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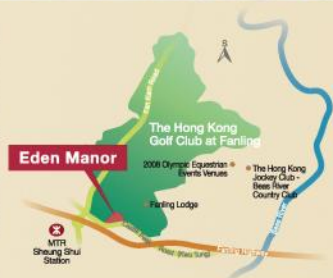


## Design concept of "Eden Manor"



Notes : 1. This photograph was taken on 16 July, 2016 in mid-air down from the helicopter at The Hong Kong Golf Club at Fanling and has been integrated, color fine-tuned and with the location and appearance of the soon-to-be-completed residential development "Eden Manor" being simulated in the photograph with computerized imaging technique to show the approximate surroundings of "Eden Manor". Please note that there may be future changes to the surrounding areas of Eden Manor". 2. The design concept is the preliminary idea generated by the designer. The vendor reserves the right to make modifications and changes according to actual circumstances without prior notice.

- Overlooking the golf course at The Hong Kong Golf Club at Fanling\* - this is the location for noble families, renowned and the elite.
- Situated near The Hong Kong Jockey Club's Beas River Country Club, the 2008 Olympic Equestrian Venue<sup>a</sup> and Fanling Lodge.
- Designed by Ronald Lu and Partners, world-renowned Hirsch Bedner and Associates Limited and CL3 Architects, "Eden Manor" comprises of 25 exclusive mansions and 8 apartment towers. The saleable areas of the exclusive mansions range from 2,601 sq.ft.\*\* to 3,063 sq.ft.\*\*, while the diversified residences include 3-bedroom and 4-bedroom apartments with saleable areas ranging from 960 sq.ft.\*\* to 1,314 sq.ft.\*\* Studio, 1-bedroom and 2-bedroom with saleable areas ranging from 276sq.ft.\*\*to 487sq.ft.\*\*
- "Eden Manor" offers a total of approximately 57,000 sq.ft. of resident's clubhouse and communal garden or play area for resident's use<sup>d</sup>. The clubhouse offers an extensive array of facilities including multi-function rooms, stylish lounge, indoor swimming pool, spa, sauna, steam bath, Elite Men's Zone, Ladies Zone, gymnasium and yoga room. An approximately 28 ft. tall magnificent crystal spiral staircase connects the two levels of the clubhouse, highlighting its luxurious decoration and impressive style.
- Seamless connectivity to China – around 9 minutes' drive to Lo Wu Control Point<sup>+</sup>, around 7 minutes' drive to Lok Ma Chau Control Point<sup>+</sup>, and around 5 minutes' drive to Sheung Shui Station<sup>+</sup>.



Note: This map has been simplified and not to scale, for reference only

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\*Source of information: The Hong Kong Golf Club - <http://www.hkgolffclub.org/club.php?s=2&ss=2010&c=20101&lang=eng> (On 20 Dec 2016) \*\*Please refer to the sales brochure for details. Area of residents' clubhouse and communal garden or play area for residents' use which are i) covered area and ii) uncovered area in Eden Manor are i) 27,431 sq.ft. and ii) 30,477 sq.ft. respectively. The areas are calculated and provided by the authorized person according to the approved building plans for the development as of 4th August 2016. \*The travelling time is estimated and calculated by independent traffic consultant (On 1 Oct 2016) Vendor: Winjoy Development Limited (also as the owner and whose holding companies are Henderson Development Limited and Henderson Land Development Company Limited). Authorized person for the development: Dr. Lu Yuen Cheung Ronald of Ronald Lu & Partners (Hong Kong) Limited (Dr. Lu Yuen Cheung Ronald is a director of Ronald Lu & Partners (Hong Kong) Limited). Building contractor for the development: Heng Lai Construction Company Limited. Vendor's solicitors: Woo Kwan Lee & Lo. Authorized institution that has made a loan, or has undertaken to provide finance, for the construction of the development: The Hongkong and Shanghai Banking Corporation Limited. Any other person who has made a loan for the construction of the development: Henderson Real Estate Agency Limited. To the best of the vendor's knowledge, the estimated material date for Eden Manor is 30th April 2019. Such date is subject to any extension of time that is permitted under the agreement for sale and purchase. All information contained in this advertisement / promotional material shall be subject to the final plans approved by the relevant Government authorities and legal documentation. The vendor reserves the right to make modification and changes according to the actual circumstances without prior notice. The description, reference, photo, drawing, image or other information whatsoever in this advertisement / promotion material shall not constitute or be construed as constituting any offer, promise, representation or warranty, whether expressed or implied. The design concepts above are the preliminary ideas generated by the designers. The vendor reserves the right to make modification and changes according to the actual circumstances without prior notice. This advertisement is published by, or with the consent of the vendor. Please refer to the sales brochure for details. Date of printing of this advertisement: 28 April 2017





▲ PAGE 58

**"THOUGH I AM 32,  
IN TERMS OF  
EXPERIENCE I FEEL  
CLOSER TO 50."**

—Itthipat "Tob" Peeradechapan,  
founder of Taokaenoi  
Food & Marketing and No. 44  
on our Thai 50 list.

COVER PHOTOGRAPH BY  
VIRGILE SIMON BERTRAND FOR FORBES

**10 | FACT & COMMENT // STEVE FORBES**

Book review: *George Washington: The Wonder of the Age*.

**GLOBAL 2000**

**34 | THE WORLD'S LARGEST PUBLICLY TRADED COMPANIES**

China leads the way, and there are 763 Asia-Pacific companies on this year's list.

BY ANDREA MURPHY

**36 | 'WE MUST TRANSFORM'**

Chinese appliance maker Midea enters the robotics business.

BY MICHAEL SCHUMAN

**41 | THE NEXT FRONTIER**

Baidu ventures from its core business to gamble on artificial intelligence.

BY YUE WANG

**44 | THE TOLL COLLECTOR**

Bruce Flatt's Brookfield Asset Management is the safest growth stock on the planet.

BY ANTOINE GARA

**50 | BREAKING THE CLASS CEILING**

Mercedes-Benz is back on top of India's luxury car market.

BY N. MADHAVAN

**COMPANIES, PEOPLE**

**12 | HOW LONG OF A REACH?**

Basketball is popular in Asia, but who will be the next Yao Ming in the NBA?

BY MATT CONNOLLY

**15 | HELLO, DOLLARS!**

Billionaires are everywhere behind the scenes on Broadway.

BY MICHAELA TINDERA

**16 | AGGREGATING ¥ ¥ ¥**

China's Jinri Toutiao is breaking news to millions on their mobiles.

BY YUE WANG

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▲ **PAGE 20**

## "I DIDN'T KNOW ANYTHING GOING IN."

—Joanna Riley, cofounder of now-shuttered 1-Page.

▼ **PAGE 36**

## "GLOBALIZATION CANNOT BE STOPPED BY ANY INDIVIDUAL OR ANY COUNTRY."

—Paul Fang, CEO of Global 2000 member Midea Group.



### 17 | DUTERTENOMICS

Breaking down the numbers of China-fueled spending in the Philippines.

BY ANDERS CORR

### 18 | CHINA'S ADVANTAGE

Veteran investor Kai-Fu Lee thinks the U.S. will soon lose its lead in artificial intelligence.

BY ALEXANDER KONRAD

### 20 | NO-PAGE

A startup's life and death Down Under.

BY RYAN MAC

### 24 | GOOGLE SLAYER

Starting with \$15,000, Jorn Lyseggen has found the talent to forge a \$300 million company.

BY ZACK O'MALLEY GREENBURG

### 27 | DEAL TOY: ONE FOR MICKEY'S MANTEL

The ABC/ESPN merger with Disney was the rare media tie-up that worked.

BY ANTOINE GARA

### 28 | THE WIZARDS FROM OZ

The two Australian billionaires behind software provider Atlassian.

BY NOAH KIRSCH

### 32 | HOW THE WEST WAS WON

NCSoft's founder puts his wife in charge of the company's expansion to the U.S.

BY DAVID M. EWALT

## INVESTING

### 56 | BUILD THE WALL, *POR FAVOR*

Trump's incendiary tweets are a gift to a BlackRock emerging-markets portfolio manager.

BY KENNETH RAPOZA

## THAILAND'S 50 RICHEST

### 58 | LITTLE RICH BOSS

Itthipat "Tob" Peeradechapan has reaped a bounty from selling flavored seaweed.

BY NAAZNEEN KARMALI

### 62 | THE LIST

Thailand's 50 richest are raking it in: worth \$123.5 billion, up 16% from last year.

BY NAAZNEEN KARMALI

## AMERICA'S RICHEST SELF-MADE WOMEN

### 72 | THE IT GIRL

Jamie Kern Lima is taking her IT Cosmetics to Asia in a big way.

BY CHLOE SORVINO

## FORBES LIFE

### 78 | LUXURY LINEAGE: THE CORVETTE AT 65

It's by no means ready for retirement.

BY MICHAEL SOLOMON

### 80 | THOUGHTS

On pioneers.



Sunrise at Batu Payung (Umbrella Rock) in Tanjung Aan Beach, Lombok • Indonesia



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## SIDELINES

# Bull in China's Shop

In the generally benign global economy of 2017, one worry has stood out: a Chinese hard landing. Aspects of this qualm keep resurfacing: heavy debt, shadow-bank “products,” malinvestment, aging population, fouled environment, curtailed dissent. The Communist Party backtracks on reforms, and Moody's issues a largely symbolic downgrade. At least one financial essayist poses the murmurings bluntly in a booklet: *Will China's Economy Collapse?* (No, author Ann Lee answers.)

Beijing policymakers have responded not only by revving up many familiar state stimuli but also by crowning these with the Belt and Road projects across Eurasia, involving huge loans to support infrastructure work by Chinese state companies. Official celebration of this effort has been stepped up even as, say some reports, the spending has retreated. There's still plenty afoot to keep big, old-line companies busy.

Mainland stock indexes—which don't capture much of China's economy—haven't joined in the recent global equity rise. Some think wary domestic investors have chased bitcoin instead—and of course the reheated property market. All of which adds to fear that the world's primary growth engine is sputtering and could fail.

A vastly different view is usually on offer from Chinese businesspeople, who keep seeing activity and opportunity. A special source of that perspective is Kai-Fu Lee, a longtime Web pioneer and now a sizable venture capitalist concentrating on China. In a visit to our U.S. offices he spelled out a wave of artificial-intelligence innovation over the coming decades and why China is well-placed to lead it (*see p. 18*).

A Taiwan native with plenty of American flavor, Lee has to square the shortcomings of China's relatively closed system with its quality and quantity attributes and comes out clearly bullish. The breakthroughs already happening in digital software (and hardware) in the People's Republic lend support to the notion of a technological juggernaut—even with information flows crimped.

China's talent has trekked in the tens of thousands to Silicon Valley and its connected schools to pursue their options. If Lee is right and most return—indeed, if the U.S. pushes them out—that will hasten the rise of Chinese output. Doubters, beware.



Lee and associates were hosted by Forbes Media CEO and Executive Chairman Mike Perlis (left).

*Tim W. Ferguson*

Tim Ferguson  
 Editor, FORBES ASIA  
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### FORBES ASIA

## READERS SAY

### CONVERSATION



“ALIA BHATT makes it to the Forbes 30 Under 30 list, and we can’t keep calm! The actress is also doing a *Forbes* Instagram take over. Way to go girl!” exclaimed India’s Inuth.com about our list of young talent making waves in Asia (May, p. 40). Pinkvilla.com added: “Alia has indeed come a long way. In just a span of five years, the gorgeous lady has made it to the prestigious *Forbes* list. Yes, you read that right!” Ms. Bhatt sounded like an elder stateswoman and tried to downplay the excitement in India’s *Pune Mirror*: “One has to be conscious about what you say and do. You develop a sense of responsibility, which comes with being in the limelight. I no longer feel as young as people make me out to be.” India’s IANS.in noted that Srikanth Bolla, founder of Bollant Industries (maker of eco-friendly packaging), said that making the 30/30 list is just the beginning: “Visually challenged Srikanth Bolla is in no mood to celebrate. His goal is to get into the *Forbes* list of richest persons. ‘That is when I will celebrate.’” Malaysia’s femalemag.com congratulated Neelofa and Vivvy Yusof: “You’ve heard them, you’ve seen them and you know them. Congrats to our very own Malaysian stereotype-breaking fashionistas for being in the elite list of *Forbes*.” Tweeted Neelofa: “Dreams do come true—thanks.”

### THE INTEREST GRAPH

Our look at Asia’s entrepreneurial youth movement easily led the way in hits from the May issue:

30 Under 30 Asia: Meet the Class of 2017

39,672 page views

South Korea’s 50 Richest 2017: A Year of Trouble and Trials

12,950

From Syria to France: Billionaire Mohed Altrad’s Rags-to-Riches Tale

6,798

What Fukushima Disaster Taught Me About Risk Management in Cybersecurity

3,906

Max Group’s Tara Singh Vachani and Sahil Vachani Build a Variety of Businesses

3,783

Samsung Fortunes Sail While the Empire’s Chief Is in Jail

2,697

“Diversity and empowerment: two words that come to mind when attempting to summarize this year’s list, which features 300 impressive young entrepreneurs.”

“We can’t change certain human behaviors. People aren’t perfect, and they make mistakes.”



# CONSERVATION IN ACTION

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Centered on a landscape approach, RESTORASI EKOSISTEM RIAU (RER) is a long-term, collaborative program with the community, forestry experts, academia and NGOs to protect and restore 150,000 hectares of ecologically important peat forest on Kampar Peninsula and Padang Island in Riau, Indonesia.



TNC is a partner to establish a model for an integrated landscape management to generate sustainable outcomes for conservation, social and economic imperatives.



# INDISPENSABLE BOOK ABOUT AN INDISPENSABLE MAN

BY STEVE FORBES, EDITOR-IN-CHIEF

## George Washington:

**The Wonder of the Age**—by John Rhodehamel (Yale University Press, \$32.50)—is a masterpiece, a concise, fluidly written and well-grounded biography. Rhodehamel, who edited two highly acclaimed books for the renowned Library of America series of great American writers (one, naturally, of Washington's writings and the other of writings from the American Revolution), has executed an accurate and revealing portrait of a man who, more than any other, made possible the creation and subsequent success of the United States. Indeed, Washington emerges as one of a handful of giants in human history.

"George Washington was a revolutionary, for a quarter-century the central figure in a radical revolution that aimed at nothing less than the transformation of Western civilization. . . . When Washington died, in 1799, the eighteenth century was coming to a close, while the age of hereditary power, the very notion of government-by-birth, had been started down the road to extinction. And the United States of America, overleaping its small beginnings on the margins of European civilization, would one day thrust itself into the forefront of world history. The little republic would become a gigantic continental democracy—a nation unlike any that had come before. . . . American success marked a fundamental turning point in human affairs."

The radical nature of what Washington vigorously sought and wrought is obscured by his image as a remote leader, heroically astride a horse, a marble figurehead who in later life wore wooden teeth. He was "said to have countless admirers but not a single friend."

Rhodehamel capably and compellingly chronicles Washington's rise, how he engaged in "self-invention" by, for instance, copying out and taking to heart the 110 "Rules of Civility and Decent Behaviour in Company and Conversation," maxims that had been compiled 150 years



before by French Jesuits. Despite rare lapses, Washington came to control his volcanic temper. He learned to cultivate patrons and mentors, his "steely will" masked by being "courteous, deferential, soft-spoken." He relentlessly educated himself. He became an outstanding horseman and—important to Virginia colonial society—a superb dancer. He made himself an excellent and prolific writer. His height and majestic bearing helped as well.

Washington also possessed a boundless energy and extraordinary courage. In battle he constantly put himself in harm's way, amazing colleagues that he was never felled by a bullet.

As a militiaman, Washington fired the first shot in what became a global conflict, the Seven Years' War—or, to Americans, the French and Indian War. He was a leading figure in much of the frontier fighting between the British and French and their various Native American allies. It was an often harsh learning experience, politically and militarily. Washington made mistakes. And he saw firsthand how politics can affect military campaigns—particularly the exasperating tardiness of governments in recruiting the necessary numbers of troops and adequately supplying them. Washington fought well enough and emerged from it all with an imposing reputation that made him the logical leader of America's rebel army in 1775. His previous experiences would be indispensable in navigating the unprecedented and treacherous situation he faced.

Britain was determined to suppress the rebellion and sent over a formidable army, supplemented by thousands of hardened and brutally disciplined Hessian mercenaries.

Washington's military performance was not flawless. Rhodehamel notes that he won two battles and lost five, and one was a draw. But that's like saying the American forces won every battle in the Vietnam War. As Rhodehamel notes, Washington held the army together, and its overall performance improved.



Keeping an effective fighting force in the field at that time was miraculous: Few troops had enlisted for the duration, and the Continental Congress was abysmal at providing equipment, clothing and food. The legend of the deprivations of the winter at Valley Forge is no myth: About one-fourth of the soldiers died of disease, hypothermia and starvation. Many were reduced to wearing rags. There were other hard winters, including one worse than that at Valley Forge.

The war was won with a decisive American-French victory at Yorktown, but the formal peace treaty was signed nearly two years later. Washington demonstrated his profound republican principles when he single-handedly defused a mutiny of his army at Newburgh, New York. The army was set to march on the Continental Congress in Philadelphia to forcibly demand it make good on its routinely broken promises, primarily regarding the army's pay (the Continental paper money with which the men had been paid was virtually worthless). With a persuasive speech and a brilliant piece of theatrics, Washington got them to back down. The principle was set: No matter how incompetent, corrupt or petty, the civil government reigned supreme over the military.

Washington was no Caesar or Napoléon. He went back home.

As it became clear that the United States' first constitution, the Articles of Confederation, was a disaster and that a real federal government was vital, Washington lent his immense prestige to assemble the Constitutional Convention in

1787 and make it a success.

As our first President, he did the same. Against the opposition of Thomas Jefferson and James Madison, he backed our first Treasury secretary, Alexander Hamilton, in his bold reforms, which brilliantly reorganized the nascent country's disastrous finances and almost overnight turned the U.S. from an international deadbeat into a nation with a triple-A credit rating, firmly on the gold standard. Foreign capital flowed in. The U.S. was on its way to greatness.

Washington firmly established the authority of the federal government, especially in the suppression of the Whiskey Rebellion, when frontiersmen took up arms to fight a new tax on spirits.

Those years saw bitter political controversies, which soon enough made Washington a target of nasty political attacks (for instance, he refused to risk war with Britain by backing France, when popular opinion was all for it). The President had a hard time understanding the idea of a "loyal opposition," but there were no secret police, no midnight knocks on the door, no dragnets to arrest opponents and no martial law. He was willing to brook unpopularity to do what he felt had to be done to keep the new yet still-weak nation safe.

During his second term, he supported a highly unpopular treaty with Britain, feeling it contained some very useful concessions and would keep the peace.

Washington believed strongly in the western expansion of the country and pursued policies to that end.

After two terms, Washington exemplified his belief in the

principle of limited power by voluntarily stepping down from office, even though he could easily have stayed on until the day he died.

As he got older, Washington became deeply disturbed by slavery. In his will he freed the slaves he owned and demanded that his heirs ensure their education so as to better their chances at earning a decent living (Virginia negated this provision).

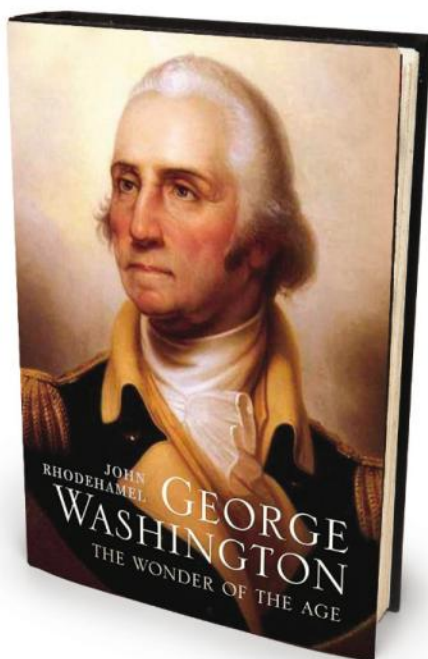
Thanks primarily to George Washington, the American Revolution and the subsequent American experiment succeeded. Rhodehamel rightly notes that this is monument enough.

## Great Show on the Great War

World War I (1914–18), rightly called "Armageddon" by Winston Churchill, was history's greatest man-made cataclysm. It undermined faith in Western civilization and the optimistic idea of progress, while bringing in its wake the police-state totalitarian horrors of communism, fascism and Nazism. (Ample traces of those ideologies' poisonous brews can be found in many of the scribblings of today's Islamic terrorists.)

An excellent way to begin to fathom what the world underwent a century ago is to watch a series on YouTube appropriately entitled *The Great War*. Each week there's a 9- to 10-minute segment, ably hosted by Indiana "Indy" Neidell, which covers the battlefield as well as the political and diplomatic events that were occurring exactly 100 years ago. Neidell, an actor and musician who was raised in Texas but has been a resident of Stockholm for 20 years, not only does the narration but also conducted most of the prodigious research involved. In addition to the weekly episodes, Neidell and his crew turn out numerous specials on weaponry, culture, aspects of trench life, notable individuals and much more.

This is quite an impressive achievement. Take a look—and then help out financially. **F**







# HOW LONG OF A REACH?

Pro basketball's Asian appeal is obvious, but it struggles to seed NBA talent here.

BY MATT CONNOLLY

**T**he NBA, while a “national association,” conducts a large part of its basketball business on international soil. The brand has grown especially popular in Asia, a region that carries the NBA’s second- and third-largest revenue markets in China and the Philippines, respectively.

And yet, despite Asia making up roughly 60% of the world’s population, in a class of 113 foreign players to break camp with an NBA squad this season, not one hailed from that continent (unless you count Australia).

In recent years, the league’s dedicated offices for China, India and six other Asian markets have launched initiatives, including newly opened academies, to establish the game across all levels of play.

For the NBA to reach its full potential in Asia, the region is going to need stars its fan bases can identify with. Players with full or partial Asian heritage (see Jeremy Lin) obviously help, but having a high-level player born and raised in Asia is key.

Yao Ming, an eight-time All-Star for the Houston Rockets from 2003 to 2011

and a recent Basketball Hall of Fame inductee, did wonders for the game in China. But since the 7-footer’s retirement in 2011, the country of nearly 1.4 billion has failed to produce any standouts. The Rockets’ 2016 second-round pick Zhou Qi is the country’s most promising prospect in years, but his ceiling is probably closer to that of Yi Jianlian, whose NBA career fizzled out after five seasons.

Satnam Singh is the only Indian player to come close to gracing the NBA hardwood, but the 2015 second-rounder has floundered with the Dallas Mavericks’ D-League affiliate. The Philippines, where basketball borders on religion, has yet to produce any NBA-caliber talent.

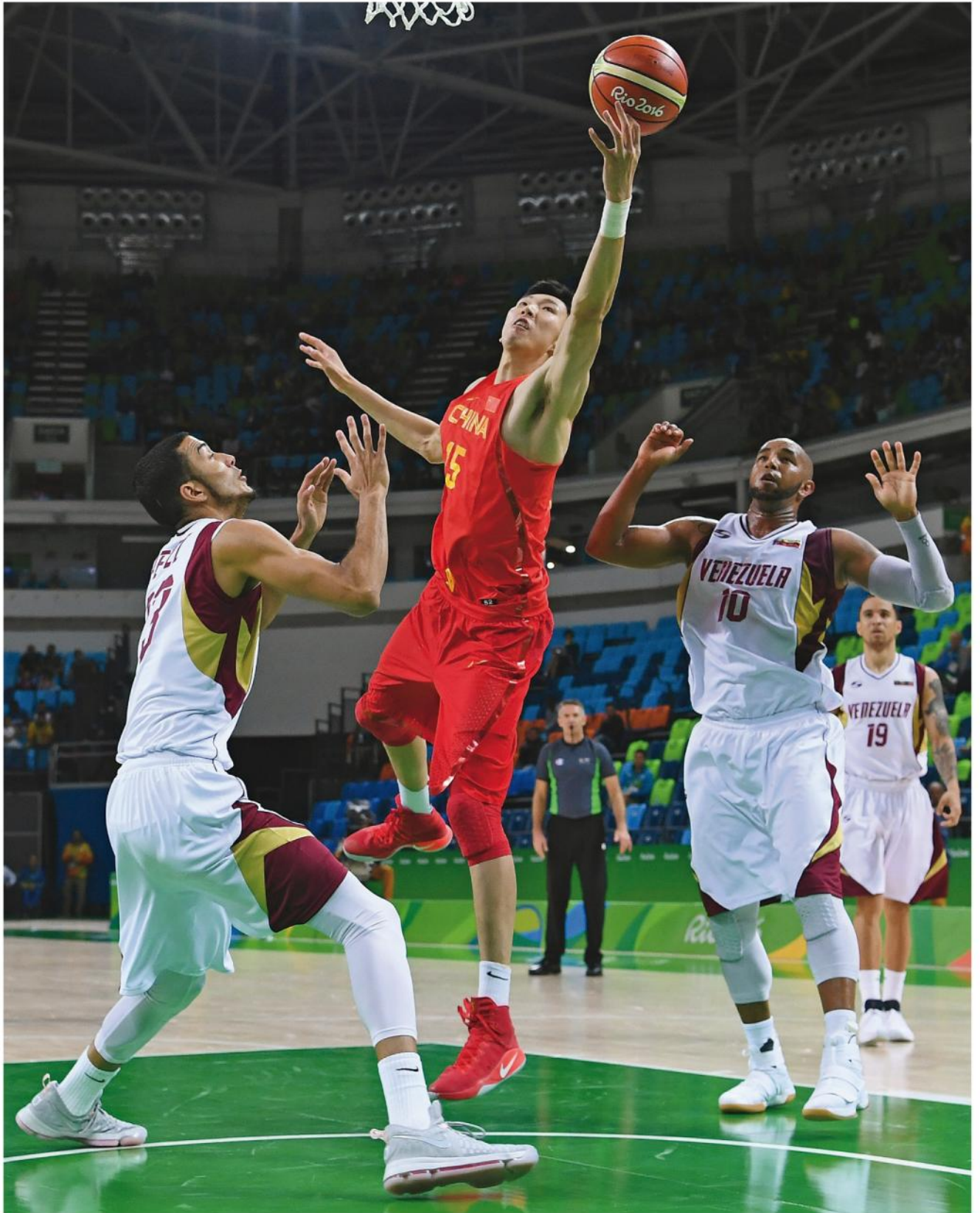
The league’s remedy? Nurture the sport, and its participants, as soon as the latter are physically possible. “There may be nothing more important than having players come out of that region and be in our league,” said Mark Tatum, NBA Deputy Commissioner, chief operating officer and leader of all NBA international efforts. “What we’re hoping to do is provide the coaching, the training and the compe-

tition required to develop an All-Star-caliber player.”

It’s been just over four years since the league first introduced “Jr. NBA” to Asia, adapting to China, India and its Southeast Asian markets its American youth program designed to impart fundamental skills and core values. The program has garnered participation from over 5.5 million youths, parents and coaches in the region. “To use a basketball expression, we’re employing a full-court press behind youth development,” NBA China CEO David Shoemaker says. “It starts with a partnership we have with the Ministry of Education, where we teach basketball as part of the physical education curriculum in elementary, middle and high school.”

Jr. NBA’s success has afforded the program an advisory council for Greater Asia, featuring Basketball Hall of Famer Dikembe Mutombo and business leaders (including *Forbes Asia* CEO William Adamopoulos). It has also led to the formation of sister programs like the NBA Yao School, an afterschool league for teenagers that, above all else, emphasizes playing basketball for the sheer enjoyment of it.





DAVID RAMOS/GETTY IMAGES

**Strong to the hoop and American shores: Zhou Qi, the Houston Rockets' 2016 second-round pick.**

## FULL-COURT PRESSURE

“Yao himself believes that what has been lacking in China is the number of people that have played sports for the fun,” Shoemaker says. The NBA icon has lately assumed the presidency of the China Basketball Association (CBA), a national league of teams.

India has followed suit. With Jr. NBA in 19 of its cities across the country, it made sense for Mumbai to become the site of the league’s first NBA Basketball School, which opened its doors this spring. The tuition-based program is for youths to age 18.

Taking it a step further, prospects with professional basketball aspirations now have the opportunity to enroll in one of the newly formed NBA Academies. The hope is that these global hubs — including three in China, one in India and one in Australia that all launched this year—will turn Asian national team players into legitimate NBA hopefuls.

“We have government-funded academies in a lot of sports, but in terms of that level of facility, it’s the first,” says NBA India Managing Director Yannick Colaco. “We’re creating a legacy through this knowledge transfer with local coaches.”

Supporting local pro basketball leagues will prove just as essential to the

“With [Yao] at the helm, I believe that many of the old practices will eventually fall by the wayside,” Shoemaker says of China’s professional-player development.

India’s situation is even more problematic, as that nation currently lacks a clear-cut professional league due to reported infighting within the Basketball Federation of India (BFI).

But there’s an effort to change. “Our focus is growing the game of basketball . . . in that sense, we’re completely aligned,” Colaco says of NBA India’s relationship with the BFI. “Everything we do, we do in correlation with the federation.”

The long-tenured Philippine Basketball Association is having its own problems filling stadiums, but a newly opened NBA office in Manila should present more opportunities for collaboration.

Japan, which had an NBA office in Tokyo from 1994 to 2011, is also back on the pro basketball map after launching a new league with backing from the domestic sports authority. With the Summer Olympics coming to the country in 2020, Tatum of the NBA hints at renewed ties.

Few could question the region’s underlying spirit for the game. Unlike most of the NBA-viewing public, Asian fans are forced to catch games in the morning—

No surprise, Asia’s also a priority for the league’s most marketable players. Kevin Durant, who toured China last summer, will grace the hardwood of the NBA Academy in India this off-season. Fellow international “endorsement All-Stars” like LeBron James (Nike, Tencent, Intel), Stephen Curry (UA, Vivo) and James Harden (Adidas) now make annual trips across the globe.

While individual player appearances are met with fanfare and mobs, the NBA’s Global Games—preseason exhibitions involving two NBA teams or one NBA team and a foreign club—have arguably been an even bigger hit. “It’s almost treated like an All-Star game when we go there,” Deputy Commissioner Tatum says. “Last year, we sold out both games in a matter of hours.”

This, despite the games not even counting toward the teams’ win-loss records, is a true testament to the region’s interest in the league’s live-event experience. Actual regular-season games in Asia would obviously do big business, but that hasn’t been attempted since a 2003 visit to Japan. “Frankly, I don’t see us playing regular-season games today in that part of the world,” Tatum says, citing “jet lag and the potential impact it might have with their performance on the court.”

Though the Global Games have made stops in the Philippines, Taipei and Macau, China has served as the exclusive Asia host for the past few years. That is to continue in 2017, with the league strategically selecting the country’s top merchandise-selling team, the Golden State Warriors, to play the Minnesota Timberwolves, who sold a minority ownership stake to Chinese businessman Lizhang Jiang last summer.

Markets like Indonesia and the Philippines are beginning to lay the groundwork to follow in China’s footsteps, but cricket-mad India may actually offer the most surprising upside in hoops. Its national team upset China in Asia tournaments in two of the last three years. “We know its qualities resonate with Indian youth,” says Colaco, the NBA man there. “We believe it can be the number-two sport in the country . . . maybe in five to six years.” **F**

## **“YAO BELIEVES THAT WHAT HAS BEEN LACKING IN CHINA IS THE NUMBER OF PEOPLE THAT HAVE PLAYED SPORTS FOR THE FUN.”**

sport’s reach. But the NBA not having a direct hand in how it conducts business and handles its talent has presented some clear challenges.

Many CBA officials, for example, double as investors in the Chinese league, leading to top domestic talent being coddled and barred from leaving the country to play in Europe, a prime entry point to the NBA. National Team participation is mandatory, even when it leaks into the CBA season. The fundamental structure of the league—from outdated arenas to a three-month schedule to an overreliance on American imports—has left the majority of its teams in the red.

either on their commute or, for many, when they’re already at work. But despite occupying a bad block for programming, viewership has steadily climbed across all major markets, due in large part to advances in live streaming.

“Their fans are sophisticated,” Tatum says. “In those time zones, they’re watching our games on our mobile platforms, our digital platforms . . . there’s a consumption habit now that’s been built there because we’re making the product readily available, easily accessible to them.”

Lucrative rights deals have been signed across broadcast and social media in several Asian nations, as well as videogames.



# Hello, Dollars!

BY MICHELA TINDERA

**EVEN BILLIONAIRES** think there's no business like show business. These six produced or coproduced Broadway shows this year, and four have Tony-nominated hits. The headliner: Len Blavatnik (with trophy, below), who financed the most shows by far, putting money into seven productions. The Great White Way has long run on the dollars of the ultrarich—even a young Daddy Showbucks named Donald Trump produced a 1970 show called *Paris Is Out!* It was a flop and closed in less than three months.

## STEVE COHEN

NET WORTH: **\$13 BIL**  
SHOW: *A Bronx Tale—The Musical*  
STAR POWER: Robert De Niro  
TOTAL BOX OFFICE GROSS: **\$21.9 MIL**  
MOST EXPENSIVE SEAT: **\$275**  
TONY NOMINATIONS: **0**  
MONEY LINE: "The grocer, the peddler, the whole neighborhood—wherever I go I know my money's no good."

## ROBERT SMITH

NET WORTH: **\$2.5 BIL**  
SHOW: *In Transit*  
STAR POWER: Justin Guarini  
TOTAL BOX OFFICE GROSS: **\$6.1 MIL**  
MOST EXPENSIVE SEAT: **\$249**  
TONY NOMINATIONS: **0**  
MONEY LINE: "I got tempting skills to pay my bills, that's my scheme till my dream comes true."

## LEN BLAVATNIK

NET WORTH: **\$19.2 BIL**  
SHOWS: *Hello, Dolly!*; *Groundhog Day*; *Sunset Boulevard*; *The Front Page*; *The Glass Menagerie*; *Sweat*; *A Doll's House, Part 2*  
STAR POWER: Bette Midler, Glenn Close  
TOTAL BOX OFFICE GROSS: **\$61.4 MIL**  
MOST EXPENSIVE SEAT (*HELLO, DOLLY!*): **\$748**  
TONY NOMINATIONS: **31**  
MONEY LINE: "Money ... is like manure. It's not worth a thing unless it's spread around"—*Hello, Dolly!*

## CAMERON MACKINTOSH

NET WORTH: **\$1 BIL**  
SHOWS: *Cats*, *Miss Saigon*  
STAR POWER: Leona Lewis  
TOTAL BOX OFFICE GROSS: **\$46.2 MIL**  
MOST EXPENSIVE SEAT (*MISS SAIGON*): **\$248**  
TONY NOMINATIONS: **2**  
MONEY LINE: "Tonight I'm out of my mind, not to mention ten bucks."—*Miss Saigon*

## BARRY DILLER

NET WORTH: **\$3.1 BIL**  
SHOW: *A Doll's House, Part 2*  
STAR POWER: Laurie Metcalf, Chris Cooper  
TOTAL BOX OFFICE GROSS: **\$538,000**  
MOST EXPENSIVE SEAT: **\$273**  
TONY NOMINATIONS: **8**  
MONEY LINE: "It looks like you're definitely not destitute."

## ROBERT RICH JR.

NET WORTH: **\$3.9 BIL**  
SHOWS: *Cats*, *Present Laughter*  
STAR POWER: Kevin Kline, Leona Lewis  
TOTAL BOX OFFICE GROSS: **\$43 MIL**  
MOST EXPENSIVE SEAT (*PRESENT LAUGHTER*): **\$350**  
TONY NOMINATIONS: **3**  
MONEY LINE: "If you offer me fish, then I always want a feast."—*Cats*



ILLUSTRATION BY JOHN UELAND

ALL BOX OFFICE FIGURES ARE FOR 2016-17 (THROUGH APRIL 30).  
SOURCE: THE BROADWAY LEAGUE.



# Aggregating ¥¥¥

China's Jinri Toutiao is breaking news to millions on their mobiles.

BY YUE WANG

With Facebook increasingly playing the role of people's daily news source, news-aggregation apps like Flipboard are losing their appeal. In China, where Facebook is banned, one such app has achieved staggering early success. Jinri Toutiao, operated by Beijing ByteDance Technology, has surpassed traditional news portals to become the information source of choice for tens of millions of users. The app, whose name means "today's headlines," doesn't have staff writers and editors, using instead artificial intelligence to tailor each newsfeed. Absorbing a user's location, smartphone model and click history, Toutiao's algorithm sorts through news, commentaries and video from more than 4,000 partner sites to find the best matches. And in a bid to attract the younger generation, a good portion of what it provides is bite-size, BuzzFeed-style stories, along with comics, GIFs, live-streaming shows and interactive Q&A channels for entertainment.

Toutiao has 80 million daily active users, who spend an average of 76 minutes reading and watching the app's fare, making it the number-one news offering in China's iOS App Store, according to App Annie, a market intelligence firm. More than 70% of its users are under 30, says Toutiao. The level of engagement beats Facebook's global average of 50 minutes a day, according to 86 Research analyst Zhang Xueru in Shanghai.

Zhang estimates that company revenue, mostly from online advertising, grew five-fold to more than 6 billion yuan (\$869 million) last year. It is unlikely to turn a profit this year as it invests in content and operations, according to Zhang. (It pays for some video, for example.)

Investors, too, like what they see. Beijing ByteDance was valued at a whopping \$11 billion in a recent fundraising round that included Sequoia Capital China and



Founder Zhang Yiming has users spending 76 minutes a day at his app.

CGB International, the investment arm of China Construction Bank. That represents a huge leap from its \$500 million valuation after a 2014 round. The 34-year-old founder, Zhang Yiming, is said to hold 30%.

"Investors in China like platform-based companies," says Ken Xu, a partner at Shanghai venture-capital firm Gobi Partners. "Toutiao has stable traffic and a sticky user base. People are willing to put a lot of money in a startup like that."

