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30 UNDER 30

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"DOCTORS ARE OVERWHELMED WITH IMAGING DATA. I WANTED TO HELP THEM."

Yuki Shimahara, cofounder of medical-software developer LPixel and member of our second annual Asia 30 Under 30 list

COVER PHOTOGRAPHS (FROM LEFT): MUNSHI AHMET; RITAM BANERJEE; TIM GERARD BARKER / MOTT VISUALS; SASHA MASLOV AND IRWIN WONG 11 | FACT & COMMENT // STEVE FORBES A blood-soaked, money-wasting scandal.

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FORBES ASIA

SIDELINES

High Anxiety

apanese prime minister Shinzo Abe is likely to enjoy a long reign because of fragmented opposition. Lucky for him, because the economic revival project called Abenomics is on slow burn as well. Like the so-called Sky Mile Tower in Tokyo Bay, to be the world's tallest but not to be realized until 2045,



Sky Mile: Tokyo needs a lift to get to 2045.

the policies have gaping ambitions and little to show for the present.

Abe keeps loading the Bank of Japan's board with inflationists in order to counter the contractionary bent of an aging and in some ways insular society whose yen currency has been *rising* this year because global traders wanted a safe haven. Normally you'd expect monetary looseness and huge government debt to weigh the other way, and surely Japan's biggest exporters much desire such exchange-rate relief to boost sales. Yet that Abenomics growth path isn't being cleared.

Without much growth and with government bonds paying nothing in interest, no wonder Japan's insurers and other institutions with long payout obligations are stressed to make the numbers add up. The same goes for the fiscal deficit.

Meantime, significant deregulation lost the impetus of the Trans-Pacific Partnership when Donald Trump scotched that trade deal. Abe's team must come up with other ways to liberalize, including a wider opening for immigration; Japan continues to trail even South Korea in that regard.

The country's science and engineering prowess remains an asset. And outfits like the Rebuild Japan Initiative Foundation are pushing a globalized consciousness. But do the Japanese really have all the running room that politics have given their premier and financial markets have allowed their out-of-whack accounts? Japan's precariousness is a boring old story. Until it isn't.

ne silver lining to the hostile rivalry that India and Pakistan have maintained for decades is that Pakistan's economic growth spurt late in the last century helped to spur India toward liberalization to get its own GDP in gear. (The tables subsequently were turned, although Pakistan has picked back up a bit.) But the tensions between them have done no good for mankind—least of all in Kashmir, as the excerpt of journalist Judith Matloff's new book (*p. 54*) shows. Her longer study looks at the role that mountainous settings play in various modern battlegrounds. In this case we see spoiled splendor and opportunities lost.

Vin W. Leiguso

Tim Ferguson Editor, FORBES ASIA globaleditor@forbes.com

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CONVERSATION



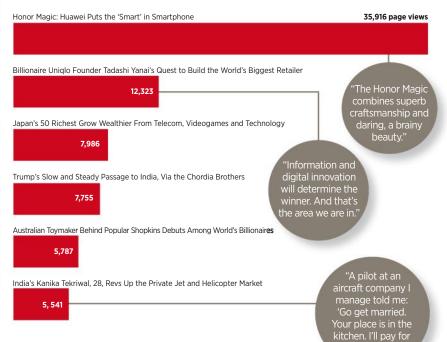
OUR LIST OF Japan's 50 richest (April, p. 42) was favorably reviewed by Vincent Leguesse III: "Japan always amazed me when it comes to avant-garde technology and similar industries. I think that we all have a lot to learn from these success stories. I'm not saying that everything is easygoing, but strategic partnerships as well as playing our cards well will ensure a concrete and positive outcome." Our story about the real estate empire of Indian brothers Sagar and Atul Chordia ("In Trump They Trust: Salesmen of the Subcontinent," p. 70) prompted this Web

your wedding.'

comment from "Steve": "Build slum rehabilitation projects first before making a gold-tinted glass tower."

THE INTEREST GRAPH

Abracadabra! Ben Sin's review of Huawei's newest phone garnered the most hits from our last issue:





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"With all thy getting, get understanding"

A BLOOD-SOAKED MONEY-WASTING SCANDAL

BY STEVE FORBES, EDITOR-IN-CHIEF

PRESIDENT TRUMP has appointed Jared Kushner to head the new White House Office of American Innovation, which is charged with making the government more efficient. Its biggest challenge, by far, will be dealing with the Defense Department's monstrously sclerotic weapons-procurement system, which has unnecessarily cost the lives of countless thousands of our servicemen and -women and has literally wasted hundreds of billions of dollars.

