasing a highly anticipated white paper, which will illustrate the uses of a utility-based cryptocurrency being conceptualized and enumerate its advantages. The cryptocurrency should gain strength with the launch of each new project and simultaneously rebate customers based on production. Funding will go to develop more projects around the world. The ultimate aim is to offer competitive energy pricing, especially in disadvantaged communities where investment is scarce but whose needs are far more significant.

With its inquisitive mindset, sweeping expansion and visionary digital currency, ENVIRIA is clearly one company to watch. ■

www.enviria.energy

CM-Equity AG

A Partner to Bridge Asian and European Markets

CM-Equity AG, a Munich-based investment bank, has become the go-to address for professional, ROI-driven investors, as well as early stage, innovative companies looking for strategic partners to grow their business internationally.

The company was founded in 2002 by **Michael Kott**, who has built an extensive international network as well as comprehensive expertise in investing and global capital markets for more than 25 years. Previously, Kott was heavily involved in designing major parts of the trading system of Germany's capital markets and oversaw secondary listings of hundreds of Asian companies on German stock exchanges.

Since establishing **CM-Equity**, Kott has developed it from a proprietary trading desk into a fully regulated and EU-passported and licenced investment bank with three business units: Asset Management, Corporate Finance and Investment Holdings.

CM-Equity's investment strategy and corporate approach defies convention as it focuses on small to midsize private and publicly listed companies. Its approach requires intensive personal and transparent communication with a network of like-minded associates, whether they are at home or abroad, in the government or in the private sector.

Kott with Shen Yazhi (left) and Xu Yiqiu (right), representatives of state-owned enterprises in China

The bank collaborates with leading universities and their attached incubators, as well as with business angels, venture capitalists and public equity firms, and always works solely with decision makers.

"Through our international work, CM-Equity recognized the outstanding opportunities of China's Belt and Road Initiative for investors and companies. The Belt and Road Initiative, laid out by President Xi Jinping in 2013, will have an impact on the world for the coming decades," Kott explained.

"Our international team is proud and privileged to work as an active contributor to the Belt and Road Initiative. Our corporate selection model enables us to execute ongoing projects in a timely and successful manner as we bridge the cultural gap between Eastern and Western businesses," he said.

Kott with Li Xiaocang, representative of the private sector in China

As a trusted partner and adviser to China's central government, CM-Equity offers substantial funding and infrastructure support for qualified companies from Germany and abroad. The bank applies people-centered criteria when screening companies. To reach a global scale and achieve sustainability, it relies on communication, transparency and entrepreneurial talent, social responsibility and trustworthy leadership.

CM-Equity's ongoing projects include the building of international industry hubs in China and in Belt and Road countries for general aviation, healthcare, medical technology, life science, education and finance, among others.

It is also setting up Innovation World in Shandong Province in China, which could work as template for similar industry ecosystems around the world.

The area will be populated by start-ups, original equipment manufacturers, university accelerators, incubators, academic coaches, venture capitalists and funding pools for multiple industries, which include those in Industry 4.0, big data, artificial intelligence, virtual and augmented reality, blockchain technology, high-tech automation and robotics, renewable energy and smart agriculture.

On a continuing basis, CM-Equity is on the lookout for qualified institutional investors, industrial partners and academic institutions from Asia, Germany and the rest of Europe to join its Belt and Road Partner Network. The bank hopes to find the right people who can contribute and support the developing of sustainable products and new markets.

"Ultimately, we will create a better world together," Kott said.

CM-Equity is also setting up a Global Startup Fund, which involves top university accelerators around the world. Professional investors who are interested in any of the mentioned projects can contact Kott at ***kott@cm-equity.de.***

CHING CHIAT KWONG

Thinking Outside the Shoebox

The founder of Oxley Holdings and the king of compact apartments in Singapore is facing headwinds in residential real estate.

BY JANE A. PETERSON

Arriving in a royal blue Rolls-Royce, Singapore tycoon Ching Chiat Kwong seemed in celebratory mood despite the stormy weather outside. It was June 2, launch day for phase one of Affinity, a 1,042-unit condominium built by his homegrown property firm, Oxley Holdings, and the fourth of his 11 local launches scheduled for 2018.

Ching, once known as Singapore's shoebox king for building a string of compact apartment condos, has never missed an Oxley launch—he has witnessed 41 through the years, not only in Singapore but also across Europe and Asia. Fresh from a business trip to Vietnam and wearing a Dsquared2 T-shirt that read "icon," the 52-year-old found two of his three local equity partners, both old friends, and began chatting in Hokkien, a Chinese dialect. He's animated yet relaxed, and full of laughter.

Tucked into the leafy Serangoon heartland, amid hipster cafes and hawker centers, Affinity was designed to hit Oxley's sweet spot—buyers in the city-state's mass market, most of them eager to upgrade from what are called HDB flats, built and subsidized by Singapore's Housing Development Board.

Ching and his partners bought the site "en bloc"—which is when 80% of the owners in a condominium approve selling the entire building to the highest bidder, usually at a premium—at the bargain price of $614 per square foot last July. "I am a step faster than the rest," Ching mused, noting competitors Keppel and Wing Tai followed his early lead and bought a site nearby two weeks later at the substantially higher price of $710 per square foot.

MUNSHI AHMED FOR FORBES

Ex-cop Ching Chiat Kwong is obsessed with dealmaking—and fashion.

CHING CHIAT KWONG

Beginning at 9 a.m., prospective buyers and their families had started to pour into a makeshift tent, listening anxiously for their numbers, picked by lottery. Once called, they would decide whether to buy one of 300 units on the blueprint, secured by a 5% down payment. (The largest four-bedroom unit was priced at $1.7 million, or $1,100 per square foot.)

The crowd was yet another sign that Singapore's property market was finally picking up steam after a multiyear stall. And Ching was on top of it. Outpacing competitors in 2017, Oxley had bought 11 en bloc condominiums—setting off a collective sales frenzy across the city-state. On the day of the Affinity launch, the self-made tycoon was unaware that five weeks later his celebratory mood would end abruptly.

In early July the Singapore government, fearing a property bubble, imposed cooling measures designed to halt the en bloc sales frenzy and rein in property prices that had risen more than 9% since mid-2017.

On hearing the news, Ching says he felt his feet grow cold as he sank down in a chair to plot his response. Springing into action, he summoned his staff to launch Riverfront Residences, his fifth project this year, that very night—before the measures kicked in the next day. Realtors contacted prospective buyers, and by 8 p.m., Ching himself was directing frantic buyers to form a queue in the showroom. "We sold over 500 units in four hours," he recalls, a record number for a single day but falling short of his original projection by perhaps 200 units.

The next day, a Friday, property and bank stocks took a nosedive. Oxley shares fell nearly 15% with further slides Monday, prompting Ching to buy back a sizeable chunk—more than 11 million shares for $2.9 million. At the same time, Oxley's market cap, which had more than tripled since it went public in 2010, fell from nearly $1.5 billion to $1.1 billion. Ching's net worth is down this year, and so is his ranking; he appears three spots lower at No. 49 with $545 million.

As for the firm's local land bank of 3,900 units—among the largest in Singapore—its estimated value, which includes partner stakes, dropped to $3.5 billion from $3.7 billion. While Oxley has reduced its leverage in the past five years, it still registers a net leverage ratio of 2.4, among the highest in the sector. Ching insists he takes calculated risks.

In a note to investors, Singapore-based Maybank analyst Derrick Heng characterized Oxley as "highly exposed to residential headwinds." He downgraded the stock from "buy" to "hold" and warned investors that Oxley's "elevated leverage" is expected to "magnify the impact on its bottom line."

Ching on meeting with Barack Obama: "The first thing he said was, 'I like your shoes!'" Ching recalls. "He hugged my waist, and I hugged his."

So far this year Oxley has sold local residential units worth $735 million from its five project launches, with net margins ranging from 15% to 25%.

Ching says he still plans to launch his remaining six projects planned for this year, some 1,900 units, but knows future sales won't meet original expectations. Instead of selling 1,000 units by year-end with 15% to 25% margins, he now hopes for 800 with 12% to 19% net margins. "The next projects are smaller and will do well," he adds, noting that under the new cooling measures first-time buyers are exempt from extra taxes and need only make a higher down payment of 25%, up from a previous 20%.

Ching's Oxford-educated son Shawn maintains Oxley is still selling around 20 Riverfront units a day despite the curbs. He calls the condominium "the cheapest 2018 launch in town," its units currently selling for an average price of $880 per square foot. An Oxley project manager, the 27-year-old Shawn is the second of Ching's three children and the only one in the building business. "We are going to tweak prices selectively," he says, noting Singapore developers have five years to sell all units in a development before late-sale penalties kick in.

Elsewhere, Oxley juggles 11 projects in eight foreign countries using an asset-light strategy. To reduce risk, he spreads ownership among several partners. According to Ching, Oxley's projects abroad are valued at $7 billion —the vast majority of them unleveraged and set to generate hefty net cash flows, including properties in London, Dublin and Cyprus.

In China, Oxley is the largest stakeholder, with 27.5%, in the 200-hectare Gaobeidian township project, located outside Beijing just north of a new Special Economic Zone called Xiongan New Area. "China wants to make it a first-class city," Ching says, noting that the region's home prices are rising. "We launch in September. It will be huge."