Zhang wasn't available to *Forbes Asia*, but the company says the idea of news aggregation came to him in 2008 when he was helping run social site Hainei.com. Zhang thought China's market was dominated by state-run media and other news sites that offered only lengthy, often stilted text.

After Hainei failed to take off and his partner Wang Xing went on to found Meituan, now China's largest local-services platform, Zhang found his way to launch Toutiao in 2012. "When Toutiao started to do personalized content, other Chinese media companies were still focusing on very serious writing," Gobi's Xu says. "But the younger generation wanted more light-hearted stuff, and Toutiao very much catered to that."

Competition is growing. China's technology trinity—Alibaba, Baidu and Ten-



cent—are all developing personalized news services. Traditional news portals such as Sina and 163.com are catching up by adding feeds in their apps, based on users' browsing.

What's more, rivals are suing. In April, Tencent and Sohu alleged that Toutiao used their content without permission. They are seeking "millions of yuan" in damages. A Toutiao spokeswoman says its intellectual-property protection system is "far superior" to its competitors, adding that the company recently sued Tencent for IP infringement. "Com-

petition is a major risk for them," 86 Research's Zhang says.

To find fresh growth opportunities, Zhang is expanding overseas. ByteDance has invested in media platforms in India and Indonesia. In February, the company acquired Flipagram, a U.S. video app, for an undisclosed amount. That deal was overseen by Liu Zhen, who previously headed Uber's China unit.

China still commands most of the company's attention. Regulators are tightening their grip on online media, and ByteDance has been repeatedly summoned over pornographic and illegal content that pops up across Toutiao's live streaming and Q&A platforms, even behind the Chinese firewall.

"We provide stringent screening measures to ensure [content from providers] is compliant and meets our rigorous standards," the company says. It uses a combination of manpower and machines to police the platform, but relying on outsiders means it has to play whack-a-mole with problematic content. **F**

# Dutertenomics

China-fueled spending in the Philippines could create a world of hurt.

BY ANDERS CORR

*This online post drew much notice in Manila. Finance Minister Carolos Dominguez minimized China's role in infrastructure borrowing and said new tax revenue would cover it.—Ed.*

According to the *South China Morning Post* on May 12, “Philippine Secretary of Budget and Management Benjamin Diokno estimated some US\$167 billion would be spent on infrastructure during Duterte’s six-year term, under the slogan ‘Build! Build! Build!’” That could increase current Philippine national government debt of approximately \$123 billion, to \$290 billion. But that doesn’t include interest. According to my analysis, at 10% interest the new debt could go to \$452 billion, bringing Philippines’ debt/GDP ratio to 197%, making it the second worst in the world. That understates the burden to the Philippines, as existing national government debt would also accrue interest over that time that was not included in the analysis. Dutertenomics, fueled by expensive loans from China, will put the Philippines into virtual debt bondage if allowed to proceed.

Duterte and his friends and business associates could each benefit with hundreds of millions of dollars in finder’s fees, of 2% to 7%, for such deals. Duterte reportedly sought to fast-track some deals and has publicly mooted the possibility of declaring martial law for a wide range of issues, including drugs, traffic and the situation on Mindanao. Debt imposed on the public through corruption, fast-tracking or under martial law should be considered odious debt and not repayable. The only way to stop such unjust debt is for the terms to be entirely transparent to the Philippine pub-

lic in advance, for full cost-benefit analyses to be done by an independent authority on each deal and for the Philippine Congress to vote on whether each deal proceeds.

The effect of that \$167 billion of new Philippine debt will be very different depending on the rate of interest—which neither the Duterte Administration nor China has divulged. The Philippine people must demand to know and agree to this interest rate before the deals are signed. Even at 5%, which is nearest the lending rate of interest published by the IMF and World Bank for the Philippines, the effect would be an increase in debt (in addition to existing debt) of \$275 billion after ten years. That would bring the Philippines’ debt/GDP ratio to approximately 136%. But at 20%, the maximum interest rate that might occur in a debt-distressed country like Argentina or Venezuela, the debt could balloon to \$1.2 trillion in ten years.

The interest rate that China will offer the Philippines on such a large sum relative to GDP is likely higher than the World Bank rate but lower than, say, 15%. Without transparency from the Duterte government and China on the rate, conditionality and repayment terms of \$167 billion of new debt

for the Philippines, the public should assume, to forestall a worst-case scenario, that the rate would be somewhere between 10% and 15%. Over ten years, that could cause Philippines’ debt/GDP ratio to balloon to as high as 296%, the highest in the world.

At any likely interest rate, the Philippines will have to give political and economic concessions to China in order to repay interest or renegotiate such a large quantity of debt. That could include political concessions—for example, giving up territory or oil rights in the South China Sea, or it could include economic concessions, like selling China its national companies or agreeing to below-market rates on exports to China.

In the worst-case scenario, China would deem the Philippines too risky as its debt grows and stop such renegotiations, and another country, like Russia, could step in with even stiffer terms. This is currently happening to Venezuela, where people are starving and dozens have been killed in antigovernment riots. Venezuela took extensive loans from China and could not repay them when the price of oil dropped. Venezuela’s President Maduro, who depends on the high-interest loans to keep his government in power, is so indebted that China will no longer extend significant capital. To repay China, Maduro is seeking new loans from Russia. This is rightly resisted by Venezuela’s National Assembly, which wants the right to approve loans. Maduro tried to shut down the Assembly in response and has been able to continue to seek the Russian loan against the Assembly’s wishes. Something similar could happen to the Philippines in ten years. Buyer beware. **F**

*Anders Corr is a contributor to Forbes.com. and founder of Corr Analytics, which provides political risk analysis to commercial, nonprofit and media clients.*



Duterte and his administration have been less than transparent.



# China's AI Advantage

Veteran researcher and investor Kai-Fu Lee believes that the U.S. is destined to lose its lead in the artificial intelligence race.

BY ALEXANDER KONRAD

**K**ai-Fu Lee watched the U.S. beat China to global internet leadership during the dot-com bubble from the inside. Now with what he sees as an even greater technological revolution taking place in the fast-growing field of artificial intelligence, Lee doesn't expect China to take a backseat a second time. "China started slow, and American companies went international," Lee says during a May visit to Forbes Media's headquarters. "But simple math says China has a larger GDP. The market will be bigger."

When Lee talks about AI, he speaks from firsthand experience. The Taiwan native developed the first speaker-independent phone recognition program as a Ph.D. student at Carnegie Mellon in the late 1980s, before stints at Apple and as an executive at Microsoft and Google in China—in fact, he was founding president of Google China.

Google and its peers were ultimately thwarted in their ambitions to carve out leadership stakes in the Chinese market, in part due to cultural differences among consumers as well as privacy clashes with the Chinese government. When Lee returned from working at Google's Mountain View, California, headquarters to launch his own VC fund, Sinovation Ventures, he came back to a China firmly entrenched in what he now describes as a duopolistic global tech economy. U.S. internet software continued to lead the English-speaking world, while a group of Chinese companies, famously led by Baidu, Alibaba and Tencent (B-A-T), controlled their domestic market and exerted increasing influence in Southeast Asia and developing markets.

With companies on both sides of the Pacific racing to develop applications of AI, China's scale can prove a decisive advantage, Lee believes. The country boasts perhaps 43% of the world's trained AI scientists, Lee says, with Microsoft alone training about 50,000 Chinese scientists in processes critical to the field starting in 1998. Overall, this doesn't represent the cream of talent in the field—that is still found in the U.S., Canada and Britain, he says—but China's legions are good.

China's political leadership continues to invest heavily in re-

search and technology. And developers may not face the same regulation when it comes to pushing real-world trials, such as with autonomous vehicles, or in mass data collection that would be viewed as intrusive or a privacy violation in the West.

In driverless cars, the U.S. has about a two-year head start, according to Lee. But each minute American tech companies find themselves mired in a regulatory battle or hobbled by objections from transportation incumbents, the Chinese can close that gap.

What's more, he says, top-down rule in China will countenance a long stretch of data-gathering experience in which the casualty rates from autonomous-vehicle use steadily drop—by orders of magnitude, Lee hypothesizes. Even relatively safe records may not pass muster in democracies.

Not only do Chinese companies have the advantage of a hypercompetitive market in which the leading players typically compete across a range of applications and use cases (compared with more specialized leaders in the U.S.), the Chinese government continues to invest in R&D while unstable visa policies could encourage more academics to return to China after attending universities in the U.S. Even a language barrier can work in China's favor: Baidu's recently departed AI chief Andrew Ng told *The Atlantic* in February: "China has a fairly deep awareness of what's happening in the English-speaking world, but the opposite is not true."

Lee's odds on China are contested by at least one top American voice in the field. "The leading AI researchers, university departments and research labs are still in the U.S.," says Oren Etzioni, CEO of Seattle's Allen Institute for Artificial Intelligence. "However, China is moving fast. As long as we continue to have an open society and strong immigration, we will remain ahead."

The race to AI leadership is crucial because what we know as AI will greatly exceed direct technological applications, Lee argues. Industries ranging from banking to insurance, health care and media will all face massive transformations from automation. Lee is fond of telling the story of how he pitted his personal banker against computer-run trading algorithms. The machines produced a return that was eight times better. "Anything with



**"Whoever has the most data wins": Kai Fu Lee sharing intelligence in mid-May with *Forbes Asia* editorial staff.**

a feedback loop will give way to AI," Lee says. That could include scanning hundreds of insurance claims or mortgage applications, shipping orders and even evaluating patient X-rays. "In most cases it's okay to be mostly accurate," says Lee.

The small comfort for logistics managers, doctors and mortgage officers: a tiny percentage—Lee guesses about 10%—of decisions will remain so mission-critical or life-and-death that a company can't take the chance the machine is wrong or its communications are off. "Robotics can fake some empathy, but compassion isn't there," Lee says. "With 10% wrong, you can still lose all trust."

Even near accuracy would still mean a massive displacement of workers, pushing the jobs to managerial or quality-control roles or putting a "last mile" human face on interactions. Lee and his team frequently invoke a 2013 Oxford research paper by Carl Benedikt Frey and Michael A. Osborne that predicted that 47% of jobs in the U.S. economy would be threatened by automation. Lee is not impressed by recent developments such as Facebook's announcement that it would hire 3,000 moderators to help its systems flag and take down inappropriate videos. "That's a tiny number," he says. "Look at what percent of global internet users Facebook is reaching" relative to the number of people who will be paid to monitor them, he says. "It's noise."

The rising AI economy, meanwhile, won't look like the B-A-T companies or the de facto American hegemony of Apple, Facebook, Microsoft and Google. Lee believes the AI economy will be spread out across practices within tech companies and large corporations as well as sold as a contract service by specialists. Through his \$1.2 billion fund—building to \$2 billion—Lee is investing in applications that can benefit from AI, including, in America, SuperFlex, a company building exosuits for disabled

and elderly people, and Wonder Workshop, which makes robots to teach children computer science. (He's skeptical about humanistic service robots like Softbank's Pepper, however.)

Lee says he's investing about 95% in China and only 5% in the U.S. One brutal reality of training any machine-learning program, he notes, is that the more the system processes information, the better trained it gets, meaning the more it's used the smarter and more accurate it gets. And no research hub has more users at its fingertips than China. Says Lee: "Whoever has the most data wins." **F**

## FACEBOOK IN CHINA?

Google famously pulled its search engine out of China in 2010 and despite months of reported off-and-on discussions with the Chinese government has yet to return. To its former president of Google China, Kai-Fu Lee, Google is no longer the most intriguing U.S. internet company to the Chinese market. That's now Facebook, the leading social network and Instagram and WhatsApp owner led by billionaire Mark Zuckerberg. In April, Xiaomi's high-profile former vice president Hugo Barra joined Facebook to lead its virtual-reality efforts; Lee believes Facebook's VR hardware Oculus will launch in China in the coming months. But success for Oculus wouldn't increase the likelihood of Facebook's core platform appearing in China, which now has a host of social media alternatives. "Facebook has the best chance" when it comes to mainstream adoption in China, says Lee. "But no one has a chance." —A.K.



# No-Page

A startup's life and death Down Under.

BY RYAN MAC

In November 2015, Joanna Riley stood in front of an audience at a Dublin technology event exuding confidence. Dressed in a vanilla tuxedo jacket and clutching a black remote to toggle between presentation slides, she paced back and forth onstage while delivering a speech about ignoring rejection, a skill she employed many times while starting her company. “I started 1-Page in my pajamas in my apartment three and a half years ago, and today it’s public for over half a billion dollars,” she said.

For Riley, it was a moment of pride. A year earlier, 1-Page had used a little-known financial maneuver to become the first Silicon Valley technology company to go public in Australia, turning a no-name recruiting software startup into an Australian Stock Exchange (ASX) darling. In the 12 months after its initial offering, 1-Page’s stock would rocket up more than 2,700% from its public debut price, propelled by an investor frenzy that would provide validation for its cofounder and chief executive. Riley’s appearance at Web Summit, one of the most well-attended tech events in the world, was just deserts. She thought she had made it.

But San Francisco-based 1-Page was built on a combination of hot air, false promises and an unworkable product. Riley was the ultimate saleswoman who took 1-Page public and fed a dot-com-esque hype cycle that ended up destroying the company. In mid-May, its board voted to cease company operations after consistent quarters of unprofitability, missed targets and a dizzying drop in share price that erased more than 90% of the

company’s value. The board also voted to remove Riley from the company she cofounded. “I didn’t know anything going in,” Riley said about taking 1-Page public in an interview with *Forbes* three days after being unceremoniously dumped. “I see it now. After raising every dollar the company has ever had and building it with, you know, complete hope, it’s been taken away by someone.”

Unlike the hundreds of startups that are unable to find funding and fizzle out every year, 1-Page flourished by taking advantage of a reverse merger, acquiring the dormant shell of an ASX-listed mining company and going public despite having no profits and less than \$1 million in revenue. Initially, the financials didn’t seem to matter. 1-Page played up its Silicon Valley founding story, and Australian investors, whose economy is heavily linked to natural resources, suddenly had access to an American technology firm on the ASX. Enthusiasm created a bubble and turned 1-Page into one of the best-performing stocks on the ASX in 2015, allowing it to raise more than \$43 million in two separate offerings and ballooning its market cap to a peak of about \$512 million in September 2015.

*Forbes* interviewed ten former employees, who spoke on the condition of anonymity due to confidentiality agreements with 1-Page, and most agreed that 1-Page lacked a coherent product. According to them, clients ranging from Starbucks to Under Armour were signed up on trial periods and promised software that could comb through social networks and diverse data sets to source hard-to-find candidates for job positions. The soft-



JAMES CROUCHER / NEWSPIX

"There are differences between being a CEO of a private company and a public company. I wasn't told about those," says 1-Page cofounder and ex-CEO Joanna Riley.



ware couldn't do what Riley and 1-Page's sales team promised; most of the clients bailed after their free or discounted test runs were over.

In at least one all-hands meeting, according to two people who attended, Riley told her employees to "fake it until you make it," alluding to the idea that her salespeople could promise undeveloped features that might eventually be added to the software in order to close a deal. Riley told *Forbes* she was joking and was simply repeating a phrase that was often used by a now-departed board member. "She was so disconnected from reality and from what the actual product was," said one former staffer. "What they were selling was essentially vaporware." Riley told *Forbes* there was not enough time to test a beta product since the company was already in the public spotlight. "We were public, and we had to launch with our clients," she said. "We said [to them], 'We want you to be our beta.'"

But, critics wondered, why was 1-Page public to begin with? It had no track record, little revenue and a pipe-dream product. "There is no way a company like this should be listed on any stock market," said Merchant Funds Management's Andrew Chapman, an activist shareholder on 1-Page's board who led the effort to shut down the company and remove Riley. "It was just hype at the end of the day."

#### "FLAKY DEALS"

The Australian Stock Exchange is littered with the shell companies of inactive mining and natural resources operations. These shells, sometimes referred to in Aussie investment circles as "cash boxes," typically trade at low volumes in line with the value of their remaining capital, adjusted for any leftover assets or liabilities.

Reverse mergers were not uncommon on the ASX but became more prevalent in 2014 when the exchange relaxed its rules on minimum share prices for listings. Foreign technology companies like 1-Page took notice, with at least 28 reverse takeovers taking place that year, up from 16 the year before. In 2015, there were 59 backdoor listings on the ASX, the most since 2000.

Introduced to the reverse-merger idea by her then-husband (they've since divorced), Riley merged her startup with Inter-Met Resources, a nonfunctioning nickel-mining company, and became the first Silicon Valley CEO to go public Down Under. In spite of the business' short life span Riley had already achieved what many technology executives spend their careers chasing: an exit. "The world tells you your valuation, not VCs, whose valuations are more art than science," she told the *San Francisco Chronicle* in November 2014. "We're a still very young company. An exit is a big deal."

Skirting the traditional venture capital route in raising money for a tech company is typically not a good sign, according to Scott Dettmer, a partner and startup advisor at law firm Gunderson Dettmer. He notes that reverse mergers sometimes

create companies that attract "fraudsters and bad actors," where thin trading volumes can allow for heavy influence by a few traders and huge swings in stock price. "In the [information technology] space, or basically across the board, these are flaky deals for companies that could not raise money in any other fashion," Dettmer says.

Riley disagreed. While she had raised about \$3 million in angel investments, she said she did not look to raise additional cash from venture capitalists before engaging in the backdoor listing. She added that she'd do it again, as 1-Page provided an example for "the hundreds of companies that followed us." (*Forbes* could not find evidence of "hundreds" of companies using backdoor listings on the ASX after 1-Page.) "I would have done it differently," she said. "I was the first-time CEO of a publicly listed company. There are differences between being a CEO of a private company and a public company. I wasn't told about those."

When *Forbes* reminded her that it was ultimately her decision to go public, she deflected attention away from herself and blamed her board and short-sellers, who, she said, weighed heavily on the company. And when asked if she thought

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**"SHE WAS SO DISCONNECTED FROM REALITY AND FROM WHAT THE ACTUAL PRODUCT WAS. WHAT THEY WERE SELLING WAS ESSENTIALLY VAPORWARE."**

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her company's shares deserved to reach such lofty heights, she failed to provide a direct answer. "We were pre-revenue anyway," she said, despite the fact that her company had a sales team and had promised deals with major corporate players. She took a long pause before adding: "Buying market shares is a free thing to do. I don't tell people to buy stock."

#### FROM BUSINESS BOOK TO STARTUP

Joanna Kidd Riley was born and raised in San Francisco, the youngest daughter of an international businessman and a film producer. After graduating from the University of Virginia (where she had a rowing scholarship), Joanna had a brief stint as an FBI trainee before she left to take a few sales gigs. While working at one of these jobs, she met with her father to discuss the idea of building a company around a somewhat successful business book that he had published in 2002. *The One-Page Proposal* sought to help anyone explain an idea succinctly in a one-page pitch. The pair hatched a company that supposedly would build a software tool to help people curate and field one-page proposals, and they named the company 1-Page.

By the spring of 2013, the company had shifted focus. With Riley as CEO and her father listed as chairman, 1-Page offered

a software-as-a-service product to recruiters, billing it as a platform for potential hires to pitch why they would be ideal for a certain position. Early employees didn't recall much traction. In the 13 months beginning January 1, 2014, the company recorded operating revenue of about \$105,000 and a loss of about \$9.3 million.

After taking 1-Page public in October 2014, she was profiled in business publications like *Fortune* and *Fast Company*, given business awards and invited to speak at tech conferences. As the spotlight and stock price increased, former employees say it increased pressure on them to close deals to generate meaningful sales or deliver new product features. And that's when it started to fall apart, as Riley did everything she could to prop up the stock price. "For Joanna, it was not a desire to deceive," said Patrick Riley, her father and cofounder, who eventually became dismayed with the direction of the company and was fired as an employee late last year. He abstained from voting in the mid-May referendum on whether to keep or remove his daughter from the company they had created together. "It was the desire of an overambitious person to perform," he added.

## KANGAROOS AND UNICORNS

1-Page's fundamental problem was its dysfunctional product. A year after its reverse takeover, the company pivoted to focus on a product called Source, a software interface that was supposed to create pools of candidates for customers looking to fill open jobs. Source was initially built on top of a database compiled by BranchOut, a formerly high-flying startup that raised \$49 million on the idea that it could comb Facebook and map personal connections for professional networking.

After Facebook changed its terms of service and cut off BranchOut's access—effectively forcing it out of business—Riley scooped up the company's database in a fire sale for \$2 million and 7.5 million 1-Page shares, hoping it would give her company a proprietary edge for Source. At least two former employees, however, said the database was useless. Facebook sent 1-Page a cease-and-desist letter threatening legal action if the company employed the BranchOut data, which had been improperly collected. LinkedIn would also later block 1-Page's IP address, preventing the company from crawling its website for employee information.

Former workers also cited Riley's lack of technical background as a major problem. In pitches to prospective customers, Riley drilled her sales team to say that the company had powerful algorithms powering the candidate search on Source. "This was entirely a lie," said one employee, pointing to the fact that workers at the company were manually searching databases and putting together candidate pools after obtaining job criteria from clients.

Investors, however, were fed a narrative that extolled Riley's merits as a Silicon Valley CEO and underscored the potential for 1-Page to be a massive business. In a report entitled "An American Unicorn in Kangaroo's Clothing?" two analysts for Vancouver investment bank Canaccord Genuity initiated cov-

erage on the company by setting the expectation that it could be a billion-dollar business. The analysts based their research on the company's own projections. When asked about these projections, Riley said she had no responsibility for the opinions of analysts and that 1-Page never made revenue projections, even though the report noted that the company guided Canaccord with its numbers. She added the document "was not a published report" and was not widely distributed, despite the fact it is still available for download from the ASX website.

Investors, including large institutions, took those projections at face value and bought into the company. In October 2015, 1-Page held a secondary offering, selling about \$36 million of shares to institutional investors like Fidelity, which amassed a 6.7% position in the company by the end of November 2015. A year later, the \$36 million worth of shares sold to investors were worth less than \$3.5 million.

## A HOSTILE TAKEOVER

As the irrationality that propelled 1-Page up the ASX subsided, gravity set in, as did the realization that the company could not live up to its lofty sales expectations. While it displayed plenty of logos on its site and issued press releases about relationships with companies like Starbucks and Amazon, those familiar with the company's sale process said that most clients never signed up beyond a brief trial period. Among them was Under Armour, whose logo is still on 1-Page's site to this day, despite ending their brief relationship in early 2016. The sports-apparel company agreed to a \$10,000, 30-day trial and gave the company multiple "at-bats" to find candidates for certain positions, said Chris Hong, Under Armour's vice president of talent. Others at Under Armour who worked directly with 1-Page's sales team, said they got "zero return" on their investment and that the candidates they received could have easily been found on LinkedIn.

Sales for the 12 months ending January 31, 2016, while improved, were just \$290,000, compared to Canaccord's earlier expectation of \$4.1 million. 1-Page's net loss escalated to about \$10 million, up from \$9.3 million the previous year. As the stock continued to fall through 2016, executives and board members left, the company attempted to downsize to save costs and an activist shareholder vacuumed up shares to mount a hostile takeover. On December 23, Riley resigned as CEO but kept her board seat, hoping that a new executive could appease the markets.

The move did not quell the negative sentiment. After the activist, Merchant's Andrew Chapman, joined the board, he soon convinced its other members, sans Riley, that the best way to proceed would be to save the company's remaining cash by shuttering operations and turning it into a shell. In mid-May, that decision came full circle. Public investors voted more than two-to-one in favor of removing Riley from the 1-Page board. Two days ahead of her 35th birthday, she boarded a plane from Sydney to San Francisco.

Her Australian adventure was over. **F**

With reporting from Sue Radlauer.



# Google Slayer

Starting with \$15,000, Jorn Lyseggen built a version of Google Alerts before Google Alerts. And despite the big-foot competition, Meltwater has found the talent to forge a \$300 million company.

BY ZACK O'MALLEY GREENBURG

A decade ago, with Google and Yahoo lumbering onto its turf, Jorn Lyseggen's fledgling media-intelligence company, Meltwater, faced an existential challenge. Getting clients to pay Meltwater to track press mentions suddenly became a lot harder when Google Alerts began offering the same service for free. Rather than cut back, Lyseggen went on a recruitment binge—interviewing 3,000 job applicants face-to-face in a dozen or so countries over a span of five years.

To find unorthodox solutions, he brought on an eclectic cast of characters. There was executive director Kaveh Rostampor, an Iranian refugee who arrived in America via Sweden. Another hire, Sebastian Geides, had been a competitive handball player on the verge of finishing a theology program. When Lyseggen asked him why he would choose Meltwater over the priesthood, Geides responded that Meltwater's product was easier to sell.

"Talent is talent, everywhere," says Lyseggen, 48. That philosophy has helped him not only survive the challenges from Google and Yahoo but also transform Meltwater into a company that produces annual revenue approaching \$300 million, with an estimated profit margin of 15%. Meltwater, based in San Francisco, has 25,000 clients—from Harvard Business School to the Denver Broncos—all paying for what's essentially a souped-up Google



Alerts. It notifies clients about media mentions but also offers tools that, for example, can distinguish positive mentions from negative ones. Prices for Meltwater range from \$5,000 to \$25,000 a year.

Lyseggen didn't have to look far for proof that talent is talent everywhere. Born in South Korea in 1968, he was adopted by a Norwegian family and raised in a tiny farming village near the Swedish border. "When people meet me, they're a little surprised that I don't look tall and blond and dashing," Lyseggen says. "I was pretty much a red-

NANA KOFI ACQUAH FOR FORBES



neck kid. I didn't know much about the world. I have friends that still are pumping gas."

He went a different route, enrolling at the Bergen University College of Engineering in 1988, where he spent nearly all of his student-loan money—roughly \$10,000—to buy the fastest personal computer available and began to design software. After graduating, he went to work for the Norwegian Computer Center, where he grew fascinated with Java. He then quit and

founded an internet-consulting outfit, EU Net Media. In December 1995, with Lyseggen's help, Norway's first online transaction was recorded. Two years later, he sold the consulting firm for \$7 million; he then launched a similar firm and got \$40 million for it in 1999. He started yet another and watched it go public in Sweden and soar to a market cap of \$500 million, only to see the share price plummet during the dot-com bust.

**Raised in Norway by adoptive parents, Jorn Lyseggen says people are often surprised he isn't tall and blond. He was photographed in Ghana at his school for entrepreneurs.**



## GOING, GOING, GHANA

The bridge on the outskirts of Accra, Ghana, looks like something from an Indiana Jones movie: a series of creaky wooden planks suspended by rope over a fetid stream. Towering palm trees and tin-roofed shacks dot the overgrown landscape. Appearances can be misleading. The span was designed and built by engineers trained by the Meltwater Entrepreneurial School of Technology, a program created by Meltwater founder Jorn Lyseggen to help West African entrepreneurs learn how to launch companies. Annual funding from Meltwater: \$2 million.

The creek separates the two buildings that constitute the school's headquarters: on the near side, classrooms; on the far side, air-conditioned offices connected by a spiral staircase adorned with quotes from Bill Gates, Warren Buffett and Nelson Mandela. The bridge reduced the trek between the edifices from 20 minutes to 2. Inside, entrepreneurs-in-training create startups from scratch and workshop them with other students and faculty. The final exam is a pitch session in front of Lyseggen and other investors, with up to \$200,000 in funding on the line.

Successful pitches move on to the school's incubator. Among them: Kudobuzz, which amplifies companies' positive ratings online; it has taken \$190,000 in investment capital from Meltwater and 500 Startups. Claimsync, a platform that processes medical claims, raised more than \$100,000 before getting bought for an undisclosed sum. Tress, a hairstyle app, "became the only place to find out what Ghanaian, Nigerian or black women in London . . . have on their head," says cofounder Priscilla Hazel. It also earned a \$20,000 grant from Y Combinator. —Z.O.G.

Lyseggen forged ahead and founded Meltwater in 2001, seeding it with just \$15,000 and opening a tiny office in an Oslo shipyard—because, he says, he was pouring money into other startups that excited him more and didn't want to subsidize a struggling business for long. But he believed in Meltwater's premise. At that point, Google was just three years old and hadn't yet launched Google Alerts. In Lyseggen's view, the world was drowning in information, and he wanted to find a way to use software to help simplify things. "The sell was a subscription to the service that monitored all the news that was published online," he says. "Whenever news that was relevant to them was published, the clients would be notified."

Initially, Lyseggen and his very small sales team pitched Meltwater to 1,500 companies. The answer from 1,499 was no, with one maybe. Lyseggen told his team they couldn't pitch the service until they got a sense of their clients' pain points. Only with that context in mind were they permitted to proceed with the hard sell. He also required that all subscription fees be paid up front for the entire year so he could continue bootstrapping the business. Both moves worked: By the end of 2003, Meltwater had signed 1,000 clients and revenue had reached seven figures.

The following year, it expanded into Sweden. Warming up to his own company, Lyseggen brought new hires to Oslo and trained them for three months before returning them to Stockholm to open a new office, which was cash-flow-positive after two weeks. He repeated the process as he spread Meltwater across northern Europe, and by the end of 2005, annual revenue had reached \$11 million.

As Meltwater continued to expand, Lyseggen unfurled his exhaustive—and exhausting—approach to recruiting: the 3,000-interview binge. With his human resources teams, he concentrated on top universities, trying to hire only candidates with management potential—as well as intelligence, drive and wit. The new hires helped Meltwater compete as Google Alerts and Yahoo News

inundated the media-intelligence space in the Web 2.0 world. Lyseggen cast his new competitors as entry-level versions of his superior service—while constantly trying to improve Meltwater's once-clunky product. Says Ben Hunt, director of digital media for the Denver Broncos, "The interface has come a long way."

When Coca-Cola asked for an analytics solution that made it easier to spot trends affecting competing brands, Meltwater built it. Other clients found new applications on their own. The CEO of a Swedish window company told Lyseggen he used Meltwater's hyperlocal media tracking to pinpoint burglary spikes so he could market more heavily in the areas affected.

During this period, Lyseggen began pondering what African youngsters might do with high-speed internet and computers like the one he had bought as a college student. "I concluded that if I wanted to do something impactful," he says, "I needed to do something that was built on my core expertise."

In 2008, Lyseggen established the Meltwater Entrepreneurial School of Technology, an all-expenses-paid program that helps African entrepreneurs learn how to launch companies. He selected Accra, Ghana, as its home (*see box*). He raced around the globe, doing 200 interviews with NGOs, colleges, software companies and potential students. Today the program accepts some 60 of 6,000 applicants a year. Instructors start with basics: how to write a business email, how to connect on LinkedIn. Then come units on coding, marketing, accounting and pitching investment ideas.

"Africa could be a place where companies all over could find software developers," Lyseggen says. "It's a population of a billion people. It's going to double and triple in the next few decades. Some people might think that's scary, and of course, there are concerning things around that as well, but if you think of it from a talent perspective, what a phenomenal talent pool."

In the meantime, Lyseggen is happy to tap that pool for Meltwater. He recently hired a handful of graduates from the entrepreneurial technology school to work on his mobile team. **F**

# One for Mickey's Mantel

Disney's \$19 billion megadeal for Capital Cities/ABC in 1995, pairing the Mouse and friends with *SportsCenter*, was the rare big-media consolidation that actually worked.

BY ANTOINE GARA

## CASH OF THE TITANS

The July 31, 1995, merger combined ABC's nationwide broadcast channels and, crucially, ESPN with Disney's film studios and theme parks. Just over a decade later, before Disney's next big acquisition push, revenue had jumped more than 70%; earnings per share increased 50%.

## THE THRILL OF VICTORY

In 1984, ABC took control of ESPN for just \$188 million. By 2005, the combined companies' cable networks (ABC Family among them) were generating 23% of sales and 53% of operating income. Today ESPN struggles amid cord cutting; it lost 2 million subscribers in 2016 alone.

## ORACLE—AND MATCHMAKER

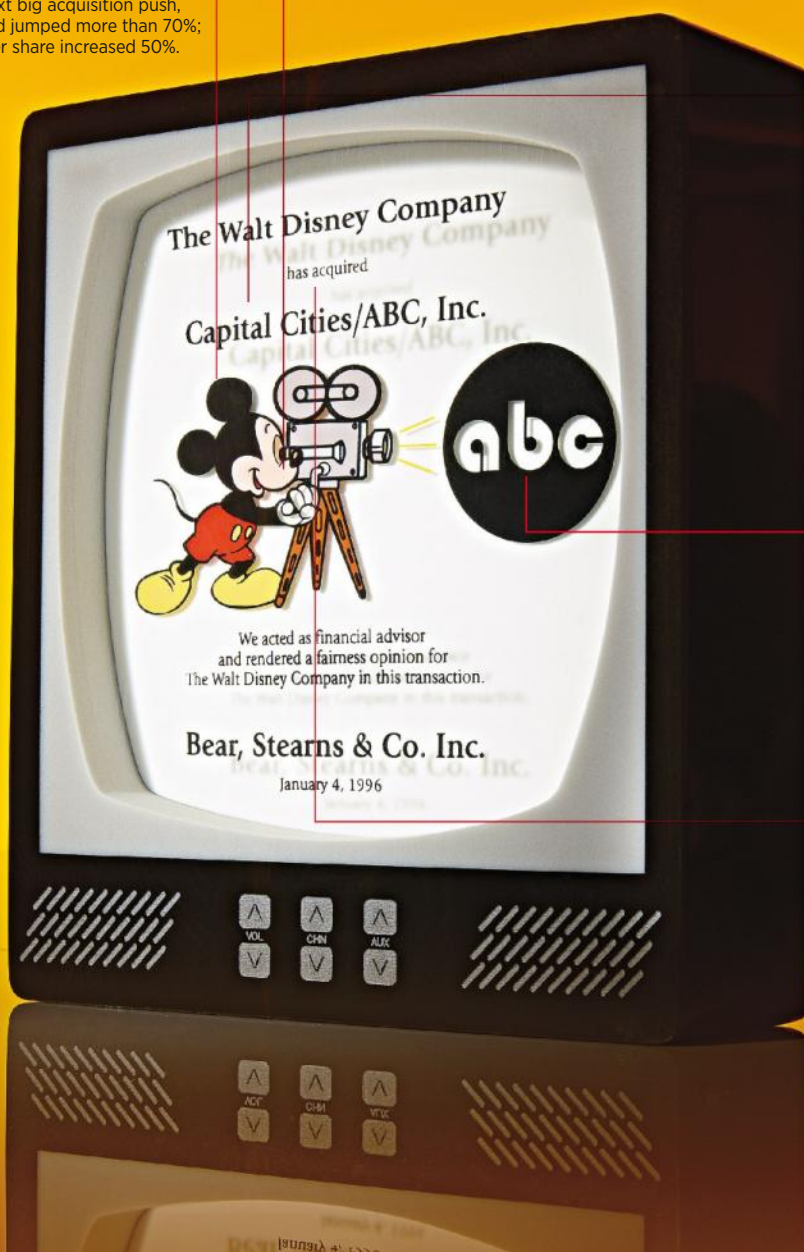
The deal wouldn't have occurred—at least not as soon—without Warren Buffett, then the largest Capital Cities/ABC investor. During a chance meeting in mid-July 1995, Buffett helped Cap Cities CEO Tom Murphy and Disney head Michael Eisner solve their biggest dispute: whether an acquisition would be all cash (as Disney preferred) or stock (Cap Cities' wish). Murphy and Eisner agreed to compromise, and the deal was put together in only two weeks.

## WARREN'S WINNING BET

Buffett had invested in television and radio broadcaster Capital Cities in 1985 to help it finance its \$3.5 billion pickup of much larger ABC. In the end, Buffett's Berkshire Hathaway received \$1.2 billion cash and \$1.3 billion in Disney stock, realizing a \$2.2 billion gain.

## TURMOIL AT THE TOP

Murphy and Capital Cities president Dan Burke were nearing retirement when Disney made its move. The Mouse was changing, too: In 1994, CEO Michael Eisner fired studio chief Jeffrey Katzenberg; onetime "superagent" Michael Ovitz would leave the company in 1997 after a brief tenure as president. Cap Cities COO Robert Iger replaced Eisner as Disney CEO in 2005 and has since presided over a fourfold increase in company stock.





# The Wizards From Oz

Enterprise software giants use armies of salespeople to hawk imperfect products and endless updates. The two Australian billionaires behind Atlassian have built smarter tools that sell themselves. Just ask Tesla, Snapchat, NASA and the entire Ivy League.

BY NOAH KIRSCH

**F**resh off the red-eye from San Francisco, Mike Cannon-Brookes enters a rented office space in Midtown Manhattan to seal the biggest deal in his company's history. Dressed in a Detroit Tigers T-shirt and blue baseball cap, he greets the room in an undulating Australian twang. Seated around a conference table are executives from his collaboration-software firm, Atlassian, which is in the final push to acquire Trello, a smaller competitor whose founder, Michael Pryor, is also present. For four hours, Cannon-Brookes relentlessly sells the importance of achieving scale and the benefits of uniting their rival firms.

Pryor is convinced. One month later, in January 2017, Atlassian will officially acquire Trello in a \$425 million deal that will help send company shares up 47% in four months and add \$820 million to the fortunes of Cannon-Brookes and his co-founder, Scott Farquhar. The 37-year-old Aussies, who dress more like off-duty surfers than top-flight executives, are worth \$2.6 billion each.

That ascent has vastly outstripped the pair's humble objective when starting Atlassian in 2002: dodging a lifetime of corporate IT drudgery. "Our aspirations were literally just to not get a real job," Farquhar admits, "and to not have to wear a

suit." Those aims thoroughly satisfied, they have managed to reach a few extra milestones as well: a blockbuster IPO in 2015, annual revenues approaching \$600 million and status as one of the most successful technology startups in Australian history.

The founders, who serve as Atlassian's co-chief executives, freely acknowledge the improbability of their meteoric rise. "I think we're completely under-skilled and under-experienced for the job that we're in," Cannon-Brookes deadpans. But despite the self-effacement, they have unquestionably built a highly disciplined business with a continually expanding global footprint. What began as Jira, a bug-tracking tool for software developers, has since morphed into over a dozen collaboration products used by many of the world's most prominent innovators, including NASA, Snapchat, Twilio and Spotify.