We can't let this horror continue.

Back in 2010 the *Economist* declared, "The chronic problem of exorbitantly expensive weapons is becoming acute." Alas, such dire warnings have been uttered countless times before and since. President Trump has the opportunity to do what every other U.S. Commander-in-Chief and defense secretary has failed to do since WWII: truly reform this festering disgrace.

Our military needs a buildup on a scale not seen since Ronald Reagan's in the 1980s. Our services are undermanned. Equipment is in dire need of repair and refurbishment. New equipment, software and weapons are needed for the U.S. to play its crucial role in keeping the world's aggressors at bay and meeting the challenges of the cyberspace, unmanned systems and robotics era. The Navy alone requires another 80 ships to meet our global obligations.

The Trump military budget for fiscal year 2018 won't even catch up on the maintenance of existing equipment and weapons and is 6% less than spending was in 2012.

Overhauling the process of developing new weapons, aircraft, ships and the like is no longer a discretionary matter. What needs to be done is simply unaffordable under current procedures. The magnitude of the task boggles the mind. The

Pentagon's total back-office personnel numbers over 1 million people.

Every step in the development of a new weapon requires clearing major bureaucratic hurdles that add years of delay. These mindnumbing, molasses-laden obstacle courses are spelled out in the



Defense Department's "bible" entitled "Operation of the Defense Acquisition System." During these innumerable reviews, thousands of change orders are made to reflect new wants and new "improvements," what critics dub "requirement creep." Anyone who has been involved in remodeling a home knows how expensive and delay-inducing changes made during a project can be.

The F-35 fighter aircraft was originally estimated to cost \$233 billion for 2,866

planes. The latest estimated cost: \$391 billion for 14% fewer planes. The price produced a sharp rebuke from President Trump. Lockheed, the F-35's chief contractor, now claims that costs are under control. Which leads one to ask: How did expenses get so out of control in the first place? The delays and cost overruns of this airplane are relatively normal in Pentagonland.

So hidebound is the procurement process that past defense chiefs have occasionally had to yank a program out of the morass to meet an urgent battlefield need. That's what defense secretary Robert Gates did in 2007 to get blastresistant vehicles to our troops in Iraq; bureaucratic lethargy had led to hundreds of avoidable Marine casualties.

Our history is riddled with examples of the military's bureaucratic blob sticking with weapons that don't work or are manifestly inferior to available alternatives. During the Civil War, the Army resisted the repeating rifle, preferring the single-shot version. That terrible decision cost the lives of tens of thousands of Union soldiers.

A deadly modern-day example of this is the original M16 assault rifle. Various people warned of its flaws. In

the early years of the Vietnam War the M16 was notorious for jamming. Yet the Army ordnance officers and bureaucrats obstinately ignored the criticism, even going so far as to rig performance tests, thereby costing who knows how many soldiers' lives. (Shockingly,



The F-35 fighter is a budget bomb.

FACT & COMMENT STEVE FORBES

non-Pentagon experts today consider the M16 and its successor, the M4, to be inferior rifles for our infantry.)

FORBES ASIA

Pentagon apologists claim their awful hurdle-after-hurdle process is necessary to prevent failure. Yet in the real world there have been numerous weapons programs that were timeand resource-wasting flops.

Once a program is under way, it's almost impossible to stop, no matter how dysfunctional the weapon turns out to be. The reason: Careers are tied to every weapon, and those involved will fight tooth and nail to keep it going, regardless of the merits—the bureaucrats, the particular branch of the service, the contractors, the lobbyists and members of Congress, who too often see the defense budget as pork for their districts and states.

Cost-plus contracting gives providers no incentive to control expenses. The bigger the price tag, the bigger the profit. And, of course, there's the dirty, not-so-secret year-end splurge—managers are penalized if they don't spend every dime they have. Savings could mean you'll get less next year.

Gumming up the process further are additional regulations imposed by other government agencies, such as the EPA and OSHA.

The Pentagon procurement horror show is no secret, but it has bedeviled every effort to substantially change it. Just about every defense secretary has made at least a stab at reform. The results have been pitiful. Back in 2005 a Rand Corp. study listed 63 reforms—and their total impact was negligible. In 2013 a *Wall Street Journal* story found that there had been at least 27 major studies on defenseacquisition reform and more than 300 serious studies by nongovernment experts.