Oxley's head office is at the top of Oxley Towers in Singapore's downtown core, overlooking Chinatown rooftops with a sliver view of the ocean. It's home to a tight-knit team of 50 employees. On display are handshake photos with local officials and a collection of trophies as well as statues and paintings of bulls that Ching collects and refers to as his "Oxley oxen."

On a recent morning, Ching rises from his desk in a white jacket from Alexander McQueen that reads, "It's only a gambling problem if I'm losing." He's also wearing a sparkling Dior "queen bee" T-shirt, black leather bracelets with dangling silver skull charms and white leather sneakers, the same ones he wears in a framed wall photo with former U.S. president Barack Obama. "The first thing he said was, 'I like your shoes!' " Ching recalls, laughing. "He hugged my waist, and I hugged his."

The self-assured, breezy manner belies Ching's hardscrabble past. His family of seven grew up in a three-room HDB apartment, though his father, a seaman, was only home once or twice a year. When his father failed to send money, he recalls creditors knocking on their door to collect. "It was quite scary," he says. At one time Ching worked several jobs to make ends meet: selling Christmas cards, hawking snacks and jeans, and waiting tables at the Hilton Hotel.

At the time, young Ching knew failure was not an option. He went to National University of Singapore, majored in sociology on a bonded police scholarship and then joined the force as a junior officer, soon becoming an investigator for crimes that included rapes and robberies. Finding it tough to make ends meet on his salary—it was about $1,300 a month in the mid-1990s—he left the force at age 28, first attempting washing and grass-turfing businesses before he moved into the building trade three years later, thanks to a stroke of serendipity.

He met a Taiwanese businessman eager to build a row of shophouses. Ching launched Oxley Construction and took the job, urged on by an architect friend who acted as his subcontractor and taught him the ropes. "Somehow Oxley seemed a good name," he explained, noting he then lived in a flat on Oxley Road, the same street as Singapore's then prime minister Lee Kuan Yew. Soon after, he was building show flats for Singapore developers.

Spotting a gap in the market for compact affordable housing units, Ching made a name for himself by aggressively selling shoebox units as small as 32 square meters. (The government later attempted to cap such small units by stipulating a minimum average size of 70 square meters.) Raising $735,000 dollars, partly funded by mortgaging his own home, he bought a small plot that became the 48-unit Tyrwhitt 139 in Little India.

The first of ten shoebox projects, it sold out in three hours, though not before he vomited from the overwhelming stress. "Those three hours changed my life," he recalls, and taught him to trust his hunches—and his friends. "They helped me achieve my dreams," he says. "If I can help my friends, I do."

Like other Singapore developers, Oxley expanded internationally when the local market slowed in 2013, launching first on London's outskirts in 2014. Royal Wharf, a 40-acre waterfront township of homes, offices and retail outlets, targets the mass market with 3,385 midpriced units. They are walking distance to the new Crossrail line, opening in 2019, which will make central London accessible in 20 minutes.

"I knew I could make money if we did it our way," Ching reflects, noting he actually took over an existing project from Irish builder Ballymore. Though Ballymore remained the development manager, the Oxley team cut costs, redesigned the blueprint to add 385 units and divided it into three phases, selling each one before breaking ground—and before Brexit kicked in. With 90% of the units now sold, and phase three completing in 2020, Oxley will soon launch a sister project, Deanston Wharf, nearby.

In the last five years, the firm has spent close to $370 million buying stakes in outside developers, Galliard Group (20%) in the U.K., Australia's Pindan Group (40%), Aspen (10%) in Malaysia, and United Engineers (20%) in Singapore.

Ching splits his time between Europe and Southeast Asia, visiting projects under construction, pitching for new business and closing deals. For him, planes are a haven: "On the ground, my phone is ringing all the time," he explains, "but on the plane, nobody disturbs me."

Inspiration happens on long morning walks. "While I am walking, I become focused on what to do next," he says. "When you are in so many countries, you need to figure out which ones to leave out and which to pick for the long term."

Oxley's 40-acre Royal Wharf waterfront project outside London.

Though he says Oxley is now in a period of consolidation, long-term favorites for expansion include Ireland, the U.K., Cambodia—and even Singapore, where Ching is looking at commercial and industrial deals, still favoring the nation's progressive payments' scheme, which allows buyers to make payments in installments.

While many Singaporeans in their 50s think about retirement, Ching says that's not for him, adding he remains confident despite the recent setback. "I will stay around until I feel I can't contribute anymore." F

BY NAAZNEEN KARMALI

Property Tigers

Real estate gains—now uncertain—helped tycoons rise 11%.

Amid escalating U.S.-China trade tensions, Singapore's export-led economy grew at a slower-than-expected 3.8% in the second quarter of 2018. Shortly thereafter, in early July, the government sought to cool down the overheated property market by imposing a fresh set of curbs including extra duties and stricter limits on how much home buyers can borrow.

Uncertainties loom: The new regime of Mahathir Mohamad in neighboring Malaysia is markedly less cozy than was the ousted Najib Razak. It has hinted at scrapping a much-touted high-speed rail link between the two countries and revisiting a decades-old water-supply agreement. Not surprisingly, both the Singapore dollar and the benchmark Straits Times Index are flat from a year ago. Nonetheless, the nation's top 50 richest collectively recorded double-digit gains; their combined wealth is up 11% to close to $116 billion.

The Ng brothers scored big with the mixed-use site in popular Holland Village.

The biggest dollar gainers are property siblings **Robert and Philip Ng** and Facebook cofounder and Singapore resident **Eduardo Saverin**. The Ngs enjoyed a $2.5 billion boost, partly on new information about their private assets. Their Far East-led consortium scored a victory in May by clinching a prized mixed-use site in the popular Holland Village precinct with a $904 million bid, beating out more than a dozen other aspirants. The brothers, who must now contend with the cooling regulations, retain their No. 1 spot with $11.9 billion. Saverin, whose fortune was also up by $2.5 billion, remains a close No. 2 with $11.8 billion. (Facebook shares gained 30% on a jump in ad revenues.)

Another billion-dollar gainer is New Zealander and long-time Singapore permanent resident **Richard Chandler**, who jumped four places to regain a spot in the top ten (at No. 8). His Singapore-headquartered Clermont Group's net assets surged 50% on undisclosed investment gains, according to official filings. It was also an eventful year for paint tycoon **Goh Cheng Liang**, who has a 39% stake in Japan's Nippon Paint Holdings. In a boardroom coup in March, his son Goh Hup Jin took control of the storied 137-year-old Japanese firm—he was named chairman and oversaw the appointment of five new executives to the board.

There are three newcomers to the list: **Gordon Tang** of property firm SingHaiyi Group; Bangladesh-born Singapore resident **Muhammed Aziz Khan**, chairman of Summit Group; and online gaming whiz **Forrest Li**, who listed his firm Sea on the NYSE in October. Four dropoffs included Serge Pun, whose Singapore-listed Yoma Strategic Holdings fell on real-estate dips in his native Myanmar. (Rankings are based on stock prices and exchange rates as of July 13.)

Additional reporting by Prisca Ang, Megha Bahree, Jean Chen, Alex Fang, Rebecca Feng, Russell Flannery, Sean Kilachand, Suzanne Nam, Jane A. Peterson, Anuradha Raghunathan, Sheela Sarvananda, Jessica Tan and Jennifer Wells.

YEN MENG JIIN/SPH/NEWSCOM

JOHN LIM: FLUSH WITH FUNDS

The cofounder of **ARA Asset Management** saw his fortune surge by more than a third on new financial information relating to his recently privatized group. Assets under management at ARA and its associates more than doubled to $58 billion in 2017, partly due to acquisitions. Lim, who owns close to one third of ARA, expanded the portfolio by splurging $575 million on stakes in Japan's Kenedix and Australia's Cromwell Property Group, which has assets in Europe. ARA deepened its presence in China through a joint venture in January with Chinese investment trust AVIC. ARA now manages 21 REITs and more than 70 private real estate funds across 20 countries.

THE LIST

1. ROBERT & PHILIP NG
$11.9 BILLION ▲
FAR EAST ORGANIZATION
AGES: 66, 59

2. EDUARDO SAVERIN
$11.8 BILLION ▲
FACEBOOK AGE: 36

3. GOH CHENG LIANG
$8.5 BILLION
NIPPON PAINT AGE: 91

4. KWEK LENG BENG
$7.6 BILLION
CITY DEVELOPMENTS
AGE: 77

5. KHOO FAMILY
$6.7 BILLION
GOODWOOD GROUP OF HOTELS

6. WEE CHO YAW
$6.4 BILLION ▲
UNITED OVERSEAS BANK
AGE: 89

7. KWEE BROTHERS
$5.4 BILLION
PONTIAC LAND

8. RICHARD CHANDLER
$3.15 BILLION ▲
CLERMONT GROUP AGE: 59

9. RAJ KUMAR & KISHIN RK
$2.7 BILLION
RB CAPITAL/ROYAL HOLDINGS
AGES: 64, 35

10. CHOO CHONG NGEN
$2.6 BILLION ▲
HOTEL 81 AGE: 65

11. KUOK KHOON HONG
$2.5 BILLION
WILMAR AGE: 68

12. PETER LIM
$2.45 BILLION ▲
THOMSON MEDICAL GROUP
AGE: 65

13. ARVIND TIKU
$2.3 BILLION ▲
AT HOLDINGS AGE: 48

14. SAM GOI
$2.1 BILLION
TEE YIH JIA FOODS AGE: 69

15. CHANG YUN CHUNG
$2.05 BILLION
PACIFIC INTERNATIONAL LINES
AGE: 99

16. ONG BENG SENG & CHRISTINA ONG
$1.85 BILLION ▼
HOTEL PROPERTIES
AGES: 73, 70

17. LIM OON KUIN
$1.75 BILLION
HIN LEONG TRADING
AGE: 74

▲UP MORE THAN 10% ▼DOWN MORE THAN 10%
★NEW TO LIST ↻RETURNEE

BY JESSICA TAN

Plug and Play

Some of Singapore's wealthiest families are putting their money behind hangouts for the Millennial crowd.