Atlassian has 85,000 customers, who pay as little as a few



JAMES HOGAN FOR FORBES



Mike Cannon-Brookes (left) and Scott Farquhar started Atlassian to avoid getting “real jobs” after college. Half of Australia’s comp sci grads apply to their company.

dollars per person per month for access to its software. Confluence, its knowledge-sharing app for teams, is its most popular after Jira. Other products include Bitbucket, an online repository for storing code; Bamboo, a technical-workflow interface; and Hipchat, a messaging service that competes with Slack. Trello, the latest addition, is a project-management tool that helps Atlassian further appeal to individuals and smaller, less technical teams.

In essence, Atlassian has taken on the unsexy mission of bridging organizational and communication gaps. If the back-end seems dry, the applications are anything but. When Elon Musk was developing the software underpinning Tesla’s electric car, he turned to Atlassian. SpaceX is using its software to coordinate coding teams and rocket scientists, and NASA relied on it to help plan the *Curiosity Rover*’s mission to Mars. The customer list extends further: Airbnb, BMW, BlackRock, Sotheby’s,



Paypal, all eight Ivy League universities and 85% of the 100 largest companies in America.

That success has come despite Farquhar and Cannon-Brookes' insistence on skirting industry norms. Atlassian has no sales staff, unheard of in the hypercompetitive world of enterprise software. And in an era when some tech leaders helm more than one multibillion-dollar venture (Jack Dorsey, Elon Musk), the cofounders are the conspicuous duo leading a single entity.

Growth has come easily so far, but the pressure is on for Atlassian—which posted just a \$4.4 million profit last year—to prove it deserves its \$8 billion market cap. And as it ventures further from its technical core competency, competitors are anything but idle. Smaller startups like Slack and Asana are nibbling away at market share, while industry giants like Microsoft pose a persistent threat from above. With the U.K.'s Clearvision, it is active in India against local rivals Zoho and Freshdesk.

Farquhar and Cannon-Brookes, unified in their drive to fend off such dangers, began their lives on disparate trajectories. Cannon-Brookes, the son of an English investment banker, spent much of his youth caroming between Sydney and a ritzy British boarding school. He bought his first computer using airline miles and decided to pursue a career in technology on a whim after being accepted into a prestigious business and computer science scholarship program at the University of New South Wales.

Farquhar, meanwhile, was raised in a home with much more modest means. His mother worked at Target and later McDonald's, his father at a service station, and he acquired his first computer—a barely functional Wang model—after his dad's

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**“IN TEN YEARS’ TIME WE’LL STILL BE VERY YOUNG AND DOING THE JOB AT 47. WE THINK ABOUT THE WORLD IN DECADES.”**

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business threw it away. He too landed at UNSW as part of the same scholarship cohort, one of a few dozen standout students offered an annual stipend of roughly \$9,000.

Despite their differences, the pair developed a fast affinity. “He just seemed like a really good bloke,” Cannon-Brookes recounts with signature nonchalance. Nevertheless, they spent most of their college years working on separate projects: Cannon-Brookes on a couple of mildly successful startups, and Farquhar, like many of his classmates, as an unhappy intern at a technology consulting firm.

They finally teamed up during their last year as undergraduates after Cannon-Brookes sent an email to a handful of classmates seeking partners for a new startup. The company would provide

third-party support for a Swedish software firm. Farquhar, eager to avoid another consulting stint, was the only person to sign on.

After graduating, they huddled in their respective bedrooms, working to cultivate clients under the banner Atlassian—named for the Greek titan Atlas, who holds up the heavens. But the third-party-support model proved difficult to scale, so they test-drove a number of other projects: a mail-archiving tool, a knowledge-management product and Jira, designed to help coders track bugs.

Jira was the first to gain traction, so they scrapped the other ideas and went all in. There was only one possible business model. “Our software didn’t do very much to start with, so we couldn’t sell it for much money,” Farquhar explains. “If you aren’t going to sell it for much money, you need to sell a lot of it. To sell a lot, it needs to be sold globally. And if you sell globally, it’s got to sell itself online.”

So Atlassian put Jira on the Web and largely let customers find it on their own. Among their first clients was American Airlines, which bought a thousand dollars’ worth of software without ever speaking to the Atlassian team. “American Airlines was the first company that just sent us some money and said, ‘We want the software,’” Cannon-Brookes says. “That was a pretty big moment. Obviously, we’ve continued to see that model.”

That low-cost approach gave the company a positive cash flow from the get-go, allowing Cannon-Brookes and Farquhar to make outsize investments in research and development and to pay early hires in cash rather than forfeit equity.

Buoyed by organic growth, Atlassian took no outside capital until 2010, when Accel Partners invested \$60 million at an estimated \$400 million valuation. By the next funding round—a \$150 million infusion led by T. Rowe Price in 2014—its valuation had soared to \$3.3 billion, and its unassuming, shaggy-haired co-CEOs were billionaires. The following year, the company went public with a \$4.4 billion market cap, and their fortunes swelled even more.

The founders downplay their riches, citing job creation as a more meaningful metric. But belying their low-maintenance public personas are some decidedly ten-figure trappings. Cannon-Brookes speculates in Bitcoin and invests in sci-fi passion projects like nano-satellites. In March, he sought to alleviate South Australia’s power crisis with the help of Elon

Musk, engaging in a round of high-profile Twitter diplomacy in a bid to import a 100 megawatt-hour Tesla battery farm (a plan that, for myriad reasons, has so far gone nowhere). For his part, Farquhar recently paid \$52 million for a 154-year-old seven-bedroom New South Wales estate that features a harborside tennis court, reportedly Australia’s priciest home purchase ever.

With a lifetime of cash already stockpiled, the two are focused on making Atlassian an indispensable tool of enterprise that will catalyze many of the next generation’s most profound innovations. The Trello acquisition, then, is simply phase one of a master plan. “In ten years’ time we’ll still be very young and doing the job at 47,” Cannon-Brookes says. “We think about the world in decades.” **F**

As Forbes' September 2017 centennial approaches, we're unearthing our favorite covers.

## November 15, 1952: Blades of Glory

BY ABRAM BROWN



### NOTABLE & NEWSWORTHY Lights, Cinerama, Action!

As a young man, Lowell Thomas had helped turn T.E. Lawrence into *Lawrence of Arabia* by filming and photographing the British Army captain during World War I. Now stock in Thomas' new company, Cinerama, was soaring after it debuted a new style of wide-screen cinematography that would later be used by such directors as John Ford and Stanley Kubrick.

TWO DECADES HAD passed since the death of King C. Gillette, but his razor manufacturer still ruled its industry. Half of the razors sold in America were Gillette, sales of which topped \$100 million annually (over \$900 million today). Company president Joseph Spang had run things smoothly for the previous 14 years, displaying the same knack for advertising and promotion as the business' legendary founder. Under Spang, Gillette's marketing budget had grown almost sevenfold to \$7.5 million (about \$70 million in 2017).

Gillette's business practices had some sharp edges, though. Its blue-collar employees described a highly stratified environment despite a professed egalitarian workplace. "We're peasants!" one told *Forbes*. The company didn't think too highly of its public shareholders, either, leaving investors to "ponder skeleton statements cloaked in consolidated mystery for 'competitive reasons.'"

### EPILOGUE Sharp-Tongued

When Gillette made the cover again in February 1991, its chief, Colman Mockler, wasn't a fan of the way we illustrated him. He had fended off four takeover bids in two years but took umbrage at our depiction of the aftermath: a bloody handprint on his white shirt. He didn't have much time to dwell on it. He died the month the issue hit newsstands.



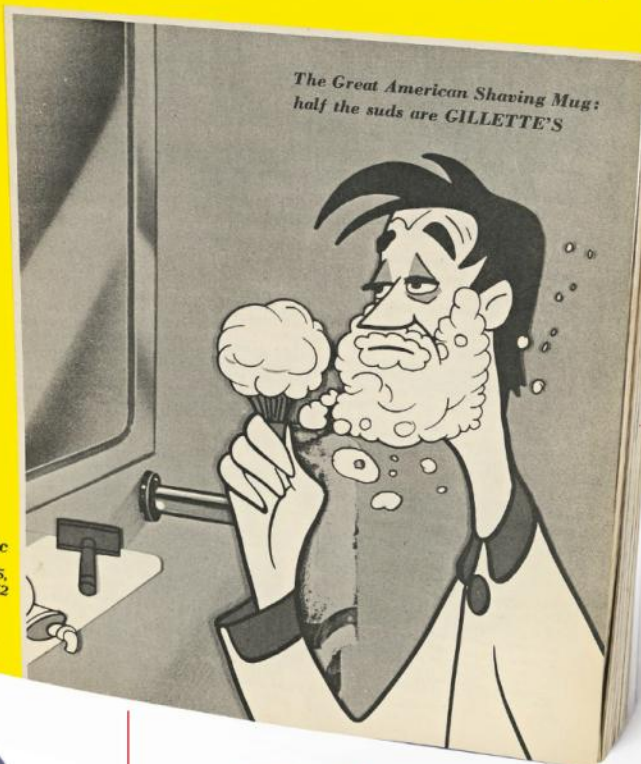
MOVIESTORE COLLECTION/ALAMY; INDEPENDENT PICTURE SERVICE/ALAMY (P&N)

# FORBES

BUSINESS AND FINANCE

The Great American Shaving Mug:  
half the suds are GILLETTE'S

35c  
NOVEMBER 15,  
1952



### SIGN OF THE TIMES The Triplicator

The Three Unit Copy Typist was a trio of typewriters linked by an electrical-pneumatic mechanism and sold by the American Automatic Typewriting Co. Whatever was typed on the so-called "master" machine was simultaneously reproduced on the other two.



### AMAZING ADS Steeling the Spotlight

U.S. Steel's many jobs added up to \$3.1 billion in sales, some \$28 billion today. It's far less busy now, doing only about a third as much revenue.

LET'S BACK  
IKE

### EDITOR'S DESK We Liked Ike

For the first time in nearly 25 years, America had a Republican president: Dwight D. Eisenhower. Malcolm Forbes partly ascribed the ex-general's victory to his being "outstandingly equipped to deal emphatically with Communism at home and abroad."



# How the West Was Won

Despite making a series of smash-hit games for its home Asian market, NCSoft struggled to translate to America—until its billionaire founder put his MIT-educated wife at the controls.

BY DAVID M. EWALT

**I**n 1998, a startup called NCSoft launched one of the most popular videogames of all time, although you've probably never heard of it. The game has earned more than \$2.6 billion in revenue, including \$330 million in 2016, 18 years after it hit the market. But you probably don't know anyone who has played it.

Two decades after it was founded, South Korea-based NCSoft is one of the biggest game companies on the planet, with a long list of hits and successful franchises, yet it remains largely unknown across the Pacific. Games like its flagship title, *Lineage*, were blockbusters in Asia but failed to catch on with Western players. Repeated attempts to expand the business into the United States never gained traction.

But Kim Taek-Jin, the company's billionaire CEO, is determined to change that. In the past two years, NCSoft has built a new game studio in California, pivoted toward a risky mobile strategy and begun developing new properties for Western audiences. Kim is so committed to translating NCSoft's success that he has even bet his family on the project: His wife, Yoon Song-yeon, an accomplished executive and neuroscientist known as *Genius Girl* in Korea, moved to California in 2014 with their kids to run the company's U.S. subsidiary.

"We've been keeping our eye on the Western market for a long time, and it's important to us," says Yoon, the CEO of NCSoft West. "We have a big presence in Asia and Korea, but that's not enough. We want a global audience."

Kim founded NCSoft in March 1997, when he was a 30-year-old engineer who had worked for Hyundai Electronics in R&D and in the division that operated Korea's first internet provider. NCSoft was initially positioned as a systems-integration company, but Kim and several key employees were enthusiastic gamers and quickly realized their networking know-how could be used to power videogames with thousands of simultaneous users. In September 1998, NCSoft launched *Lineage*, one of Korea's first massively multiplayer online role-playing games, or MMORPGs,

in which players fight and explore their way through a medieval fantasy setting. The game was a hit: Three years later, it had more than 3 million subscribers paying about \$25 a month.

Kim quickly tried to repeat that success in America. In May 2000, the company launched NCSoft Interactive, a subsidiary in Austin, Texas, and just over a year later released an English-language version of *Lineage* in North America. But Western gamers were much less enthusiastic than their Korean counterparts. The game was built for Asian consumers who often played with groups of friends, in internet cafes, on relatively underpowered computers. Americans played solo, at home, on newer PCs, so the game seemed difficult, repetitive and dated.

*Lineage* struggled in the U.S., but NCSoft didn't give up. In 2001, the company acquired *Destination Games*, also in Austin, but the studio took six years to release its first title, the MMORPG *Tabula Rasa*, which sold so poorly that NCSoft shut it down after just 15 months. In 2002, NCSoft acquired Seattle developer *ArenaNet*, and that deal went better: *ArenaNet*'s 2005 *Guild Wars* remains one of NCSoft's few hits in North America. Yet back in Korea, NCSoft prospered. Today the company has more than 3,000 employees, operates seven successful MMORPGs and had worldwide sales in 2016 of more than \$860 million. "They are a major company in Korea, where they generate most of their revenue," says David Cole, CEO of market research firm DFC Intelligence. "In the U.S. they are a one-trick pony."

If NCSoft is going to fix that problem, the responsibility will fall on NCSoft West's *Genius Girl* chief executive. Korean newspapers gave Yoon the nickname after she earned a Ph.D. in computational neuroscience from MIT in 2000, when she was 24, and then quickly climbed the ladder at McKinsey & Co. and Seoul-based wireless giant SK Telecom. In 2007, she married Kim and, a year later, joined him at NCSoft.

"I studied electrical engineering, computer science, artificial intelligence and brain sciences, without knowing that I would be working in the game industry," Yoon says. "But everything is

so related.” As NCSoft’s chief strategy officer, she pushed the company into AI (to keep customers paying and playing) and oversaw the development of Guild Wars’ successful sequel. Yoon was made CEO of NCSoft West in November 2011.

In May 2015, Yoon launched Iron Tiger Studios, a new mobile-gaming division, based in San Mateo, California. NCSoft had only dabbled in mobile games before. The company’s main products were games that were huge, complex and expensive to make, a far cry from the small and inexpensive games that dominate the mobile market.

It’s a risky strategy. Plenty of game companies in the U.S. have tried and failed to translate their products to the mobile market. But mobile is also an “untapped frontier with fewer built-in biases,” says Michael Pachter, managing director of equity research at Wedbush Securities. “I think that some of their properties will work better in the West on mobile.”

If they do, the rewards could be significant. According to market research firm Newzoo, mobile is the largest and fastest-growing segment of the \$100 billion global game market, with revenues estimated to climb 19% in 2017 to \$46.1 billion.

NCSoft built out Iron Tiger quickly. It will reach 150 employees by year’s end, and the studio’s first game (Aion: Legions of War) is expected to be released in the next few months. Meanwhile, NCSoft West is also working on building better Westernizations of its existing Korean games—not simply translating the in-game language but adjusting art to Western styles and tweaking the action for Western gamers.

“Bringing games directly from Korea to just translate and publish them taught us what works and what doesn’t,” Yoon says. “Western players pay attention to narratives and their experience within the game . . . but don’t necessarily spend a lot of time trying to understand the saga and legend behind it.” Americans also like being heroes, she says, and are more likely to play solo.

So far, the strategy is working. In January of last year, NCSoft West released a Westernized version of its martial arts game



**NCSoft West CEO Yoon Songye, an accomplished neuroscientist known as Genius Girl in Korea, wrote her Ph.D. thesis on a new method for designing virtual creatures with realistic personalities and emotions.**

Blade & Soul, which debuted in 2012 in Korea; it was an instant hit, surpassing a million players in its first month. Today the game has 4 million paying players, making it one of the biggest Korean-developed games NCSoft has launched in North America and Europe. As a result, that region had 25% sales growth for 2016, the most of any of the company’s territories. In 2017, analysts expect the company’s worldwide revenues to top 1.3 trillion Korean won—more than \$1.1 billion—for the first time in its history.

And soon North American gamers will even get to play games before NCSoft’s Asian audience has a crack at them. The company’s newest franchise, a multiplayer online battle-arena game called Master X Master, is currently under development by NCSoft’s lead studio in Seoul but will make its global debut in North America later this year.

“It’s U.S. first, developed in Korea, with all our feedback from the Western regions,” Yoon says. “And if it’s a great game, then everyone will like it, whether they’re from this market or another.” **F**



# GLOBAL 2000



## THE WORLD'S BIGGEST COMPANIES

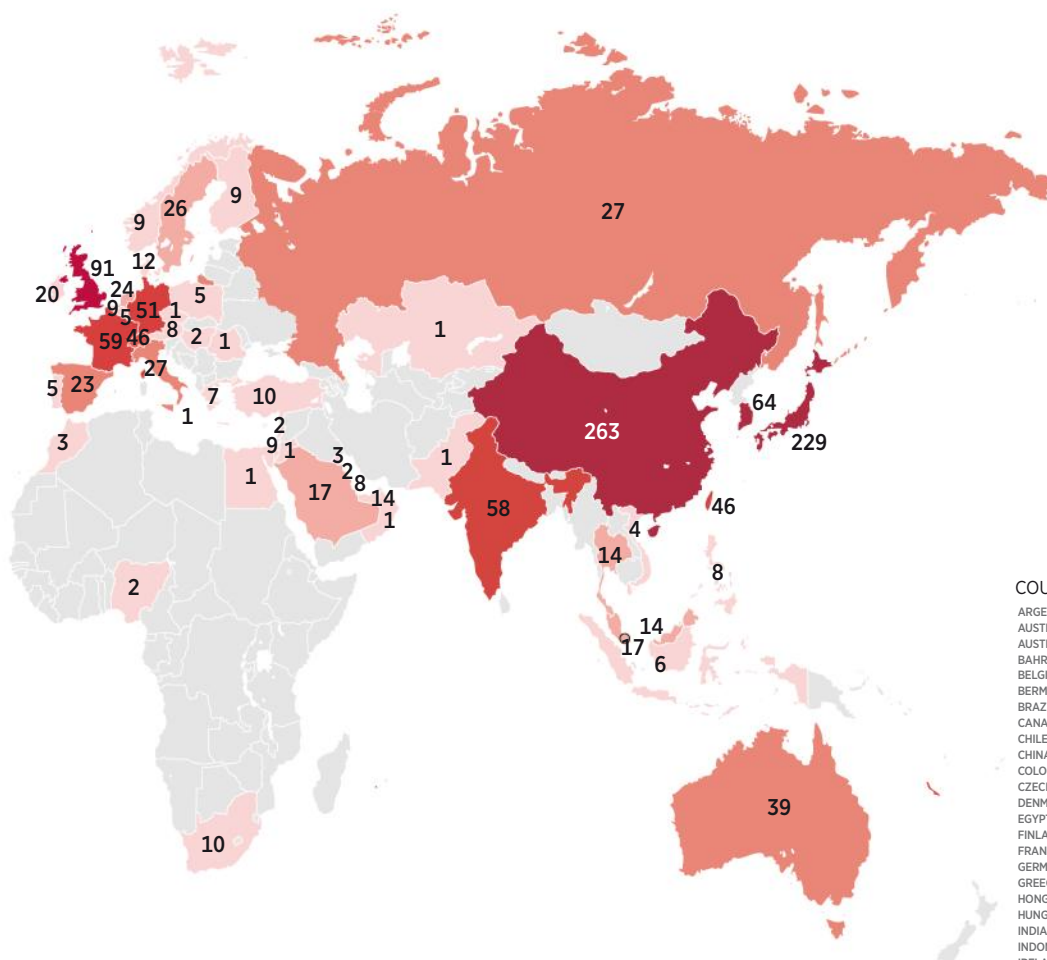
China holds on to the top of the 2017 Global 2000, our annual ranking of the world's biggest and most powerful listed companies. The Industrial & Commercial Bank of China and the China Construction Bank take the No. 1 and 2 spots for the fifth consecutive year. Twelve percent of the companies in the top 500 are from China-Hong Kong, up from just 2% on our inaugural list in 2003. Asia-Pacific leads this year's Global 2000 with 763 companies and a combined market value of \$13.2 trillion. Companies from the region make up 38% of the list compared to 23% in 2003. Global 2000 companies are ranked using four criteria: sales, profits, assets and market value. Total market value increased by 10% over last year. In comparison, global GDP grew by 3.1% in 2016.

—Andrea Murphy

### THE TOP 100

1	●	ICBC	CN	31	▲	COMCAST	US
2	●	CHINA CONSTRUCTION BANK	CN	32	●	JOHNSON & JOHNSON	US
3	▲	BERKSHIRE HATHAWAY	US	33	▲	BANCO SANTANDER	SP
4	▲	JPMORGAN CHASE	US	34	▲	BANK OF COMMUNICATIONS	CN
5	▲	WELLS FARGO	US	34	▼	NESTLÉ	SZ
6	▼	AGRICULTURAL BANK OF CHINA	CN	36	▲	UNITEDHEALTH	US
7	▲	BANK OF AMERICA	US	37	▲	NIPPON TELEGRAPH & TEL	JA
8	▼	BANK OF CHINA	CN	38	▲	ITAÚ UNIBANCO	BR
9	▼	APPLE	US	38	▲	SOFTBANK	JA
10	●	TOYOTA MOTOR	JA	40	▲	GAZPROM	RU
11	▲	AT&T	US	40	▲	GENERAL MOTORS	US
12	▲	CITIGROUP	US	42	▼	CHINA MERCHANTS BANK	CN
13	▼	EXXONMOBIL	US	43	▼	IBM	US
14	▲	GENERAL ELECTRIC	US	44	▲	ROYAL BANK OF CANADA	CA
15	▲	SAMSUNG ELECTRONICS	KO	45	▼	JAPAN POST	JA
16	▲	PING AN INSURANCE	CN	46	▼	PROCTER & GAMBLE	US
17	▼	WAL-MART STORES	US	47	▼	PFIZER	US
18	▼	VERIZON COMMUNICATIONS	US	48	▼	HSBC	UK
19	▲	MICROSOFT	US	49	▲	GOLDMAN SACHS	US
20	▲	ROYAL DUTCH SHELL	NE	50	▲	SIEMENS	GE
21	●	ALLIANZ	GE	51	▼	BMW	GE
21	▼	CHINA MOBILE	HK	52	▼	CHINA LIFE INSURANCE	CN
23	▲	BNP PARIBAS	FR	53	▲	ING	NE
24	▲	ALPHABET	US	54	▲	INTEL	US
25	▲	CHINA PETROLEUM & CHEMICAL	CN	55	●	POSTAL SAVINGS BANK OF CHINA	CN
26	▲	TOTAL	FR	56	▲	SBERBANK	RU
27	▼	AXA	FR	56	▲	TD BANK	CA
28	▼	DAIMLER	GE	58	▲	CISCO SYSTEMS	US
28	▼	VOLKSWAGEN	GE	58	●	COMMONWEALTH BANK	AU
30	▲	MITSUBISHI UFJ FINANCIAL	JA	60	▲	MORGAN STANLEY	US

ASIAN COMPANIES ARE IN RED TYPE.



## COUNTRY CODES

ARGENTINA	AR
AUSTRALIA	AU
AUSTRIA	AS
BAHRAIN	BN
BELGIUM	BE
BERMUDA	BU
BRAZIL	BR
CANADA	CA
CHILE	CH
CHINA	CN
COLOMBIA	CO
CZECH REPUBLIC	CZ
DENMARK	DE
EGYPT	EG
FINLAND	FI
FRANCE	FR
GERMANY	GE
GREECE	GR
HONG KONG	HK
HUNGARY	HU
INDIA	IN
INDONESIA	ID
IRELAND	IR
ISRAEL	IS
ITALY	IT
JAPAN	JP
JORDAN	JO
KUWAIT	KU
LEBANON	LE
LUXEMBOURG	LU
MALAYSIA	MA
MEXICO	MX
MOROCCO	MO
NETHERLANDS	NE
NIGERIA	NI
NORWAY	NO
OMAN	OM
PAKISTAN	PK
PERU	PE
PHILIPPINES	PH
POLAND	PL
PORTUGAL	PO
QATAR	QA
RUSSIA	RU
SAUDI ARABIA	SU
SINGAPORE	SI
SOUTH AFRICA	SA
SOUTH KOREA	KO
SPAIN	SP
SWEDEN	SW
SWITZERLAND	SZ
TAIWAN	TA
THAILAND	TH
TURKEY	TU
UNITED ARAB EMIRATES	AE
UNITED KINGDOM	UK
UNITED STATES	US
VENEZUELA	VZ
VIETNAM	VE

61 ▼	NOVARTIS	SZ
62 ▲	BANCO BRADESCO	BR
63 ▼	INDUSTRIAL BANK	CN
64 ▼	FORD MOTOR	US
64 ▼	SHANGHAI PUDONG DEVELOPMENT	CN
66 ▼	CVS HEALTH	US
67 ▲	WALT DISNEY	US
68 ▼	PRUDENTIAL	UK
69 ▲	PRUDENTIAL FINANCIAL	US
70 ▲	ORACLE	US
71 ▲	CHINA STATE CONST ENGINEERING	CN
72 ▼	CITIC PACIFIC	HK
73 ▲	BOEING	US
74 ●	HONDA MOTOR	JP
75 ▼	CHINA MINSHENG BANKING	CN
76 ▼	WESTPAC BANKING	AU
77 ▼	DEUTSCHE TELEKOM	GE
78 ▲	CHINA CITIC BANK	CN
79 ▲	ROCHE	SZ
80 ▼	UBS	SZ
81 ▲	BANK OF NOVA SCOTIA	CA

82 ▼	ROSNEFT	RU
83 ▲	AMAZON.COM	US
84 ▲	PEPSICO	US
84 ▼	SUMITOMO MITSUI FINANCIAL	JP
86 ▼	COCA-COLA	US
87 ▲	UNITED TECHNOLOGIES	US
88 ▲	SANOFI	FR
89 ▲	BAYER	GE
90 ▲	MIZUHO FINANCIAL	JP
91 ▲	ZURICH INSURANCE	SZ
92 ▼	ANZ	AU
93 ▲	BASF	US
94 ▲	WALGREENS BOOTS ALLIANCE	US
95 ▼	NISSAN MOTOR	JP
96 ▲	US BANCORP	US
97 ▼	AMERICAN EXPRESS	US
98 ▲	HON HAI PRECISION	TA
99 ▲	ENEL	IT
100 ▼	MERCK & CO	US
100 ▼	NATIONAL AUSTRALIA BANK	AU

101 ▼	ABB (CONGLOMERATE)	SZ
102 ▼	ABBOTT LABORATORIES	US
103 ▼	ABBVIE	US
104 ▼	ABERTIS	SP
105 ▼	ABOITIZ EQUITY VENTURES	PH
106 ▼	ABU DHABI COMMERCIAL BANK	AE
107 ▼	ABU DHABI ISLAMIC BANK	AE
108 ▼	ACCENTURE	IR
109 ▼	ACCIONA	SP
110 ▼	ACCOR	FR
111 ▼	ACTELION	SZ
112 ▼	ACTIVISION BLIZZARD	US
113 ▼	ADANI PORTS & SP ECON ZONE	IN
114 ▼	ADECCO	SZ
115 ▼	ADIDAS	GE
116 ▼	ADIANT	IR
117 ▼	ADOBE SYSTEMS	US
118 ▼	ADVANCE AUTO PARTS	US
119 ▼	ADVANCED INFO SERVICE	TH
120 ▼	ADVANCED MICRO DEVICES	US
121 ▼	ADVANCED SEMICONDUCTOR	TA
122 ▼	AECOM TECHNOLOGY	US
123 ▼	AEGON	NE
124 ▼	AENA	SP
125 ▼	AEON	JP
126 ▼	AERCAP	IR
127 ▼	AEROFLOT-RUSSIAN AIRLINES	RU
128 ▼	AEROPORTS DE PARIS	FR
129 ▼	AES (UTILITIES)	US
130 ▼	AETNA	US
131 ▼	AFFILIATED MANAGERS	US
132 ▼	AFLAC	US
133 ▼	AGEAS (INSURANCE)	BE
134 ▼	AGILE PROPERTY	CN
135 ▼	AGILENT TECHNOLOGIES	US
136 ▼	AGL ENERGY	AU
137 ▼	AGNC INVESTMENT	US
138 ▼	AGRICULTURAL BANK OF CHINA	CN
139 ▼	AGRIUM	CA
140 ▼	AHLI UNITED BANK	BN
141 ▼	AIA (INSURANCE)	HK
142 ▼	AIR CANADA	CA
143 ▼	AIR FRANCE-KLM	FR
144 ▼	AIR LIQUIDE	FR
145 ▼	AIR PRODUCTS & CHEMICALS	US
146 ▼	AIRPORTS OF THAILAND	TH
147 ▼	AISIN SEIKI (CONSUMER DUR)	JP
148 ▼	AJINOMOTO	JP
149 ▼	AKAMAI TECHNOLOGIES	US
150 ▼	AKBANK	TU
151 ▼	AKZO NOBEL	NE
152 ▼	AL RAJHI BANK	SU
153 ▼	ALASKA AIR	US
154 ▼	ALAWWAL BANK	SU
155 ▼	ALBEMARLE	US
156 ▼	ALCOA	US
157 ▼	ALDAR PROPERTIES	AE
158 ▼	ALEXION PHARMACEUTICALS	US
159 ▼	ALFA (CONGLOMERATE)	MX
160 ▼	ALFREDA	JP
161 ▼	ALIBABA	CN
162 ▼	ALINMA BANK	SU
163 ▼	ALL NIPPON AIRWAYS	JP
164 ▼	ALLAHABAD BANK	IN
165 ▼	ALLEGHANY	US
166 ▼	ALLERGAN	IR
167 ▼	ALLIANCE DATA SYSTEMS	US
168 ▼	ALLIANT ENERGY	US
169 ▼	ALLIANZ	GE
170 ▼	ALLIED IRISH BANKS	IR
171 ▼	ALLSTATE	US
172 ▼	ALLY FINANCIAL	US
173 ▼	ALMARAI	SU
174 ▼	ALPHA BANK	GR
175 ▼	ALPHABET	US
176 ▼	ALROSA	RU
177 ▼	ALSTOM	FR
178 ▼	ALTICE (TELECOM)	NE
179 ▼	ALTRIA	US
180 ▼	ALUMINUM CORP OF CHINA	CN
181 ▼	AMADEUS IT	SP
182 ▼	AMAZON.COM	US
183 ▼	AMBAK	MA
184 ▼	AMCOR (MATERIALS)	AU
185 ▼	AMDCOS	US
186 ▼	AMEREN	US
187 ▼	AMERICA MÓVIL	MX
188 ▼	AMERICAN AIRLINES	US
189 ▼	AMERICAN ELECTRIC	US
190 ▼	AMERICAN EQUITY INVESTMENT	US
191 ▼	AMERICAN EXPRESS	US
192 ▼	AMERICAN FINANCIAL	US
193 ▼	AMERICAN INTL	US
194 ▼	AMERICAN TOWER	US
195 ▼	AMERICAN WATER WORKS	US
196 ▼	AMERIPRISE FINANCIAL	US
197 ▼	AMERISOURCEBERGEN	US
198 ▼	AMETEK (CONGLOMERATE)	US
199 ▼	AMGEN	US
200 ▼	AMOREPACIFIC	KO
201 ▼	AMP (DIVERSIFIED FINANCIAL)	AU
202 ▼	AMPHENOL	US
203 ▼	AMTRUST FINANCIAL SERVICES	US
204 ▼	ANADARKO PETROLEUM	US
205 ▼	ANALOG DEVICES	US
206 ▼	ANDHRA BANK	IN
207 ▼	ANGANG STEEL	CN
208 ▼	ANGLO AMERICAN	UK
209 ▼	ANHEUSER-BUSCH INBEV	BE
210 ▼	ANHUI CONCH CEMENT	CN

## METHODOLOGY

THE FORBES GLOBAL 2000 IS A LIST OF THE WORLD'S LARGEST PUBLIC COMPANIES AS MEASURED BY REVENUES, PROFITS, ASSETS AND MARKET VALUE AS OF APRIL 7, USING DATA FROM FACTSET RESEARCH SYSTEMS. WE WEIGHT THE FOUR METRICS EQUALLY TO COME UP WITH A COMPOSITE SCORE. NOT INCLUDED ARE EMPLOYEE- OR COOPERATIVE-OWNED ENTITIES SUCH AS HUAWEI OF CHINA AND FONTERA OF NEW ZEALAND. COMPANIES STRUCTURED AS LIMITED PARTNERSHIPS, SUCH AS SOME LARGE PRIVATE EQUITY FIRMS, ARE EXCLUDED FOR ACCOUNTING INCONSISTENCIES. LATER ACTIVITY NOT REFLECTED.



# 'WE MUST TRANSFORM'

Midea makes more refrigerators, air conditioners and other appliances than any other company. Now, with the advantage of its low-cost Chinese labor disappearing, it's entered the robotics business.

BY MICHAEL SCHUMAN

**T**he chief executive of the world's largest appliance company had arrived from China and stood in front of a tough crowd in Augsburg, Germany. Some 3,000 employees of robot-maker Kuka had gathered to meet their new boss. Paul Fang runs Midea Group, and a few days earlier he had finalized its \$3.9 billion acquisition of the proud German company. The deal had sparked controversy from the shop floor all the way up to the highest ranks of the European Union. Would he shutter the German factories, lay off all its workers and walk off with Kuka's homegrown technology? Was it wise for Germany to sell a company with such advanced technology to China in the first place?

Fang's task in that January town hall meeting was to soothe these fears. With thousands of skeptical eyes boring into him, he tried to sell the acquisition as a "win-win" for both companies. "We will work together to develop the market, help Kuka to grow," he says he told the audience in a short address. "What's wrong with that?"

Back in his headquarters in Foshan in southern China, a more relaxed Fang was still not certain he convinced the doubters. "When I was standing on the stage, I understood perfectly well that the majority of these people may not be willing to accept the current situation," he told *Forbes Asia*. "I tried to think from their perspective, how they feel. It's not something one meeting can solve."