It's the old government story: Appointed officials come and go, the bureaucracy stays.

Compounding the current problem are its origins. Legendary WWII general and overseer of our armed forces George Marshall concluded after the war that henceforth in peacetime the U.S. would have an officer corps far larger



Deadly scandal: The U.S. infantry was fatally ill-served by the flawed M16 rifle in Vietnam.

than seemingly necessary. That way our military would have a ready, experienced group of leaders to deal with any needed rapid military buildup. But what to do when there was no big war? Have officers work on weapons systems. Where one officer would do, use ten!

The most ambitious, thorough push for a major overhaul of the Pentagon development and procurement blob occurred in 2014–15. A riveting account of this effort, authored by Craig Whitlock and Bob Woodward, appeared last December in the *Washington Post*. It was spearheaded by the Defense Business Board, a federal advisory panel of corporate executives brought together to "provide trusted independent and objective advice ... on proven and effective best business practices for consideration and potential application to the [Defense] Department."

Assisted by a passel of knowledgeable McKinsey & Co. consultants, the board engaged in an unprecedented deep dive into all facets of the Pentagon, unearthing numerous agencies and data systems.

The waste and stupendous inefficiencies uncovered by the board stunned even the most jaded observers. Just dealing with administrative waste would save at least \$125 billion over five years.

No surprise, the Empire struck back. The Pentagon did everything it could to pretend the report never existed or to dismiss it as "naive" and "superficial." When the exhaustive study was done, a 77-page summary was posted on a Defense Department website. It was quickly expunged.

There's a battle being waged by an ethical contractor against the Pentagon that exemplifies this problem. Palantir, a software outfit, came up with a data-an-

alytics platform that would give troops in the field just about all the information they needed on a tablet, ranging from weather to the latest local intelligence. The cost: about \$100 million a year. As recounted by Steven Brill in an excellent Fortune article, the Army wanted nothing to do with it, choosing "instead to favor an updated version of a deeply flawed system created by a team of [traditional] defense contractors that ... produced cascading cost overruns, and bills of nearly \$6 billion." Field troops despise the Army's version and love Palantir's (a number of local commanders used local, discretionary funds to get the Palantir platform). One Marine colonel wrote: "Marines are alive today because of the capability of this system." Yet the Defense Department is waging a jihad against Palantir, playing every bureaucratic trick it can to keep it from bidding on the contract.

What should Kushner and his team do? Tear into this bloodstained, massive mountain of bureaucratic muck on two fronts.

First, dig up that Defense Business Board report. There's no need to reinvent the wheel. The findings there will give them all they need to mount a sustained, substantive attack that will yield the mother of all government reforms in U.S. history.

Second, take to heart the lesson of the Gordian knot and put into practice an idea recommended by Christopher Lehman, a former national security official in the Reagan administration, in the *Philadelphia Inquirer* in January: "a simple legislative provision that would grant to the defense secretary, or any of the services secretaries (Army, Navy, and Air Force), the authority for five years to waive any and all Federal Acquisition Regulations. Instead, the legislation would allow that official to use standard commercial law to acquire goods or services with funds appropriated by Congress.

"In this way, thousands of pages of red tape and myriad bureaucratic obstacles could be eliminated and straightforward commercial contracting could be employed, saving months, years, or a decade or more, of delay and unneeded expenses."



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BITCOIN TO THE MASSES

Fintech is giving 'VC' an added meaning where startups shave the cost of remittances.

BY CASEY HYNES

xperts at the International Monetary Fund suggested last year that virtual currencies (VCs) could promote financial inclusion. Along with the standard cautions about possible money laundering, terrorism and other nefarious purposes, the IMF noted, "VCs offer many potential benefits, including greater speed and efficiency in making payments and transfer–particularly across borders. ..."

The cross-border benefits have led to the launch of Bitcoin startups in places like the Philippines, where remittances from overseas Filipino workers contribute more than \$26 billion to the economy. One example is Coins, a mobile-first, blockchain-based platform that facilitates remittances, bill payments and mobile airtime top-ups.

"I was initially looking for a way to solve the issue of expensive cross-border payments, which led me to blockchain technologies and how they could be used to provide widespread financial access in general," says Justin Leow, head of business operations for Coins in Metro Manila.