The Great Room, a two-year-old co-working-space operator with an adjacent members-only business club on the 18th floor of Centennial Tower, commands a lavish view of Marina Bay and a giant ferris wheel known as the Singapore Flyer. Its membership roster boasts stars from Singapore's tech and startup scene, such as Lai Chang Wen, 31, cofounder and CEO of last-mile logistics firm Ninja Van, and Vinnie Lauria, 38, founding partner of venture capital firm Golden Gate Ventures.

On a recent morning, the Great Room CEO and cofounder Jaelle Ang whisks through a stylish reception area adorned with five-star-hotel touches, including leather sofas, Italian hand-dyed rugs, framed artwork, even coffee baristas and a concierge. She discloses that the club, which has three sites in Singapore and one in downtown Bangkok, is preparing to open two more next year—a second in Bangkok and one in Hong Kong.

Ang, 38, a trained architect and ex-banker, whose family has real estate interests, started the venture right after helping to roll out a $1.1 billion project with a Four Seasons luxury hotel and residences, plus a Capella hotel, along Bangkok's Chao Phraya River for Thai developer Country Group Development on whose board she still sits. Her marketing savvy has attracted investors, including the family office of Goldbell Group's William Chua, once among Singapore's top 50 richest. Ang, who was a childhood pal of Chua's two sons, Alex and Arthur, is now raising $110 million for further expansion by tapping other wealthy families and property developers she knows in the region. "My Asian godfathers [are] coming in," Ang says, smiling.

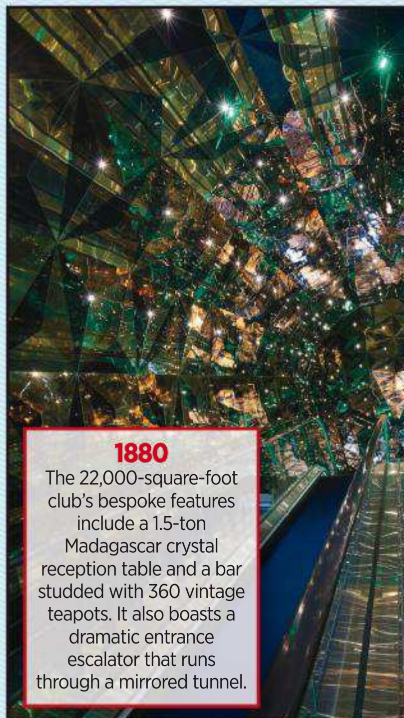
Taking their cue from global peers such as Soho House and WeWork, which started in the U.K. and the U.S. respectively, private members' clubs and co-working spaces targeting mostly the Millennial crowd are Singapore's latest real estate wave, backed by some of the nation's richest.

Last December 1880, a private members' club that also offers a co-working venue, opened on the third floor of the hotel InterContinental Singapore Robertson Quay, which is owned by Kishin RK's RB Capital. Kishin, 35, who is listed with his father, Raj Kumar, at No. 9 with $2.7 billion, is a key investor in the club, which is the brainchild of Canadian entrepreneur Marc Nicholson. The club has more than 1,100 members, half of them women, and is not in any hurry to recruit more. "It's all about building a community. Having the right mix of members is crucial," Kishin says.

The Straits Clan, a popular club located close to Chinatown, has a similar philosophy. Its 800-plus members are drawn from an array of fields, from the arts to startups as well as law and finance. The club's cofounder is Wee Teng Wen, grandson of billionaire banker Wee Cho Yaw (No. 6) and managing director of hospitality firm Lo & Behold Group. The young Wee, 37, who declined to disclose how much he has invested, says he sees Straits Clan as a "unique social network."

The newest entrant is Sherman Kwek, son of property tycoon Kwek Leng Beng and group CEO of City Developments. In July, Kwek junior, 42, oversaw the opening of the Singapore unit of Chinese co-working-space provider Distrii, at CDL's Republic Plaza office building in the central business district. With a 62,000-square-foot space, one of Distrii's earliest members is BitTemple, a

THE GREAT ROOM
The Great Room hosts fireside chats on topics such as blockchain, fintech and health tech. Members have access to all Great Room locations in the region.



1880
The 22,000-square-foot club's bespoke features include a 1.5-ton Madagascar crystal reception table and a bar studded with 360 vintage teapots. It also boasts a dramatic entrance escalator that runs through a mirrored tunnel.

DISTRII REPUBLIC PLAZA
The tech-driven Distrii has an app that connects its 15,000-strong community across more than 30 locations in China and Singapore.

STRAITS CLAN
Housed in a 4-story building on a street that has been home to Chinese clan associations since the 19th century, the Straits Clan has a membership waiting list. It has reciprocal arrangements with more than two dozen clubs across Australia, Europe, the U.K. and North America.

global blockchain incubator.

Sustaining the early flush of success is the biggest challenge facing these new-age ventures, which draw their revenues largely from membership fees (joining costs for clubs range from $1,800 to $3,600 and are topped by a monthly fee) and food and beverage. Madison Rooms, a private members' club started in 2016 by a pair of young entrepreneurs, shut down recently. Weekly events such as discussions or lectures can help clubs stay relevant, says Kishin, but "the risk of failure is huge."

18. HO FAMILY
$1.72 BILLION ▲
TAI TAK ESTATES

19. ZHONG SHENG JIAN
$1.7 BILLION
YANLORD LAND
AGE: 60

20. LEE FAMILY
$1.68 BILLION
OCBC BANK

21. ASOK KUMAR HIRANANDANI
$1.6 BILLION ▲
ROYAL GROUP HOLDINGS
AGE: 63

22. OEI HONG LEONG
$1.5 BILLION ▲
AGE: 70

23. CHUA THIAN POH
$1.45 BILLION
HO BEE LAND
AGE: 70

24. TANG WEE KIT
$1.44 BILLION
TANG HOLDINGS
AGE: 63

25. CHEW GEK KHIM
$1.4 BILLION
STRAITS TRADING
AGE: 56

26. TAY FAMILY
$1.3 BILLION ▲
MEMOCORP

27. KOH WEE MENG
$1.29 BILLION ▲
FRAGRANCE GROUP
AGE: 55

28. LIEN FAMILY
$1.25 BILLION
UNITED OVERSEAS BANK

29. RON SIM
$1.16 BILLION
V3 GROUP
AGE: 59

30. PETER FU CHONG CHENG
$1.15 BILLION ▲
KUO INTERNATIONAL

31. ROBERT FRIEDLAND
$1.1 BILLION ▼
IVANHOE MINES
AGE: 67

32. GORDON TANG
$1 BILLION ★
SINGHAIYI HOLDINGS

33. MICHAEL KUM
$930 MILLION
M&L HOSPITALITY AGE: 73

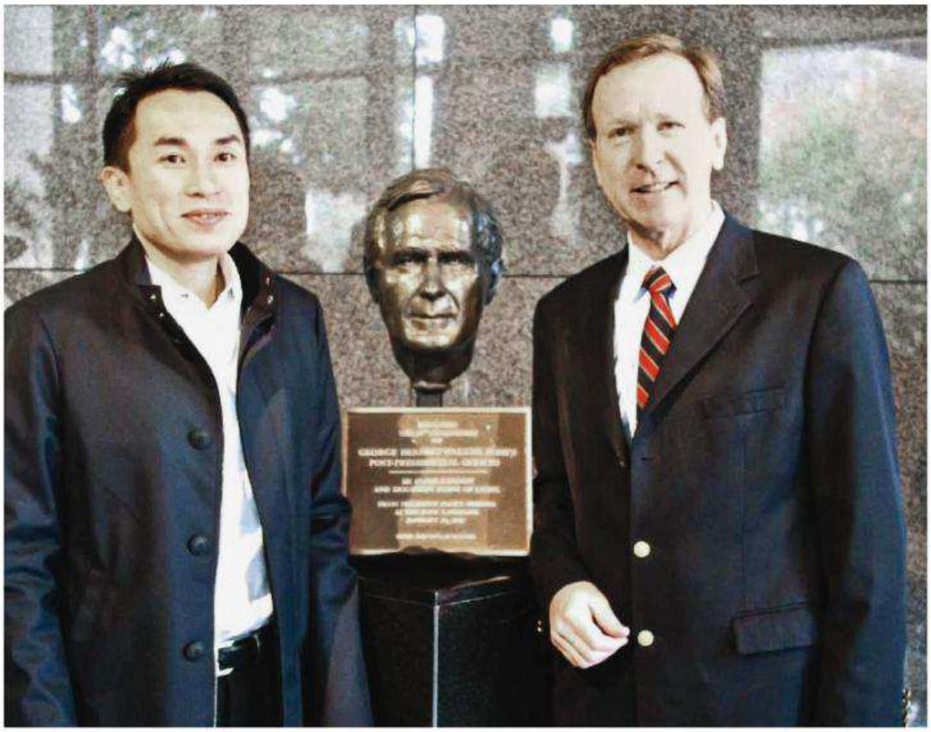
34. MUHAMMED AZIZ KHAN
$910 MILLION ★
SUMMIT GROUP AGE: 63

▲UP MORE THAN 10% ▼DOWN MORE THAN 10%
★NEW TO LIST ↻RETURNEE

Singapore's 50 Richest

GORDON TANG: GOOD CONNECTIONS

Tang, a Chinese-born permanent resident of Singapore, joins the ranks of the top 50 for the first time. His interests include a controlling stake in listed property firm **SingHaiyi Group**, which he ran until 2013, when he handed over operations to his wife, Celine. Now a nonexecutive director, Tang is focused on developing townships in the southeastern Chinese city of Shantou. Tang's business partner and SingHaiyi's chairman is Neil Bush (right, in archive photo), the brother of former U.S. president George W. Bush. (In 2015, Tang donated $1.3 million to Neil's brother Jeb Bush for his 2016 presidential campaign.) Tang and his wife also own valuable stakes in Suntec REIT, Cromwell European REIT and OUE Commercial REIT.