But solve it Fang must—not just for the future of Midea, but also

VIRGILE SIMON BERTRAND FOR FORBES

**CEO Paul Fang:**  
"Globalization cannot  
be stopped by any  
individual or any country."



## GLOBAL 2000

ANNALY CAPITAL MGMT	US	741	▲
ANTARCHILE	CH	1140	▼
ANTHEM	US	155	▼
ANTOFAGASTA	UK	1813	●
ANZ (BANKING)	AU	92	▼
AONCH	UK	444	▼
AOZORA BANK	JA	1476	▲
APACHE	US	1133	▼
APPLE	US	9	▼
APPLIED MATERIALS	US	499	▲
ARAB BANK	JO	1307	▼
ARAB BANKING	BN	1948	▲
ARAB NATIONAL BANK	SU	1200	▼
ARAMARK	US	1236	▲
ARCA CONTINENTAL	MX	1369	▲
ARCELORMITTAL	LU	216	▲
ARCH CAPITAL	BU	970	▲
ARCHER DANIELS MIDLAND	US	291	▼
ARCONIC	US	1046	●
ARES CAPITAL CORP	US	1919	▲
AREVA	FR	1892	▼
ARKEMA	FR	1345	▲
AROUNDTOWN PROPERTY	GE	1919	▲
ARROW ELECTRONICS	US	1025	▼
ARTHUR J. GALLAGHER	US	1362	▲
ASAHI GLASS	JA	989	▲
ASAHI	JA	635	▲
ASAHI KASEI	JA	602	▲
ASHTREAD	UK	1477	▲
ASIAN PAINTS	IN	1783	●
ASML (SEMICONDUCTORS)	NE	531	▲
ASR NEDERLAND (INSURANCE)	NE	926	●
ASSA ABLOY	SW	860	▼
ASSOCIATED BANC-CORP	US	1963	▲
ASSOCIATED BRITISH FOODS	UK	555	▼
ASSURANT	US	1104	▲
ASSURED GUARANTY	BU	1553	▼
ASTELLAS PHARMA	JA	528	▲
ASTRAZENECA	UK	176	▼
ASUSTEK COMPUTER	TA	1074	▲
AT&T	US	11	▲
ATHENE	BU	846	●
ATLANTIA	IT	587	▲
ATLAS COPCO	SW	570	▼
ATMOS ENERGY	US	1906	●
ATOS	FR	822	▲
ATTIJARIWAFABANK	MO	1182	▼
AU OPTRONICS	TA	1682	▼
AURUBIS	GE	1995	▼
AUTODESK	US	1809	▲
AUTOLIV	SW	1174	▼
AUTOMATIC DATA PROCESSING	US	334	▲
AUTONATION	US	1288	▼
AUTOZONE	US	772	▼
AVALONBAY COMMUNITIES	US	893	▲
AVERY DENNISON	US	1845	●
AVIC CAPITA	CN	1459	▼
AVIS BUDGET	US	1592	▼
AVIVA	UK	208	▼
AVNET	US	1216	▼
AXA	FR	27	▼
AXIATA	MA	1510	▼
AXIS BANK	IN	463	▲
AXIS CAPITAL	BU	1626	▼
AYALA CORPORATION	PH	1176	▲
BABCOCK INTL	UK	1897	▼
BAE SYSTEMS	UK	365	▼
BAIC MOTOR	CN	681	▲
BAIDU	CN	390	▼
BAIYIN NONFERROUS	CN	1399	●
BAJAJ AUTO	IN	1435	▲
BAKER HUGHES	US	952	▼
BALL	US	1152	▲
BÂLOISE	SZ	855	▼
BANCA IFIS	IT	1952	●
BANCA MEDIOLANUM	IT	1409	▼
BANCA MPS	IT	1274	▲
BANCA POPOLARE DI SONDRIO	IT	1811	▼
BANCO BPI	PO	1536	▲
BANCO BPM	IT	1554	●
BANCO BRADESCO	BR	62	▲
BANCO BTG PACTUAL	BU	993	●
BANCO COMERCIAL PORTUGUES	PO	1623	▼
BANCO DAVIVIENDA	CO	1374	▲
BANCO DE CHILE	CH	1742	▲
BANCO DE SABADELL	SP	613	▼
BANCO DE VENEZUELA	VZ	1225	▼
BANCO DO BRASIL	BR	132	▲
BANCO POPULAR ESPANOL	SP	1467	▼
BANCO SANTANDER	SP	33	▲
BANCOLOMBIA	CO	724	▲
BANDAI NAMCO	JA	1802	●
BANGKOK BANK	TH	804	▼
BANK AUDI	LE	1391	▲
BANK CENTRAL ASIA	ID	564	▲
BANK HAPAOALIM	IS	921	▼
BANK LEUMI	IS	1028	▼
BANK MANDIRI	ID	494	▼
BANK MUSCAT	OM	1507	▼
BANK NEGARA INDONESIA	ID	924	▲
BANK OF AMERICA	US	7	▲
BANK OF BARODA	IN	1145	▼
BANK OF BEIJING	CN	257	▼
BANK OF CHINA	CN	8	▼
BANK OF CHONGQING	CN	1276	▼
BANK OF COMMUNICATIONS	CN	34	▲
BANK OF EAST ASIA	HK	1004	▲
BANK OF GREECE	GR	1727	▼
BANK OF GUIYANG	CN	1261	●
BANK OF HANGZHOU	CN	982	●
BANK OF INDIA	IN	1250	▼
BANK OF IRELAND	IR	853	▼

▲ UP ▼ DOWN

● UNCHANGED ● NEW

ASIAN COMPANIES ARE IN RED TYPE



BANK OF IWATE	JA	1984	▲
BANK OF JIANGSU	CN	366	▲
BANK OF JINZHOU	CN	873	▲
BANK OF KYOTO	JA	1626	▲
BANK OF MONTREAL	CA	133	▲
BANK OF NAGOYA	JA	1916	▲
BANK OF NANJING	CN	549	▲
BANK OF NEW YORK MELLON	US	163	▼
BANK OF NINGBO	CN	633	▲
BANK OF NOVA SCOTIA	CA	81	▲
BANK OF QINGDAO	CN	1617	▲
BANK OF QUEENSLAND	AU	1815	▲
BANK OF SHANGHAI	CN	309	▲
BANK OF TIANJIN	CN	1128	▼
BANK OF ZHENGZHOU	CN	1237	▲
BANK OTKRITIE	RU	1563	▼
BANK RAKYAT INDONESIA	ID	386	▲
BANKIA	SP	719	▼
BANKINTER	SP	1078	▲
BANKUNITED	US	1988	▲
BANQUE CENTRALE POPULAIRE	MO	1807	▲
BANQUE SAUDI FRANSI	SU	944	▼
BAOSHAN IRON & STEEL	CN	430	▲
BARCLAYS	UK	122	▲
BARRATT DEVELOPMENTS	UK	1424	▼
BARRICK GOLD	CA	669	▲
BARRY CALLEBAUT	SZ	1988	▲
BASF	GE	93	▲
BASLER KANTONALBANK	SZ	1827	▼
BAXTER INTERNATIONAL	US	520	●
BAYER	GE	89	▲
BAYWA	GE	1707	▲
BB&T (BANKING)	US	247	▲
BBMG (CONSTRUCTION)	CN	1035	▲
BBVA BANCO CONTINENTAL	PE	1604	▼
BBVA-BANCO BILBAO VIZCAYA	SP	105	▲
BCE (TELECOM)	CA	296	▲
BCI-BANCO CREDITO	CH	1155	▲
BCV (BANKING)	SZ	1575	▼
BDO UNIBANK	PH	1018	▲
BECTON DICKINSON	US	436	▲
BED BATH & BEYOND	US	1274	▼
BEIERSDORF	GE	927	▲
BEIJING CAPITAL DEV	CN	1868	▲
BEIJING ENTERPRISES	HK	1065	▼
BEIJING SHOUGANG	CN	1659	▲
BEKB-BCBE (BANKING)	SZ	1996	▼
BELLE INTERNATIONAL	HK	1979	▼
BENDIGO & ADELAIDE BANK	AU	1570	▼
BERKSHIRE HATHAWAY	US	3	▲
BEST BUY	US	569	▲
BHARAT PETROLEUM	IN	583	▲
BHARTI AIRTEL	IN	513	▼
BHP BILLITON	AU	124	▲
BID CORP (DIVERSIFIED FIN)	SA	1829	▲
BIOGEN	US	372	▲
BIOMARIN PHARMACEUTICAL	US	1930	▼
BLACKROCK	US	205	▲
BLOM BANK	LE	1495	▲
BLUESCOPE STEEL	AU	1835	▲
BM&F BOVESPA	BR	1597	▼
BMCE BANK	MO	1944	▲
BMW	GE	51	▼
BNK FINANCIAL	KO	1316	▼
BNP PARIBAS	FR	23	▲
BOE TECHNOLOGY	CN	961	▼
BOEING	US	73	▲
BOHAI FINANCIAL INV	CN	1724	▲
BOK FINANCIAL	US	1901	▼
BOLIDEN	SW	1610	▲
BOMBARDIER	CA	1258	▼
BORGWARNER	US	1651	▼
BOSTON PROPERTIES	US	1064	▲
BOSTON SCIENTIFIC	US	848	▲
BOUYGUES	FR	454	▲
BP	UK	359	▲
BPER BANCA	IT	1642	▲
BRAMBLES	AU	1418	▼
BRASKEM	BR	1233	▼
BRENNTAG	GE	1257	▼
BRF (FOOD, DRINK, TOBACCO)	BR	1325	▼
BRIDGESTONE	JA	279	▼
BRILLIANCE CHINA AUTO	HK	1690	▲
BRISTOL-MYERS SQUIBB	US	234	▲
BRITISH AMERICAN TOBACCO	UK	172	▲
BRITISH LAND	UK	1422	▼
BRITISH SKY BROADCASTING	UK	531	▲
BROADCOM	SI	592	▲
BROOKFIELD ASSET MGMT	CA	202	▲
BROTHER INDUSTRIES	JA	1977	▲
BROWN-FORMAN	US	1158	▲
BT (TELECOM)	UK	203	▲
BUNGE	US	638	▲
BUNZL	UK	1300	▼
BURBERRY	UK	1881	▼
BUREAU VERITAS	FR	1686	▲
BYD (CONSUMER DURABLES)	CN	599	▲
CH ROBINSON	US	1060	▼
CA (IT SOFTWARE & SVCS)	US	1227	▼
CAIXABANK	SP	321	▲
CALATLANTIC	US	1750	▲
CALPINE	US	1706	▼
CALTEX AUSTRALIA	AU	1390	▼
CAMPBELL SOUP	US	1079	▼
CANADIAN IMPERIAL BANK	CA	193	▲
CANADIAN NATIONAL RAILWAY	CA	373	▼
CANADIAN NAT RESOURCES	CA	783	▼
CANADIAN PACIFIC RAILWAY	CA	875	▼
CANADIAN TIRE	CA	1146	▼
CANADIAN UTILITIES	CA	1584	▲
CANARA BANK	IN	1230	▼
CANON	JA	266	▼

▲ UP ▼ DOWN

● UNCHANGED ● NEW

ASIAN COMPANIES ARE IN RED TYPE

## MODERN CONVENIENCES

### MOST CHINESE HAVE REFRIGERATORS AND AIR CONDITIONERS, BUT DISHWASHERS AND TUMBLE DRYERS HAVE BEEN SLOW TO CATCH ON.

	CONSUMER APPLIANCE PENETRATION IN CHINA	
	2011	2016
REFRIGERATOR/FREEZERS	61.1%	88.3%
SPLIT AIR CONDITIONERS <sup>1</sup>	49.9	77.0
AUTOMATIC WASHING MACHINES	32.2	49.2
MICROWAVE OVENS	20.6	23.4
DISHWASHERS	0.1	0.3
TUMBLE DRYERS	0.1	0.2
OVENS	0.1	0.1

<sup>1</sup>AN AIR CONDITIONER IN WHICH THE PART THAT BLOWS THE AIR IS IN THE ROOM AND THE CONDENSER IS SEPARATE.

SOURCE: EUROMONITOR INTERNATIONAL

for the entire Chinese economy. China's miraculous growth over the past 30 years has been propelled to a great degree by low costs, which attracted all those factories that churn out the clothes, toys and electronics that fill the world's store shelves. But as the economy gains in wealth, wages have increased dramatically, eating away at industrial competitiveness. Meanwhile, the local market, once exploding with growth and opportunity, is maturing and slowing down. That leaves Chinese companies with only one way forward—become more innovative, produce more-advanced products and compete on a global scale.

Fang stands on the front lines of this great transformation. With \$23.9 billion in sales and \$2.2 billion in net profits last year, Midea is already one of China's most prominent companies, ranking No. 335 on the *Forbes* Global 2000. Last year, Midea sold more consumer appliances—from air conditioners to rice cookers—than any other company. Its global market share, at 5.5% last year, is up from 3.9% four years earlier, estimates research firm Euromonitor International. In fact, you may have a Midea product in your home and not even know it. The Chinese firm manufactures microwave ovens and other products for famous brands, and it has a batch of joint ventures making air conditioners with Carrier.

But Fang is fully aware that this is not nearly enough. He is striving to upgrade Midea's product lines, buff its brand image and expand internationally. Though he's scored some successes—the Kuka deal, for one—Midea's experience also illuminates the challenges that await Chinese companies in their efforts to become global competitors for top U.S. and European firms. “The direction is very, very clear. We

must transform from a labor-intensive to an innovation-driven company,” he says. “We want to be a global company. There is still a long way to go.”

Midea has already come quite a long way. The company was founded in Foshan in 1968 when He Xiangjian collected 5,000 yuan—the equivalent today of \$725—and opened a small factory making plastic and glass bottles with 23 villagers. Later, after organizing itself into a commune, the company shifted into other products: auto parts, engines, fans and, in 1984, air conditioners. He, now 74, retired in 2012 and passed the reins to Fang. The founder still owns 34% of the publicly traded company, and *FORBES ASIA* estimates his net worth at \$13.4 billion.

Fang, 50, hails from even humbler origins. Born in a ten-family village in a mountainous region of impoverished Anhui Province in central China, he spent his childhood fetching water from wells and chopping firewood. He was saved by his smarts, performing well enough on the country's tough college entrance exam to gain admission to East China Normal University in Shanghai, where he studied history. After graduating, he landed a job at a state-owned factory that made cars and trucks but found the atmosphere stifling. Inspired by a 1992 tour of the country's south by then-paramount leader Deng Xiaoping, orchestrated to energize a new wave of economic reform, Fang quit his job and moved to that region in search of opportunities.

He discovered one at Midea, which hired him to edit the company newsletter. Fang describes the Midea he joined as a “small village enterprise,” but he found the environment much more exciting. “The sense of entrepreneurship was really different in a private enterprise than a state-owned factory,” he recalls. “There was a lot to do, and I didn't have time to do everything I wanted.”

Midea didn't stay small for long. As China's economy surged, Midea went along for the ride. Rising household incomes gave the average Chinese family the cash to purchase refrigerators, washing machines and other modern conveniences. And with a population of more than 1.3 billion, there was no shortage of kitchens and living rooms in need. Midea's sales are roughly 400 times larger today than when Fang joined the company 25 years ago.

But as Chinese families grow richer, the market becomes tougher. Appliances once considered luxuries are now necessities, so roughly nine out of ten families have a refrigerator-freezer, for instance, while more than three-fourths own air conditioners. That means growth is slowing. Euromonitor forecasts that the volume of appliances sold in China will increase by 3.6% a year to 2021, much less than the 6.5% annual clip

from 2011 to 2016. Consumers are also becoming more sophisticated and demanding. Since many are now replacing old appliances, they are looking for upgrades in performance and quality. Globally, too, the industry is changing, with growing demand for new types of products, such as Wi-Fi-connected appliances. “The market is evolving very quickly,” says Dinesh Kithany, principal analyst for the home-appliance industry at London-based consulting firm IHS Markit. “Companies need to differentiate their products, and that will come only through innovation.”

Fang has been handed the task of navigating Midea through these new realities. Executives describe him as a hands-off type, who leaves the nitty-gritty details to his top lieutenants while focusing on big-picture strategy. Zachary Hu, president of Midea’s corporate research center, says Fang has visited his office only twice in the past couple of years, trusting him with the day-to-day management of his department. “Instead of listening to a bunch of specialists, he will try to figure the business out by himself and set the direction of the company,” says Hu. “He is forward-thinking. Even in the good times, we started thinking about the risks facing us down the road and what changes we should make.”

Hu is a key part of those changes. Lured to Midea from Samsung Electronics five years ago, he is now spearheading the company’s efforts to create a more effective research-and-development program. Since 2012, Midea has more than doubled its R&D staff to 10,000 (out of 120,000 employees overall). In April, Midea opened a research center in San Jose, California, and plans to spend \$250 million on it over the next five years.

But Hu cautions that more resources alone don’t immediately translate into innovation. Like many manufacturing firms, he explains, Midea was fixated on improving efficiency and notching quick returns, a management focus ill-suited to fostering creativity. “If you try to drive product leadership, you have to invest for the long term,” he says. “The company culture was not designed that way. They built up [R&D] teams, but they were not doing much. The company had to have a mind-set change to deal with the risk of it. That was a huge challenge for us internally.”

Hu started slowly. Rather than assigning his new staff to ambitious endeavors, he first told them to find and fix problems with Midea’s product line. His engineers, for instance, made washing machines quieter and

more durable, with better capacity for their size and an easier-to-use detergent dispenser. Such enhanced designs, added to Midea’s especially wide-ranging product offerings and some strong online distribution, has helped boost the company’s market share in China in major household appliances—such as washing machines and refrigerators—to 13% in 2016 from 8.7% four years earlier, according to Euromonitor data.

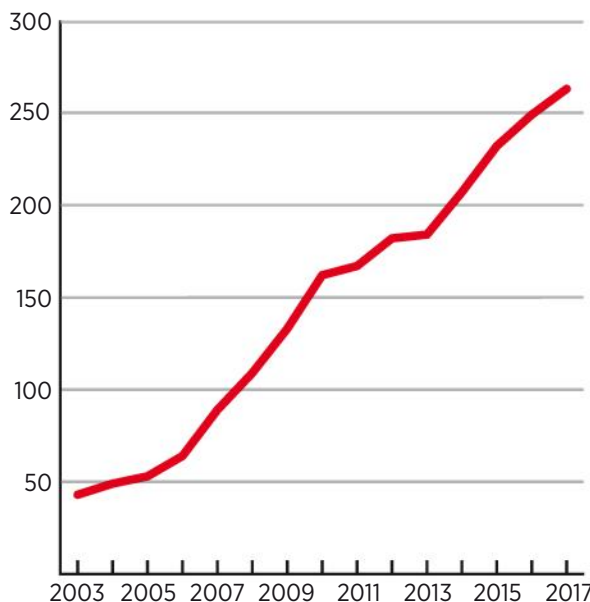
Then Hu pressed his teams to create new products. The results included a light, versatile fan and a combination rice cooker and microwave oven. Still, Hu believes that Midea has a long way to go before it invents something completely original. “To try to have a revolutionary product—we’re not there yet. We are still at the beginning of the journey to our final goal.”

That’s true with Midea’s international expansion as well. The company’s global gains have been helped by an expanding presence in key, high-growth emerging markets, such as Vietnam and Indonesia. The company is now investing \$160 million in India; a new factory is scheduled to open there at the end of next year. Andy Gu, Midea’s vice president, says the goal is to capture young entrants to the middle class. “They have no preconception of brands, and they need a quality product,” he says. “That is really the message.”

Midea has also grown through acquisitions. Last year, Fang snapped up majority stakes in the appliance operation of Japan’s Toshiba for \$500 million and Italy’s air-conditioner maker Clivet for an undisclosed sum,

## RAPID RISE ON THE GLOBAL 2000

THE NUMBER OF CHINESE COMPANIES ON OUR LIST IS MORE THAN FIVE TIMES WHAT IT WAS IN 2003.



CAPGEMINI	FR	639	▼
CAPITAL ONE FINANCIAL	US	128	▼
CAPITALAND	SI	948	▼
CARDINAL HEALTH	US	281	▼
CARLSBERG	DE	787	▲
CARMAX	US	790	▼
CARNIVAL	US	270	▲
CARREFOUR	FR	345	▼
CATCHER TECHNOLOGY	TA	1663	▲
CATERPILLAR	US	503	▼
CATHAY FINANCIAL	TA	238	▲
CATHAY PACIFIC AIRWAYS	HK	1341	▼
CATTOLICA ASSICURAZIONI	IT	1692	▼
CBRE (CONSTRUCTION)	US	974	▼
CBS	US	459	▼
CCR (TRANSPORTATION)	BR	1572	●
CDW (IT SOFTWARE & SVCS)	US	1155	▲
CELANESE	US	1121	▲
CELGENE	US	346	▲
CEMEX	MX	620	▲
CENOSUD	CH	894	▲
CENOVUS ENERGY	CA	1132	▼
CENTENE (DRUGS & BIOTECH)	US	651	▲
CENTERPOINT ENERGY	US	957	▲
CENTRAL BANK OF INDIA	IN	1664	▼
CENTRAL JAPAN RAILWAY	JA	262	▲
CENTRAL PUERTO	AR	1767	●
CENTRICA	UK	371	▲
CENTURYLINK	US	548	▼
CERNER	US	1163	▲
CZ (UTILITIES)	CZ	900	▼
CGI (IT SOFTWARE & SERVICES)	CA	997	▼
CGN POWER	CN	718	▲
CHANG HWA BANK	TA	1416	▼
CHANGJIANG SECURITIES	CN	1709	▼
CHARLES SCHWAB	US	303	▲
CHAROEN POKPHAND FOODS	TH	1149	▲
CHARTER COMMUNICATIONS	US	107	▲
CHECK POINT SOFTWARE	IS	1251	▲
CHENIERE ENERGY	US	1466	▲
CHESAPEAKE ENERGY	US	1822	▼
CHEUNG KONG PROPERTY	HK	362	▲
CHEVRON	US	359	▼
CHIBA BANK	JP	1209	▲
CHICAGO BRIDGE & IRON	NE	1977	▼
CHIMERA INVESTMENT	US	1652	●
CHINA AGRI-INDUSTRIES	HK	1925	▲
CHINA AVIATION OIL	SI	1909	●
CHINA CINDA ASSET MGMT	CN	327	▲
CHINA CITIC BANK	CN	78	▲
CHINA COAL ENERGY	CN	980	▲
CHINA COMM CONSTRUCTION	CN	135	▲
CHINA COMMUNICATIONS SVCS	CN	1518	▲
CHINA CONSTRUCTION BANK	CN	2	●
CHINA EASTERN AIRLINES	CN	619	▼
CHINA ENERGY ENGINEERING	CN	750	▼
CHINA EVERBRIGHT BANK	CN	149	▼
CHINA EVERGRANDE	CN	347	▲
CHINA FORTUNE LAND DEV	CN	625	▲
CHINA GALAXY SECURITIES	CN	868	▼
CHINA GEZHOUBA	CN	854	▲
CHINA GRAND AUTO SVCS	CN	1011	▲
CHINA GREAT WALL COMPUTER	CN	1970	▼
CHINA HONGQIAO	CN	1101	▲
CHINA HUARONG ASSET MGMT	CN	294	▲
CHINA INTERNATIONAL MARINE	CN	1594	▼
CHINA JINMAO	HK	1643	▼
CHINA LIFE INSURANCE	CN	52	▼
CHINA LIFE INS (TAIWAN)	TA	1270	▲
CHINA LONGYUAN POWER	CN	1493	▼
CHINA MENGNIU DAIRY	HK	1769	▼
CHINA MERCHANTS BANK	CN	42	▼
CHINA MERCHANTS	HK	1432	▼
CHINA MERCHANTS SECURITIES	CN	872	▼
CHINA MERCH SHEKOU IND ZONECN	CN	504	▲
CHINA MINSHENG BANKING	CN	75	▼
CHINA MOBILE	HK	21	▼
CHINA MOLYBDENUM	CN	1851	●
CHINA NATIONAL BUILDING	CN	1094	▼
CHINA NATIONAL CHEMICAL	CN	1448	▼
CHINA NATIONAL MATERIALS	CN	1755	▼
CHINA NAT NUCLEAR POWER	CN	845	▲
CHINA PACIFIC INSURANCE	CN	174	▼
CHINA PETROLEUM & CHEMICAL	CN	25	▲
CHINA RAILWAY CONSTRUCTION	CN	167	▲
CHINA RAILWAY	CN	165	▼
CHINA RAILWAY SIGNAL & COMM	CN	1838	●
CHINA REINSURANCE	CN	670	▼
CHINA RESOURCES GAS	HK	1874	●
CHINA RESOURCES LAND	HK	329	▲
CHINA RESOURCES PHARMA	HK	1029	●
CHINA RESOURCES POWER	HK	775	▼
CHINA SHENHUA ENERGY	CN	161	▲
CHINA SHIPBUILDING INDUSTRY	CN	939	▼
CHINA SOUTHERN AIRLINES	CN	628	▲
CHINA ST CONSTR ENGINEERING	CN	71	▲
CHINA STEEL	TA	852	▲
CHINA TAIPING INSURANCE	HK	615	▼
CHINA TELECOM	CN	142	▼
CHINA UNICOM	HK	524	▼
CHINA VANKE	CN	167	▲
CHINA YANGTZE POWER	CN	411	▲
CHINA ZHESHANG BANK	CN	534	▲
CHINATRUST FINANCIAL	TA	508	▲
CHINESE ESTATES	HK	1912	▼
CHONGQING CHANGAN AUTO	CN	748	▲
CHONGQING NEW CENT CRUISE	CN	1774	●
CHONGQING RURAL BANK	HK	816	▲
CHOW TAI FOOK JEWELLERY	HK	1505	▼
CHRISTIAN DIOR	FR	189	▲
CHUBB	SZ	109	▲
CHUBU ELECTRIC POWER	JA	450	▼

▲ UP ▼ DOWN  
● UNCHANGED ● NEW  
ASIAN COMPANIES ARE IN RED TYPE



## MIDEA

CHUGOKU BANK	JA 1630 ▲	DASSAULT SYSTEMES	FR 1321 ▲
CHUGOKU ELECTRIC POWER	JA 1331 ▲	DATANG INTL POWER	CN 1124 ▼
CHUNGHWA TELECOM	TA 720 ▼	DAVITA	US 662 ▲
CHURCH & DWIGHT	US 1572 ▲	DBS (BANKING)	SI 245 ▲
CIC (BANKING)	FR 525 ▼	DCC (CONGLOMERATE)	IR 1379 ▲
CIELO	BR 1103 ▼	DEERE & COMPANY	US 260 ▼
CIGNA	US 209 ▼	DELEK	IS 1877 ▲
CIMB	MA 671 ▼	DELL TECHNOLOGIES	US 608 ●
CINCINNATI FINANCIAL	US 1001 ▼	DELPHI AUTOMOTIVE	UK 637 ▼
CINTAS	US 1321 ▲	DELTA AIR LINES	US 183 ▼
CISCO SYSTEMS	US 58 ▲	DELTA ELECTRONICS	TA 1134 ●
CIT	US 1272 ▼	DELTA LLOYD	NE 1303 ▼
CITIC PACIFIC	HK 72 ▼	DENSO	JA 233 ▼
CITIC SECURITIES	CN 394 ▼	DENTSPLY SIRONA	US 1400 ▲
CITIGROUP	US 12 ▲	DENTSU	JA 703 ▼
CITIZENS FINANCIAL	US 551 ▲	DEUTSCHE BANK	GE 441 ▲
CITRIX SYSTEMS	US 1461 ▲	DEUTSCHE BOERSE	GE 704 ▼
CITY DEVELOPMENTS	SI 1719 ▼	DEUTSCHE LUFTHANSA	GE 513 ▼
CJ CHEILJEDANG	KO 1601 ▲	DEUTSCHE PFANDBRIEFBANK	GE 1649 ▼
CJ (FOOD, DRINK, TOBACCO)	KO 1226 ▼	DEUTSCHE POST	GE 196 ▲
CK HUTCHISON	HK 125 ▲	DEUTSCHE TELEKOM	GE 77 ▼
CLOROX	US 1102 ▼	DEUTSCHE WOHNEN	GE 965 ▲
CLP (UTILITIES)	HK 469 ▼	DEVON ENERGY	US 888 ▼
CME	US 577 ▲	DEXIA	BE 1240 ▲
CMS ENERGY	US 937 ▼	DGB FINANCIAL	KO 1765 ▼
CNH INDUSTRIAL	UK 736 ▲	DIAGEO	UK 261 ▼
CNO FINANCIAL	US 1598 ▲	DIGITAL REALTY TRUST	US 1329 ▼
CNOOC	HK 529 ▼	DISCOVER FINANCIAL SERVICES	US 317 ▲
CNP ASSURANCES	FR 292 ▼	DISCOVERY COMMUNICATIONS	US 781 ▲
CNPCT CAPITAL	CN 1670 ●	DISH NETWORK	US 393 ▲
COACH	US 1440 ▼	DIXONS CARPHONE	UK 1645 ▼
COAL INDIA	IN 541 ▼	DKSH	SZ 1982 ●
COCA-COLA	US 86 ▼	DNB (BANKING)	NO 313 ▼
COCA-COLA EURO PARTNERS	UK 734 ▲	DOHA BANK	QA 1932 ▼
COCA-COLA HBC	SZ 1443 ▼	DOLLAR GENERAL	US 612 ▼
COGNIZANT TECHNOLOGY	US 537 ▼	DOLLAR TREE	US 590 ▲
COLGATE-PALMOLIVE	US 472 ▲	DOLLARAMA	CA 1961 ●
COLOPLAST	DE 1430 ▲	DOMINION RESOURCES	US 283 ▲
COLRUYT	BE 1393 ▼	DONG ENERGY	DE 685 ●
COMCAST	US 31 ▲	DONGBU INSURANCE	KO 1002 ▲
COMERICA	US 968 ▲	DONGFENG MOTOR	CN 550 ▼
COMMERCE BANCSHARES	US 1967 ●	DOOSAN	KO 1289 ▼
COMMERCIAL BANK FOR INV & DEV OF VIETNAM	VE 1682 ▲	DOVER	US 1168 ▼
COMMERCIAL BANK OF QATAR	QA 1843 ▼	DOW CHEMICAL	US 113 ▼
COMMERCIAL INTL BANK	EG 1699 ▼	DP WORLD	AE 883 ▲
COMMERZBANK	GE 663 ▼	DR HORTON	US 808 ▲
COMMONWEALTH BANK	AU 58 ●	DR PEPPER SNAPPLE	US 1000 ▲
COMMUNITY HEALTH SYSTEMS	US 1253 ▼	DSM (CHEMICALS)	NE 913 ▲
COMPAL ELECTRONICS	TA 1531 ▼	DSME (CAPITAL GOODS)	KO 1687 ▼
COMPANHIA BRASILEIRA DE DISTRIBUICAO	BR 1545 ▼	DSV (TRANSPORTATION)	DE 1521 ▲
COMPASS	UK 486 ▼	DTE ENERGY	US 566 ▲
CONAGRA BRANDS	US 938 ▲	DUBAI ISLAMIC BANK	AE 1013 ▲
CONCHO RESOURCES	US 1586 ▲	DUFFY	SZ 1712 ▲
CONCORDIA FINANCIAL	JA 1507 ●	DUKE ENERGY	US 154 ▼
CONOCOPHILLIPS	US 519 ▼	DVB BANK	GE 1964 ▼
CONSOLIDATED EDISON	US 390 ▲	DXC TECHNOLOGY	US 1311 ▲
CONSTELLATION BRANDS	US 595 ▲	E.ON	GE 607 ▼
CONTINENTAL	GE 206 ▲	E.SUN FINANCIAL	TA 1384 ▼
CONTINENTAL RESOURCES	US 1541 ▼	EADS	NE 166 ▼
CORE-MARK	US 1788 ▲	EAST JAPAN RAILWAY	JA 217 ▼
CORNING	US 433 ▲	EAST WEST BANCORP	US 1278 ▲
CORPORATION BANK	IN 1854 ▼	EASTMAN CHEMICAL	US 826 ▼
COSCO SHIPPING	CN 1281 ▼	EASYJET	UK 1607 ▼
COSMO ENERGY	JA 1441 ▲	EATON	IR 322 ▼
COSTCO WHOLESALE	US 179 ▲	EBAY	US 407 ▲
COTY	US 1259 ▲	ECOLAB	US 505 ▼
COUCHE TARD	CA 517 ▲	ECOPETROL	CO 559 ▲
COUNTRY GARDEN	HK 273 ▲	EDF (UTILITIES)	FR 146 ▲
CP ALL (FOOD MARKETS)	TH 985 ▲	EDISON INTERNATIONAL	US 367 ▲
CPFL ENERGIA	BR 1735 ●	EDP-ENERGIAS DE PORTUGAL	PO 488 ▼
CR BARD (HEALTH CARE EQUIP)	US 1354 ▲	EDWARDS LIFESCIENCES	US 1298 ▼
CREDICORP	PE 761 ▼	EFG INTERNATIONAL	SZ 1554 ●
CREDIT AGRICOLE	FR 151 ▼	EI DU PONT DE NEMOURS	US 220 ▲
CREDIT SAISON	JA 1779 ●	EIFEAGE	FR 803 ▲
CREDIT SUISSE	SZ 491 ▼	EISAI	JA 1304 ▲
CREDITO EMILIANO	IT 1786 ▲	EL PUERTO DE LIVERPOOL	MX 1301 ▼
CRH (CONSTRUCTION)	IR 317 ▲	ELECTRIC POWER DEV	JA 1348 ▼
CROWN CASTLE INTL	US 1052 ▼	ELECTROLUX	SW 1135 ▲
CROWN	US 1359 ▼	ELECTRONIC ARTS	US 983 ▲
CROWN RESORTS	AU 1738 ●	ELETROBRÁS	BR 610 ▲
CRRC (CAPITAL GOODS)	CN 235 ▼	ELI LILLY	US 221 ▲
CSC FINANCIAL	CN 1220 ●	EMAAR PROPERTIES	AE 801 ▲
CSL (PHARMA & BIOTECH)	AU 806 ▲	E-MART	KO 1446 ▼
CST BRANDS	US 1688 ▲	EMERA	CA 1796 ●
CSX (TRANSPORTATION)	US 354 ▲	EMERSON ELECTRIC	US 439 ▼
CTRIPO.COM INTERNATIONAL	CN 1268 ▼	EMIRATES INTEG TELECOM	AE 1917 ▼
CULLEN/FROST BANKERS	US 1762 ▲	EMPIRE	CA 1675 ▲
CUMMINS	US 533 ▼	EMPS-CHEMIE	SZ 1525 ▲
CVS HEALTH	US 66 ▼	ENBRIDGE	CA 212 ▲
CYBG (BANKING)	UK 1700 ●	ENBW-ENERGIE BADEN	GE 1012 ▼
DAH SING FINANCIAL	HK 1973 ▲	ENCANA	CA 1718 ▲
DAI NIPPON PRINTING	JA 1270 ▼	ENEL	IT 99 ▲
DAI-ICHI LIFE INSURANCE	JA 191 ▲	ENGIE	FR 455 ▼
DAIICHI SANKYO	JA 839 ▼	ENI	IT 431 ▼
DAIKIN INDUSTRIES	JA 434 ▲	ENKA	TU 1870 ▼
DAIMLER	GE 28 ▼	ENSCO	UK 1552 ●
DAISHI BANK	JA 1731 ▲	ENTERGY	US 874 ▼
DAITO TRUST CONSTRUCTION	JA 971 ▲	EOG RESOURCES	US 831 ▼
DAIWA HOUSE INDUSTRY	JA 389 ▲	EQT (OIL & GAS)	US 1692 ▼
DAIWA SECURITIES	JA 705 ▼	EQUIFAX	US 1426 ▲
DALI FOODS	CN 1842 ▼	EQUINIX	US 1439 ▲
DAMAC PROPERTIES	AE 1792 ▼	EQUITY RESIDENTIAL	US 1294 ▼
DANA	US 1656 ●	ERICSSON	SW 710 ▼
DANAHER	US 229 ▼	ERSTE BANK	AS 429 ▲
DANGOTE CEMENT	NI 1500 ▼	ESSEX PROPERTY TRUST	US 1376 ▼
DANONE	FR 252 ▲	ESSILOR INTERNATIONAL	FR 744 ▼
DANSKE BANK	DE 230 ▲	ESTEE LAUDER	US 678 ▼
DAQIN RAILWAY	CN 767 ▼	ETISALAT	AE 320 ▼
DARDEN RESTAURANTS	US 1265 ▲	E-TRADE FINANCIAL	US 1032 ▲
DASSAULT AVIATION	FR 1433 ▲	EURAZEO	FR 1987 ▼
		EUROBANK ERGASIAS	GR 1640 ▼

▲ UP ▼ DOWN

● UNCHANGED ● NEW

ASIAN COMPANIES ARE IN RED TYPE

as well as picking up the Eureka vacuum-cleaner brand from Electrolux. Midea's sales outside of China surged nearly 30% last year, compared with only 5% growth in China.

But Midea faces serious constraints to building a global brand. Midea is wary of upsetting its partners by introducing its own, competing product lines in markets where they have a strong presence. Management is also all too aware of the shoddy image that China-made goods have among many consumers, which has caused appliance-rival Haier and other reputable Chinese companies to struggle in many markets. "We're being very careful with our brand-building initiative," says Gu. "You have all these small and medium-size Chinese companies that export lousy products. To overcome that perception takes time."

Midea's most ambitious global undertaking by far is its acquisition of Kuka. Midea's management team got the idea to enter robotics from its own troubles keeping factories running at home. Even with wages rising precipitously, recruiting enough staff to fill assembly-line jobs in an economy bursting with opportunities has become a stiff challenge. So Midea has had to rely more and more on automation. One plant in the central Chinese city of Wuhan, where Midea has invested more than \$70 million on automation and information technology since the beginning of last year, has more than tripled the amount produced per worker. "We find it is getting more and more difficult to get people to work for us," says Gu. "We feel there is a strong need in China for automation, and we found that very few Chinese companies are capable of providing that capability. We have to find some way to fill that gap."

That led to an interest in selling the robots that Chinese factories need—and in Germany's Kuka. Fang and his executives argue that their savvy in China could help Kuka's top-notch industrial robots capture more of that burgeoning Chinese demand. "They can grow, but we can help them grow faster," says Gu.

Some politicians in Europe fret that selling a high-tech outfit such as Kuka to the Chinese will undercut the competitiveness of the region's economy. Günther Oettinger, then-European Commissioner for Digital Economy & Society, told a German newspaper last year that Kuka is "a successful company in a strategic sector that is of key importance for the digital future of European industry" and called on its existing shareholders or other companies in Europe to step up and keep it out of Chinese hands. Germany's vice chancellor, Sigmar Gabriel, who has openly criticized China for failing to reciprocate the free-market openness of the West, reportedly tried to organize just such an alternative bid.

Fang attempted to ease such concerns by agreeing to maintain Kuka's plants and workers in Germany until 2023. He has also kept management in place and intends to operate the robotics company as a separate unit. Though Gu is now chairman of Kuka's supervisory board, he visits only once a month for meetings, and Midea has posted no Chinese staff full-time to Augsburg. "It is a very different environment, different culture," he says. "We leave them alone to run the business."

Still, Midea's managers realize they have bridges to build. "There is this China monster that comes to your country, that grabs your jobs—that perception is still there everywhere," says Gu. "You cannot change it overnight." Fang knows as well that Midea's experience in Germany is part of something bigger and more daunting for a Chinese company with global ambitions: rising economic nationalism. Yet he believes that this sentiment will eventually pass. "There are antiglobal trends now, but you have to look at things from a long-term perspective," he says. "Globalization is a major trend and cannot be stopped by any individual or any country."

That leaves Fang confident about the future of Midea—and China. "Chinese companies are going global," he says, "and this trend will not change." **F**

*With reporting by Yue Wang.*

## GLOBAL 2000



Baidu's billionaire founder, Robin Li.

# THE NEXT FRONTIER

Baidu veers from its core business to gamble on artificial intelligence.

BY YUE WANG

**C**HINESE SEARCH-ENGINE OPERATOR BAIDU, DUBBED THE GOOGLE of China, is betting big that smart machines will disrupt industry after industry. Of the \$3 billion Baidu spent in research and development over the past two and a half years, the majority has gone to artificial intelligence, says Wang Haifeng, the company's vice president and head of the AI group.

In the past quarter alone, R&D expenses went up by 35% from a year ago, to \$412 million, according to Baidu's latest financial results. Like Google, Baidu wants to use the technology to refine its search algorithms, develop voice assistants, produce self-driving cars and build augmented-reality tools that may soon have broader applications in marketing, tourism and health care.

To Baidu, however, AI means more than frontier research. The company needs AI-enabled services to bring in new revenue, as its core online-advertising revenue faces mounting pressure from government restrictions, particularly in health care ads. What's more, advertisers are flocking to e-commerce and social media platforms such as Tencent's messaging app WeChat and Alibaba's Taobao marketplace. According to consultancy eMarketer, Alibaba accounted for 29% of China's \$42 billion digital-advertising market in 2016, with Baidu's share falling to 21% from 28% in 2015.