Coins was founded in 2014 by Ron Hose, like Leow a Cornell grad, and Runar Petursson. Since then, it has signed up half a million users and partnered with retail outlets, banks and others to create a distribution network of 22,000 cash disbursement and collection locations in the Philippines. In late 2016, the company raised \$5 million in a Series A funding round.

Leow says Coins has been able to lower remittance costs from 7% to 8% to about 2% to 3% for its customers, including those who use it for bill-paying and remittances, as well as merchants and service providers who accept bitcoin. The company's ultimate goal is "to increase financial inclusion by delivering financial services directly to people through their mobile phones."

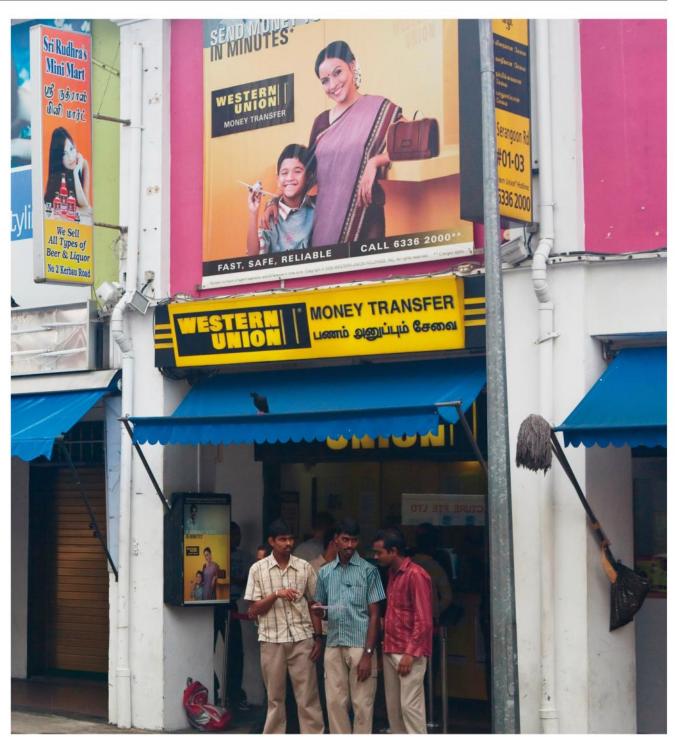
Experts see remittances as an area that could be ripe for VC disruption. The Philippines is not the only country with a high population of overseas workers whose families depend on their remittances. High transaction fees and slow or inconvenient transfer services create extreme hardships on people who can't afford to spend hours claiming one payment, or who live far from banks or shops that manage remittance payments.

"The costs of these transactions, which can average as high as 12% in sub-Saharan Africa, hit the poor the hardest. Technological advances like cryptocurrency and distributed ledgers may offer a solution," Garrick Hileman, a cryptocurrency researcher at the Cambridge Centre for Alternative Finance, told Phys.org, a science site. "It would be surprising to me if in 30 years from now we aren't looking back and saying, yes, this was a watershed moment for financial inclusion, and that cryptocurrency and distributed ledgers played a significant role in opening up access to the financial system in developing economies."

A 2016 KPMG article indicated that more than 70% of the population in Southeast Asia is unbanked, leaving hundreds of millions at steep disadvantages for achieving financial security. But fintech companies see mobile technology as a means of closing that gap.

"One of the important ways to increase financial inclusion is facilitating the transition from people being purely cash-based to [being] able to access and use [their] money online. In this regard, cryptocurrencies work very well as railways for seamless fund transfers and being able to pay for services," Leow of Coins says. "The advantage that cryptocurrencies provide relative to other closed-loop systems is that anyone can be connected to the payment network very easily and services can be made available to anyone else on the network."

Remittances and mobile payments aren't the only ways blockchain technology facilitates inclusion. Business processes are another cost sink. So, for instance, Acudeen, a Filipino fintech startup, helps small businesses streamline invoicing by using



A possible end to lines and waiting: Experts see remittances as an area ripe for virtual currency disruption.

blockchain technology to ensure that its clients' contracts are secure.

STOCK/ALAMY

AHOWDEN/SINGAPORE

If cryptocurrency does go mainstream, it will likely do so quietly, at least as far as the average consumer is concerned. Luis Buenaventura, chief technology officer of Bloom Solutions and author of *Reinvent-ing Remittances With Bitcoin*, advises that Bitcoin is "probably best off as a back-end technology." Similar to the protocols behind email systems, blockchain technology may drive common services, but users

won't ever interact with it.