FORREST LI: GAME ON

The Tianjin-born Stanford grad founded and runs online gaming firm **Sea**, which also has interests in e-commerce (Shopee) and e-payments (AirPay). Li enters the top 50 ranks after listing Sea (formerly known as Garena) on the New York Stock Exchange in October. Backed by Tencent, which has a 35% stake, Sea's other investors include Wilmar billionaire Kuok Khoon Hong and private equity firm General Atlantic. The $5.3 billion (market cap) firm, whose shares are trading close to its IPO price, has yet to turn a profit.

NICKY LOH/BLOOMBERG (BOTTOM)

MUHAMMED AZIZ KHAN: POWER PLAYER

Bangladesh-born Khan, a Singapore permanent resident since 1988 and chairman of the Summit Group, is waiting to list his energy firm **Summit Power International** on the Singapore exchange. Bangladesh's biggest private sector power producer, Summit, which is backed by the International Finance Corp., has a dozen plants with a combined capacity of 1508 megawatts. It has a new $3 billion project with GE and Japan's Mitsubishi to build power plants and oil and gas terminals in Bangladesh. The Singapore-based Summit Power, which recently postponed its IPO due to market uncertainty, is run by Khan's daughter Ayesha, a Columbia University business school grad. The son of an army officer, who had a construction business, Khan set up Summit in 1985 and expanded into fertilizers and trading before latching on to infrastructure. Summit's other interests include ports, fiber optics and real estate.

PETER LIM: HEALTHCARE BET

Lim orchestrated a deal in 2017 to transfer his healthcare assets in Singapore and Malaysia to publicly traded Rowsley, renaming the firm **Thomson Medical Group**. The former stockbroker known for his astute investments, who owns close to 90% of Thomson, was congratulated for the move in a half-page ad published in Singapore's *Straits Times* by none other than football star Cristiano Ronaldo. Lim *(with wife Cherie, right)* is a sports aficionado and owns Ronaldo's image rights as well as Spanish football club Valencia. Despite the uncertain fate of a high-speed rail project between Singapore and Malaysia, Thomson maintains that its ambitious $1.2 billion plan to build a healthcare city in the neighboring city of Johor is still on track.

DAVID ALIAGA/NURPHOTO VIA GETTY IMAGES (BOTTOM)

WONG NGIT LIONG

Volatile Venture

Wong's advice: "Don't listen to rumors."

Wong Ngit Liong, chairman and chief executive of Venture Corp., an early Singapore tech standout, was in the eye of a storm recently. Wong, 77, who last featured among the country's richest in 2009, saw Venture's shares plunge by one third over just two and a half weeks, starting in mid-April, when it became the target of short-sellers.

The bear raid was prompted partly by an anonymous blog report that Venture was too dependent on its key client, tobacco giant Philip Morris, which had reported weak sales of its electronic cigarette, manufactured by Venture.

In the first quarterly results briefing on April 25, Wong told analysts to consider the report's source and intention, while Venture's CFO said that the short-sellers behind the report had a "clear hidden agenda." According to the *Business Times*, a local paper, Wong said at the briefing: "Do these people have the guts to show their face? Don't listen to rumors."

Venture's shares have fallen 21% since early May, when the company bought back shares from the market and released a statement about its diversified client pool, which it said comprises more than 100 active customers. It also defended its decision to keep its clients confidential in an intensely competitive industry.

It will be tough for Venture's stock to return to its previous historic high, due to the global drag on the electronics and semiconductor industries, says Jarick Seet, head of small and midcap research at RHB Research Institute Singapore. Despite Venture's market cap of $3.4 billion, Wong, who owns 7% of the firm, remains well below the top 50 cutoff.

A trained engineer and former UC Berkeley Fulbright scholar, Wong cut his teeth at Hewlett-Packard in the U.S. and was instrumental in the startup of HP in Singapore and in Malaysia. He became Venture's chairman and chief executive in 1986, two years after the company, formerly known as Venture Manufacturing Singapore, was founded.

Wong has also made headlines for being the city-state's highest-paid executive. He took home $9 million last year, more than double his salary in 2016, outearning Singapore's top bankers, DBS chief Piyush Gupta and United Overseas Bank CEO Wee Ee Cheong (the son of No. 6 Wee Cho Yaw).

Under Wong, Venture's profit more than doubled last year to $280 million, buoyed by record revenue of $3 billion, improvements in engineering design and better operational processes. It posted 2018 first-quarter net profit of $62 million, up 72% on year; revenue inched up 1.5% to $634 million.

—*Prisca Ang*

35. LIM CHAP HUAT
$895 MILLION
SOILBUILD GROUP
AGE: 64

36. LIM HOCK CHEE
$830 MILLION
SHENG SIONG GROUP
AGE: 56

37. PRIMUS CHENG
$785 MILLION
PRIMA FOOD AGE: 68

38. JOHN LIM
$780 MILLION ▲
ARA AGE: 62

39. LOO CHOON YONG
$760 MILLION ▼
RAFFLES MEDICAL GROUP
AGE: 69

40. SAURABH MITTAL
$750 MILLION ▲
MISSION HOLDINGS
AGE: 44

41. CHENG WAI KEUNG
$740 MILLION
WING TAI HOLDINGS
AGE: 67

42. FORREST LI
$738 MILLION ★
SEA
AGE: 40

43. KUIK AH HAN
$733 MILLION
SIM LIAN GROUP
AGE: 72

44. TAN BOY TEE
$713 MILLION
BESTFORD GROUP
AGE: 69

45. MIN-LIANG TAN
$690 MILLION
RAZER AGE: 40

46. YAO HSIAO TUNG
$650 MILLION ↻
HI-P INTERNATIONAL
AGE: 78

47. DANNY YONG
$610 MILLION
DYMON ASIA CAPITAL AGE: 46

48. SHAW VEE MENG
$585 MILLION
SHAW ORGANIZATION
AGE: 85

49. CHING CHIAT KWONG
$545 MILLION ▼
OXLEY HOLDINGS
AGE: 52

50. HO KIAN GUAN
$535 MILLION
KECK SENG GROUP
AGE: 72

▲UP MORE THAN 10% ▼DOWN MORE THAN 10%
★NEW TO LIST ↻RETURNEE

OLIVIA LUM

Underwater World

In 2005, Olivia Lum debuted on the list of Southeast Asia's 40 wealthiest. The founder of water-treatment firm Hyflux saw her fortune surge to $460 million in 2011, a year in which she also became the first woman to receive Ernst & Young's World Entrepreneur Award. A year later, the self-made Lum featured on *Forbes Asia*'s inaugural list of Asia's 50 Power Businesswomen.

Today Lum is struggling with shocked investors after Hyflux sought and won court protection in May to tackle mounting debts and reorganize its business, which now includes power generation. For 2017, the company reported its first-ever annual loss, amounting to $85 million, with further losses in the first quarter of 2018. Total liabilities, including bank debt, are $2.1 billion.

Lum, 57, who fell from the ranks of the 50 richest in 2013, blames the losses on an oversupply of gas that depressed Singapore electricity prices, creating a liquidity crunch with a knock-on hit to the firm's overall cash position. Lum has sought to sell the firm's landmark Tuaspring plant, Asia's first integrated water-and-power project, which supplies power for desalination as well as the electricity grid and remains in the red. Also dragging on the bottom line is its unsold Tianjin Dagang desalination plant in China.

Hyflux's market cap stands at $121 million, a steep fall from the 2010 peak of $1.6 billion. The shares, which had been down 44% for the year, were suspended May 23, affecting more than 50,000 retail and institutional investors. Also halted: payments on its high-yield perpetual securities.

Lum says she opted for reorganization over attempting to "ride out the storm." Meanwhile, she insists, it's business as usual as she continues talks with potential buyers for the two plants and 19 potential financiers. Hyflux is seeking a $150 million cash injection.

It's a bitter pill for the Malaysian-born chief executive, an adopted child from a poor background, who moved to Singapore for high school at age 15. A bright student, she went on to graduate with a degree in chemistry from the National University of Singapore and then worked as a chemist for GlaxoSmithKline.

Things have dried up for Lum's Hyflux since she was on our cover in 2005.