In the past quarter, Baidu's operating profit declined by 9% to \$291 million, after going down 14% last year. Its other diversification efforts have produced mixed results. The company invested billions of dollars in online-to-offline services a few years ago, betting that it would earn healthy commission fees from cinemas, restaurants and other local services using its products to connect to nearby customers. But that plan didn't gain much traction, as the Tencent-backed

EVERBRIGHT SECURITIES	CN	1210	▼
EVEREST RE	BU	920	▼
EVERSOURCE ENERGY	US	614	▼
EVONIK	GE	626	▼
EXELON	US	237	▼
EXOR (DIV FINANCIAL)	IT	417	▼
EXPEDIA	US	1063	▼
EXPEDITORS INTERNATIONAL	US	1409	▼
EXPERIAN	IR	1122	▲
EXPRESS SCRIPTS	US	158	▼
EXTRA SPACE STORAGE	US	1879	▼
EXXONMOBIL	US	13	▼
EZDAN	QA	1346	▼
F5 NETWORKS	US	1979	▼
FABEGE	SW	1897	▼
FACEBOOK	US	119	▲
FAIRFAX FINANCIAL	CA	941	▼
FALABELLA	CH	582	▲
FANNIE MAE	US	342	▼
FANUC (CAP GOODS)	JA	823	▼
FAR EAST HORIZON	HK	1617	▼
FAR EASTERN NEW CENTURY	TA	1824	▼
FAST RETAILING	JA	677	▼
FASTENAL	US	1449	▼
FASTIGHETS BALDER	SW	1996	▼
FEDEX	US	194	▲
FEMSA	MX	380	▲
FERRARI	IT	1550	▼
FERROVIAL	SP	769	▼
FIAT CHRYSLER AUTOMOBILES	UK	224	▲
FIBI	IS	1887	▲
FIDELITY NATIONAL FINANCIAL	US	977	▼
FIDELITY NATIONAL INF	US	649	▼
FIFTH THIRD BANCORP	US	453	▲
FINANCIAL STREET	CN	1879	▼
FINANCIERE DE L'ODET	FR	1378	▼
FINATIS	FR	1007	▼
FIRST CITIZENS BANCSHARES	US	1899	▲
FIRST DATA	US	713	▲
FIRST FINANCIAL	TA	1081	▲
FIRST HORIZON NATIONAL	US	1976	▼
FIRST PACIFIC	HK	1762	▼
FIRST QUANTUM MINERALS	CA	1874	▼
FIRST REPUBLIC BANK	US	829	▼
FIRSTENERGY	US	813	▼
FIRSTSTRAND	SA	423	▲
FISERV	US	972	▲
FLEETCOR TECHNOLOGIES	US	1523	▲
FLEXTRONICS INTERNATIONAL	SI	1110	▼
FLUOR	US	1384	▼
FOCUS MEDIA INF TECHNOLOGY	CN	1394	▼
FONCIERE DES REGIONS	FR	1308	▲
FOOT LOCKER	US	1163	▲
FORD MOTOR	US	64	▼
FORMOSA CHEMICALS	TA	644	▲
FORMOSA PETROCHEMICAL	TA	466	▲
FORMOSA PLASTICS	TA	851	▲
FORTESCUE METALS	AU	663	▲
FORTIS (CANADA)	CA	905	▲
FORTIVE	US	984	▲
FORTUM	FI	1091	▲
FORTUNE BRANDS HOME	US	1614	▲
& SECURITY	US	1563	▲
FOSHAN HAITIAN FLAV & FOOD	CN	1563	▲
FOSUN INTERNATIONAL	CN	448	▲
FOUNDER SECURITIES	CN	1317	▼
FRANKLIN RESOURCES	US	687	▼
FRASERS CENTREPOINT	SI	1783	▼
FREDDIE MAC	US	355	▲
FREEMPORT-MCMORAN INC	US	775	▼
FRESHENUS	GE	228	▲
FRESNILLO	MX	1520	▼
FRONTIER COMMUNICATIONS	US	1357	▲
FUBON FINANCIAL	TA	322	▼
FUJIFILM	JA	447	▼
FUJITSU	JA	460	▲
FUKUOKA FINANCIAL	JA	1398	▼
FULLSHARE	HK	1804	▼
FUYAO GLASS INDUSTRY	CN	1813	▼
G4S	UK	1864	▼
GAIL INDIA	IN	1283	▼
GALAXY ENTERTAINMENT	HK	946	▲
GALP ENERGIA	PO	1118	▼
GAMESTOP	US	1782	▼
GAP	US	998	▼
GARANTI BANK	TU	523	▼
GARMIN	SZ	1619	▲
GAS NATURAL FENOSA	SP	307	▼
GAZPROM	RU	40	▲
GD POWER DEVELOPMENT	CN	780	▼
GEA (CAP GOODS)	GE	1888	▼
GERBERIT	SZ	1380	▲
GECCINA	FR	1297	▼
GEELY AUTOMOBILE	HK	1030	▼
GEMDALE	CN	911	▲
GENERAL DYNAMICS	US	230	▲
GENERAL ELECTRIC	US	14	▲
GENERAL GROWTH PROPERTIES US	US	818	▼
GENERAL MILLS	US	414	▼
GENERAL MOTORS	US	40	▲
GENERALI	IT	139	▼
GENTING	MA	1259	▼
GENUINE PARTS	US	903	▼
GENWORTH FINANCIAL	US	1162	▼
GEORGE WESTON	CA	689	▼
GF SECURITIES	CN	705	▼
GFNORTE	MX	591	▼
GILEAD SCIENCES	US	134	▼
GIVALDAN	SZ	1207	▼
GJENSIDIGE FORSIKRING	NO	1455	▼
GKN (CONSUMER DUR)	UK	1314	▲
GLAXOSMITHKLINE	UK	194	▲
GLENCORE INTERNATIONAL	SZ	417	▲
GLOBAL LOGISTIC PROPERTIES	SI	1170	▲

▲ UP ▼ DOWN  
● UNCHANGED ● NEW  
ASIAN COMPANIES ARE IN RED TYPE



## BAIDU

GLOBAL PAYMENTS	US	1966	▲
GOLDCORP	CA	1461	▼
GOLDEN AGRI-RESOURCES	SI	1823	▲
GOLDMAN SACHS	US	49	▲
GOME ELECTRICAL APPLIANCES	HK	1919	▼
GOODMAN	AU	1443	▼
GOODYEAR	US	732	▲
GPT (DIVERSIFIED FINANCIAL)	AU	1635	▲
GRASIM INDUSTRIES	IN	1622	▲
GREAT WALL MOTOR	CN	652	▲
GREE ELECTRIC APPLIANCES	CN	364	▲
GREENLAND	CN	326	▼
GREENTOWN CHINA	CN	1919	▲
GRIFOLS	SP	1191	▲
GROUP 1 AUTOMOTIVE	US	1960	▲
GRUPA PZU (INSURANCE)	PL	1026	▼
GRUPO ACS (CONSTRUCTION)	SP	511	▼
GRUPO AVAL (DIVERSIFIED FIN)	CO	693	▼
GRUPO BIMBO	MX	1092	▼
GRUPO BOLIVAR	CO	1546	▼
GRUPO CARSO	MX	1402	▲
GRUPO GALICIA	AR	1982	▼
GRUPO INBURSA	MX	1054	▼
GRUPO MEXICO	MX	606	▲
GRUPO TELEvisa	MX	1365	▼
GRUPO ZULIANO	VZ	1796	▲
GS ENGINEERING	KO	1884	▼
GS HOLDINGS (CONGLOM)	KO	1070	▲
GUANGDONG INVESTMENT	HK	1629	▼
G'DONG WENS FOODSTUFFS	CN	763	▲
GUANGXI GUIGUAN ELECT POW	CN	1992	▲
GUANGZHOU AUTOMOBILE	CN	842	▲
GUANGZHOU R&F	CN	933	▲
GUDANG GARAM	ID	1373	▲
GUNMA BANK	JA	1590	▲
GUOCO	HK	1866	▼
GUOSEN SECURITIES	CN	699	▼
GUOTAI JUNAN SECURITIES	CN	594	▲
H&M	SW	506	▼
HABIB BANK	PK	1819	▼
HACHIJUNI BANK	JA	1628	▲
HAIRAN AIRLINES	CN	1110	▲
HAITONG SECURITIES	CN	510	▼
HAKUHODO DY	JA	1910	▲
HAL TRUST	NE	727	▲
HALKBANK	TU	932	▼
HALLIBURTON	US	716	▼
HANA FINANCIAL	KO	492	▲
HANESBRANDS	US	1452	▼
HANG LUNG	HK	1490	▲
HANKOOK TIRE	KO	1575	▼
HANKYU HANSHIN	JA	999	▲
HANWA	JA	1836	▲
HANWHA CHEMICAL	KO	1355	▲
HANWHA CORP	KO	743	▲
HARBIN BANK	CN	1130	▲
HARLEY-DAVIDSON	US	1187	▼
HARRIS	US	1005	▲
HARTFORD FINANCIAL SVCS	US	338	▼
HASBRO	US	1325	▲
HASEKO	JA	1685	▲
HCA	US	243	▲
HCL TECHNOLOGIES	IN	958	▼
HCP (DIVERSIFIED FINANCIAL)	US	1125	▲
HD SUPPLY	US	1793	▼
HDFC	IN	373	▲
HDFC BANK	IN	258	▲
HEIDELBERGCEMENT	GE	463	▲
HEINEKEN	NE	316	▼
HELLA KGAA HUECK	GE	1899	▼
HELLENIC PETROLEUM	GR	1868	▲
HELVEITIA	SZ	1048	▼
HENDERSON LAND	HK	627	▲
HENGAN INTERNATIONAL	CN	1679	▼
HENKEL	GE	286	▲
HENRY SCHEIN	US	1040	▼
HERMES INTERNATIONAL	FR	835	▲
HERO MOTOCORP	IN	1587	▲
HERSHEY	US	956	▲
HERTZ GLOBAL	US	1518	▼
HESS	US	1187	▼
HESTEEL	CN	1155	▲
HEWLETT PACKARD ENTERPRISE	US	171	▼
HEXAGON	SW	1348	▲
HIKVISION	CN	1014	▲
HILTON	US	766	▼
HINDALCO INDUSTRIES	IN	1175	▲
HINDUSTAN PETROLEUM	IN	807	▲
HIROSHIMA BANK	JA	1546	▲
HITACHI	JA	201	▼
HOKKAIDO ELECTRIC POWER	JA	1885	▲
HOKKOKU BANK	JA	1841	▼
HOKUHOKU FINANCIAL	JA	1496	▲
HOLLYFRONTIER	US	1972	▼
HOLOGIC	US	1804	▲
HOME DEPOT	US	114	▼
HON HAI PRECISION	TA	98	▲
HONDA MOTOR	JA	74	●
HONEYWELL INTERNATIONAL	US	136	▲
HONG KONG EXCHANGES	HK	786	▼
HONG LEONG FINANCIAL	MA	1472	▼
HOPSON DEVELOPMENT	HK	1703	▲
HORMEL FOODS	US	889	▼
HOST HOTELS & RESORTS	US	1073	▲
HOYA	JA	1160	▲
HP	US	271	▲
HRG (CONSUMER DURABLES)	US	1608	▼
HSBC	UK	48	▼
HUA NAN FINANCIAL	TA	1291	▼
HUADIAN POWER INTL	CN	974	▼
HUANENG POWER INTL	CN	420	▼
HUATAI SECURITIES	CN	752	▼
HUAXIA BANK	CN	255	▼
HUDSON'S BAY	CA	1956	▼
HUIZHANG BANK	CN	918	▼
HUMANA	US	438	▼
HUNTINGTON BANCSHARES	US	785	▲
HUNTINGTON INGALLS INDS	US	1253	▲
HUNTSMAN	US	1722	▲
HUSKY ENERGY	CA	749	▲
HYAKUGO BANK	JA	1730	▲
HYAKUJUSHI BANK	JA	1781	▲
HYDRO ONE	CA	1088	▼
HYOSUNG	KO	1474	▼
HYUNDAI ENGINEERING	KO	1142	▲
HYUNDAI GLOVIS	KO	1451	▼
HYUNDAI HEAVY INDUSTRIES	KO	616	▲
HYUNDAI MARINE & FIRE	KO	1136	▲
HYUNDAI MOBIS	KO	312	▼
HYUNDAI MOTOR	KO	104	▲
HYUNDAI STEEL	KO	825	▼
IBERDROLA	SP	145	▼
IBM	US	43	▼
ICA GRUPPEN	SW	1383	▼
ICBC	CN	1	●
ICICI BANK	IN	310	▲
IDBI BANK	IN	1524	▼
IDEMITSU KOSAN	JA	963	▲
IHI (CAPITAL GOODS)	JA	1488	▼
IHS MARKIT (BUSINESS SVCS)	UK	1569	▲
IIDA (CONSTRUCTION)	JA	1295	▲
ILIAD	FR	1367	▼
ILLINOIS TOOL WORKS	US	465	▼
ILLUMINA	US	1327	▲
IMPERIAL TOBACCO	UK	295	▼
IMPULSORA DEL DESARROLLO Y EL EMPLEO EN AMERICA LATINA	MX	1799	▲
INCHCAPE	UK	1988	▲
INCYTE	US	1645	▲
INDIABULLS HOUSING FINANCE	IN	1934	▲
INDIAN BANK	IN	1937	▼
INDIAN OIL	IN	264	▲
INDIAN OVERSEAS BANK	IN	1828	▼
INDITEX	SP	276	▲
INDORAMA VENTURES	TH	1757	▲
INDUSIND BANK	IN	1272	▲
INDUSTRIAL ALLIANCE INS	CA	1181	▲
INDUSTRIAL BANK	CN	63	▼
INDUSTRIAL BANK OF KOREA	KO	742	▼
INDUSTRIAL SECURITIES	CN	1567	▲
INDUSTRIAS PEÑOLES	MX	1843	▲
INDUSTRIES QATAR	QA	1198	▲
INDUSTRIAVARDEN	SW	1213	▲
INFINEON TECHNOLOGIES	GE	906	▲
INFOSYS	IN	598	▼
ING	NE	53	▲
INGERSOLL RAND	IR	547	▲
INGREDION	US	1480	▲
INNER MONGOLIA BAOTOU STEEL	CN	1409	▼
INNER MONGOLIA YILI	CN	925	▲
INNOLUX	TA	1872	▼
INPEX	JA	978	▲
INSURANCE AUSTRALIA	AU	1031	▼
INTACT FINANCIAL	CA	1169	▲
INTEL	US	54	▲
INTELSAT	LU	1578	▲
INTER RAO	RU	1054	▲
INTERACTIVE BROKERS	US	1166	▲
INTERCONEXION ELECTRICA	CO	1712	▲
INTERCONTINENTAL HOTELS	UK	1798	▲
INTERCONTINENTALEXCHANGE	US	445	▲
INTERNATIONAL AIRLINES	UK	405	▼
INTL FLAVORS & FRAGRANCES	US	1754	▼
INTERNATIONAL PAPER	US	425	▲
INTERPUBLIC	US	1075	▲
INTESA SANPAOLO	IT	121	▼
INTL FCSTONE (DIV FINANCIAL)	US	1698	▲
INTUIT	US	1042	▲
INTUITIVE SURGICAL	US	1146	▲
INVENTEC	TA	1834	▲
INVECO	US	912	▼
INVESTEC	UK	1085	▼
INVESTOR AB	SW	402	▲
ISBANK	TU	527	▼
ISETAN MITSUKOSHI	JA	1748	▲
ISRAEL DISCOUNT BANK	IS	1673	▲
ISS (BUSINESS SVCS)	DE	1441	▼
ISUZU MOTORS	JA	711	▲
ITAU UNIBANCO	BR	38	▲
ITAUSA	BR	791	▲
ITC (FOOD, DRINK & TOBACCO)	IN	797	▼
ITOCHU	JA	218	▼
ITV (MEDIA)	UK	1465	▼
IYO BANK	JA	1664	▲
J SAINSBURY	UK	723	▲
JABAL OMAR DEVELOPMENT	US	1864	▲
JABIL CIRCUIT	US	1637	▲
JACCS	JA	1932	▲
JACOBS ENGINEERING	US	1775	▲
JAPAN AIRLINES	JA	760	▼
JAPAN EXCHANGE	JA	1090	▼
JAPAN POST	JA	45	▼
JAPAN SECURITIES	JA	1853	▲
JAPAN TOBACCO	JA	219	▲
JARDINE MATHESON	HK	169	▲
JAZZ PHARMACEUTICALS	IR	1901	▲
JB FINANCIAL	KO	1826	▲
JB HUNT TRANSPORT	US	1365	▼
JBS (FOOD, DRINK & TOBACCO)	BR	895	▼
JC PENNEY	US	1862	▼
JD.COM	CN	659	▲
JERONIMO MARTINS	PO	940	▲

▲ UP ▼ DOWN  
● UNCHANGED ● NEW

ASIAN COMPANIES ARE IN RED TYPE

Meituan Dianping now holds 80% of this \$100 billion market, according to Beijing consultancy Analysys International. IQiyi, its online-video unit that just inked a streaming partnership with Netflix, remains popular but is facing rising content costs.

Baidu has amassed a 1,700-member AI team and built four research labs in China and Silicon Valley, with the second Silicon Valley lab ready to accommodate 150 scientists, the company announced in March. In January, it hired Lu Qi, a Microsoft veteran, as its president and chief operating officer overseeing Baidu's AI research. The company has one advantage: Its online search app boasts 665 million monthly active users, whose behavioral patterns can be harnessed for deep learning, a branch of AI that teaches machines to learn by themselves. And because search encompasses so many different topics, Baidu has more diversified data tranches than other Chinese tech giants, says Wang Shengjin, a professor at China's prestigious Tsinghua University.

And there has been real progress in this area. The company, which claims a 97% accuracy rate in voice recognition and 99.7% rate in facial recognition, has won many international competitions in speech-text interaction with its DuerOS platform, including one where its software achieved a typing speed three times as fast as humans'. It has also been appointed by China's National Development & Reform Commission to lead a national AI lab, as Beijing seeks to transform from a manufacturing economy to one driven by advanced technologies.

In perhaps the clearest articulation of Baidu's ambition, its billionaire founder, Robin Li, said at last year's World Internet Conference in Wuzhen that, "The age of the mobile internet is over. Future opportunities lie in artificial intelligence."

But not everyone is convinced of that prospect. In voice recognition, which is the most commercialized aspect of AI, other tech giants are catching up. Earlier this month, Tencent launched Dingdang, a voice-interaction platform that is a direct competitor of Baidu's DuerOS. DuerOS now counts speaker manufacturer Harman as well as smartphone companies Lenovo, Xiaomi and Vivo among its customers, according to Baidu.

When it comes to driverless cars, commercialization is still decades away, partly because all relevant players need to collect far more data, says Yang Qiang, a professor at the Hong Kong University of Science & Technology. "Current data collected for autonomous driving isn't reliable enough," according to Yang. "And we have to figure out how to use those cars. Is it in car-sharing or logistics—or something else? We have no idea yet."

That means Baidu's biggest advantage is still in online search, since it has plenty of related data to write better algorithms, Yang says. In addition to adding voice and image search functions, Baidu is using AI to develop personalized news feeds in its mobile search app, which Nomura Securities analyst Shi Jialong estimates will bring 6 billion yuan (nearly \$900 million) in revenues in fiscal year 2017.

Baidu also faces talent competition. After the company's chief scientist, Andrew Ng, resigned in March, Zhang Tong, director of Baidu's big data lab, was poached by Tencent. In the same month, Baidu's senior vice president, Wang Jing, resigned to build his own autonomous driving startup. Baidu's Wang acknowledges the fierce battle for brains: "AI represents an enormous opportunity—but to seize this opportunity, we need access to the best R&D talents in China and globally," he said. "There is fierce competition throughout the industry to both find and retain these talents."

But the commercialization of AI is still in its very early stages, and Baidu may still stand out in the end, HSBC analyst Chi Tsang says. "Any market where there are tremendous amounts of data and the inability to process data is applicable to AI," Tsang said. "The building blocks of AI that Baidu has can enable them to enter a lot more markets other than advertising" **F**

# Forbes

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### JUL 2017

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# THE TOLL COLLECTOR

While Wall Street wasn't looking, accountant Bruce Flatt became a billionaire by assembling one of the world's largest portfolios of office buildings, power plants and infrastructure projects—and making Brookfield Asset Management the safest growth stock on the planet.

BY ANTOINE GARA

**J**UST OFF A 14-HOUR COMMERCIAL FLIGHT from Dubai, Brookfield Asset Management chief Bruce Flatt stares into a gaping hole in the ground that looks like open-heart surgery performed on an entire city block in Manhattan. Piles of beams, mazes of scaffolding and even active railroad tracks crisscross each other endlessly.

“The amount of steel here is enormous,” Flatt shouts over a cacophony of honking car horns, grinding cement mixers and moving cranes at one end of the notoriously clogged Lincoln Tunnel. More than 17.2 million pounds of steel, to be precise, enough to anchor a 67-story glass office tower. Two more towers are also going up, along with a 30-floor boutique hotel and a 16-story trapezoidal glass office building with 26-foot-high ceilings and floors the size of football fields—much of it suspended over railroad yards. Dubbed Manhattan West, this 7-million-square-foot, \$5 billion project encompasses two square city blocks.

And yet it's completely invisible in the public consciousness—the vast majority of New Yorkers have never heard of it. Most people assume it's part of the adjacent Hudson Yards development, a \$25 billion project from billionaire Stephen Ross and his Related Companies that



FRANCO VOGT FOR FORBES

**"The amount of steel  
here is enormous":  
Bruce Flatt at his  
\$5 billion Manhattan  
West project.**

## GLOBAL 2000

JETBLUE AIRWAYS	US	1341	▲
JFE (MATERIALS)	JA	819	▼
JG SUMMIT	PH	1151	▼
JIANGSU EXPRESSWAY	CN	1919	●
JIANGSU HENGRI MEDICINE	CN	1497	▲
JIANGSU YANGHE BREWERY	CN	1190	▲
JIANGXI COPPER	CN	1206	▼
JILIN JIUTAI RURAL COMM BANK	CN	1870	●
JM SMUCKER	US	876	▲
JOHNSON & JOHNSON	US	32	●
JOHNSON CONTROLS INTL	IR	601	●
JOHNSON MATTHEY	UK	1363	▼
JOINT STOCK COMMERCIAL BANK FOR			
FOREIGN TRADE OF VIETNAM	VE	1656	▲
JPMORGAN CHASE	US	4	▲
JSW STEEL	IN	1347	▲
JTEKT	JA	1704	▼
JULIUS BAER	SZ	889	▲
JUNIPER NETWORKS	US	1334	▲
JUROKU BANK	JA	1681	▲
JXTG (OIL & GAS)	JA	624	▲
JYSKE BANK	DE	1269	▲
KAJIMA	JA	881	▲
KANGMEI PHARMACEUTICAL	CN	1487	▲
KANSAI ELECTRIC POWER	JA	368	▲
KANSAS CITY SOUTHERN	US	1710	▼
KAO (HOUSEHOLD PRODUCTS)	JA	645	▲
KASIKORN BANK	TH	642	▼
KAWASAKI HEAVY INDUSTRIES	JA	1328	▲
KB FINANCIAL	KO	302	▲
KB INSURANCE	KO	1481	▲
KBC	BE	259	▼
KDDI (TELECOM)	JA	141	▲
KEIYO BANK	JA	1804	▲
KELLOGG	US	675	▼
KEPPEL	SI	1138	▼
KERING	FR	471	▲
KERRY	IR	1120	▼
KERRY PROPERTIES	HK	1351	▲
KESKO	FI	1937	●
KEYCORP	US	600	▲
KEYENCE	JA	943	▲
KIA MOTORS	KO	337	▼
KIMBERLY-CLARK	US	427	▲
KINDER MORGAN	US	357	▲
KINGBOARD CHEMICAL	HK	1817	●
KINGFISHER	UK	878	▼
KINTETSU	JA	1360	▼
KION	GE	1753	●
KIRIN	JA	543	▲
KIYO BANK	JA	1788	▲
KLA-TENCOR	US	1246	▲
KLEPIERRE	FR	906	▲
KOBE STEEL	JA	1338	▼
KOC	TU	567	▼
KOHL'S	US	1019	▼
KOITO MANUFACTURING	JA	1331	▲
KOMATSU	JA	509	▼
KONE (CONSTRUCTION)	FI	789	▼
KONICA MINOLTA BUSINESS SOL	JA	1984	▼
KOREA ELECTRIC POWER	KO	138	▼
KOREA GAS	KO	1137	▼
KOREA INVESTMENT	KO	1936	▼
KOREA ZINC	KO	1758	▼
KOREAN AIR	KO	1471	▼
KOTAK MAHINDRA BANK	IN	744	▲
KPN (TELECOM)	NE	1069	▼
KRAFT HEINZ	US	117	▲
KROGER	US	241	▼
KROTON EDUCACIONAL	BR	1895	●
KRUNG THAI BANK	TH	672	▲
KT CORP (TELECOM)	KO	797	▲
KT&G (FOOD, DRINK & TOBACCO)	KO	1292	▼
KUBOTA	JA	526	▼
KUEHNE + NAGEL	SZ	812	▼
KUWAIT FINANCE HOUSE	KU	1010	▲
KUWAIT PROJECTS	KU	1908	●
KWEICHOW MOUTAI	CN	647	▲
KWG PROPERTY	HK	1721	▲
KYOCERA	JA	522	▲
KYUSHU ELECTRIC POWER	JA	746	▲
KYUSHU FINANCIAL	JA	1608	▼
L BRANDS (RETAILING)	US	828	▼
L3 TECHNOLOGIES	US	899	▲
LABCORP	US	821	▲
LAFARGEHOLCIM	SZ	225	▲
LAM RESEARCH	US	871	▲
LAND SECURITIES	UK	1100	▼
LANXESS	GE	1877	●
LARGAN PRECISION	TA	1223	▲
LARSEN & TOUBRO	IN	483	▲
LAS VEGAS SANDS	US	451	▼
LATAM AIRLINES	CH	1286	▲
LAURENTIAN BANK	CA	1896	▲
LEAR	US	879	▲
LEGAL & GENERAL	UK	187	▲
LEGEND	CN	610	▲
LEGRAND	FR	1123	▲
LEIDOS	US	1893	●
LEND LEASE	AU	1115	▲
LENNAR	US	768	▲
LENOVO	HK	690	▲
LEONARDO	IT	809	▲
LEUCADIA NATIONAL	US	978	▲
LEVEL 3 COMMUNICATIONS	US	685	▼
LG CHEM	KO	573	▼
LG CORP	KO	833	▼
LG DISPLAY	KO	691	▼
LG ELECTRONICS	KO	811	▲
LG HOUSEHOLD & HEALTH CARE	KO	1391	▲
LG UPLUS (TELECOM)	KO	1550	▲
LI & FUNG	HK	1716	▼

▲ UP ▼ DOWN  
● UNCHANGED ● NEW  
ASIAN COMPANIES ARE IN RED TYPE



LIBERBANK	SP	1800	▼	MITSUI OSK LINES	JA	1381	▼
LIBERTY BROADBAND	US	1207	●	MIZRAHI TEFAHOT BANK	IS	1485	▲
LIBERTY EXPEDIA	US	1068	●	MIZUHO FINANCIAL	JA	90	▲
LIBERTY GLOBAL	UK	262	▲	MMI (DIVERSIFIED FINANCIAL)	SA	1910	▼
LIBERTY INTERACTIVE	US	733	▼	MOHAWK INDUSTRIES	US	866	▲
LIBERTY MEDIA LIB FORM ONE	US	1538	●	MOL HUNGARIAN OIL	HU	1340	▲
LINCOLN NATIONAL	US	356	▲	MOLINA HEALTHCARE	US	1688	▲
LINDE	GE	336	▲	MØLLER-MAERSK	DE	558	▼
LINDT & SPRUNGLI	SZ	1540	▼	MOLSON COORS BREWING	US	654	▲
LINK REIT	HK	836	▼	MONDELEZ	US	213	▼
LIVE NATION ENTERTAINMENT	US	1992	●	MONDI	UK	1097	▲
LIXIL	JA	1043	▼	MONSANTO	US	378	▲
LKQ (CONSUMER DURABLES)	US	1293	▼	MONSTER BEVERAGE	US	1167	▲
LLOYDS BANKING	UK	115	▲	MOODY'S	US	1679	▼
LOCKHEED MARTIN	US	152	▼	MORGAN STANLEY	US	60	▲
LOEWS	US	517	▲	MOSAIC	US	1230	▼
LOGAN PROPERTY	CN	1764	●	MOSCOVSKIY OBLASTNOI BANK	RU	1624	●
LONDON STOCK EXCHANGE	UK	1044	▼	MOSCOW EXCHANGE	RU	1512	▲
LONGFOR PROPERTIES	CN	667	▲	MOTHERSON SUMI SYSTEMS	IN	1952	●
LONGZA	SZ	1885	●	MOTOROLA SOLUTIONS	US	1183	▼
L'ORÉAL	FR	198	●	MS&AD INSURANCE	JA	206	▲
LOTTE CHEMICAL	KO	755	▲	MTN (TELECOM)	SA	1020	▼
LOTTE SHOPPING	KO	1082	▼	MTR (TRANSPORTATION)	HK	570	▼
LOWE'S	US	185	▲	MUNICH RE	GE	120	▼
LUKOIL	RU	129	▼	MURATA MANUFACTURING	JA	622	▼
LUNDBERGS	SW	1217	▲	MURPHY USA	US	1915	▼
LUPIN	IN	1716	▼	MUSASHINO BANK	JA	1825	▲
LUXOTTICA	IT	753	▼	MYLAN	UK	639	▼
LUZERNER KANTONALBANK	SZ	1873	▲	NAN YA PLASTICS	TA	665	▲
LYONDELLBASELL INDUSTRIES	UK	298	▼	NANTO BANK	JA	1715	▲
M&T BANK	US	497	▲	NANYA TECHNOLOGY	TA	1973	●
MACQUARIE	AU	344	▼	NASDAQ	US	1734	▲
MACY'S	US	737	▼	NASPERS	SA	655	▲
MAGNA INTERNATIONAL	CA	410	▼	NATIONAL AUSTRALIA BANK	AU	100	▼
MAGNIT	RU	813	▼	NATIONAL BANK OF ABU DHABI	AE	660	▲
MAGNITOGORSK IRON & STEEL	RU	1320	●	NATIONAL BANK OF CANADA	CA	560	▲
MAHINDRA & MAHINDRA	IN	916	▼	NATIONAL BANK OF GREECE	GR	1606	▼
MAKITA	JA	1836	▲	NATIONAL BANK OF KUWAIT	KU	758	▲
MANILA ELECTRIC	PH	1947	▼	NATIONAL COMMERCIAL BANK	SU	428	▲
MANPOWER	US	1238	▲	NATIONAL GRID	UK	185	▼
MANULIFE	CA	137	▲	NATIONAL OILWELL VARCO	US	1109	▼
MAPFRE	SP	475	▲	NATIXIS	FR	292	▲
MARATHON OIL	US	1277	▼	NAVER	KO	1222	▲
MARATHON PETROLEUM	US	287	▼	NAVIENT	US	1015	▼
MARINE HARVEST ASA	NO	1829	●	NCC	SW	1468	●
MARKEL	US	976	▼	NEC	JA	877	▲
MARKS & SPENCER	UK	1305	▼	NESTE OIL	FI	936	▲
MARRIOTT INTERNATIONAL	US	467	▲	NESTLE	SZ	34	▲
MARSH & MCLENNAN	US	458	▼	NETAPP	US	1615	▲
MARTIN MARIETTA MATERIALS	US	1575	▲	NETEASE	CN	820	▲
MARUBENI	JA	565	▼	NETFLIX	US	996	▲
MASCO	US	1240	▲	NEW CHINA LIFE INSURANCE	CN	369	▼
MASHREQ BANK	AE	1388	▼	NEW HOPE LIUHE	CN	1667	▼
MASRAFA AL RAYAN	QA	1189	▲	NEW RESIDENTIAL INVESTMENT	US	1648	●
MASTERCARD	US	379	▲	NEW WORLD DEVELOPMENT	HK	603	▼
MATERIALS IND ZHONGDA	CN	1402	▲	NEW YORK COMMUNITY	US	1221	▲
MATTEL	US	1778	▼	NEWCREST MINING	AU	1431	▲
MAXIM INTEGRATED PRODUCTS	US	1504	▼	NEWELL BRANDS	US	584	▲
MAXIS	MA	1596	▼	NEWMONT MINING	US	1056	▼
MAYBANK	MA	390	▼	NEWS CORP	US	1514	▼
MAZDA MOTOR	JA	682	▼	NEX	UK	1529	▼
MCCORMICK	US	1456	▲	NEXT	UK	1367	▼
MCDONALD'S	US	215	▼	NEXTERA ENERGY	US	204	▲
MCKESSON	US	188	▼	NH FOODS	JA	1944	●
MEAD JOHNSON NUTRITION	US	1374	▼	NH INVESTMENT & SECURITIES	KO	1852	▲
MEBURI FINANCIAL	JA	967	▲	NIDEC	JA	688	▲
MEDIATEK	TA	991	▼	NIELSEN	US	1007	▼
MEDIOBANCA	IT	988	▼	NIKE	US	249	▲
MEDIPAL	JA	1299	▲	NINGBO PORT	CN	1771	▼
MEDTRONIC	IR	115	▲	NINTENDO	JA	1033	▲
MEGA FINANCIAL	TA	863	▼	NIPPON EXPRESS	JA	1310	▲
MEIJI	JA	1041	▲	NIPPON PAINT	JA	1704	●
MELCO INTERNATIONAL DEV	HK	1460	●	NIPPON PAPER INDUSTRIES	JA	1829	▼
MERCANTIL SERVICIOS	VZ	930	▼	NIPPON STEEL & SUMITOMO	JA	440	▼
MERCK	GE	288	▲	METAL	JA	1726	▲
MERCK & CO	US	100	▼	NIPPON STEEL TRADING	JA	37	▲
MERCURIES & ASSOCIATES	TA	1562	▲	NIPPON TELEGRAPH & TEL	JA	1324	▼
MERITZ FINANCIAL	KO	1486	▼	NIPPON YUSEN	JA	1613	●
MERLIN PROPERTIES	SP	1845	●	NISHI-NIPPON FINANCIAL	US	1535	▼
METALLURGICAL CORP OF CHINA	CN	398	▲	NISSOURCE	US	1535	▼
METALLURGICA GERDAU	BR	1515	▼	NISSAN MOTOR	JA	95	▼
METLIFE	US	174	▼	NITORI	JA	1279	▲
METRO	CA	1412	▼	NITTO DENKO	JA	1198	▲
METRO	GE	805	▼	NN (INSURANCE)	NE	411	▼
METROPOLITAN BANK & TRUST	PH	1531	▼	NOBLE ENERGY	US	1389	▼
METTLER-TOLEDO INTL	US	1666	▲	NOBLE	HK	1355	▼
MGM RESORTS	US	589	▲	NOKIA	FI	608	▲
MICHAEL KORS	UK	1671	▼	NOMURA	JA	284	●
MICHELIN	FR	361	▲	NOMURA RESEARCH INSTITUTE	JA	1759	▲
MICROCHIP TECHNOLOGY	US	1904	▼	NORDEA BANK	SW	157	▼
MICRON TECHNOLOGY	US	482	▲	NORDSTROM	US	1312	▲
MICROSOFT	US	19	▲	NORFOLK SOUTHERN	US	400	▲
MID-AMERICA APARTMENT COMM	US	1888	●	NORILSK NICKEL	RU	586	▲
MIDEA	CN	335	▲	NORSK HYDRO	NO	839	▲
MIGDAL INSURANCE	IS	1707	▲	NORTH PACIFIC BANK	JA	1621	▲
MINATO BANK	JA	1939	▲	NORTHERN TRUST	US	576	▲
MIRAE ASSET DAEWOO	KO	1738	▲	NORTHROP GRUMMAN	US	297	▲
MIRVAC	AU	1779	▲	NORWEGIAN CRUISE LINE	US	1186	▲
MISC (TRANSPORTATION)	MA	1543	▼	NOVARTIS	SZ	61	▼
mitsubishi chemical	JA	435	▲	NOVATEK	RU	542	▲
mitsubishi corp	JA	478	▼	NOVO NORDISK	DE	375	▼
mitsubishi electric	JA	278	▲	NOVOLIPETSK STEEL	RU	1009	▲
mitsubishi estate	JA	479	▲	NOVOZYMES	DE	1591	▼
mitsubishi heavy industries	JA	708	▼	NRG ENERGY	US	1217	▼
mitsubishi materials	JA	1165	▼	NSK (MATERIALS)	JA	1425	▲
mitsubishi motors	JA	1193	▼	NTPC (UTILITIES)	IN	408	▼
mitsubishi ufj financial	JA	30	▲	NUCOR	US	657	▲
mitsubishi ufj lease	JA	1062	▲	NÜRNBERGER	GE	1752	▼
mitsui	JA	545	▼	NVIDIA	US	726	▲
mitsui chemicals	JA	1531	▲	NVR (CONSTRUCTION)	US	1610	▲
mitsui fudosan	JA	384	▼	NXP SEMICONDUCTORS	NE	844	▼

▲ UP ▼ DOWN  
● UNCHANGED ● NEW  
ASIAN COMPANIES ARE IN RED TYPE

## BROOKFIELD

will feature 16 skyscrapers and 18 million square feet.

That's fitting. The high-profile Stephen Ross has an oceanfront Palm Beach mansion, owns the Miami Dolphins and travels in the same circles as Donald Trump. Bruce Flatt is an accountant from Manitoba who lives in a quiet Toronto neighborhood and often commutes by subway.

But if you're comparing their portfolios? It's not even close. Brookfield quietly owns entire city skylines in places like Toronto and Sydney. It's the biggest office landlord in London and downtown Los Angeles. In Berlin it owns Potsdamer Platz and, in London, Canary Wharf, two of the biggest real estate developments in Europe. It has 14,200 hotel rooms, including Atlantis in the Bahamas and the Diplomat in Florida, and scores of shopping malls courtesy of divisions like Rouse Properties and General Growth, and several high-end Brazil shopping centers. In all, Brookfield owns some 400 million square feet of commercial space.

And that's just the real estate. Flatt's true passion is infrastructure, which he sees as a \$35 trillion opportunity that, like Manhattan West, is hiding in plain sight. "Infrastructure will be an enormous asset class for institutional investors in the coming 25 years," Flatt insists.