Leow says, "We should remember that at the end of the day, people want to get things done and generally care less about the actual implementation of how that happens."

TECHNOLOGY 🄛 ben sin // gadgetman

BALL OF FUN



CONSUMING VIRTUAL REALITY

content in 2017, whether it's via budget devices like the Samsung Gear VR or through pricier products like the Oculus Rift, is a bit of a mixed bag. Sure, the first blast of imagery often does deliver a jolt of "whoa," but after 15 minutes you'll have a headache or strained eyes. And the resolution of even highend VR goggles is a bit too low for true immersion (VR won't truly take off until 5G is here in 2020).

Looking at VR content without a headset, however, is usually a more practical and headache-saving experience. Sure, it's less immersive, but you still get the full picture—you just have to tilt your phone or scroll with a finger. There are quite a few 360-degree cameras on the market right now, but the most affordable and portable one is probably the Insta360 Air.

Made by a Shenzhen startup (just about all tech hardware comes from Shenzhen these days), the Air is basically a tiny rubber ball (weighing 26.5g) that you plug into your phone. Then just download the Insta360 app and you're ready to go. The device uses your phone

for power and storage, so the Air does not require charging. It's literally a plug-and-play gadget. This means the Air isn't the most powerful 360-degree camera out there. It can't shoot videos in 4K resolution, for example, and there's no mic, so your videos are going to get the Charlie Chaplin treatment. But it's only \$129, compared with double that for other 360-degree cameras from Samsung or Nikon.

If you're a serious videographer, you'll want to pay the extra dough for the better-quality videos. But the Air is perfectly adequate for the other 95% who just want to take immersive photos during their travels: Its dual camera snaps photos with a resolution of 3008 x 1504, which is quite good. When you shoot videos, the resolution drops to 1920 x 960, a tad below 1080p. The result is still more than enough for average users.

The Insta360 app is intuitive and easy to use. Snapping photos and videos is just a matter of one tap, and you can instantly share them to social media platforms like Facebook or YouTube. There are even Instagram-style filters built in if you want to give your photos a makeover. Overall the app's interface is clean and coherent.

Photo quality, as mentioned earlier, is quite good—if there's enough light. As you'd expect, if you shoot on a

dimly lit street at night, the photo or video will have a ton of noise. But in daylight or venues with good lighting, the image looks vibrant and quite detailed.

The Air is for Android only right now. But Insta360 has a smaller version called the Nano for iOS. And if you're thinking the specs and video/photo quality just aren't up to par, well, Insta360 has a pro version that matches top-tier cameras spec for spec, including 8K VR content.

If there's one complaint I have, it's that because the device is attached to the phone's bottom and you must tap the on-screen button to capture an image/video, you will be in the shot every time. You guys know how much I don't like selfies, and this is effectively only for 360-degree selfies. But if you travel or socialize a lot and want a quick and cheap option to take fun 360-degree photos or videos, the Insta360, at \$129, is hard to beat.



The chubby Insta360 Air is literally a plug-and-play gadget.



PRECISION

5-Time World's Most Punctual Airline.



OTHERS FLY, WE SOAR. 坐





jal.com

The Most Valuable Baseball Teams

BY MICHAEL K. OZANIAN, KURT BADENHAUSEN AND CHRISTINA SETTIMI

LIKE THE SCREWBALL and the .400 full-season batting average, the cash-strapped pro ball club may soon be a thing of the past. The average Major League Baseball team brought in \$34 million in operating income last year, a 52% jump over a year ago, and is worth \$1.54 billion, a 19% jump.

Why the surge in profits? The rise in total league revenue last year was more than double the increase in player costs, such as salaries and signing bonuses. As for the teams' valuations, they've reached upper-deck proportions thanks to new local TV deals and the escalating value of MLB Advanced Media, baseball's interactive-media subsidiary that the 30 clubs jointly own.