In 1989, at age 28, Lum founded her Singapore water business, initially called Hydrochem, raising $15,000 as startup capital by selling her condominium and car. In the early days Lum acted as an agent for large companies, selling water filters and treatment chemicals.

Listing in 2001, Hyflux became a storied Singapore star, building the island nation's first wastewater recycling plant, as well as becoming a global leader in water treatment. With offices in eight countries and a workforce of 2,500 employees, it has delivered clean drinking water to China, the Middle East and Africa.

Hyflux maintains it is still bidding for new contracts—it recently won two—noting the firm is not in bankruptcy or planning to delist. Bond analyst Ang Chung Yuh of iFast Financial in Singapore says a "longer-term question mark" remains about the company's business model following years of taking a highly leveraged approach. OCBC's credit research analyst, Ezien Hoo, predicts that even if Hyflux is successfully restructured, it will likely emerge "smaller in scale with a narrower business scope."

—*Jane A. Peterson*

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Forbes Asia

THE NEXT TYCOONS

A GENERATION EMERGES

FORBES ASIA FORUM: THE NEXT TYCOONS

July 3, 2018 • Singapore

First Row *(L-R)* Michelle Yong, Director, Aurum Land; Jeffrey Yam, Principal, Integrated Capital Holdings; Goodwin Gaw, Managing Principal & Chairman, Gaw Capital Partners; Beh Swan Gin, Chairman, Singapore Economic Development Board; Katrina Razon, MD, KSR Ventures, Managing Partner, Third Culture Music + Media; Heng Swee Keat, Minister for Finance, Singapore; Matt Dalio, Founder & Chief of Product, Endless; Chee Hong Tat, Senior Minister of State, Ministry of Trade and Industry & Ministry of Education; Joanne Kua, Group CEO & Executive Director, KSK Group; Sabrina Ho Chiu Yeng, MD, Chiu Yeng Culture, Strategic Partner, UNESCO; Nishita Shah, Group MD, GP Group; Melissa Kwee, CEO, National Volunteer & Philanthropy Centre

Second Row *(L-R)* Axton Salim, Executive Director, Salim Group; Korawad Chearavanont, CEO, Eko Communications; Justin Doebele, Executive Director, Forbes Asia; Pamela Ambler, Digital Reporter, Forbes Asia; Rana Wehbe, Senior Editor-Special Projects, Forbes Asia; Allen Law, CEO, Park Hotel Group; Abhimanyu Munjal, Joint MD & CEO, Hero FinCorp; William Adamopoulos, CEO/Asia, Forbes Media; Tim Ferguson, Editor, Forbes Asia; Loh Boon Chye, CEO, SGX; Karan Virwani, CWeO, WeWork India; Ton Chirathivat, Head of Customer Strategy, Central Group; Laurence Lien, Chairman, Lien Foundation, CEO, Asia Philanthropy Circle; Anderson Tanoto, Member, Board of Trustees, Tanoto Foundation; Alvin Sariaatmadja, President Director, Emtek Group

Held in Singapore on July 3, 2018, the 5th edition of the *Forbes Asia Forum: The Next Tycoons* brought together some 140 guests including some of the brightest business leaders of the next generation. The forum provided a platform for these next gens to discuss key issues shaping and transforming family businesses across Asia.

Panelists shared their views on how family-run companies can embrace digital disruption and cope with the technological revolution. The discussions also shed light on capital optimization strategies for family businesses and examined challenges faced by next gens who chose to pursue their calling outside of the family business. The forum also examined how an emerging generation of philanthropists is taking the lead in giving back to society and addressing pressing issues around the world.

Forbes Asia THE NEXT TYCOONS A GENERATION EMERGES

Welcome remarks by Tim Ferguson, Editor, Forbes Asia

Welcome remarks by Beh Swan Gin, Chairman, Singapore Economic Development Board

A dialogue with Heng Swee Keat, Minister for Finance, Singapore

At the forum, Minister Heng Swee Keat engaged in a one-on-one dialogue with Tim Ferguson. The Minister addressed trade, currency and debt concerns in Southeast Asia. Before a family-driven business audience, the Minister also discussed Singapore's competitiveness on tax and regulatory fronts and encouraged business leaders to use Singapore as a base for their business.

(L-R) Minister Heng Swee Keat; Tim Ferguson, Editor, Forbes Asia

(L-R) Chng Kai Fong, MD, Singapore Economic Development Board; Joshua Yeoh, Director, YTL Cement; Kishin R K, CEO, RB Capital; Minister Heng Swee Keat; Anderson Tanoto, Member, Board of Trustees, Tanoto Foundation; William Adamopoulos, CEO/Asia, Forbes Media

(L-R) Axton Salim, Executive Director, Salim Group; William Adamopoulos, CEO/Asia, Forbes Media; Minister Heng Swee Keat

(L-R) Minister Heng Swee Keat; Melissa Kwee, CEO, National Volunteer & Philanthropy Centre

Forbes Asia
THE NEXT TYCOONS
A GENERATION EMERGES

FAMILY BUSINESS 4.0

(L-R) Ton Chirathivat, Head of Customer Strategy, Central Group; Axton Salim, Executive Director, Salim Group; Alvin Sariaatmadja, President Director, Emtek Group; Karan Virwani, CWeO, WeWork India; Michelle Yong, Director, Aurum Land; Rana Wehbe, Senior Editor-Special Projects, Forbes Asia

OPTIMIZING CAPITAL

(L-R) Loh Boon Chye, CEO, SGX; Joanne Kua, Group CEO & Executive Director, KSK Group; Allen Law, CEO, Park Hotel Group; Abhimanyu Munjal, Joint MD & CEO, Hero FinCorp; Tim Ferguson, Editor, Forbes Asia

BREAKING FREE

(L-R) Korawad Chearavanont, CEO, Eko Communications; Matt Dalio, Founder & Chief of Product, Endless; Goodwin Gaw, Managing Principal & Chairman, Gaw Capital Partners; Katrina Razon, MD, KSR Ventures, Managing Partner, Third Culture Music + Media; Pamela Ambler, Digital Reporter, Forbes Asia

MAKING AN IMPACT

(L-R) Sabrina Ho Chiu Yeng, MD, Chiu Yeng Culture, Strategic Partner, UNESCO; Melissa Kwee, CEO, National Volunteer & Philanthropy Centre; Laurence Lien, Chairman, Lien Foundation, CEO, Asia Philanthropy Circle; Nishita Shah, Group MD, GP Group; Anderson Tanoto, Member, Board of Trustees, Tanoto Foundation; Justin Doebele, Executive Director, Forbes Asia

The forum provided excellent networking opportunities for delegates to interact within the Forbes community.

(L-R) J Satrijo Tanudjojo, CEO, Tanoto Foundation; Chee Hong Tat, Senior Minister of State, Ministry of Trade and Industry & Ministry of Education

(L-R) Loh Boon Chye, CEO, SGX; Allen Law, CEO, Park Hotel Group; Abhimanyu Munjal, Joint MD & CEO, Hero FinCorp

(L-R) Korawad Chearavanont, CEO, Eko Communications; Jenny Tchinnosian, Chief of Staff, Toptal; Matt Dalio, Founder & Chief of Product, Endless; Justin Doebele, Executive Director, Forbes Asia

(L-R) Goodwin Gaw, Managing Principal & Chairman, Gaw Capital Partners; Katrina Razon, MD, KSR Ventures, Managing Partner, Third Culture Music + Media

Forbes Asia
THE NEXT TYCOONS
A GENERATION EMERGES

(L-R) Panote Sirivadhanabhakdi, Group CEO, Frasers Property; Beh Swan Gin, Chairman, Singapore Economic Development Board

(L-R) Karan Virwani, CWeO, WeWork India; Ton Chirathivat, Head of Customer Strategy, Central Group

(L-R) Le Nu Thuy Duong, Vice Chairwoman, Long Thanh Golf Investment & Trading, General Director, Thien Duc Trading - Construction; Sabrina Ho Chiu Yeng, MD, Chiu Yeng Culture, Strategic Partner, UNESCO; Mandy Pao, Chief Representative, CYC Culture; Nishita Shah, Group MD, GP Group; Omar Shahzad, Group CEO, Meinhardt (Singapore)

(L-R) Lim Wee Kiat, VP, Kestral Capital; William Adamopoulos, CEO/Asia, Forbes Media; Jonathan Ng, Executive Director, CEO's Office, Far East Organization; Nathaniel Lee, CEO, Citypartner

(L-R) Miwako Date, President & CEO, Mori Trust; Suthipak Chirathivat, Executive Director, Central Pattana

(L-R) Laurence Lien, Chairman, Lien Foundation, CEO, Asia Philanthropy Circle; Arif Patrick Rachmat, Co-Founder & Group CEO, Triputra Agro Persada

(L-R) Joanne Kua, Group CEO & Executive Director, KSK Group; Ruth Yeoh, Executive Director, YTL Singapore

(L-R) Alvin Sariaatmadja, President Director, Emtek Group; William Adamopoulos, CEO/Asia, Forbes Media; Abhinav Jhunjhunwala, CEO, AJ Capital

(L-R) Kenneth Goi, Group COO & Executive Director, GSH Corporation; Robbie Antonio, Founder & CEO, Revolution Precrafted, MD, Century Properties Group; Jeffrey Yam, Principal, Integrated Capital Holdings

Forbes Asia
THE NEXT TYCOONS
A GENERATION EMERGES

(L-R) Rana Wehbe, Senior Editor-Special Projects, Forbes Asia; Michelle Yong, Director, Aurum Land

(L-R) Burjis Godrej, GM, New Product Development, Godrej Agrovet; Kuok Meng Xiong, Director, Kuok Investments Singapore

(L-R) Parithad Petampai, Deputy MD, Muang Thai Leasing; William Adamopoulos, CEO/Asia, Forbes Media; Vikram Hora, Chairman & CEO, YTY Group

(L-R) David Atmadja, Director, Mayora Indah; Danel C Aboitiz, President & COO, AboitizPower - Coal Power Business Unit

Forbes would like to thank the speakers, delegates and sponsors of the ***Forbes Asia Forum: The Next Tycoons.***

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STEFEN CHOW FOR FORBES

Tricks of a Crypto Trader

How did an IT salesman and his buddies turn a bitcoin-trading sideline into the hottest crypto-asset management firm in Asia?