Brookfield owns 218 hydroelectric plants on 82 river systems in North and South America. In France, Brookfield has the largest independent owner of cell towers. In Chile its electric power lines serve 98% of the population. In Ireland it owns 20% of the country's wind-farm capacity. It owns 36 ports in the U.K., North America, Australia and Europe, and in India and South America it manages 3,600 kilometers of toll roads. All told, Brookfield has 2,000 projects across 30 countries on five continents, encompassing \$250 billion in assets and 70,000 employees. President Trump talks about an infrastructure plan—Bruce Flatt is actually executing one.

And Wall Street loves it. Despite Brookfield's low profile, its stock has returned 1,350% since Flatt took the helm in 2002, versus 183% for the S&P 500—that's a Buffet-esque 19% annual average, buoyed by assets that generated some \$25 billion in revenues last year and net profits of \$3.3 billion. With a \$36 billion market cap, Brookfield is the size of KKR, Apollo, Carlyle Group and Colony Northstar combined. "Bruce is not afraid to make large bets when he sees an opportunity," says Jonathan Gray, Blackstone's real estate chief and a possible heir to Blackstone chief Stephen Schwarzman. "He buys high-quality, long-duration assets—be they pipelines or electric grids or large pieces of real estate. Between the combination of yield and appreciation, they generate strong returns over time." At 51, Flatt just joined the *Forbes* Billionaires list, with a net worth of \$1.3 billion.

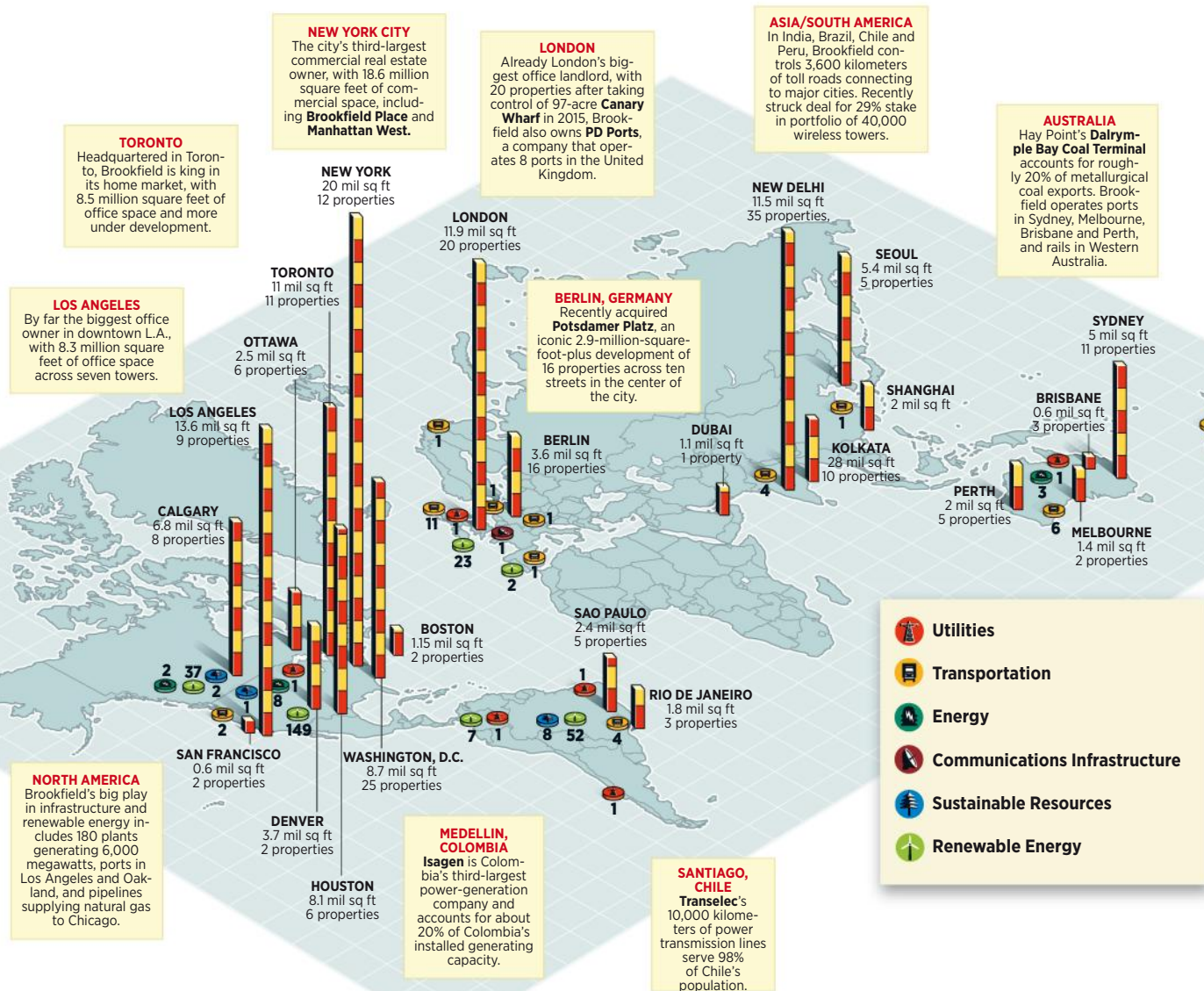
Flatt has been called Canada's Warren Buffett not only because he's a contrarian, long-term investor but also because his investment strategy relies less on price than on patience and the power of compounding income streams. "We will pay more for quality because in the fullness of time, real assets will generally always go up in value," Flatt says. "We'd rather earn a 12% to 15% net return over 20 years than a 25% return over three."

In fact, if ever there were a collection of sleep-well-at-night investments that might one day rival the safe-haven status of U.S. Treasury bonds or gold, you could argue that it's the well-diversified trove of real assets in Brookfield's \$250 billion portfolio. And it's about to get far bigger.

IF FLATT IS TRYING to cultivate the Buffett comparisons, his Toronto digs encourage it. Modest home? He lives in a two-story brick townhouse barely set back from the sidewalk. Humble office? A drab cubicle, positioned against a window looking onto a courtyard of an office complex that Brookfield owns. Contrarian outlook? The only piece of art visible from Flatt's desk is a framed cartoon depicting a herd of white sheep moving toward a cliff as a single black sheep heads in the opposite direction.

## THE WORLD IS FLATT'S

WHEN IT COMES TO GLOBAL DIVERSIFICATION AND GROWTH, BROOKFIELD'S COLLECTION OF REAL ASSETS IS UNRIVALED. IN REAL ESTATE, BROOKFIELD OWNS ENTIRE SKYLINES IN CITIES LIKE TORONTO, SYDNEY AND BERLIN, PLUS MALLS, APARTMENTS AND SELF-STORAGE. BUT INFRASTRUCTURE AND RENEWABLE ENERGY COULD BECOME EVEN BIGGER. GLOBALLY, THE COMPANY ALREADY HAS 36 PORTS, 218 HYDRO-ELECTRIC PLANTS, THOUSANDS OF KILOMETERS OF PIPELINES AND RAIL NETWORKS, PLUS CELL TOWERS, WIND FARMS AND TOLL ROADS.



His break came early. His father was an executive at a mutual fund company in Manitoba, and Platt, numerically inclined, joined an accounting firm in Toronto out of college.

In 1990, at 25, he was hired at Brascan, a conglomerate controlled by Peter and Edward Bronfman. He rose to become vice president of its merchant bank and gained a seat in the engine room of one of Canada's largest companies, with holdings like Labatt Beer, the Toronto Blue Jays and millions of acres of timberland. Then came trouble. Brascan's interests were built by Peter Bronfman and a South African investor named Jack Cockwell, who financed its am-

bition through a web of intermingled corporate holdings. The structure faltered during the early 1990s downturn, and troubled Brascan was forced to sell its beer, baseball and forestry interests.

Platt and a number of young partners began to rebuild Brascan. Its stock was deeply depressed, and by the mid-1990s Bronfman had stepped aside, selling his shares to a partnership that distributed stock to the company's upper ranks. For Platt, it was a billion-dollar opportunity: By borrowing, he was ultimately able to gain control of a large number of shares with a chance for immense wealth if he and his partners could devise a better strategy.



## BROOKFIELD

OBAYASHI	JA	886	▲
OCCIDENTAL PETROLEUM	US	722	▼
OCEANWIDE	CN	1517	▲
OFFICE DEPOT	US	1560	▲
OGAKI KYORITSU BANK	JA	1729	▲
OI (TELECOM)	BR	1503	▼
OIL & NATURAL GAS	IN	246	▼
OITA BANK	JA	1998	▲
OJI (MATERIALS)	JA	1470	▼
OLAM INTL	SI	1414	▲
OLD MUTUAL	UK	409	▼
OLD REPUBLIC INTL	US	1397	▲
OLYMPUS	JA	1153	▲
OMNICOM	US	506	▼
OMRON	JA	1395	▲
OMV (OIL & GAS)	AS	799	▲
ONEOK (OIL & GAS)	US	1058	▲
ONEX (DIVERSIFIED FIN)	CA	952	▲
ONO PHARMACEUTICAL	JA	1594	▲
OOREDOO TELECOM	QA	866	▼
OPEN TEXT	CA	1405	▲
ORACLE	US	70	▲
ORANGE	FR	304	▼
O'REILLY AUTOMOTIVE	US	827	▼
ORIENT	JA	1700	▲
ORIENT SECURITIES	CN	1192	▼
ORIENTAL BANK OF COMMERCE	IN	1859	▲
ORIENTAL LAND	JA	1180	▲
ORIGIN ENERGY	AU	1193	▲
ORIX (BUSINESS SVCS)	JA	256	▲
ORKLA	NO	1580	▲
OSAKA GAS	JA	1080	▼
OTP BANK	HU	1071	▲
OTSUKA	JA	578	▲
OVERSEA-CHINESE BANKING	SI	301	▼
OWENS CORNING	US	1807	▲
PACCAR	US	631	▼
PACIFIC EXPLORATION & PROD	CA	1567	▲
PACKAGING CORP OF AMERICA	US	1516	▲
PACWEST BANCORP	US	1676	▲
PANASONIC	JA	221	▲
PANDORA	DE	1312	▲
PARAMOUNT RES	CA	1860	▲
PARKER-HANNIFIN	US	739	▲
PARTNERS	SZ	1387	▲
PAYCHEX	US	1178	▲
PAYPAL	US	380	▲
PBF ENERGY	US	1737	▲
PEARSON	UK	1951	▼
PEGATRON	TA	884	▼
PEMBINA PIPELINE	CA	1587	▲
PENN VIRGINIA	US	1771	▲
PENSKE AUTOMOTIVE	US	1453	▲
PENTAIR	UK	1197	▼
PEOPLE'S INSURANCE	CN	214	▼
PEOPLE'S UNITED FINANCIAL	US	1619	▲
PEPSICO	US	84	▲
PERFORMANCE FOOD	US	1728	▲
PERNOD RICARD	FR	443	▲
PERRIGO	IR	1428	▼
PERSIMMON	UK	1479	▼
PETRO RABIGH	SU	1845	▲
PETROBRAS	BR	399	▲
PETROCHINA	CN	102	▼
PETRONAS CHEMICALS	MA	1319	▼
PETRONAS GAS	MA	1881	▼
PEUGEOT	FR	289	▲
PFIZER	US	47	▼
PG&E	US	280	▲
PGE POLSKA GRUPA ENERGET	PL	1255	▲
PGNIG	PL	1117	▼
PHILIP MORRIS INTL	US	181	▲
PHILIPS	NE	313	▲
PHILLIPS 66	US	210	▼
PHOENIX	UK	1129	▲
PHOSAGRO	RU	1849	▲
PING AN INSURANCE	CN	16	▲
PINNACLE WEST	US	1415	▲
PIONEER NATURAL RESOURCES	US	1306	▲
PIRAEUS BANK	GR	1599	▼
PKN ORLEN	PL	680	▲
PKO BANK POLSKI	PL	900	▲
PNC FINANCIAL SERVICES	US	147	▲
POLY REAL ESTATE	CN	311	▲
POPULAR	US	1821	▼
PORSCHE AUTOMOBIL	GE	788	▼
POSCO	KO	299	▲
POSTAL SAV BANK OF CHINA	CN	55	▲
POSTE ITALIANE	IT	475	▼
POTASHCORP	CA	1262	▼
POU CHEN	TA	1925	▲
POWER ASSETS	HK	1002	▼
POWER CORP OF CANADA	CA	358	▼
POWER FINANCE	IN	1086	▲
POWER GRID OF INDIA	IN	884	▲
PPG (CHEMICALS)	US	717	▼
PPL (UTILITIES)	US	479	▼
PRADA	IT	1755	▲
PRAXAIR	US	521	▼
PREMIER	US	1924	▲
PRESIDENT CHAIN STORE	TA	1647	▲
PRINCIPAL FINANCIAL	US	341	▲
PROCTER & GAMBLE	US	46	▼
PROGRESSIVE	US	382	▲
PROLOGIS	US	731	▲
PROSIEBENSATI MEDIA	GE	1653	▼
PROXIMUS	BE	1243	▼
PRUDENTIAL	UK	68	▼
PRUDENTIAL FINANCIAL	US	69	▲
PTT GLOBAL CHEMICAL	TH	1026	▼
PTT PCL (OIL & GAS)	TH	190	▲
PUBLIC BANK	MA	632	▼
PUBLIC POWER	GR	1854	▼

▲ UP ▼ DOWN  
● UNCHANGED ● NEW  
ASIAN COMPANIES ARE IN RED TYPE

Flatt forged an investing style to capitalize on the miscalculations of others. "We were young in our careers and watched very difficult markets in the late 1980s and early 1990s," he says. "That was quite impressionable on us to how we run the business—never put yourself in a situation where you have to sell something in an environment where you should be buying."

The opportunity came quickly. Another humbled Canadian giant, Olympia & York, filed for bankruptcy in 1992 after heavy losses in developing London's Canary Wharf. Flatt scooped up O&Y senior debt and organized a plan with creditors, including Hong Kong billionaire Li Ka-shing, beating out Apollo and Tishman Speyer. When the dust settled, Flatt controlled the World Financial Center—and a block on the West Side of Manhattan that he would sit on. Flatt listed the real estate trove on public markets in 1997 under the name Brookfield Properties. He then proceeded to buy out his minority partners. The stock quickly soared, reviving parent Brascan.

History repeated ahead of the next downturn. On 9/11, Flatt sprang into action, first reassuring investors that the World Financial Center had been mangled but not toppled. Then he hopped in a limousine and traveled from Toronto to Lower Manhattan to check on his workers and buildings. Alongside executives like John Zuccotti, a former deputy mayor of New York, Flatt and his team organized a months-long cleanup. When the crisis passed, he was anointed CEO by Brascan's partner-

ship, capping a dramatic ascent for the 36-year-old. Once in charge, Flatt streamlined Brascan's sprawling operations into three lines: real estate, renewable energy and infrastructure. On top of these divisions would sit an asset-management unit to invest outside funds—including co-investments from sovereign wealth funds—designed to generate fees and have capital ready for market dislocations.

And those dislocations kept coming. After the Enron debacle, for example, Flatt's renewable-energy business acquired hundreds of hydroelectric plants. By 2005, Flatt decided to rebrand the whole Brascan operation under the Brookfield name.

ON THE EVE OF THE FINANCIAL CRISIS in 2007, hundreds of skeptical investors gathered at the New-York Historical Society for a one-day conference on the fragile state of the global economy. Bearish Merrill Lynch economist David Rosenberg warned

that a severe recession was imminent. Hedge fund manager Bill Ackman railed against a new Wall Street creation called CDOs, which he predicted would soon implode. But when the young chief executive of Canada's Brookfield Asset Management got up to speak, he turned the topic to infrastructure—a \$35 trillion opportunity hiding in plain sight.

Forget the gloom. Pipelines, wireless towers, power generation, ports and toll roads—the backbone of the global economy—would soon become the holy grail investment product for trillions of dollars stagnating in pension funds and savings. "David [Rosenberg's] presentation is probably about the next six months," Flatt told the doomsday-obsessed audience. "Mine is more relevant to the next 25 to 60 years."

Recession or not, this market could be bigger than real estate—and Flatt was ready once again to exercise his penchant for buying during desperate times.

First up: Australian construction and real estate giant Multiplex, suffering heavy losses after massive cost overruns in building London's Wembley Stadium. Brookfield acquired it for a bargain \$3.8 billion, gaining a global construction business, \$6.6 billion in real

## HALF OF BROOKFIELD'S FUNDING NEVER HAS TO BE RETURNED TO INVESTORS, ALLOWING IT TO COMPOUND INVESTMENTS AND BUILD MUSCLE AND FLEXIBILITY.

estate and an operating toehold in Australia. Next, in 2009, Brookfield spent \$1.1 billion acquiring a major stake in the bankrupt infrastructure giant Babcock & Brown, control of Britain's third-largest port operator and a 50% interest in the world's largest coal-export terminal in Queensland, Australia, adding \$8 billion in infrastructure assets.

A year later, Brookfield, with Ackman, led the recapitalization of bankrupt mall operator General Growth, ponying up \$2.5 billion for a 26% stake, one of the seminal investment scores of the crisis. So far it has yielded Brookfield and its investors \$10 billion in profit. Flatt remains chairman of General Growth, and Brookfield is a 35% shareholder. "We didn't get in trouble before the crisis, so we were able to continue to grow and we were running fast coming out," Flatt says. "We could move money where money was needed."

As brilliant as Flatt's purchases were his exits. Beginning in 2008, he took each of his divisions pub-

lic on the NYSE (separate from the already public real estate arm, now known as Brookfield Property Partners). First, infrastructure (Brookfield Infrastructure Partners), then renewable energy (Brookfield Renewable Partners), then the private equity arm (Brookfield Business Partners). All this in addition to the holding company itself, Brookfield Asset Management. Collectively, Brookfield's five public entities carry more than \$70 billion in public market value.

The holding company's stakes in the four derivative companies range from 30% to 75%, forming a byzantine structure that feeds the parent with a perpetual and growing stream of cash, since it gets fixed fees plus a 1.25% annual management fee based on the value of its listed partnerships and performance fees of 15% to 25% based on the level of the dividends. Fold in its dozens of private funds, and Flatt's flagship found itself generating \$1.1 billion in fee revenues.

Besides the annuity of charging people to manage their money, this structure also carries a big tactical advantage. Because permanent capital is built into its public vehicles, roughly half of Brookfield's funding never has to be returned to investors, allowing it to compound investments and build more muscle and flexibility than almost any investment firm on earth. "These are lifelong entities," Neuberger Berman's Charles Kantor says. "I think that was brilliant."

**ONE DISTINCT DIFFERENCE BETWEEN Brookfield and Berkshire Hathaway:** While Buffett's annual shareholder meeting is a carnival of capitalism, Brookfield's annual investor meeting is a sober gathering of suits. There are no members of the press or do-eyed fans, just financial analysts and money managers ready to absorb head-spinning financial math that is both Brookfield's strength and its Achilles' heel.

At the start of his presentation, Flatt strolls to a podium: "There's really nothing different that we're doing or we're proposing to do with this company, and essentially nothing has changed." But this humility is a ruse. Brookfield had a banner 2016, and he's brimming. "The numbers are bigger, money has been raised faster, and therefore the returns should be higher and come quicker," he says.

First the money: Infrastructure has become Wall Street's hottest product—in 2016, \$62.5 billion was raised at 59 infrastructure funds—and Brookfield has first-mover advantage. Over the past year, Brookfield closed \$27 billion in private funds, one of the biggest gatherings of cash in the history of Wall Street, led by \$14 billion for infrastructure investments and driven by Brookfield's network of 450 sovereign wealth investors, pension funds and endowments.

There were also more deals: \$18 billion was spent mostly in markets where investors see calamity but Brookfield's flexibility allows it to buy. Brazil, roiled by a recession and a corruption scandal, has been a key Brookfield target. So far, Petrobras sold it NTS, the country's pipeline giant, for \$5.2 billion—Brookfield's ability to close without financing conditions was the key to the deal. Then it agreed to buy a 70% stake in the nation's largest private water and sewage company, Odebrecht Ambiental, whose holding company CEO was carted off to jail in 2016. Some \$6.9 billion was spent alongside partners to buy Australia's biggest rail-freight and container-port operator. Berlin's Potsdamer Platz, once a no man's land by the Berlin Wall, was acquired for a reported \$1.4 billion.

All told, Brookfield is on a 100-transaction-a-year pace, fed by 700 global deal scouts. Flatt presides over small teams that review each deal. He boasts that he hardly ever turns down a pitch because the firm's strict underwriting standards have been institutionalized over many decades. These executives forgo immense overnight riches that partners sometimes get at private equity firms and take the slow-but-steady path, gained by appreciation of its stock. In this model, Flatt and his team, unlike at so many funds, are largely aligned with their investors. Insiders own roughly 20% of Brookfield Asset Management; Flatt's \$1.2 billion in holdings is the largest stake, while others, like former CEO Jack Cockwell, hold interests in the hundreds of millions.

Despite its long-term call on global productivity and growth, Brookfield carries risk. During the crisis in 2008 and 2009, as Flatt was doubling down, Brookfield's stock plunged more than 70%. Bribery and corruption remain an issue for a company running so many arteries in so many countries. In 2012, for example, Brookfield was hit with a civil lawsuit in Brazil, as well as an SEC and Department of Justice investigation for alleged bribery by some of its employees. The SEC and DOJ investigations closed with no charges.

There are also geopolitical risks. The \$5.2 billion pipeline deal was suspended in February by a Brazilian court; lawyers challenged the injunction and had it overturned. And events like Brexit roil projects like Canary Wharf, which Flatt took control of in 2015.

But Flatt figures to have a solid two-decade time line to see his projects through and a corporate mandate that matches such patience. "Brexit may happen over the next ten years. But London is still going to be one of the great cities of commerce," Flatt says, noting that a high-speed railway will soon connect Heathrow to Canary Wharf in 40 minutes. "Over the next 20 years, we are going to make an enormous amount of money." **F**

PUBLIC SERVICE ENTERPRISE	US	540	▼
PUBLIC STORAGE	US	965	▼
PUBLICIS	FR	954	▼
PULTEGROUP	US	1284	▲
PUNJAB NATIONAL BANK	IN	1148	▼
PVH (HOUSEHOLD PRODUCTS)	US	1213	▼
QANTAS AIRWAYS	AU	1195	▼
QATAR ISLAMIC BANK	QA	1229	▼
QATAR NATIONAL BANK	QA	225	▲
QBE INSURANCE	AU	575	▼
QINGDAO HAIER	CN	730	▲
QUALCOMM	US	170	▼
QUANTA COMPUTER	TA	870	▼
QUEST DIAGNOSTICS	US	1061	▼
QUINENCO	CH	1323	▲
QUINTILESIMS	US	1076	▲
RAIFFEISEN BANK INTL	AS	849	▲
RAJESH EXPORTS	IN	1556	●
RAKUTEN	JA	855	▼
RAMSAY HEALTH CARE	AU	1438	▼
RANDSTAD	NE	908	▲
RAYMOND JAMES FINANCIAL	US	910	▲
RAYTHEON	US	285	▲
REALTY INCOME	US	1463	▲
RECKITT BENCKISER	UK	353	▼
RECRUIT	JP	676	▲
RED ELECTRICA	SP	1336	▼
RED HAT	US	1935	▲
RED STAR MACALLINE	CN	1775	▼
REGENERON PHARMA	US	986	▲
REGIONS FINANCIAL	US	546	▲
REINSURANCE GROUP OF AMER	US	694	▲
RELIAANCE INDUSTRIES	IN	106	▲
RELIAANCE STEEL	US	1894	▼
RELX	UK	553	▼
REMGRO	SA	1786	▼
RENAISSANCE	BU	1965	●
RENAULT	FR	164	▼
RENESAS ELECTRONICS	JA	1150	▲
REPSOL	SP	240	▲
REPUBLIC SERVICES	US	709	▼
RESONA	JA	512	▲
RESTAURANT BRANDS INTL	CA	1066	▲
REXEL	FR	1624	▼
REYNOLDS AMERICAN	US	232	▲
RHB BANK	MA	1405	▼
RICHMONT	SZ	472	▼
RICOH	JA	1202	▼
RIO TINTO	UK	123	▲
RIOCAN REIT	CA	1795	●
RISESEN REAL ESTATE DEV	CN	1446	▲
RITE AID	US	1429	▼
RIYAD BANK	US	959	▼
ROCHE	SZ	79	▲
ROCKWELL AUTOMATION	US	1039	▼
ROCKWELL COLLINS	US	1178	▲
ROGERS COMMUNICATIONS	CA	668	▼
ROLLS-ROYCE	UK	758	▲
ROPER INDUSTRIES	US	1071	▲
ROSNEFT	RU	82	▼
ROSS STORES	US	735	▲
ROSSETI	RU	778	▲
ROYAL AHOLD DELHAIZE	NE	330	●
ROYAL BANK OF CANADA	CA	44	▲
ROYAL BANK OF SCOTLAND	UK	500	▼
ROYAL CARIBBEAN CRUISES	US	596	▲
ROYAL DUTCH SHELL	NE	20	▲
ROYAL MAIL	UK	1579	▼
RSA INSURANCE	UK	1245	▼
RURAL ELECTRIFICATION	IN	1234	▼
RUSHHYDRO	RU	1337	▲
RWE	GE	698	▲
RYANAIR	IR	784	▼
S&P GLOBAL	US	815	▲
SF	CN	891	●
SABANCI	TU	739	▼
SABESP	BR	1436	●
SAFRAN	FR	319	▲
SAIC MOTOR	CN	108	▲
SAINT-GOBAIN	FR	268	▼
SAIPEM	IT	1580	●
SALESFORCE.COM	US	929	▲
SAMBA FINANCIAL	SU	777	▼
SAMPO	FI	493	▼
SAMSUNG C&T	KO	697	●
SAMSUNG ELECTRONICS	KO	15	▲
SAMSUNG FIRE & MARINE	KO	553	▼
SAMSUNG HEAVY INDUSTRIES	KO	1696	▼
SAMSUNG LIFE INSURANCE	KO	253	▲
SAMSUNG SDI	KO	1969	▼
SAMSUNG SDS	KO	1416	▼
SANDVIK	SW	882	▲
SAN-IN GODO BANK	JA	1712	▲
SANLAM	SA	838	▼
SANOFI	FR	88	▲
SAP	GE	178	▲
SAPUTO	CA	1095	▼
SASOL	SA	539	▼
SAUDI ARABIAN MINING	SU	1386	▲
SAUDI BASIC INDUSTRIES	SU	117	▼
SAUDI BRITISH BANK	SU	923	▼
SAUDI ELECTRICITY	SU	431	▲
SAUDI INVESTMENT BANK	SU	1943	▼
SAUDI TELECOM	SU	350	▲
SBA COMMUNICATIONS	US	1954	▲
SBERBANK	RU	56	▲
SBI	JA	1633	▲
SCA (HOUSEHOLD PRODUCTS)	SW	647	▼
SCANA	US	1205	▼
SCENTRE	AU	770	▼
SCHAEFFLER	GE	779	▲
SCHINDLER	SZ	892	▼
SCHLUMBERGER	US	495	▼

▲ UP ▼ DOWN  
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# BREAKING THE CLASS CEILING

By reimagining the way it operates in India, Mercedes-Benz is back on top of the country's luxury car market.

BY N. MADHAVAN

**T**he year 2012 was a particularly bad one for Mercedes-Benz in India. Its performance hit its nadir, and the company dropped to third, in terms of sales, in the luxury-car market, behind compatriots BMW and Audi. The Stuttgart carmaker, which had reentered India in 1994 and dominated the market for a decade and a half, posted a rare loss as well.

Its problems began with the entry of BMW and Audi into the Indian market in 2007. The duo, being late entrants, unleashed a product offensive with attractive prices. Like Daimler subsidiary Mercedes-Benz, their vehicles had the famed German-engineering DNA. But what caught the fancy of customers was their modern design and styling. Mercedes-Benz, on the other hand, had a more dated design. Plus it lacked a strong SUV portfolio. Its traditional communication strategy and approach did not suit the changing customer profile, and soon the brand was perceived as one suited to older people. BMW, Audi and other nameplates such as Jaguar Land Rover and Volvo gained in reputation and customer attention. In 2009, BMW overtook Mercedes-Benz, and Audi followed suit in 2012. The fact that Mercedes-Benz had lost the crown globally to BMW in 2005 did not help, either. With the parent itself facing strong headwinds, the ability of the Indian operations to react strongly to the altering market environment was impaired.

"We got complacent. We were the only player in the market, and in a monopoly situation you do not satisfy customers as you should. The year 2009 was a wake-up call," Roland S. Folger tells *Forbes India* in an interview in Pune. Folger, who took over as managing director and CEO of Mercedes-Benz India in October 2015, recalls how the poor performance sent the Mercedes-Benz India management team into introspection mode to understand what had hit them and what needed to be done to regain market leadership. The company labeled 2013 "The Year of the Offensive."

Results followed in a couple of years. By 2015, Mercedes-Benz had regained



**"We got complacent:"**  
Roland Folger, CEO of  
Mercedes-Benz India.





SCHNEIDER ELECTRIC	FR	250	▼
SCHROEDERS	UK	1059	▼
SCOR	FR	746	▼
SCRIPPS NETWORKS INTACTIVE	US	1489	▼
SDIC ESSENCE	CN	1500	▼
SDIC POWER	CN	1099	▼
SEAGATE TECHNOLOGY	IR	1036	▲
SEALED AIR	US	1420	▼
SEARS	US	1638	▼
SEB (BANKING)	SW	385	▼
SECOM (BUSINESS SERVICES)	JA	832	▲
SECURITAS	SW	1770	▼
SEIBU	JA	1492	▲
SEIKO EPSON	JA	1423	▼
SEKISUI CHEMICAL	JA	1256	▲
SEKISUI HOUSE	JA	616	▲
SEMPRA ENERGY	US	404	▲
SENSHU IKEDA	JA	1732	▲
SERVICENOW	US	1967	●
SES (MEDIA)	LU	1126	▲
SEVEN & I	JA	277	▼
77 BANK	JA	1631	▲
SEVERN TRENT	UK	1735	●
SEVERSTAL	RU	1022	▲
SGS (BUSINESS SERVICES)	SZ	1141	▼
SHAANXI COAL INDUSTRY	CN	1992	▼
SHANDONG GOLD MINING	CN	1635	●
SHANGHAI COMM & SVNGS BANK	TA	1457	▼
SHANGHAI CONSTRUCTION	CN	1096	▲
SHANGHAI ELECTRIC	CN	1113	▼
SHANGHAI FOSUN PHARMA	CN	1766	●
SHANGHAI INDUSTRIAL	HK	1839	▼
SHANGHAI INTL AIRPORT	CN	1905	▼
SHANGHAI INTL PORT	CN	864	▲
SHANGHAI LUJIANZI	CN	1653	●
SHANGHAI PHARMACEUTICALS	CN	995	▲
SHANGHAI PUDONG DEV	CN	64	▼
SHANGHAI RAAS BLOOD PRODS	CN	1962	▼
SHANXI TAIGANG STAINLESS	CN	1973	▼
SHARP	JA	927	▲
SHAW COMMUNICATIONS	CA	1684	▲
SHENGJING BANK	CN	861	▼
SHENWAN HONGYUAN	CN	810	▼
SHENZHEN OVERSEAS	CN	1119	▲
SHENZHOU INTL	CN	1790	●
SHERWIN-WILLIAMS	US	724	▼
SHIGA BANK	JA	1740	▲
SHIMANO	JA	1506	▲
SHIMAO PROPERTY	HK	922	▼
SHIMIZU	JA	949	▲
SHIN KONG FINANCIAL	TA	1098	▲
SHIN-ETSU CHEMICAL	JA	474	▲
SHINHAN FINANCIAL	KO	265	▲
SHINSEI BANK	JA	1232	▼
SHIONOGI	JA	1219	▲
SHIRE	IR	562	▲
SHISEIDO	JA	1457	▲
SHIZUOKA BANK	JA	1561	▼
SHOPRITE	SA	1454	▲
SHOWA SHELL SEKIYU	JA	1743	▼
SIAM CEMENT	TH	604	▲
SIAM COMMERCIAL BANK	TH	616	▼
SIEMENS	GE	50	▲
SIGNATURE BANK	US	1284	▼
SIGNET JEWELERS	BU	1673	▼
SIKA	SZ	1158	▲
SIME DARBY	MA	791	▲
SIMON PROPERTY	US	530	▼
SINGAPORE AIRLINES	SI	992	▼
SINGTEL	SI	330	▼
SINO LAND	HK	1722	▼
SINOHYDRO	CN	352	▲
SINO-OCEAN LAND	CN	1308	▲
SINOPAC FINANCIAL	TA	1696	▼
SINOPEC OILFIELD SERVICE	CN	1958	●
SINOPHARM	CN	581	▲
SISTEMA	RU	1481	▼
SK (IT SOFTWARE)	KO	363	▼
SK HYNIX (SEMICONDUCTORS)	KO	349	▲
SK INNOVATION (OIL & GAS)	KO	437	▲
SK NETWORKS (TRADING COS)	KO	1740	▼
SK TELECOM	KO	501	▲
SKANSKA	SW	909	▼
SKF (MATERIALS)	SW	1282	▼
SKYWORKS SOLUTIONS	US	1171	▲
SL GREEN REALTY	US	1656	▲
SM INVESTMENTS	PH	823	▲
SMC (CAPITAL GOODS)	JA	1084	▲
SMITH & NEPHEW	UK	1210	▲
SMITHS	UK	1639	▲
SMURFIT KAPPA	IR	1472	▼
SNAM (OIL & GAS)	IT	950	▼
SNAP (IT SOFTWARE)	US	1694	●
SNAP-ON	US	1616	▲
SOCIÉTÉ GÉNÉRALE	FR	112	▲
SODEXO	FR	641	▲
SOFTBANK	JA	38	▲
S-OIL	KO	830	▲
SOJITZ	JA	1264	▼
SOLVAY	BE	666	▲
SOMPO	JA	306	▲
SONY	JA	449	▼
SOUTH32	AU	1016	●
SOUTHERN CO	US	184	▲
SOUTHWEST AIRLINES	US	339	▲
SPECTRUM BRANDS	US	1863	●
SPIRIT AEROSYSTEMS	US	1558	▼
SSE (UTILITIES)	UK	405	▼
ST ENGINEERING	SI	1874	▼
ST GALLER KANTONALBANK	SZ	1918	▼
ST JAMES'S PLACE	UK	955	▲
STANDARD BANK	SA	421	▼
STANDARD CHARTERED	UK	535	▼



## DAIMLER

STANDARD LIFE	UK	556	▼	TEXTRON	US	707	▲
STANLEY BLACK & DECKER	US	656	▼	THAI BEVERAGE	TH	1107	▲
STAPLES	US	1563	▼	THAI OIL	TH	1509	▲
STARBUCKS	US	370	▲	THALES	FR	497	▲
STARWOOD PROPERTY TRUST	US	1361	▼	THE PRICELINE	US	416	▲
STATE BANK OF INDIA	IN	244	▼	THERMO FISHER SCIENTIFIC	US	251	▲
STATE STREET	US	274	▲	THOMAS COOK	UK	1946	▼
STATOIL	NO	461	▼	THOMSON REUTERS	US	470	▼
STEEL AUTHORITY OF INDIA	IN	1930	▼	3I	UK	1249	▲
STEEL DYNAMICS	US	1437	▲	3M	US	197	▲
STEINHOFF INTERNATIONAL	NE	456	▼	THYSSENKRUPP	GE	629	▲
STMICROELECTRONICS	SZ	1499	▲	TIAN AN CHINA INVESTMENTS	HK	1971	▲
STOCKLAND AUSTRALIA	AU	1413	▼	TIFFANY	US	1602	▲
STORA ENSO	FI	1033	▼	TIME WARNER	US	153	▲
STOREBRAND	NO	1478	▼	TINGYI	CN	1760	▲
STRABAG	AS	1631	▼	TJX COS (RETAILING)	US	401	▲
STRYKER	US	446	▲	TOHO BANK	JA	1690	▲
SUBARU	JA	333	▼	TOHO	JA	1901	▲
SUMITOMO CHEMICAL	JA	800	▼	TOHOKU ELECTRIC POWER	JA	756	▼
SUMITOMO CORP	JA	322	▲	TOKIO MARINE	JA	143	▲
SUMITOMO ELECTRIC	JA	561	▲	TOKYO CENTURY	JA	1173	▲
SUMITOMO METAL MINING	JA	1593	▼	TOKYO ELECTRIC POWER	JA	536	▼
SUMITOMO MITSUI FINANCIAL	JA	84	▼	TOKYO ELECTRON	JA	1017	▲
SUMITOMO MITSUI TRUST	JA	413	▼	TOKYO GAS	JA	865	▼
SUMITOMO REALTY	JA	621	▲	TOKYO TY FINANCIAL	JA	1725	▼
SUMITOMO RUBBER	JA	1891	▼	TOKYU	JA	935	▼
SUN ART RETAIL	HK	1154	▲	TOKYU FUDOSAN	JA	1676	▼
SUN HUNG KAI PROPERTIES	HK	223	▲	TOMONY	JA	1927	▲
SUN LIFE FINANCIAL	CA	239	▲	TONGLING NONFERR METALS	CN	1856	▼
SUN PHARMA INDUSTRIES	IN	1023	▲	TONGYANG LIFE INSURANCE	KO	1695	▲
SUNAC CHINA	CN	1266	▲	TOP FRONTIER INVESTMENT	PH	1228	▼
SUNCOR ENERGY	CA	487	▲	TOPPAN PRINTING	JA	1142	▲
SUNCORP	AU	572	▼	TORAY INDUSTRIES	JA	605	▲
SUNING APPLIANCE	CN	897	▲	TORCHMARK	US	1242	▲
SUNTORY BEVERAGE & FOOD	JA	993	▼	TOSHIBA	JA	817	▼
SUNTRUST BANKS	US	322	▲	TOSOH	JA	1655	▲
SUPERVALU	US	1733	▼	TOTO	FR	26	▲
SURGUTNEFTGAS	RU	305	▼	TOTAL SYSTEM SERVICES	US	1956	▼
SURUGA BANK	JA	1529	▲	TOWNGAS	HK	945	▼
SUZUKEN	JA	1584	▼	TOYOTA BOSHOKU	JA	1861	▲
SUZUKI MOTOR	JA	396	▲	TOYOTA INDUSTRIES	JA	442	▼
SVB FINANCIAL	US	1161	▲	TOYOTA MOTOR	JA	10	●
SVENSKA HANDELSBANKEN	SW	383	▼	TOYOTA TSUSHO	JA	764	▼
SWATCH	SZ	917	▼	TP ICAP (DIVERSIFIED FIN)	UK	1913	▲
SWEDBANK	SW	376	▼	TRACTOR SUPPLY	US	1401	▼
SWIRE PACIFIC	HK	552	▼	TRANSCANADA	CA	700	▲
SWISS LIFE	SZ	422	▲	TRANSNIGM	US	1531	▼
SWISS RE	SZ	130	▼	TRANSNEFT	RU	658	▼
SWISSCOM	SZ	516	▼	TRANSOCEAN	SZ	1290	▼
SYDNEY AIRPORT	AU	1650	▼	TRANSURBAN	AU	1426	▼
SYMANTEC	US	857	▲	TRAVELERS	US	179	▼
SYNCHRONY FINANCIAL	US	267	▲	TSINGHUA TONGFANG	CN	1641	▲
SYNDICATE BANK	IN	1745	▼	TUI (BUSINESS SERVICES)	GE	960	▲
SYNGENTA	SZ	489	▼	TURKCELL	TU	1744	▼
SYNNEX	US	1790	▲	TURKISH AIRLINES	TU	1511	▼
SYNNEX TECHNOLOGY INTL	TA	1986	▲	TWENTY-FIRST CENTURY FOX	US	192	▲
SYNOVUS FINANCIAL	US	1949	▲	TWO HARBORS INVESTMENT	US	1866	▼
SYSCO	US	424	▲	TYSON FOODS	US	351	▲
SYSMEX	JA	1659	▲	UBI BANCA	IT	1434	▼
T ROWE PRICE	US	1116	▼	UBS	SZ	80	▼
T&D (INSURANCE)	JA	544	▲	UC RUSAL	RU	961	▲
TAIHEIYO CEMENT	JA	1536	▲	UCB	BE	1212	▲
TAISEI	JA	879	▲	UCO BANK	IN	1849	▼
TAISHIN FINANCIAL	TA	1483	▼	UGI	US	1364	▲
TAIWAN BUSINESS BANK	TA	1749	▲	ULTA SALON COSMETICS & FRAG	US	1358	▲
TAIWAN COOPERATIVE FIN	TA	1252	▲	ULTRAPAR PARTICIPACOES	BR	981	▼
TAIWAN MOBILE	TA	1527	▼	UMICORE	BE	1819	▼
TAIWAN SEMICONDUCTOR	TA	127	▲	UNIBAIL-RODAMCO	FR	635	▼
TAKEDA PHARMACEUTICAL	JA	348	▲	UNICHARM	JA	1266	▲
TALANX	GE	414	▼	UNICREDIT	IT	496	▼
TAGA (UTILITIES)	AE	1829	▼	UNILEVER	NE	103	▲
TARGA RESOURCES	US	1407	▲	UNION BANK OF INDIA	IN	1420	▼
TARGET	US	227	▼	UNION NATIONAL BANK	AE	1589	▼
TATA CONSULTANCY SERVICES	IN	376	▲	UNION PACIFIC	US	182	▼
TATA MOTORS	IN	290	▼	UNIPER	GE	896	▲
TATA STEEL	IN	1076	▲	UNIPOL GRUPPO	IT	869	▼
TATNEFT	RU	673	▲	UNI-PRESIDENT	TA	1036	▼
TAYLOR WIMPEY	UK	1408	▼	UNIQIA	AS	1543	▲
TCL (TECH HARDWARE)	CN	1104	▼	UNITED AIRCRAFT	RU	1829	▲
TD AMERITRADE	US	836	▲	UNITED CONTINENTAL	US	269	▼
TD BANK	CA	56	▲	UNITED OVERSEAS BANK	SI	332	▼
TDK (TECH HARDWARE)	JA	1036	▼	UNITED PARCEL SERVICE	US	159	▼
TE CONNECTIVITY	SZ	502	▼	UNITED RENTALS	US	1183	▲
TECH DATA	US	1604	▼	UNITED TECHNOLOGIES	US	87	▲
TECH MAHINDRA	IN	1998	▼	UNITED UTILITIES	UK	1335	▼
TECHNIPFMC	UK	1914	▲	UNITEDHEALTH	US	36	▲
TECHTRONIC INDUSTRIES	HK	1676	▲	UNIVERSAL HEALTH	US	990	▼
TECK RESOURCES	CA	753	▲	UNUM	US	568	▲
TELECOM ITALIA	IT	300	▲	UPM-KYMMENE	FI	762	▲
TELEFÓNICA	SP	110	▼	URALKALI	RU	1370	▲
TELEKOM INDONESIA	ID	653	▲	US BANCORP	US	96	▲
TELENOR	NO	715	▼	US FOODS	US	1571	▲
TELIAISONERA	SW	702	▼	US STEEL	US	1941	▼
TELSTRA	AU	282	▼	VAKIFBANK	TU	951	▼
TELUS	CA	643	▼	VALE	BR	156	▲
TENAGA NASIONAL	MA	490	▼	VALEANT PHARMACEUTICALS	CA	1248	▲
TENARIS	LU	1396	▼	VALEO	FR	634	▲
TENCENT	CN	148	▲	VALERO ENERGY	US	211	▼
TENET HEALTHCARE	US	1204	▲	VALSPAR	US	1979	▼
TENNECO	US	1761	▲	VEDANTA RESOURCES	UK	1318	▼
TERNA	IT	1172	▼	VENTAS	US	973	▲
TERNIUM	LU	1671	▲	VEOLIA ENVIRONNEMENT	FR	721	▼
TERUMO	JA	1559	▼	VEON	NE	802	▲
TESCO	UK	587	▼	VERBUND	AS	1942	▲
TESLA	US	933	▲	VEREIT	US	1929	▼
TESORO	US	694	▼	VERISIGN	US	1811	▼
TEVA PHARMACEUTICAL	IS	485	▼	VERISK ANALYTICS	US	1418	▲
TEXAS INSTRUMENTS	US	387	▲	VERIZON COMMUNICATIONS	US	18	▼

▲ UP ▼ DOWN

● UNCHANGED ● NEW

ASIAN COMPANIES ARE IN RED TYPE

market leadership in India. As per its filings with the Registrar of Companies, Mercedes-Benz's profits in India in 2014–15 stood at about \$50 million. In 2016, it consolidated its lead despite being badly hit by the ban on the sale of big diesel cars in the National Capital Region (NCR) as well as by demonetization; in the first quarter of 2017, it posted its highest-ever sales numbers, 3,650 units, with those of SUVs growing by 13%. The perception that it is not a brand for younger people was changing as well—the average age of its customers dropped from 45 to 37. Globally, too, Mercedes-Benz regained its leadership in 2016 after over a decade of playing catch-up.

Mercedes-Benz's recovery in India began with the launch of the A-Class in 2013. The car, with its modern design, ran up 400 orders in just ten days. More launches followed, including in the SUV segment. In 2015, some 15 models debuted, followed by another 13 in 2016. This year has already witnessed three launches: the new E-Class with a long wheelbase, Night Editions in the A-Class and B-Class models, and the S-Class Connoisseur's Edition. "The new launches helped us cover all the white spots in our product range," says Folger, a 57-year-old Mercedes-Benz lifer who headed the Malaysia business before coming to India. "Our new launches this year will be more or less the same as last year."

The product blitzkrieg has helped the company erase its "slow mover" image, while offering customers multiple options across segments—be it a compact car, sedan or SUV, dream cars like Cabriolet or performance vehicles such as AMG.

Even as the company launched new models, it realized that the new class of customers it was wooing was different from its traditional buyers in many respects. For instance, entrepreneurs—in the startup space and elsewhere—and professionals who had tasted success early in their careers wanted to own a Mercedes-Benz but found them unaffordable. The company adopted a multipronged strategy to tackle that challenge.

First, it put to better use its manufacturing facility at Chakan, near Pune, with a capacity to assemble up to 20,000 cars, by assembling more vehicles in India. "Today we locally assemble nine models that account for 80% of our volumes," Folger says. The company also focused heavily on localization. For most of the nine models the local content is about 60%. "These measures enabled us to reduce our prices by 20% to 30%. This helped our volumes and improved our profitability," he says.

Today any model that sells over 500 units a year presents a business case for the company to assemble locally. This applies to top-end cars as well. India is the first and the only market outside Germany where a righthand-drive, long-wheelbase E-Class is assembled locally. The same is the true of the Mercedes-Maybach S500 and S600, priced at \$260,000 and \$400,000 respectively. "It is testimony to the fact that we can produce cars of the same quality as Germany with no discernible difference at all," Folger says. "Such is the quality of the people at our plant that when Mercedes-Benz started a plant in Brazil, workers from here were sent to train people there."

The company also adapted cars that came as CBUs (completely built-up units) for the Indian market in a bid to make them more affordable. For instance, AMGs were launched globally with 4-liter V8 engines, but the company felt they were too powerful for Indian conditions and cost too much. The company opted for a 3-liter, V6 engine,

which offered a relatively lower horsepower and torque but worked well for local conditions and came with a lower price tag.

The affordability factor was also tackled through some innovative financing products. Daimler Financial Services India (DFSI), the captive financing company, came in handy here. “The challenge before us was to make a Mercedes-Benz car more accessible to customers who wanted to own it but were unsure of servicing a large equated monthly installment,” says Fred Wick, managing director and CEO of DFSI.

Launched in 2013, STAR Agility, a finance solution created by Mercedes-Benz India with Mercedes-Benz Financial, gave buyers the option of making a balloon payment at the end of the contract and either take ownership of the car or exchange it for a new model at the end of the contract period. STAR Agility reduced the equated monthly installment by 40%, making the cars affordable for a wider pool of customers.

“Mercedes-Benz learned from its past mistakes and understood the need to make its products attractive and affordable to the new breed of customers. By doing so, it has come back strongly,” says Amit Jain, a partner at BMR Associates. “It also built a strong management team to go deeper into the country.” With 89 sales and service outlets across 41 cities, Mercedes-Benz has the densest network among all luxury-car players in the country and 35% more than its nearest competitor.

“Our ‘go to customer’ strategy, a qualitative network expansion, has been the key to our growth story. We have tried to unleash the potential not only in the key metros but also in emerging T2 and T3 markets,” says Michael Jopp, vice president of sales and marketing at Mercedes-Benz India.

This widespread network was useful when the company rolled out its next biggest differentiator: My Mercedes-My Service. Until a few years ago, the total cost of ownership—a metric that looks at the cost a buyer incurs while using a car—was never a factor in the luxury-car space. But for the new crop of buyers who wanted to own a luxury car for the first time, a high maintenance cost—as well as service—was a big deterrent to buying a Mercedes. To address this issue, the company extended the warranty period to three

years (two years is the norm in the industry) for all cars.

It did not stop there. Mercedes began offering attractive service packages in various forms. Each car has 45 different packages that enable customers to choose a plan based on their usage pattern—three years or 30,000 km, three years or 60,000 km and even ten years or 200,000 km. About 30% of all new car buyers have opted for the My Mercedes-My Service scheme since it launched in July 2016. “My father always said you learn how to save money from rich people,” Folger says.

Mercedes-Benz is back on a firm footing. It has attracted younger customers, and what pleases Folger even more is that many of the traditional customers who left the brand in 2009–10 are returning. “They tried out other brands and realized that the grass is not always greener on the other side,” he says. If anything worries him today, it is the larger issue of growth in the Indian luxury-car market. For many years now, the volumes have remained almost flat. Between 2013 and 2016, the segment added just 4,000 units, and in 2016, growth declined by 5% to 34,176 units. The high duty structure seems to be an impeding factor. “The exorbitant duty structure makes luxury cars quite prohibitive in pricing in this market. Any reduction in excise duty would have grown the volume, and the fear of revenue loss would have been more than aptly balanced,” Jopp says. Folger adds, “India is still a bit socialist in its thinking.”

But that is changing from a customer’s perspective. “Buying a luxury car is not a taboo any longer, and customers now perceive a luxury car as an extension of their lifestyle and also as an achievement,” Jopp says. BMR’s Jain agrees. “The Indian market is upping the ante. People want to own a luxury car.” The numbers surely show the potential headroom for growth. In India, the share of luxury cars among total new cars registered, at 1.2%, is among the lowest in the world. In Indonesia it is 2.5%, Malaysia 5.4%, China 8% and Germany 24%. “I am confident the market will grow,” says Folger. He adds that Mercedes-Benz has never been better prepared to take advantage of any sharp increase in demand for luxury cars in the country. **F**  
*Adapted from Forbes India, a licensee of Forbes Media.*

VERTEX PHARMACEUTICALS	US	1644	▲
VESTAS WIND SYSTEMS	DE	774	▲
VF	US	728	▼
VIACOM	US	538	▼
VICINITY CENTRES	AU	1301	▲
VIENNA INSURANCE	AS	1083	▲
VIENTIANE BANK	VE	1633	▲
VIETNAM DAIRY PRODUCTS	VE	1888	●
VINCI	FR	162	●
VIPSHOP	CN	1746	▲
VIRGIN MONEY	UK	1777	▼
VISA	US	173	▲
VIVENDI	FR	425	▼
VMWARE	US	645	▲
VODAFONE	UK	419	▼
VOESTALPINE	AS	1086	▼
VOLKSWAGEN	GE	28	▼
VOLVO	SW	275	▼
VONOVIA	GE	713	▲
VORNADO REALTY	US	919	▼
VOYA FINANCIAL	US	969	▼
VTB BANK	RU	397	▲
VULCAN MATERIALS	US	1542	▲
W&W-WÜSTENROT	GE	1263	▼
WALGREENS BOOTS ALLIANCE	US	94	▲
WAL-MART STORES	US	17	▼
WALT DISNEY	US	67	▲
WANHUA CHEMICAL	CN	1817	●
WANT WANT CHINA	CN	1661	▼
WÄRTSILÄ	FI	1502	▼
WASTE CONNECTIONS	CA	1751	●
WASTE MANAGEMENT	US	481	▲
WATERS	US	1490	▲
WEC ENERGY	US	623	▲
WEICHAI POWER	CN	1024	▲
WELLFAR HEALTH PLANS	US	1662	▲
WELLS FARGO	US	5	▲
WELLTOWER	US	796	▲
WENDEL	FR	1557	▼
WESFARMERS	AU	461	▼
WEST JAPAN RAILWAY	JA	661	▲
WESTAR ENERGY	US	1959	●
WESTERN DIGITAL	US	757	▼
WESTERN UNION	US	1950	▼
WESTFIELD	AU	942	▼
WESTLAKE CHEMICAL	US	1582	▲
WESTPAC BANKING	AU	76	▼
WESTROCK	US	964	▲
WEYERHAEUSER	US	682	▲
WH (FOOD, DRINK & TOBACCO)	HK	674	▼
WHEELLOCK	HK	457	▲
WHIRLPOOL	US	630	▼
WHITBREAD	UK	1526	▼
WHOLE FOODS MARKET	US	1089	▼
WILLIAMS	US	839	▲
WILLIS TOWERS WATSON	UK	795	▲
WILMAR INTERNATIONAL	SI	388	▼
WIPRO	IN	765	▼
WISTRON	TA	1667	▲
WM MORRISON SUPERMARKETS	UK	1139	▼
WOLSELEY	SZ	793	▼
WOLTERS KLUWER	NE	1343	▲
WOODSIDE PETROLEUM	AU	847	▲
WOOLWORTHS	AU	682	▲
WOORI BANK	KO	592	▼
WORKDAY	US	1881	▲
WORLD FUEL SERVICES	US	1600	▼
WPG	TA	1719	▼
WPP	UK	308	▲
WR BERKLEY	US	947	▲
WULIANGYE YIBIN	CN	1106	▲
WW GRAINGER	US	1021	▼
WYNDHAM WORLDWIDE	US	1338	▼
WYNN RESORTS	US	1702	▲
X5 RETAIL	NE	1244	▲
XCEL ENERGY	US	452	▲
XEROX	US	1202	▼
XIAMEN C&D	CN	1114	▼
XIAMEN INTL TRADE	CN	1840	●
XIAMEN XIANGYU	CN	1785	●
XILINX	US	1371	▲
XISHUI STRONG YEAR INNER	CN	1768	●
XL (INSURANCE)	BU	738	▼
XPO LOGISTICS	US	1603	▲
YAHOO!	US	898	▲
YAMADA DENKI	JA	1574	▲
YAMAGUCHI FINANCIAL	JA	1484	▲
YAMAHA MOTOR	JA	1049	▲
YAMANASHI CHUO BANK	JA	1991	●
YAMATO	JA	1280	▲
YANZHOU COAL MINING	CN	1112	▲
YARA INTERNATIONAL	NO	859	▼
YES BANK	IN	1239	▲
YONGHUI SUPERSTORES	CN	1810	●
YPF (OIL & GAS)	AR	1006	▼
YUANTA FINANCIAL	TA	1351	▲
YUM BRANDS	US	729	▼
YUM CHINA	US	1224	●
YUNNAN BAIYAO	CN	1548	▲
ZENITH BANK	NI	1802	▼
ZHEJIANG ZHENENG ELECTRIC	CN	915	▼
POWER	CN	1563	▼
ZHENGZHOU YUTONG BUS	CN	1857	▼
ZHONGSHENG	CN	1200	▼
ZUIJIN MINING	CN	1200	▼
ZIMMER BIOMET	US	887	▲
ZIONS BANCORP	US	1107	▲
ZOETIS	US	1047	▲
ZTE	CN	1052	▼
ZURICH INSURANCE	SZ	91	▲

▲ UP ▼ DOWN  
● UNCHANGED ● NEW  
ASIAN COMPANIES ARE IN RED TYPE





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# Build the Wall!

## *Por Favor.*

Trump's incendiary tweets against Mexico are music to the ears of BlackRock's intrepid emerging-market portfolio manager Gerardo Rodriguez.

BY KENNETH RAPOZA

**A**mong Mexicans, few get as much pleasure from President Trump's tough talk excoriating our southern neighbor as Gerardo Rodriguez, portfolio manager of BlackRock's Total Emerging Markets Fund. Since January, Total has been seriously overweighting Mexican bonds, and the president's rhetoric and tweets about "bad hombres," building walls and dealing NAFTA a death-blow tend to send the peso falling. In January, during Trump's first days in office, the peso's exchange rate with the U.S. dollar peaked at nearly 22, its weakest level in history.

For Rodriguez, that moment was somewhat like the S&P 500 low in March 2009, after the financial crisis. Rodriguez knew it was a great time to buy Mexico, and he instructed BlackRock traders to pile into peso-denominated bonds when most investors were running for cover. At the time, Mexican government bonds were yielding 7.8%, compared with 2.3% for ten-year U.S. Treasuries. This move, plus a big allocation to beaten-down Asian stocks like Samsung and Alibaba, has helped Total Emerging Markets achieve a 10.4% total return year to date and a 4.2% three-year average annual return, topping its category and earning it five stars among Morningstar-rated funds.

"All of our analysis was flashing red hot in favor of Mexico in January. Trump's aggressiveness didn't frighten us away. When there's a big move like that in Mexico, you go in," Rodriguez says from his office on Park Avenue in New York, a colorful sombrero hanging outside on the wall. Rodriguez just returned from 90-degree weather in Mexico City, but New York on this day was an unseasonable 55.

"You have a window. It's now until the end of the year. After that, things will start to intensify, and you will need to reassess. There will be new themes because of [domestic] politics," Rodriguez says, adding that populism in Latin America, recently dormant, could be awakened given that ex-Mexico City governor An-

drés Manuel Lopez Obrador, a populist, is leading in the polls for next year's election.

According to Rodriguez, Mexico has been through far worse than Trump. "He's not really at the top of our minds. Security, corruption and the economy are far more important," he says in a strong Mexican accent.

Rodriguez begins to run down a list of things that make Mexico reliable for investors: chiefly, its proximity to the U.S., its welcoming stance on manufacturing and trade, and relatively conservative fiscal and monetary policies. The takeaway: Mexican politics are turbulent, but economic policy is not. In January, hundreds of Mexicans took to the streets to protest gasoline price hikes. He describes the scene of looted shops, busted windows and protesters calling for President Enrique Peña Nieto's resignation. Mexico's president is less popular than Trump, so the government can't avoid political stress. But it will seek to avoid financial stress, Rodriguez insists.

He ought to know. He has insider status when it comes to Mexico's finances. Born in Puebla, a state with a 64% poverty rate, Rodriguez, 44, is the son of a construction entrepreneur and attended Universidad de las Américas in Puebla, majoring in economics and playing shooting guard for the college's championship team, the Aztecas. Rodriguez went straight from there to an entry-level position at Mexico's Ministry of Finance and then on to Stanford, earning a master's degree in engineering, economic systems and operations research.

After graduating in 1999, Rodriguez headed back to the finance ministry under presidents Vicente Fox and Felipe Calderón, ultimately rising to undersecretary of finance. During his 14-year tenure there, Rodriguez got to know the Mexican capital markets intimately, because he helped create them. From 2005 to 2011, as head of Mexico's public-debt management, he was the nation's yield-curve czar. He also created an online Treasury Direct platform similar to the one in the U.S. and launched

a National Infrastructure Fund.

"I was in the finance ministry during the Asian Tiger crisis, at a time when we were just getting over the Tequila Crisis ... and then, bam, it's 2008," Rodriguez recalls. The Tequila Crisis refers to Mexico's devaluation of its peso in December 1994, which sparked hyperinflation and capital flight. At the time, Mexico faced default on its dollar debts, and the IMF, with the help of the U.S. Treasury, spent \$40 billion bailing out the country.

"We became the poster child of the IMF," he says. "None of that compared to 2008." That's when the world began falling apart. In Mexico City, while Wall Street was imploding, Rodriguez and others in the finance ministry were looking at their balance sheets for ticking time bombs, "and we found nothing," he says. Until Rodriguez realized that Mexican corporations had gorged on dollar loans. Companies needed more pesos to pay dollar debts. It was the Great Recession with a painful reminder of the peso crisis.

"We spent \$25 billion in different forms to stabilize the situation, because we thought, No way is anyone going to fund us. It was intense," he says shaking his head, with a "never again" look on his face.

Thanks to Mexico's good record paying back its 1990s peso-crisis debts, it got thrown another IMF lifeline during the 2009 G20 meeting in London. "We got a \$47 billion credit line. Until then, we thought we were entering another major financial crisis," he says. On the news, the peso rebounded from 15 to the dollar to about 13.

According to Rodriguez, the peso strengthens fast on good news. He predicts it will happen again.

In 2013, Rodriguez was recruited by BlackRock, barely a year after he spearheaded the hosting of the G20 Summit in Mexico City. During the meeting, Rodriguez led the effort to increase IMF funding by over \$450 billion. Despite his decision to move El Norte, Rodriguez continues to be named as a potential successor to Agustín Carstens, the current governor of Mexico's central bank.

In his new role managing BlackRock's \$370 million fund, Rodriguez has spread its investments around the globe, employing something of a contrarian value strategy. The fund currently has its largest exposure to equities in China and Taiwan and is overweight tech



and telecom stocks. From a currency standpoint, he is long the Brazilian real as well as the Thai baht and Turkish lira. For bonds, his top three holdings are Mexico, South Africa and Indonesia, all yielding around 7%. Total is leveraged 140% on the fixed-income side to help limit volatility in equities. In 2016, the fund returned 13.2%, beating the benchmarks and its category average of 8.47%.

In December, Fitch downgraded Mexico's credit outlook from stable to negative amid an interest rate hike by its central bank. The peso has recently strengthened to 18.80, and Rodriguez has lightened up his positions there.

"The big mystery for Mexico has been Trump, but soon local politics will take center stage," he says. "But there is a strong fundamental backdrop in the country." What if its populist frontrunner comes to power and the peso falls back to 22? Says Rodriguez, "Buy. Absolutely buy." **F**



## Little Rich Boss

32-year-old Itthipat “Tob” Peeradechapan has reaped a bounty from selling flavored seaweed.

BY NAAZNEEN KARMALI

**T**he Taokaenoi Land store at the popular Terminal 21 mall in central Bangkok is a favorite pit stop for Chinese tourists, who flock there to pick up Thailand's signature seaweed snack. Taokaenoi's wafer-thin sheets of crispy dried algae are available in an array of flavors from tom yum to wasabi. These are the East Asian equivalent of potato chips, providing a nutrient-rich fix for a salty snack craving.

“One-fifth of the world's population already eats seaweed. But that only means there's huge room to grow,” says Itthipat “Tob” Peeradechapan, founder of Thai-exchange-listed Taokaenoi Food & Marketing. The company dominates the domestic market for seaweed snacks with close to a two-thirds share. Its nearest competitor is Masita, made by beer baron Santi Bhirombhakdi's (No. 9) Singha, with a 19% market share.

Taokaenoi means “little boss” in Thai, a nod to 32-year-old Tob, a college dropout and former vendor of roasted chestnuts, whose seaweed success has made him something of a youth icon. An early achiever, he shot into the limelight at age 26 when a movie was made about his life titled *The Billionaire*.

In dollar terms, Tob doesn't make the billionaire cut yet, but he's on his way.

Taokaenoi's surging sales—up more than a third in 2016 to \$136 million—lifted its shares, securing Tob's debut on the list at No. 44 with \$610 million.

The stock has jumped fivefold since the company's 2015 IPO, a gain that was “beyond our expectations,” acknowledges Kongkiat Opaswongkarn, chief executive of Asia Plus Securities, the lead investment bank for the public issue. He attributes the rise partly to investors' growing appetite for the food and beverage sector.

Analysts say the post-IPO buzz around Taokaenoi was also sparked by rising sales in China, the company's biggest overseas market, which contributes more than a third to revenues. “The IPO price hadn't fully factored in the China play,” says Nantika Wiangphoem, an analyst at Bangkok securities firm DBS Vickers, who tracks the company.

At his company's Bangkok headquarters, Tob, wearing a solid black T-shirt, the color preferred by his icon Steve Jobs, admits to eyeing an even bigger play: to make Taokaenoi a global brand. “The next stop has to be the U.S., as that's the world's biggest snacking market,” he says. In the American market, as in China, Taokaenoi will have to fight it out with earlier Korean and Japanese arrivals.

Unfazed, Tob is in the throes of doubling Taokaenoi's annual production



LUKE DUGGLE/REDUX FOR FORBES





Laying it all out:  
“The next stop has  
to be the U.S.”



# Thailand's 50 Richest

## SNACK MAN

capacity to 12,000 tons. He's used half the \$42 million IPO proceeds to build a new factory that will produce exclusively for export. It is located in an industrial park 47 miles north of Bangkok, close to the historic city of Ayutthya, the former capital of the Kingdom of Siam. Adjacent to Taokaenoi's 7-acre complex, is, ironically, a PepsiCo plant producing Lay's potato chips.

Traditional labor-intensive production, whereby seaweed is manually fried (or roasted) in woks, has been replaced here with automation, using imported Korean and Japanese machines and some equipment that was developed in-house. Chief operations officer Boonchai Kowpanich, who oversees the newly opened unit, says it needs a third of the 3,000 who are employed at the old factory.

Uraiwan Tantisuwannakul, an analyst with CIMB Securities (Thailand), points out that the eight-year tax break that the new unit enjoys, combined with productivity gains and cost savings, should make Taokaenoi more competitive. But, she adds, the company remains vulnerable to price increases of its main raw material. And seaweed isn't available locally.

Taokaenoi depends on imports from South Korea, but Tob insists that it secures "competitive rates." The capacity expansion and export push are crucial, he says, for achieving his target of doubling revenue by 2024. "We have to be big or we cannot survive."

Tob imbibed such survival lessons at an early age. The youngest of three children, he saw his father's construction business collapse in the wake of the 1997 Asian financial crisis with the bank threatening to take possession of their home. A videogame fanatic, he dabbled in selling such fare while at school, netting \$10,000. In his freshman year of college, he dropped out to start "a real business" to help with the family's financial woes.

A visit to a food fair sparked the idea of selling roasted chestnuts. He used \$7,200 from his savings to buy equip-

ment and set up a stall at a food court in a mall. But sales were slow, and he contemplated shutting shop and going to work at the McDonald's opposite his stall. Just then he got a timely break with supermarket chain Tesco Lotus. Sales took off from the get-go. "My kiosk was close to the cash counter," he says. "It was all about location, location, location."

He called his fledgling venture Taokaenoi because "my father used to tease me by calling me Little Boss." Soon he had expanded to 30 locations with

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**Tob latched on to seaweed when a girlfriend brought him a packet of the traditional variety. "It was love at first bite!" he says.**

---

monthly sales of \$87,000 and 50 staffers. "That wasn't bad for a 19-year-old," he says, smiling. But he kept close tabs, visiting every spot at least once a week.

A change in management at Tesco Lotus ended his dream run. The chain wanted him to shift to the parking lot since the smoke from the oven was affecting some customers and turning ceilings black. His offer to retrofit was turned down. Sales plummeted, forcing him to look for other avenues.

Tob latched on to seaweed when a girlfriend brought him a packet of the traditional variety from her university store. "It was love at first bite!" he says. He sensed an opportunity as seaweed snacks were already popular with the younger crowd but were not being made in Thailand in a big way.

He sought know-how from experts at Kasetsart University, which is known for agricultural sciences, and enlisted his mother's help in creating flavors. "Our original salty and spicy flavors are based

on her recipes," he says. Raising \$200,000 by selling some of his chestnut stalls, he set up a factory to make crispy seaweed in 2006.

Wirote Tangwutthikaiwit, founder of PAG Design, the firm that designed Taokaenoi's logo of a young boy in traditional Chinese attire, recalls being amazed by the teenage Tob. "He was only 19 but had a clear vision for what he was out to do."

Taokaenoi's launch at a 7-Eleven store sputtered when the packs were placed on lower shelves, hence out of sight. After Tob persuaded the store manager to move them close to the cashier, sales jumped. In 2008, when Taokaenoi's sales touched \$30 million, his confidence got a boost and he mulled taking Taokaenoi public: "I knew then that I would succeed."

But success spawned competition by the likes of Masita and a raft of smaller copycats. He faced a setback in 2011 when flooding in Thailand devastated Taokaenoi's factory. Working overtime, he restored production in three months, though the plan for an IPO had to be postponed. "In the foods business if you don't have your product on the shelves, consumers will try another brand," he explains.

What if seaweed snacks become passé with consumers? Tob admits that he frets about the possibility but is following Warren Buffett's advice to stay focused. Taokaenoi's range now includes corn snacks (Tob Corn) and Seagle seaweed chips made of seaweed powder and a flour mix. Tob has splashed \$2 million on Taokaenoi's latest marketing campaign, which revolves around the popular South Korean boy band Got7.

In recent months, Tob has divested 10% of his holdings to institutional investors, partly to diversify his personal portfolio. Having tasted success, he is keen to back startups and what he calls the "next generation" of entrepreneurs: "Though I am 32, in terms of experience I feel closer to 50." **F**

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# Thailand's 50 Richest

BY NAAZNEEN KARMALI

## Rising Against the Odds

The nation's wealthiest record handsome gains in a downcast year.

**T**hailand's economy expanded 3.3% in the first quarter of 2017, its highest rate in four years, largely on the back of improved farm production, increased consumer spending and a recovery in exports. The uptick spells good news for a nation under authoritarian rule that is observing a yearlong period of mourning for much revered King Bhumibol Adulyadej, at his death the world's longest-reigning monarch, who ruled over seven decades.

Despite the subdued sentiment, Thailand's 50 richest are raking it in. They are worth \$123.5 billion, up 16% since 2016, outperforming the stock market's 12% rise in the past 12 months. More than two-thirds of the country's 50 richest added to their wealth, with the top 5 notching up the biggest dollar gains.

The **Chearavanont brothers** of the Charoen Pokphand Group added \$3 billion to retain their No. 1 spot with a fortune of \$21.5 billion. Liquor tycoon **Charoen Sirivadhanabhakdi**, who remains at No. 2, was in the news for his plan to build a \$3.5 billion township in central Bangkok, the city's biggest development to date, overseen by his younger son, Panote, age 39 (see "Charoen Earth," p. 66).

The Red Bull clan, headed by **Chalerm Yoovidhya**, is the second-biggest gainer in



Panote Sirivadhanabhakdi oversees the \$3.5 billion One Bangkok project.

dollars, up \$2.8 billion since 2016. Though Red Bull sales are flat, the sector is sizzling and public competitors trade at higher multiples than a year ago. (Chalerm's son, Vorayuth, has subtracted himself in a criminal matter; see "Fugitive Heir," p. 69)

Three are new this year: **Itthipat Peeradechapan**, founder of seaweed snack maker Taokaenoi Food & Marketing, who at 32 is the youngest on the list (see "Little Rich Boss," p. 58); poultry prince **Winai Teawsomboonkij**, who founded his Thai-foods Group in 1987 with a farm of 20,000 chickens; and **Nutchamai Thanombooncharoen**, another energy-drink maker and one of only half a dozen women (see p. 68).

The biggest drop in net worth was suffered by **Prasert Prasarttong-Osoth**, whose wealth shrank by \$600 million as shares of his hospital chain, Bangkok Dusit Medical Services, and airline, Bangkok Airways, both took a hit on falling profits.

Notable drop-offs include siblings Nijaporn Charanachitta and Premchai Karnasuta, whose flagship, Italian-Thai Development, saw its shares fall 35% in the past year as the government delayed infrastructure spending.

Net worths were based on stock prices and exchange rates from May 18.

—Reporting by Ron Gluckman, Sean Kilachand, Suzanne Nam, Phisanu Phromchanya and Anuradha Raghunathan

JACK PICONE FOR FORBES

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## PETCH OSATHANUGRAH: WAITING FOR A BOOST

The much anticipated IPO of Thailand's oldest consumer product company, 125-year-old **Osotspa**, maker of the popular M-150 energy drink, is expected to be one of the largest on the Thai stock exchange. Originally planned for 2016, the offering was put on hold due to a weak market and tighter listing rules but is expected this year. The delay allows the Osathanugrah family (No. 24) to decide which of nearly 50

companies, besides the drinks business, to include. Meantime, Osotspa's exotic CEO Petch, who shares close to two-thirds of the company with younger brother Ratch and cousin Niti, is preparing to break ground on his contemporary art museum, Sansab. A collector for three decades, he recently "bought my first Picasso!" The museum, says Petch, who also runs the family-founded Bangkok University, will be a gift to Thailand.

BANGKOK POST

## THE LIST

<b>1</b>	<b>CHEARAVANONT BROTHERS</b> <b>\$21.5 BILLION</b> ▲ CHAROEN POKPHAND GROUP
<b>2</b>	<b>CHAROEN SIRIVADHANABHAKDI</b> <b>\$15.4 BILLION</b> ▲ THAI BEVERAGE AGE: 73
<b>3</b>	<b>CHIRATHIVAT FAMILY</b> <b>\$15.3 BILLION</b> ▲ CENTRAL GROUP
<b>4</b>	<b>CHALERM YOOVIDHYA</b> <b>\$12.5 BILLION</b> ▲ RED BULL AGE: 66
<b>5</b>	<b>VICHAI SRIVADDHANAPRABHA</b> <b>\$4.7 BILLION</b> ▲ KING POWER AGE: 59
<b>6</b>	<b>KRIT RATANARAK</b> <b>\$3.9 BILLION</b> ▲ BANGKOK BROADCASTING & TV AGE: 71
<b>7</b>	<b>VANICH CHAIYAWAN</b> <b>\$3.8 BILLION</b> THAI LIFE AGE: 85
<b>8</b>	<b>PRASERT PRASARTTONG-OSOTH</b> <b>\$2.6 BILLION</b> ▼ BANGKOK DUST MEDICAL SERVICES AGE: 84
<b>9</b>	<b>SANTI BHIROMBHAKDI</b> <b>\$2.3 BILLION</b> BOON RAWD BREWERY AGE: 70
<b>10</b>	<b>ALOKE LOHIA</b> <b>\$1.75 BILLION</b> ▲ INDORAMA VENTURES AGE: 58
<b>11</b>	<b>THAKSIN SHINAWATRA</b> <b>\$1.7 BILLION</b> SC ASSET AGE: 67
<b>12</b>	<b>SUPALUCK UMPUJH</b> <b>\$1.65 BILLION</b> ▲ THE MALL GROUP AGE: 62

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# Thailand's 50 Richest



## THEN AND NOW

Bag man: Vichai showing off some of his duty-free goodies in our profile 11 years ago; (inset) a more recent look.

## VICHAJ SRIVADDHANAPRABHA: SHOP AND FLY

Thailand's tourism boom drew a record 32.6 million visitors in 2016, more than a fourth of them mainland Chinese. Thanks to their spending, sales at Vichai's **King Power** duty-free stores were up 20% to \$2.4 billion last year, adding \$1.45 billion to his wealth and earning him a spot in the top five for the first time. But this growth faces speed bumps: The military junta has started cracking

down on cut-price group tours from China and is set to end King Power's airport monopoly in 2020. To expand beyond duty-free, Vichai picked up a 21% stake in Thai Air Asia for \$225 million in the past year. The football fan, who transformed Leicester City into a Premier League champ, reportedly agreed to buy Belgian second-tier football team OH Leuven for an undisclosed sum.

LUKE DUGGLEY/REDFUX FOR FORBES (RIGHT)

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## CHUCHAT & DAONAPA PETAUMPAI: MONEY ON WHEELS

With one million customers and 2,000 branches, **Muangthai Leasing**, the country's biggest provider of loans against motorcycles, is thriving. Its loan portfolio grew by more than 80% to \$695 million in 2016. Shares surged 60% since last year, propelling the combined wealth of the founders past the \$1 billion mark for the first time. The husband-and-wife team, who gave up bank jobs to start Muangthai in 1992, appear at No. 19 with \$1.4 billion. Chuchat, an avid wine collector with 2,000 bottles in his private cellar, says they are aiming for 50% growth this year with 600 additional branches.