BY JEFF KAUFLIN

On a damp Tuesday night in March, some 200 people crammed into a bar in San Francisco's Four Seasons Hotel to discuss the buzziest topic in finance and tech: cryptocurrencies. The party had been organized just two days earlier, yet in they poured, mostly Asian men in their 20s and 30s, carrying iPhone X's and big ideas for how digital currencies might reshape the future and

FBG Capital's crypto trading whiz, Shuoji "Vincent" Zhou, in a shared office in Beijing. He got hooked on trading bitcoin while caring for his newborn.

make them rich. They were lured by the chance to rub elbows with the latest overnight success story in crypto, FBG Capital of Beijing.

To the crowd assembled, FBG's fame stems from turning $20 million into $200 million in a year. In fact, ten months before this soiree, the group of traders behind the firm didn't yet have a name for their company. Today it counts Silicon Valley venture capital firm Sequoia Capital among its blue-chip investors and is one of the biggest crypto-asset managers in Asia. They have landed in America and are seeking investors.

FBG's approach has three pillars: Invest like a venture capitalist in initial coin offerings (ICOs), trade on news and events by moving in and out of tokens rapidly and, critically, exploit insider relationships and marketing hype to ensure profitability. The firm's rise speaks volumes about the anything-goes world of cryptocurrencies, where the stated ideals of democratization are a joke and being an insider is the surest path to riches.

The firm's rise speaks volumes about the anything-goes world of cryptocurrencies, where the stated ideals of democratization are a joke and being an insider is the surest path to riches.

FBG founder Shuoji Zhou, 36, grew up in Yancheng, China, a regional city of 7 million in Jiangsu Province, a few hours north of Shanghai. He studied applied math at the University of Electronic Science & Technology, a middle-tier school in central China, but he wasn't there for the coursework. "Friendship, I think, is the most important thing in college. I forgot all the things I studied," he tells *Forbes* from a hotel room in San Francisco. FBG, which stands for Fintech Blockchain Group, has employees in New York, Singapore, South Korea and China. Until recently its headquarters was a shared co-working space in Beijing. Its website is a single page with its logo and an email address.

After college, Zhou worked in Beijing as an IT consultant for IBM and then Oracle, and in 2014, he committed $10,000 of his savings to trade bitcoin. The next year, he left Oracle to trade crypto full-time and increased his stash to nearly $100,000 during a period when the digital coin went from $270 to $430. One of Zhou's tricks was to capitalize on the inherent inefficiencies of the nascent market. He could often buy bitcoin on one exchange at $300 and sell it on another at, say, $301.50, pocketing a riskless $1.50 per coin. To anyone with a fast internet connection and a modicum of trading skill, it was easy money.

He soon joined a group of like-minded Chinese traders who pooled their money, and by early 2017, they had amassed some $20 million. That year, as the ICO frenzy began bubbling over, Zhou and his trading buddies were eager buyers, sometimes investing on little more than a research paper and lofty promises. His group plowed millions into dozens of projects like Tron, Decentraland and MakerDAO.

One former member of Zhou's trading operation, Gordon Chen, describes FBG's unorthodox ICO investing approach: Look closely at the founding team, monitor chat rooms on Telegram and talk to academics, scientists, engineers, investors and community leaders. Chen adds that his ICO due diligence required him to travel incessantly to meet with crypto project teams. "I only slept three or four hours a night this week," Chen said in San Francisco in March.

FBG's amorphous investment process, where hard numbers are nearly nonexistent, is typical in cryptoland and has so far returned riches. Its investment in OmiseGO, a crypto platform that claims it will provide financial services to unbanked populations, leaped by 33 times after FBG bought coins at $0.27 a pop in mid-2017. It bought tokens in Zilliqa, a platform for speeding up financial transactions, at about nine tenths of a cent per token. This year, Zilliqa has traded as high as 20 cents and now sells for 6, a 567% return. Like other big investors in crypto, FBG is offered "presale" discounts on ICOs to the tune of 30%.

"I view FBG as just one of the most talented investor teams in this space," says Olaf Carlson-Wee, 29, a crypto wonder boy who graced the July 27, 2017, cover of *Forbes* and is the founder of the largest crypto fund in the U.S., Polychain Capital, which has roughly $1 billion in assets under management. FBG is known for spotting promising crypto projects in Asia.

According to Zhou, trading makes up more than half FBG's revenue, but as the crypto trading environment has become more transparent and efficient, the firm has moved from arbitraging crypto exchange-price discrepancies to event-driven trading, in which FBG bets on how topics like regulatory news will affect crypto prices. For example, when the CME Group announced it would launch bitcoin futures contracts last December, Zhou went long on the bitcoin uptick. When news broke that the Japanese exchange Coincheck had been hacked earlier this year, he quickly went short. In 2017, FBG says it quadrupled its money in trading, although the company declines to disclose any details.

Not all of FBG tactics seem completely aboveboard. One little-publicized investing dynamic that FBG's executives gloss over is its relationships with cryptocurrency exchanges, the crypto equivalent of the NYSE or Nasdaq. Typically, when a new token announces its listing on a top exchange, the price jumps because the new liquidity is perceived as an endorsement. Zhou has cozy relationships with the three most active crypto exchanges: OKEx, Binance and Huobi, each processing $500 million to $1 billion or more in crypto trades a day. Using these connections, FBG has helped ICOs it has invested in, like Zilliqa, obtain listings on the exchanges.

Many crypto hedge funds try to influence exchange listings, but FBG has a compelling advantage: trading volume. Since FBG is an active market maker—it says it does $10 billion worth of trades a month—it can direct orders toward any given trading platform, bringing more revenue to an exchange.

Zhou says he doesn't have any "special rights" to influence which coins get listed on any exchange. He can only make recommendations, and exchanges make their own decisions. Even if that's the case, one problem with these arrangements is that they're not all disclosed. Singapore-based Huobi, for example, has a committee of outside partners who make token-listing recommendations, which are published on its website. FBG is on the committee. But Binance makes no such disclosures.

Hyping its investments is another strategic priority in FBG's business model. In China, FBG connects ICOs with media agencies that pay bloggers to write positive reviews of their tokens, apparently a common practice in Asia. Last year FBG invested in Tron, a crypto platform that says it's creating "a global free content entertainment system, utilizing blockchain technology." Tron originated in China and has been widely criticized for allegedly copying pieces of its research documentation directly from another crypto project, Filecoin.

Why did FBG buy into Tron? "We thought he was a very good marketer," says FBG partner Richard Liu of Tron CEO Justin Sun. Sun's 450,000-follower Twitter feed is filled with promotional messages, like a recent tweet featuring Tron's logo on Times Square's Nasdaq Jumbotron with the caption "#TRON hits #NASDAQ once again! We're going to change blockchain, the internet, and the world! We're going full speed. Don't get left behind." Sun has hyped Tron to a $18.9 billion peak market value, despite no meaningful revenues.

FBG also has a reputation for getting in and out of investments quickly. "They're flippers," says Yubo Ruan, founder of Palo Alto-based 8 Decimal Capital, a rival crypto hedge fund. "Their reputation is pump and dump."

Liu, a former investment banker who joined FBG in June 2017, vehemently denies the accusation. The firm doesn't disclose its ICO trading history and is reluctant to reveal specific holdings. One exception: Aeternity, which competes with Ethereum, the second-largest crypto platform. Founded by Yanislav Malahov, the self-anointed Godfather of Ethereum, Aeternity offers so-called off-chain features.

One little-publicized investing dynamic that FBG's executives gloss over is its relationships with cryptocurrency exchanges, the crypto equivalent of the NYSE or Nasdaq.

So far in 2018, bitcoin has dropped more than 50%. Liu claims FBG's trading has been profitable each month, even though he also says its ICO investments are down about 30% in the current bear market.

Like most big crypto investors, FBG worries about regulation. Zhou's biggest concern is that the SEC could say, "All these tokens are illegal." Dark clouds be damned, FBG is pushing ahead, soliciting investors for its new Cayman Islands-registered Volatility Token Fund. It has already raised $100 million, with fees of "1.5 and 20." Besides Sequoia and Polychain, Beijing's Bitmain, the biggest bitcoin mining operation in the world, has committed to FBG's new fund.

"We want to be an institution rather than just people making money," Liu says from a restaurant in San Francisco. Who knows? In a market where being antiestablishment is rewarded, FBG's fuzzy money management approach may be just right.