ANTHONY KWAN/ELONBERG (BOTTOM)

## SUPHACHAI CHEARAVANONT: SONS ALSO RISE

Agribusiness conglomerate **Charoen Pokphand Group**, controlled by Thailand's richest clan, announced a long-expected succession in its top ranks in January. After 48 years as chairman and CEO, Dhanin Chearavanont crowned his oldest son, Soopakij, 53, and the youngest, Suphachai, 50, as CP's chairman and CEO respectively. An alum of New York University, Soopakij has worked in key group companies. Suphachai, an undergrad from Boston University, started out at retailing arm Siam Makro and went on to head True, CP's telecom business, in which the group has invested billions, though it has struggled to make it profitable. Suphachai recently announced "CP 4.0," a plan to transform the group with digital technology, among much else. "I see myself as both a professional and an entrepreneur," he says. The patriarch, 77, is now designated senior chairman, though it is believed he continues to call the shots.

## THE LIST

<b>13</b> <b>PRAYUDH MAHAGITSIRI</b> <b>\$1.62 BILLION</b> ▲ QUALITY COFFEE PRODUCTS AGE: 71
<b>14</b> <b>RIT THIRAKOMEN</b> <b>\$1.6 BILLION</b> ▲ MK RESTAURANT GROUP AGE: 65
<b>15</b> <b>WILLIAM HEINECKE</b> <b>\$1.55 BILLION</b> MINOR INTERNATIONAL AGE: 68
<b>16</b> <b>WICHAI THONGTANG</b> <b>\$1.5 BILLION</b> BANGKOK DUSIT MEDICAL SVCS AGE: 70
<b>17</b> <b>CHATRI SOPHONPANICH</b> <b>\$1.47 BILLION</b> BANGKOK BANK AGE: 83
<b>18</b> <b>KEEREE KANJANAPAS</b> <b>\$1.43 BILLION</b> BTS GROUP HOLDINGS AGE: 67
<b>19</b> <b>CHUCHAT &amp; DAONAPA PETAUMPAI</b> <b>\$1.4 BILLION</b> ▲ MUANGTHAI LEASING AGE: 63, 63
<b>20</b> <b>THONGMA VIJITPONGPUN</b> <b>\$1.39 BILLION</b> PRUKSA REAL ESTATE AGE: 59
<b>21</b> <b>SOMPOTE AHUNAI</b> <b>\$1.37 BILLION</b> ▲ ENERGY ABSOLUTE AGE: 49
<b>22</b> <b>ISARA VONGKUSOLKIT</b> <b>\$1.36 BILLION</b> ▲ MITR PHOL SUGAR AGE: 68
<b>23</b> <b>HARALD LINK</b> <b>\$1.2 BILLION</b> B. GRIMM GROUP AGE: 62
<b>24</b> <b>OSATHANUGRAH FAMILY</b> <b>\$1.12 BILLION</b> ▲ OSOTSPA
<b>25</b> <b>ANANT ASAVABHOKHIN</b> <b>\$1.11 BILLION</b> ▲ LAND & HOUSES AGE: 66

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

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# Charoen Earth

BY RON GLUCKMAN

Nobody knew what to expect when Thailand's richest tycoon, Charoen Sirivadhanabhakdi, outbid other suitors to snatch beverage-and-property giant Fraser & Neave of Singapore for \$11.2 billion in 2013. Now comes news of the first offspring of the Frasers property unit: One Bangkok, a \$3.5 billion development in the heart of Bangkok's central business district. The project, touted as the largest investment on a single site in the city, is being developed with Charoen's privately held TCC Assets (Thailand), through which he controls vast land parcels in Thailand, including this one.

Spread over 41 acres, it will be a mix of office towers, hotels, residences and retail. Reports say it will include a 90-story skyscraper. "This is all on a scale unlike anything we've seen before," notes Simon Landy, executive chairman of property consultancy Colliers International Thailand.

Panote Sirivadhanabhakdi, 39, Charoen's youngest child, is overseeing One Bangkok. While his older brother, Thapana, works on the liquor, food and beverage side as president and chief executive of flagship Thai Beverage, Panote, group CEO of listed property arm Frasers Centrepoint in Singapore, is in charge of the family's international property interests.

The site, along Rama IV and Wireless roads, snug against Lumpini Park and close to the embassy district, has long been among the most desired for development. Owned by the Crown Property Bureau, it housed the popular Suan Lum Night Bazaar until 2007, when vendors were evicted. TCC and listed Univentures, which Charoen also controls, won the bid to develop it in 2014 for an undisclosed price.

Originally granted a 30-year lease, TCC won a rare 30-year extension, which Panote insists is critical to the project's viability. He dismisses worries of a property glut, saying it will be done in stages and completion won't be until 2025. In the process, the project should also boost values for a bevy of other properties that Charoen owns or leases in the area (*see photo*), making the tycoon, says one banker, "the Regent of Rama IV."



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## THE LIST



SOURCE: JLL THAILAND RESEARCH

**26**  
**PHORNTHEP PHORNPRAPHA**  
**\$1.1 BILLION** ▲  
SIAM MOTORS AGE: 68

**27**  
**BANTHOON LAMSAM**  
**\$1.05 BILLION**  
KASIKORN BANK AGE: 64

**28**  
**PETE BODHARAMIK**  
**\$1 BILLION** ▲  
JASMINE INTERNATIONAL AGE: 44

**29**  
**PRANEETSILPA VACHARAPHOL**  
**\$950 MILLION**  
THAI RATH AGE: 85

**30**  
**VICHAI MALEENONT**  
**\$890 MILLION**  
BEC WORLD AGE: 97

**31**  
**CHATCHAI KAEWBOOTTA**  
**\$870 MILLION** ▲  
SRISAWAD POWER 1979 AGE: 65

**32**  
**SATHIEN SETTHASIT**  
**\$830 MILLION** ▲  
CARABAO GROUP AGE: 63

**33**  
**SURANG PREMPREE**  
**\$820 MILLION** ▲  
BBTV AGE: 74

**34**  
**PAWAT VITOORAPAKORN**  
**\$790 MILLION** ▲  
EASTERN POLYMER GROUP AGE: 65

**35**  
**WINAI TEAWSOMBOONKIJ**  
**\$750 MILLION** ★  
THAIFOODS GROUP AGE: 54

**36**  
**WITON SURYAWANAKUL**  
**\$745 MILLION** ▲  
SIAM GLOBAL HOUSE AGE: 59

**37**  
**NISHITA SHAH FEDERBUSH**  
**\$730 MILLION** ▲  
PRECIOUS SHIPPING AGE: 37

**38**  
**BOONCHAI BENCHARONGKUL**  
**\$710 MILLION** ▲  
TOTAL ACCESS COMMUNICATIONS  
AGE: 63

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# Thailand's 50 Richest



## **NUTCHAMAI THANOMBOONCHAROEN: MS. FIZZ**

In a year when the energy-drinks market in Thailand declined 3%, SET-listed **Carabao Group**, maker of Carabao Dang, Thailand's second-most-popular energy drink, recorded double-digit growth in volume. The company's shares surged 55% in the past 12 months, propelling its cofounder and managing director onto the list for the first time. With a 26% stake she debuts at No. 46 with a \$590 million fortune, joining her business partner Sathien Sethasit, who entered the ranks in 2015. She branched out from her family's financial-services business to team up with Sathien for a property venture before setting up Tawandang German Brewery, a microbrewery and restaurant, in 1999. Two years later, they partnered with popular folk singer Aed Carabao for a foray into energy drinks.

## **ANANT ASAVABHOKHIN: TEMPLE TANGLE**

The property baron is in the spotlight over his alleged role in a financial scandal linked to the Dhammakaya Temple, north of Bangkok. Anant was reportedly summoned for questioning by the Department of Special Investigation over supposedly dodgy land deals he entered into with the former chairman of a credit union, who is serving a prison term for embezzlement of funds. The jailed chairman is alleged to have sold land at a fraction of the market price to Anant, who in turn sold it at a huge profit and donated the bulk of the proceeds to the Buddhist temple. Anant, who didn't respond to requests for a comment, reportedly said that he was perplexed by the summons. Nonetheless, he resigned from the chairmanship of four of his companies: Land & Houses, Quality Houses, LH Bank and Home Product Center. It was speculated that the Bank of Thailand may have forced his hand.



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## THE LIST

VORAYUTH YOOVIDHYA

# Fugitive Heir

Early one September morning in 2012, a speeding black Ferrari ran over and killed a motorcycle policeman in central Bangkok and fled the scene. While the cops were quick to identify the alleged culprit by following a trail of brake fluid to his home, nearly five years on—unbelievably—he has yet to be brought to book.

The driver was allegedly Vorayuth Yoovidhya, whose late grandfather Chaleo Yoovidhya co-founded the global energy-drink maker **Red Bull**. The family, led by Vorayuth's father, Chalerm, is Thailand's fourth richest, with a \$12.5 billion fortune. Ignoring multiple police and court summonses, Vorayuth, whose nickname is Boss, is on the lam at an unknown overseas location.

The high-profile case, which has incited public anger over the blatant impunity enjoyed by the rich, returned to the headlines recently as some of the charges Vorayuth could face—for speeding and reckless driving causing property damage—lapsed owing to the statute of limitations, though he still faces charges of reckless driving causing death and failing to help the victim. Last month, days before he was to appear in court, Vorayuth reportedly flew to Singapore, from where he fled.

His disappearance prompted prosecutors to take urgent actions. A warrant for the scion's arrest was finally issued and his passport revoked by the Foreign Ministry. The government said it was seeking Interpol's help for Vorayuth's extradition. Despite these moves, the general perception is that the law will never catch up with the fugitive heir.

Indeed, in the aftermath of the accident, Vorayuth didn't seem racked with remorse. He continued to live the high life and, as reported by



Living the high life in glamorous locales.

AP, posted photos on social media from glamorous foreign locales as he hit the ski slopes and racing tracks, among much else. (The family did not respond to a request for comment.)

A recent editorial in the *Bangkok Post*, titled "Raging Red Bull Runs Rings Round Lame Ducks," slammed the foot-dragging by the police and prosecutors. Niti Pawakapan, a professor of sociology and anthropology at Chulalongkorn University, doubts Vorayuth will suffer any consequences.

The case has drawn attention to another lister: deposed prime minister Thaksin Shinawatra, who faces corruption charges and has been living in self-imposed exile in Dubai for a decade. Thaksin, who has denied wrongdoing, appears at No. 11 with \$1.7 billion. —N.K.

**39**  
**KRAISORN CHANSIRI**  
**\$695 MILLION**  
THAI UNION GROUP AGE: 82

**40**  
**BANCHA ONGKOSIT**  
**\$670 MILLION** ▲  
KCE ELECTRONICS AGE: 65

**41**  
**PARPHAN SIRIVIRIYAKUL**  
**\$660 MILLION**  
KASET THAI INTERNATIONAL SUGAR  
AGE: 64

**42**  
**VIRIYABHUN FAMILY**  
**\$630 MILLION** ▼  
VIRIYAH INSURANCE

**43**  
**CHAMROON CHINTHAMMIT**  
**\$615 MILLION** ▲  
KHON KAEN SUGAR AGE: 66

**44**  
**ITTHIPAT**  
**PEERADECHAPAN**  
**\$610 MILLION** ★  
TAOKAENOI FOOD & MARKETING  
AGE: 32

**45**  
**PONGSAK VIDDAYAKORN**  
**\$595 MILLION** ▲  
PRINCIPAL CAPITAL AGE: 83

**46**  
**NUTCHAMAI**  
**THANOMBOONCHAROEN**  
**\$590 MILLION** ★  
CARABAO GROUP AGE: 55

**47**  
**SIRIPONG**  
**RUNGROJKITIYOS**  
**\$585 MILLION**  
P.C.S. MACHINE GROUP AGE: 66

**48**  
**GUNKUL**  
**DHUMRONGPIYAWUT**  
**\$510 MILLION**  
GUNKUL ENGINEERING AGE: 62

**49**  
**VICHA POOLVARALUCK**  
**\$465 MILLION** ▲  
MAJOR CINEPLEX AGE: 53

**50**  
**CHALERM HARNPHANICH**  
**\$460 MILLION** ◯  
BANGKOK CHAIN HOSPITAL  
AGE: 64

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## Around Asia In *Forbes*:



### FORBES KOREA JUNE

Chung Mong-won is chairman of Halla Group. The auto-parts-maker-cum-conglomerate was founded by his father (who split off from his brother's Hyundai). While restoring Halla's fortunes, Chung also has built up Korean ice hockey. His team will compete in next year's Winter Olympics at Pyeongchang. ([forbeskorea.com](http://forbeskorea.com))



### FORBES CHINA MAY-JUNE

Tencent cofounder Charles Chen, No. 1 on the latest Forbes China Philanthropy List, is emblematic of the internet giant's charitable bent. ([forbeschina.com](http://forbeschina.com))



### FORBES INDONESIA JUNE

Government veteran Agus Rahardjo, 61, has energized friend and foe of the Corruption Eradication Commission (KPK). At its helm since December, he's pursuing kickbacks in the rollout of a national ID card after earlier targeting the ex-CEO of state airline Garuda Indonesia. "There will be turmoil," he says. ([forbesindonesia.com](http://forbesindonesia.com))

### FORBES INDIA MAY 12


Under new CEO Kalyan Krishnamurthy, an alum of eBay and the Tiger Global fund, Flipkart is restoring its market capitalization after a difficult 2016 as it consolidates India's ecommerce market for continued battle with Amazon. ([forbesindia.com](http://forbesindia.com))











CEO Jamie Kern Lima (center) and her product team gather in the boardroom of IT Cosmetics' Jersey City headquarters to celebrate the launch of Confidence in a Compact, its first ever foundation that has an antiaging solid serum in it. More than 400,000 units were sold in the first quarter.

# The IT Girl

Former news anchor Jamie Kern Lima began testing makeup a decade ago to help cover her red, blotchy skin. That experimentation led to the creation of IT Cosmetics, which L'Oréal snapped up in 2016 for \$1.2 billion. Now she's plotting to turn IT into the largest beauty brand in the world.

BY CHLOE SORVINO

**F**ifty women start lining up outside an Ulta Beauty store in northern New Jersey at 7:30 a.m. on a winter Saturday, here for a two-hour workshop in makeup application taught by employees of IT Cosmetics. An hour and a half later, IT Cosmetics' founder, 39-year-old Jamie Kern Lima, arrives. She's wearing a bright-pink dress and pumps, and her light-brown hair is pulled back in a low ponytail, accentuating her flawless complexion. She points to her right cheek and then wipes off her makeup to reveal red blotches that "feel like sandpaper." She pauses, then applies color-correcting cream across her face. In seconds, the spots are undetectable. "For so long, we would never see real," she says. At the end of the class, the participants—including a lupus patient whose brows and eyelashes have fallen out, an emergen-

JANEL TOPPIN FOR FORBES



cy-room nurse and a construction worker—line up to meet her and rave about her products.

Kern Lima, who has a skin condition called rosacea, which causes redness, has put this show on since 2010. That's when she began peddling her corrective products—hybrids of skin care and makeup—live on the QVC home shopping channel. Since then, Kern Lima has appeared on TV hundreds of times, and IT Cosmetics, which stands for Innovative Technology, has been mentioned in 8.4 million YouTube videos. On Facebook, the brand is shared or commented on an average of 3,600 times a day, according to analytics firm Listen-First Media. "When women find something that works, they tell somebody. That's really how we grew," Kern Lima says.

## IT COSMETICS WILL CONTINUE TO RAMP UP IN SOUTHEAST ASIA, THE INDUSTRY'S FASTEST-GROWING REGION.

She calls her loyal customers "IT Girls." But it's Kern Lima who has become the it girl of the \$445 billion beauty industry. Her popularity has helped make IT Cosmetics one of the hottest beauty brands in the country. So hot that the world's biggest beauty company, L'Oréal, paid \$1.2 billion in cash for it in August 2016, the French conglomerate's biggest acquisition in eight years. Kern Lima, the majority owner, pocketed an estimated \$410 million after taxes. She is staying on to run IT, making her the first female CEO of any of L'Oréal's brands (34 in the U.S. alone) in its 108-year history.

The \$28 billion global giant was drawn to IT (estimated 2016 sales of \$300 million) by its charismatic founder and its popular products, but the deal illustrates a larger trend. Right now, the beauty industry is growing at a tepid 3% a year. That has driven big players like L'Oréal, Coty and Estée Lauder into bidding wars for the fastest-growing, most fashionable brands, pushing them to pay high multiples. IT, for

instance, received numerous offers and was sold for 6.6 times its previous 12 months revenue of \$182 million. In all, 62 private beauty companies were acquired in 2016, 38% more than the previous year, according to the analytics firm CB Insights. Estée Lauder paid approximately \$1.45 billion for Too Faced, an irreverent cosmetics brand known for edgy products like Better Than Sex mascara, and roughly \$200 million for Becca Cosmetics, known for its shimmering bronzers, both in 2016. L'Oréal bought Toni Ko's NYX Cosmetics for \$500 million two years earlier.

"The organic growth is just not there for the established brands," says Hana Ben-Shabat, a partner at the global consultancy A.T. Kearney and the lead author of the report "Shop or Drop: The Inevitable Path for Growth in Beauty," which studied 214 beauty transactions over six years. Beauty conglomerates, she has said, "cannot afford to be inactive in the acquisition game if they want to succeed."

Small companies can easily create new products by working with makeup labs, but expanding overseas, with the differing regulations and the need to find local distributors, is nearly impossible. "There are a large number of brands that have to survive in a very competitive environment. The market is not growing fast enough—that's made M&A almost inevitable," Ben-Shabat explains.

According to A.T. Kearney's concept of "Merger End Game," based on the analysis of hundreds of mergers, an industry typically approaches a merger tipping point when the top three companies have a combined market share of 45% or more, making increased M&A activity likely. The beauty and personal care industry arrived there by the end of last year, explaining the current wave. The beer and telecom sectors similarly went through a period of consolidation about a decade ago.

L'Oréal has high hopes for IT Cosmetics, planning to build it into the most popular makeup brand on the planet. For now, it ranks 35th in the world, according to Euromonitor, well below L'Oréal's top brands:

Maybelline (No. 1; 2016 sales of \$4.9 billion), L'Oréal Paris (No. 2; \$3.2 billion) and Lancôme (No. 5; \$1.6 billion).

Kern Lima is a big part of its gamble. "I'm still driven at this moment the way I was even before the L'Oréal acquisition," she says. "I'm just scratching the surface of what I have to give and what I have to do."

THE BEAUTY INDUSTRY has long been a beacon for female entrepreneurs. In the 1940s, Queens-born Estée Lauder was selling pots of cream in beauty parlors around New York City. Her heirs are worth \$18 billion. In 1995, Bobbi Brown, a makeup artist turned entrepreneur, sold her company for about \$70 million, roughly \$115 million today. There are now at least 40 prominent beauty businesses founded by women. In part, that's because the barriers are quite low, says Kern Lima. "I feel like what I've done, any woman can do."

The makeup mogul began honing her drive at an early age. Given up at birth and adopted as a newborn, she grew up in Seattle and at 15 started doing odd jobs such as bagging groceries and coaching gymnastics. The first in her family to go to college, she worked as a waitress at Denny's to pay her way through Washington State. She graduated as valedictorian.

In 1999, she won a competition to appear on a *Baywatch* episode and was crowned Miss Washington USA, which led to a stint on the first season of the reality show *Big Brother*. She changed gears and headed to Columbia University in 2002 to earn an M.B.A. Kern Lima met her husband, Paulo, in statistics class and began writing for the student newspaper. After graduation, she took a job back in Washington at a TV station for \$23,000 a year and quickly moved to a Fox affiliate in Portland, Oregon.

Having to start work at midnight most days was stressful, and her hereditary rosacea flared up. (The disease, which affects at least 16 million Americans, typically begins after age 30.) Foundation made her condition look worse. Fed up, she started thinking about new formulations and technologies to help people with flawed, sensitive skin. In Paulo's native Brazil, the couple met with family friends who were plastic surgeons. They set up an advisory

board that included plastic surgeons and dermatologists. The newlyweds wrote the business plan on a flight to South Africa for their 2007 honeymoon.

Kern Lima left the TV station in 2008, and the couple began bootstrapping in their Los Angeles living room. “If you want something, you figure out how to make it happen,” she recalls from her glassy office in Jersey City, which looks across the Hudson River at Manhattan. Putting her reporting skills to use, she cold-called beauty companies to find manufacturers. An actress who lived in their spare bedroom rent-free spent 20 hours a week putting products in boxes and getting them ready to ship. A graphic designer from her former news station worked with her remotely on packaging.

IT’s first products were contouring kits that included concealers, highlighting creams and bronzers. QVC told her it wasn’t interested. Just a few months later, shopping channel HSN agreed to feature her dark-circle concealer, which uses a proprietary “3D Skin Flex” technology to allow the foundation to move with facial expressions without creasing.

With ample on-air experience, Kern Lima thought pitching her wares on TV would be fun. But the products didn’t sell, and she wasn’t asked back at the end of her contract. Shopping Channel Canada did see her segment, though, and gave her another chance a year later.

All the while, she was hounding QVC, nearly four times the size of HSN in 2010, to give her another shot at the American market. Allen Burke had been building QVC Beauty since 1997, when the channel started featuring high-end brands like Bobbi Brown and Clinique. After saying no several times, he gave her a chance in the fall of 2010. “Did she go call me after every Canada visit and tell me how she did? Yes,” Burke says, who retired in late 2011 and was hired by IT as a paid consultant in January 2012. To prepare, Kern Lima watched her competitors’ past segments and started figuring out how to connect better with her customers. She wiped the concealer off her cheek (yes, she used under-eye concealer on her face) on TV for the first time. She also hired a 66-year-old woman to appear with her. The prod-



**Mirror, mirror:** Kern Lima seated at her reflecting desk, in her glass office.

ucts sold out in ten minutes.

QVC brought her back another four times before the end of 2010, and sales topped an estimated \$1 million. “It took us a while to say, ‘Let’s give this a shot,’ but it was an instant success from the beginning,” Burke says. In 2011, Kern Lima and her husband, who is co-CEO and largely handles the operations and finances, moved to Bayonne, New Jersey, from California to be within driving distance of the network’s studios in eastern Pennsylvania.

Investors began calling. “You’re so tempted, especially if you were a poor entrepreneur like I was,” Kern Lima recalls. “You’re just hoping for someone to help you grow your infrastructure beyond what you can do yourself.” But she hesitated and did due diligence, ringing up every entrepreneur and CEO who had previously worked with the suitors.

She focused on a couple: TSG Consumer Partners, a \$5 billion private equity firm best known for investments in Plan-



## JAMIE KERN LIMA

et Fitness and Glacéau Vitaminwater, and Guthy-Renker, the direct-marketing powerhouse that built Proactiv into a billion-dollar acne-treatment brand. Both said no. She waited. “You have to hold your gut and your own belief on a pedestal,” Kern Lima says. “All the ones that had said no finally said yes.”

It wasn't until 2012, after Ulta Beauty signed a deal to sell the brand, that TSG invested an undisclosed sum. A year later, Guthy-Renker followed suit; it got an estimated 20% stake in return for the right to package and market discounted kits to be sold on infomercials. Guthy-Renker has spent about \$50 million a year buying infomercial spots, according to cofounder Greg Renker.

In 2013, IT Cosmetics rolled out what became its top seller, CC Cream, which

would be decades longer if we did it internally” (though she did bring IT to Australia in 2014).

After meeting Carol Hamilton, the head of L'Oréal's Luxe Division, at an industry conference in 2013, Kern Lima followed up with a handwritten thank-you note, which is currently on display in Hamilton's office. Hamilton visited IT later that year and walked out the door thinking it was the most powerful brand she'd seen in a long time. “I realized the connection that Jamie had with women was authentic,” Hamilton recalls. “She absolutely has a fierce desire to make every woman realize her best self. A lot of women might say that, but her commitment was what made me really convinced that her brand was going to continue to be on fire.”

While both parties were smitten, there

eted approximately \$150 million.

Under the L'Oréal umbrella, IT Cosmetics will continue to ramp up in Southeast Asia, a rapidly expanding region for the industry and home to four of the top five fastest-growing markets for beauty in the world, according to Euromonitor: Myanmar (No. 1), Laos (No. 2), Sri Lanka (No. 4) and Cambodia (No. 5).

IT is already positioned to do well there. The company says that its products that help cut down on sweat and shrink pores, like the Bye Bye Pores finishing powder, have become bestsellers in Southeast Asia since hitting shelves in August. With L'Oréal's support, the company will also be developing more products specifically suited for the humid weather and tailored to the region's women.

In addition to international expansion,

## Makeup Mergers

Cosmetic conglomerates are snapping up smaller brands at a record pace. Here are some of the biggest recent deals.

### NYX Cosmetics

*Bold colors, drugstore prices*

**ACQUIRED BY**  
**L'Oréal**  
**\$500 MILLION**  
2014



### Glamglow

*Facial masks and skin care*

**ACQUIRED BY**  
**Estée Lauder**  
**EST. \$100 MILLION**  
2015



### IT Cosmetics

*Problem-solving makeup*

**ACQUIRED BY**  
**L'Oréal**  
**\$1.2 BILLION**  
2016



### Too Faced

*Millennial fave for lipstick, eye colors*

**ACQUIRED BY**  
**Estée Lauder**  
**\$1.45 BILLION**  
2016



### Becca Cosmetics

*Highlighters and bronzers*

**ACQUIRED BY**  
**Estée Lauder**  
**EST. \$200 MILLION**  
2016



took four years and more than 200 attempts to perfect. By 2014, sales hit an estimated \$117 million. Another top seller took even longer: Superhero Mascara, which lifts even the shortest lashes by catching hairs through a proprietary elastic-stretch technology and has antiaging ingredients in the tint. Launched in February 2016, it took three years and 275 tries to formulate.

INTERESTED IN RE-CREATING that success outside the U.S., Kern Lima began thinking about a buyer early on: “We could [go internationally] on our own for sure—it would just be so much slower. Every entrepreneur learns at some point that you don't know what you don't know. From a capacity and infrastructure situation, it

were several false starts. After talks fell apart one time, Hamilton called Kern Lima to give her the bad news and told her not to give up. Kern Lima's response: “I am certain someday we're going to be part of the L'Oréal family.”

Kern Lima considered taking the company public and also went ahead with plans to expand into Southeast Asia, the industry's fastest-growing region. One week before that launch, the sale to L'Oréal finally went through. TSG founder and CEO Chuck Esserman recalls Kern Lima telling him IT would be the best investment he ever made. “Every entrepreneur tells me that. In Jamie's case, she did it,” says Esserman. *Forbes* estimates his firm made 25 times its money on the sale, while Guthy-Renker pock-

there will likely be stand-alone stores and more products, such as its first face wash, called Confidence in a Cleanser.

Days after the sale, Kern Lima and Hamilton got on a plane for Singapore, followed by Thailand and Malaysia. Hamilton admits she was anxious to see how IT, whose acquisition she'd championed, would translate in Asia. She got quick relief inside Singapore's biggest mall, where women who had just met Kern Lima were suddenly crying. Back at L'Oréal's headquarters, Hamilton smiles, promising the deal was well worth it. “She allows herself to be vulnerable in front of women. She knows how to tap into that and make us believe in ourselves. Confidence is not something that is defined by national boundaries.” **F**

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# The Corvette at 65

BY MICHAEL SOLOMON

**LIKE A LOT OF** sexagenarians, the Chevrolet Corvette still looks youthful for one reason—it's had a lot of work done. Introduced by General Motors in 1953, the Corvette (named for a small, fast warship) was the first American sports car, and while its initial performance didn't live up to that of its European competitors, the Corvette eventually became one of the great muscle cars of all time. In April, Chevrolet debuted a 65th-anniversary edition, the Corvette Carbon 65—meaning retirement is not in its future.



## 1953: C1

Displayed as a concept car at a 1953 General Motors auto show, the C1 Corvette was sped into production in June 1953. Only 300 were built, with a sticker price of \$3,498—about \$32,000 today—and they now sell for more than 100 times that at auction. John Wayne was one of the first owners of the two-seat fiberglass convertible, which came with a 150-hp straight-six engine. It was available only in white with a red interior, and it had just two luxurious options: a heater and an AM radio.

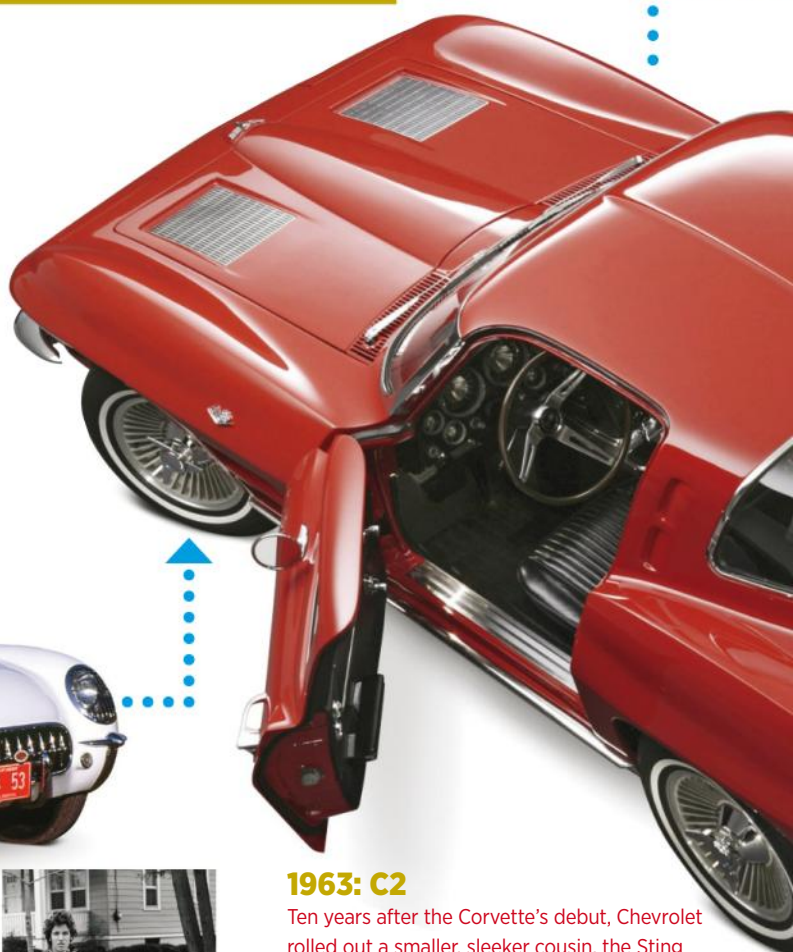


Boss car: Bruce Springsteen bought himself a 1960 Corvette after the success of *Born to Run*.



## 2018: Carbon Fiber 65

For its 65th birthday, Chevrolet introduced the Carbon Fiber 65 in Grand Sport 3LT and Z06 3LZ models in April. But good luck getting one: Chevy will produce only 650 of each for all markets, with a price starting at \$81,490 for the Grand Sport and \$99,490 for the Z06. And say goodbye to the C7 next year—the eighth-generation Corvette is coming.



## 1963: C2

Ten years after the Corvette's debut, Chevrolet rolled out a smaller, sleeker cousin, the Sting Ray. The second-generation Corvette, the C2, had a more powerful engine (250 hp) and a controversial split rear window, which lasted only a year but is prized by collectors today. The Sting Ray, which had a list price of \$4,252 for the coupe (roughly \$34,000 in today's dollars), was a smash—Corvette sales increased from a record 14,531 in 1962 to 21,513 the following year.

## 2013: C7

The Stingray returned after an absence of 38 years, featuring a carbon-fiber hood and aluminum panels to keep the body light. Selling for a list price of \$51,995, the Corvette continued to get more muscular, with a 455-hp engine.





O-mobile: Jerry Seinfeld got coffee with Barack Obama in a 1963 Sting Ray.



## 1968: C3

The third-generation Corvette, the C3, was produced from 1968 to 1982 and included the second-generation Stingray (rebranded as one word). The 1968 models, which started at \$4,320 (\$30,000 today), featured a redesigned body (but maintained the hidden headlights) and a more powerful engine, including a turbo option. Mark Wahlberg's Dirk Diggler drove a '77 Corvette in *Boogie Nights*, and in honor of its 25th anniversary, the Corvette was named the official pace car of the 1978 Indy 500.



Regal ride: Cleopatra Jones rolled in a 1973 Corvette with automatic weapons.

## 1984: C4

While the price continued to increase for the C4 Corvette (from \$21,800 in 1984 to \$37,225 in 1996), sales sharply declined during its 12-year production run (from 51,547 to 21,536). The car remained popular with collectors, though—a 1984 Corvette (*below*) driven by Dirk Benedict's character on *The A-Team* was listed for an ambitious \$40,000 several years ago.



Hot wheels: Austin Powers worked his mojo on Felicity Shagwell in a 1965 Corvette convertible.



## 1997: C5

As its 45th year approached, the Corvette had its most dramatic overhaul since 1953—it even finally got a large trunk. The fifth-generation C5 (which listed for \$37,495) also improved performance, with a top speed of 175 mph. In the 2002 movie *Mr. Deeds*, Adam Sandler gave an entire town little red Corvettes—2002 C5s—after listening to some Prince.



## 2005: C6

Produced between 2005 and 2013, the C6 Corvette got another new body and featured exposed headlights for the first time since 1962. The sticker price for that initial C6 was \$44,245, and the production run, which ended in 2013, included lots of racing variants. After all, the 6-liter V8 engine delivered 400 hp.



1953 CORVETTE: NATIONAL MOTOR MUSEUM/HERITAGE IMAGES/GETTY IMAGES; 1984 CORVETTE: RON TOM/NBCU PHOTO BANK/GETTY IMAGES; 1984 CORVETTE: RON TOM/NBCU PHOTO BANK/GETTY IMAGES; 1968 CORVETTE: MARVIN MCABEE/ALAMY; 1997 CORVETTE: OLEKSIY MAKSYMENKO/ALAMY; CLEOPATRA JONES: EVERETT COLLECTION/ALAMY



# THOUGHTS ON Pioneers



"I don't repeat myself well. I want and need that stimulus of walking forward from one new world to another."  
—MARGARET BOURKE-WHITE

*"WE PUSH ASIDE BRANCHES OR CUT THEM BACK, WE TRAMP DOWN NETTLES AND LONG GRASSES, FORD RIVERS AND STREAMS, THROUGH THE INNER AND OUTER LANDSCAPES."*

—LUCY H. PEARCE

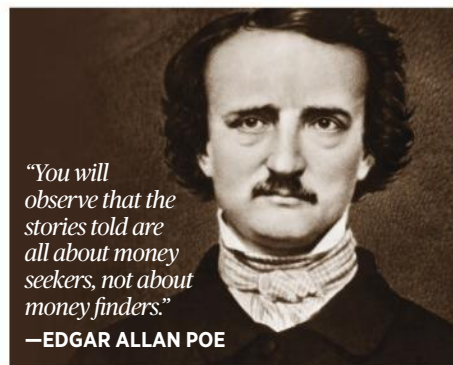
"Pioneers may be picturesque figures, but they are often rather lonely ones."

—NANCY ASTOR



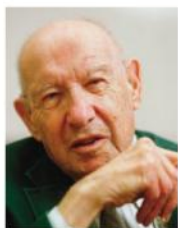
*"You will observe that the stories told are all about money seekers, not about money finders."*

—EDGAR ALLAN POE



**"IF YOU WANT SOMETHING NEW, YOU HAVE TO STOP DOING SOMETHING OLD."**

—PETER DRUCKER

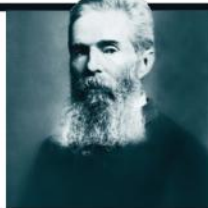


*"THE ADVENTURES MAY BE MAD, BUT THE ADVENTURER MUST BE SANE."*

—G.K. CHESTERTON

**"WE ARE THE PIONEERS OF THE WORLD, THE ADVANCE GUARD SENT ON THROUGH THE WILDERNESS OF UNTRIED THINGS."**

—HERMAN MELVILLE



*"One does not discover new lands without consenting to lose sight of the shore for a very long time."*

—ANDRÉ GIDE

"I have set my life upon a cast, and I will stand the hazard of the die."

—WILLIAM SHAKESPEARE



**"SOCIAL GAINS ARE NEVER HANDED OUT. THEY MUST BE SEIZED."**

—SHERYL SANDBERG



*"It is always painful to set oneself against tradition, especially against the conventions and prejudices that hedge about womanhood."*

—HELEN KELLER



*"Our wretched species is so made that those who walk on the well-trodden path always throw stones at those who are showing a new road."*

—VOLTAIRE

*"AT THAT TIME HIS VOICE SHOOK THE EARTH, BUT NOW HE HAS PROMISED, 'ONCE MORE I WILL SHAKE NOT ONLY THE EARTH BUT ALSO THE HEAVENS.'"*

—HEBREWS 12:26



**FINAL THOUGHT**

*"Life is a gamble. Yes, but at least you play your own cards."*

—B.C. FORBES

SOURCES: WHITE JACKET, BY HERMAN MELVILLE; REBEL LIVES, BY HELEN KELLER; PHILOSOPHICAL DICTIONARY, BY VOLTAIRE; BURNING WOMAN, BY LUCY H. PEARCE; LEAN IN, BY SHERYL SANDBERG; GOODREADS.COM; THE GOLD BUG, BY EDGAR ALLAN POE; THE MAN WHO WAS THURSDAY, BY G.K. CHESTERTON; RICHARD III, BY WILLIAM SHAKESPEARE.

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PROFIT GROWTH



HALAL AWARD  
2015

\* 2015 ANNUAL REPORT, PT Nippon Indosari Corpindo, TBK

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