CELEBRITY 100

The World's Highest-Paid Entertainers

THE STARS ON *FORBES*' 20TH ANNUAL CELEBRITY 100 RANKING EARNED A COMBINED $6.3 BILLION OVER THE PAST 12 MONTHS, UP 22% FROM LAST YEAR.

1 Floyd Mayweather
ATHLETE ***U.S.*** **$285 MIL**
The boxer's August fight versus Conor McGregor generated more than $550 million in revenue, with "Money" Mayweather earning $275 million as the "A" side of the bout and for his role as promoter.

2 George Clooney
ACTOR ***U.S.*** **$239 MIL**
British liquor giant Diageo purchased Casamigos, the tequila company Clooney co-founded, for $700 million up front, giving him the best annual take-home of his—or any actor's—career.

3 Kylie Jenner
PERSONALITY ***U.S.*** **$166.5 MIL**

4 Judy Sheindlin ("Judge Judy")
PERSONALITY ***U.S.*** **$147 MIL**

5 Dwayne "The Rock" Johnson
ACTOR ***U.S.*** **$124 MIL**

6 U2
MUSICIANS ***IRELAND*** **$118 MIL**

7 Coldplay
MUSICIANS ***U.K.*** **$115.5 MIL**

8 Lionel Messi
ATHLETE ***ARGENTINA*** **$111 MIL**

9 Ed Sheeran
MUSICIAN ***U.K.*** **$110 MIL**

10 Cristiano Ronaldo
ATHLETE ***PORTUGAL*** **$108 MIL**

11 Bruno Mars
MUSICIAN ***U.S.*** **$100 MIL**

12 Conor McGregor
ATHLETE ***IRELAND*** **$99 MIL**

13 Neymar
ATHLETE ***BRAZIL*** **$90 MIL**

13 Howard Stern
PERSONALITY ***U.S.*** **$90 MIL**

15 Ellen DeGeneres
PERSONALITY ***U.S.*** **$87.5 MIL**
In addition to earning an eight-figure check for her eponymous show and smaller ones for other projects like charades app Heads Up, DeGeneres made history this year as the first woman to receive $20 million for a Netflix stand-up special en route to her most lucrative year yet.

16 James Patterson
AUTHOR ***U.S.*** **$86 MIL**

17 LeBron James
ATHLETE ***U.S.*** **$85.5 MIL**
(see p. 102)

18 Rush Limbaugh
PERSONALITY ***U.S.*** **$84.5 MIL**

19 Katy Perry
MUSICIAN ***U.S.*** **$83 MIL**

20 Robert Downey Jr.
ACTOR ***U.S.*** **$81 MIL**

21 Taylor Swift
MUSICIAN ***U.S.*** **$80 MIL**

22 Dr. Phil
PERSONALITY ***U.S.*** **$77.5 MIL**

23 Roger Federer
ATHLETE ***SWITZERLAND*** **$77.2 MIL**

24 Stephen Curry
ATHLETE ***U.S.*** **$76.9 MIL**

25 Jay-Z
MUSICIAN ***U.S.*** **$76.5 MIL**

26 Ryan Seacrest
PERSONALITY ***U.S.*** **$74 MIL**

27 Guns N' Roses
MUSICIANS ***U.S.*** **$71 MIL**

28 Roger Waters
MUSICIAN ***U.K.*** **$68 MIL**

29 Matt Ryan
ATHLETE ***U.S.*** **$67.3 MIL**

30 Kim Kardashian West
PERSONALITY ***U.S.*** **$67 MIL**

31 Chris Hemsworth
ACTOR ***AUSTRALIA*** **$64.5 MIL**

32 Diddy
MUSICIAN ***U.S.*** **$64 MIL**

33 Gordon Ramsay
PERSONALITY ***U.K.*** **$62 MIL**

34 David Copperfield
MAGICIAN ***U.S.*** **$61 MIL**

35 Beyoncé
MUSICIAN ***U.S.*** **$60 MIL**

36 Matthew Stafford
ATHLETE ***U.S.*** **$59.5 MIL**

37 Kendrick Lamar
MUSICIAN ***U.S.*** **$58 MIL**

38 Jerry Seinfeld
COMEDIAN ***U.S.*** **$57.5 MIL**

39 Kevin Hart
COMEDIAN ***U.S.*** **$57 MIL**
His Kevin Hart: The Irresponsible Tour, which sold over 1 million tickets, earned him more than $30 million and secured its spot as the biggest comedy excursion of 2018.

39 The Weeknd
MUSICIAN ***CANADA*** **$57 MIL**

41 The Eagles
MUSICIANS ***U.S.*** **$56 MIL**

42 J.K. Rowling
AUTHOR ***U.K.*** **$54 MIL**

43 Kevin Durant
ATHLETE ***U.S.*** **$53.7 MIL**

44 Depeche Mode
MUSICIANS ***U.K.*** **$53 MIL**

45 Pink
MUSICIAN ***U.S.*** **$52 MIL**

45 Luke Bryan
MUSICIAN ***U.S.*** **$52 MIL**

47 Jimmy Buffett
MUSICIAN ***U.S.*** **$51 MIL**

47 Lewis Hamilton
ATHLETE ***U.K.*** **$51 MIL**

49 Lady Gaga
MUSICIAN ***U.S.*** **$50 MIL**

50 Calvin Harris
MUSICIAN ***U.K.*** **$48 MIL**

PABLO FOR FORBES

51 Russell Westbrook
ATHLETE *U.S.* **$47.6 MIL**

52 Paul McCartney
MUSICIAN *U.K.* **$47.5 MIL**

53 Drake
MUSICIAN *CANADA* **$47 MIL**

53 Foo Fighters
MUSICIANS *U.S.* **$47 MIL**

53 Jennifer Lopez
MUSICIAN *U.S.* **$47 MIL**

56 James Harden
ATHLETE *U.S.* **$46.4 MIL**

57 Elton John
MUSICIAN *U.K.* **$46 MIL**

57 Metallica
MUSICIANS *U.S.* **$46 MIL**

59 Garth Brooks
MUSICIAN *U.S.* **$45.5 MIL**

59 The Chainsmokers
MUSICIANS *U.S.* **$45.5 MIL**

59 Jackie Chan
ACTOR *CHINA* **$45.5 MIL**

62 Canelo Alvarez
ATHLETE *MEXICO* **$44.5 MIL**

63 Steve Harvey
PERSONALITY *U.S.* **$44 MIL**

64 Simon Cowell
PERSONALITY *U.K.* **$43.5 MIL**

64 Billy Joel
MUSICIAN *U.S.* **$43.5 MIL**

66 Tiger Woods
ATHLETE *U.S.* **$43.3 MIL**

67 Drew Brees
ATHLETE *U.S.* **$42.9 MIL**

68 Sofía Vergara
ACTOR *COLOMBIA* **$42.5 MIL**

The *Modern Family* star still earns big from a slew of endorsements and joint ventures with unglamorous brands such as Head & Shoulders shampoo and SharkNinja Coffee.

69 Sebastian Vettel
ATHLETE *GERMANY* **$42.3 MIL**

70 Derek Carr
ATHLETE *U.S.* **$42.1 MIL**

71 Will Smith
ACTOR *U.S.* **$42 MIL**

72 Rafael Nadal
ATHLETE *SPAIN* **$41.4 MIL**

72 Alex Smith
ATHLETE *U.S.* **$41.4 MIL**

74 Phil Mickelson
ATHLETE *U.S.* **$41.3 MIL**

75 Jordan Spieth
ATHLETE *U.S.* **$41.2 MIL**

76 Scarlett Johansson
ACTOR *U.S.* **$40.5 MIL**

76 Akshay Kumar
ACTOR *INDIA* **$40.5 MIL**

78 Adam Sandler
ACTOR *U.S.* **$39.5 MIL**

79 Damian Lillard
ATHLETE *U.S.* **$39.2 MIL**

80 Anthony Joshua
ATHLETE *U.K.* **$39 MIL**

80 Rolling Stones
MUSICIANS *U.K.* **$39 MIL**

82 Salman Khan
ACTOR *INDIA* **$38.5 MIL**

83 Rory McIlroy
ATHLETE *U.K.* **$37.7 MIL**

84 Kris Jenner
PERSONALITY *U.S.* **$37.5 MIL**

84 Rihanna
MUSICIAN *BARBADOS* **$37.5 MIL**

84 Bruce Springsteen
MUSICIAN *U.S.* **$37.5 MIL**

87 Kenny Chesney
MUSICIAN *U.S.* **$37 MIL**

87 Trumaine Johnson
ATHLETE *U.S.* **$37 MIL**

89 Imagine Dragons
MUSICIANS *U.S.* **$36.5 MIL**

90 Jimmy Garoppolo
ATHLETE *U.S.* **$36.2 MIL**

91 Kyrie Irving
ATHLETE *U.S.* **$36.1 MIL**

92 Sean Hannity
PERSONALITY *U.S.* **$36 MIL**

93 Giannis Antetokounmpo
ATHLETE *GREECE* **$35.5 MIL**

93 Blake Griffin
ATHLETE *U.S.* **$35.5 MIL**

93 J. Cole
MUSICIAN *U.S.* **$35.5 MIL**

96 Ryan Tannehill
ATHLETE *U.S.* **$35.2 MIL**

97 Von Miller
ATHLETE *U.S.* **$35.1 MIL**

98 Dave Chappelle
COMEDIAN *U.S.* **$35 MIL**

98 Dr. Dre
MUSICIAN *U.S.* **$35 MIL**

98 Nas
MUSICIAN *U.S.* **$35 MIL**

METHODOLOGY

ABOUT THE LIST: The Celebrity 100 ranks "front of camera" stars worldwide by pretax earnings from June 1, 2017, through June 1, 2018 (prior to fees and expenses). Our figures are based on data from IMDB, Nielsen SoundScan, NPD BookScan, Pollstar and ComScore as well as interviews with industry experts and many of the celebs themselves.

EDITED BY: Zack O'Malley Greenburg and Natalie Robehmed.

REPORTED BY: Kurt Badenhausen, Madeline Berg, Hayley Cuccinello, Rebecca Lerner and Susan Radlauer.

CELEBRITY 100

La-La's New King

WITH HIS MOVE TO THE LAKERS, LEBRON JAMES TAKES A BIG STEP TOWARD HIS GOAL OF BEING A BILLIONAIRE.

BY KURT BADENHAUSEN

LeBron James talked about his ambition to be a billionaire four years ago in a cover story for *GQ* magazine. "It's my biggest milestone. Obviously. I want to maximize my business," said James. "And if I happen to get it, if I happen to be a billion-dollar athlete, ho. Hip hip hooray! Oh, my God, I'm gonna be excited."

King James took another step toward the three-comma club with his July 1 announcement via his agency's Instagram page that he had agreed to a four-year, $154 million contract with the Los Angeles Lakers.

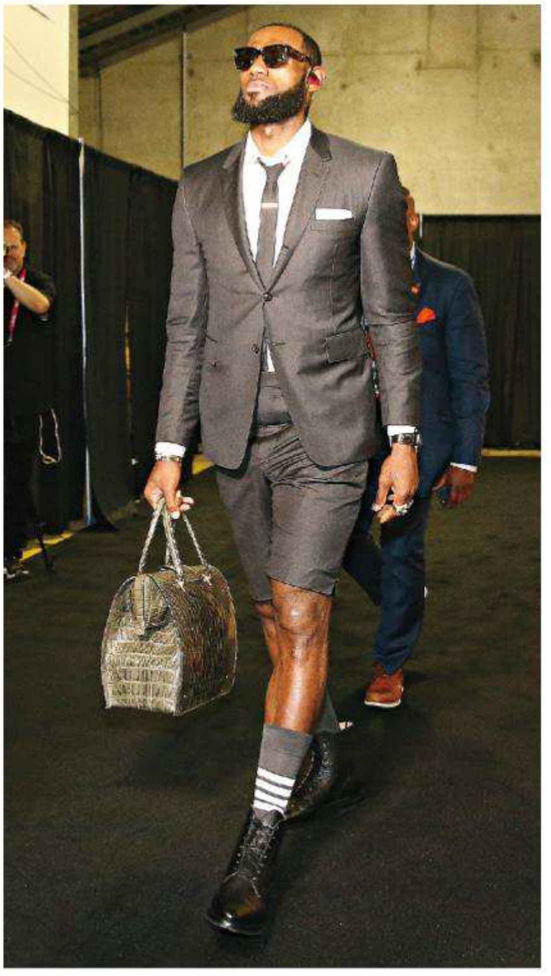
James could have signed a bigger deal in Cleveland: The Cavaliers held James' "Bird" rights, allowing for a five-year deal worth around $205 million. But the move to Los Angeles opens up new business opportunities for James and could propel him to even bigger global superstar status if he can return the purple-and-gold to NBA title contention (the last five seasons ranked among the ten worst in the Lakers' history).

James had probably maxed his value and earnings potential off the court as a Cavalier, returning from Miami to deliver the city's first title in any major sports league in 52 years. The Lakers are the NBA's most storied franchise, with 16 titles and a staggering assortment of stars for whom only one name is needed: Wilt, Kareem, Magic, Shaq and Kobe. Add LeBron's name to the list. The Lakers are also a global franchise, based in the heart of the second-biggest city in the U.S., so James and his longtime manager, Maverick Carter, will have business opportunities in almost every space.

Forbes' last deep dive into James' net worth was two years ago as part of our look at the 40 Richest Entrepreneurs Under 40. Our estimate was $275 million, but James has banked another $170 million, including endorsements, since then, and the stock market continues to move higher. James has made $765 million, including off-court earnings, since he turned pro in 2003. Of course, taxes and expenses eat up a major chunk of those proceeds.

James has business interests in Los Angeles through his production company, SpringHill Entertainment, which has broadcast TV shows like *The Wall* and *Survivor's Remorse* and is working on a remake of the 1990 film *House Party*. James' media company, Uninterrupted, got a $15.8 million investment from Time Warner in 2015.

Free-agency decisions by the three-time NBA champion held the league hostage during 2010 and 2014. James didn't spare any time making his new team known this go-round, announcing the move on the first day of free agency.



NATHANIEL S. BUTLER/NBAE VIA GETTY IMAGES

The Lakers were the odds-on favorite to land the four-time MVP thanks to potentially $62 million in salary-cap room and an up-and-coming roster that ranked as the NBA's second youngest last season. James owns a pair of homes in L.A., which added fuel to the speculation.

James has always preferred to compare his on-court game to Magic Johnson, the facilitator, instead of Michael Jordan, the scorer. Now James will learn at the feet of one of the NBA's all-time great success stories in player turned businessman Magic Johnson, the Lakers' president of basketball operations, who has enjoyed three decades of business triumphs touching real estate, retail, sports and more.

James' earning power was destined to remain unmatched in the NBA, whether he stayed in Cleveland or moved to Los Angeles. He is still at the top of the game at 33 years old, and his endorsements are the best in the NBA at more than $50 million annually through deals with Nike, Coca-Cola, Beats, Kia, Intel and Blaze Pizza. He is also an investor and franchisee in Blaze. Stephen Curry is the only hoops star within $20 million of James off the court, and James' total earnings are likely to approach $400 million during his four years in L.A.

It is good to be the king. F

When **BIG** names talk, they talk to the **BBC**

Big Interviews on BBC World News

BBC WORLD NEWS

BBC .com

THOUGHTS ON

Sovereignty

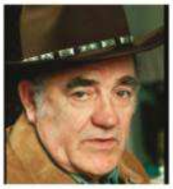
"YOU CELEBRATE WHO YOU ARE. YOU SAY, 'THIS IS MY KINGDOM.' "
—SALMA HAYEK

"Whatever this is that I am, it is flesh and spirit . . . and the ruling part."
—MARCUS AURELIUS

"A queen—a queen who bowed to no one, a queen who had faced them all down and triumphed."
—SARAH J. MAAS

"I do not wish women to have power over men, but over themselves."
—MARY WOLLSTONECRAFT

"HE IS A FOOL WHO WILL DESCEND INTO A WELL ON ANOTHER MAN'S ROPE."
—LOUIS L'AMOUR



"NOTHING GROWS WELL IN THE SHADE OF A BIG TREE."
—CONSTANTIN BRANCUSI

"People have only as much liberty as they have the intelligence to want and the courage to take."
—EMMA GOLDMAN

"It is the height of cruelty to rob the individual of a single natural right."
—ELIZABETH CADY STANTON

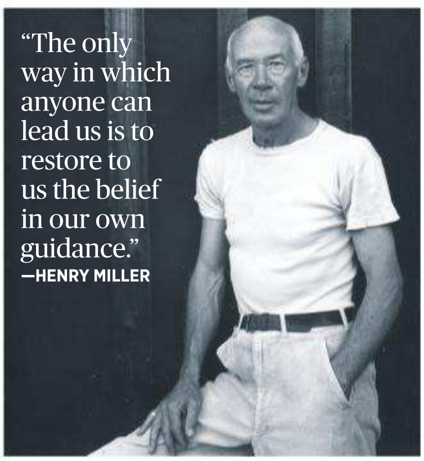
"THE SOVEREIGNTY OF ONE'S SELF OVER ONESELF IS CALLED LIBERTY."
—ALBERT PIKE

"Nothing is more difficult, and therefore more precious, than to be able to decide."
—NAPOLÉON BONAPARTE

"My life didn't please me, so I created my life."
—COCO CHANEL

"Sovereignty is not given; it is taken."
—MUSTAFA KEMAL ATATURK

"The only way in which anyone can lead us is to restore to us the belief in our own guidance."
—HENRY MILLER



"A BORN KING IS A VERY RARE BEING."
—JEAN-JACQUES ROUSSEAU

FINAL THOUGHT

"Don't depend on others, or by and by you won't be able to depend on yourself—nor will anyone else."
—B.C. FORBES

"DOES NOT THE POTTER HAVE THE RIGHT TO MAKE OUT OF THE SAME LUMP OF CLAY SOME POTTERY FOR SPECIAL PURPOSES AND SOME FOR COMMON USE?"
—ROMANS 9:21

SOURCES: MEDITATIONS, BY MARCUS AURELIUS; THE SOCIAL CONTRACT, BY JEAN-JACQUES ROUSSEAU; THE TIMES BOOK OF QUOTATIONS; A COURT OF MIST AND FURY, BY SARAH J. MAAS; A VINDICATION OF THE RIGHTS OF WOMAN, BY MARY WOLLSTONECRAFT; SOLITUDE OF SELF, BY ELIZABETH CADY STANTON; THE WALKING DRUM, BY LOUIS L'AMOUR.

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