THE MOST VALUABLE TEAMS' HIGHEST-PAID PLAYERS



HAMME



YTON KERSHAW \$33 MILLION



RANK TEAM

2

3

4

5

6

7

8

9

NEW YORK YANKEES

BOSTON RED SOX

CHICAGO CUBS

NEW YORK METS

LOS ANGELES DODGERS

SAN FRANCISCO GIANTS

ST. LOUIS CARDINALS

LOS ANGELES ANGELS

PHILADELPHIA PHILLIES

10 WASHINGTON NATIONALS

11 TEXAS RANGERS

12 ATLANTA BRAVES

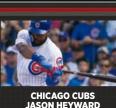
13 HOUSTON ASTROS

14 SEATTLE MARINERS

15 CHICAGO WHITE SOX

16 TORONTO BLUE JAYS

DAVID PRICE \$30 MILLION







7

VALUE OPERATING CURRENT¹ 1-YEAR REVENUES INCOME² (\$MIL) % CHANGE (\$MIL) (\$MIL)

\$526

462

434

434

428

332

310

350

325

304

298

275

299

289

269

278

\$39.0

-20.5

78.6

83.8

78.1

31.7

40.5

68.1

87.7

37.6

18.6

15.2

75.9

11.6

41.9

22.9

9%

10

17

22

18

21

12

31

34

23

27

28

32

17

29

<u>1</u>1

\$3,700

2.750

2,700

2,675

2,650

2,000

1,800

1,750

1,650

1.600

1,550

1,500

1.450

1,400

1,350

1.300

HOW MUCH IS THAT SLUGGER IN THE WINDOW?

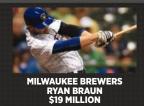
Teams are managing player expenditures better, and franchises' total costs rose just 3.5% in 2016, to \$4.6 billion. Below, the yellow number is a team's total payroll, in





RANK TEAM	VA CURRENT (\$MIL)	LUE ' 1-YEAR % CHANGE	REVENUES (\$MIL)	OPERATING INCOME ² (\$MIL)
17 PITTSBURGH PIRATES	\$1,250	28%	\$265	\$51.0
18 DETROIT TIGERS	1,200	4	275	-36.4
19 BALTIMORE ORIOLES	1,175	18	253	-2.1
20 ARIZONA DIAMONDBACKS	1,150	24	253	47.2
21 SAN DIEGO PADRES	1,125	26	259	22.8
22 MINNESOTA TWINS	1,025	13	249	29.9
23 COLORADO ROCKIES	1,000	16	248	26.6
24 KANSAS CITY ROYALS	950	10	246	-0.9
25 MIAMI MARLINS	940	39	206	-2.2
26 MILWAUKEE BREWERS	925	6	239	58.2
27 CLEVELAND INDIANS	920	15	271	46.9
28 CINCINNATI REDS	915	1	229	15.9
29 OAKLAND ATHLETICS	880	21	216	25.5
30 TAMPA BAY RAYS	825	27	205	32.1
LEAGUE AVERAGE	1,537	19	301	34.2

PAYROLL TAX. ¹ENTERPRISE VALUE (EQUITY PLUS NET DEBT) DEPRECIATION AND AMORTIZATION.







REELING IN THE MARLINS

How much will the Miami Marlins sell for? A handshake deal between Jeffrey Loria, who owns the team, and the Kushner family fell through earlier this year. That would've put a \$1.6 billion price tag on the franchise, which seems to us like

too much for an unprofitable team with poor attendance.

THE LEAST VALUABLE TEAMS' HIGHEST-PAID PLAYERS



OAKLAND ATHLETICS RYAN MADSON \$7.5 MILLION



ALL LINE

TAMPA BAY RAYS EVAN LONGORIA \$13 MILLION

millions; the white one is the change from a year ago.



CINCINNATI REDS JOEY VOTTO \$22 MILLION

The Outsider

Born destitute in Syria, Mohed Altrad went to France and made a fortune. With xenophobia sweeping through Europe, can an Arab immigrant like him make it big today?

BY SAMUEL WENDEL

yrian-born Mohed Altrad arrived in Montpellier, France, from Syria in 1969 during an outpouring of anti-Arab sentiment. A few years earlier, Algeria had won its independence from France in a bloody war, provoking a backlash towards anyone Algerian or Arab. "It was hostile," remembers Altrad, now 69. He came to study on a scholarship at the University of Montpellier, leaving behind his own bitter memories of Syria, where his father, a bedouin tribesman, abandoned him as an infant following his mother's death.

Altrad endured prejudice in France, but he proved his worth—and then some. He became a citizen, wrote a prizewinning novel, married a Frenchwoman, purchased a rugby team, had a stadium named after him and bought a bankrupt French scaffolding business.

The Montpellier-based Altrad Group is now one of the world's leading manufacturers of scaffolding

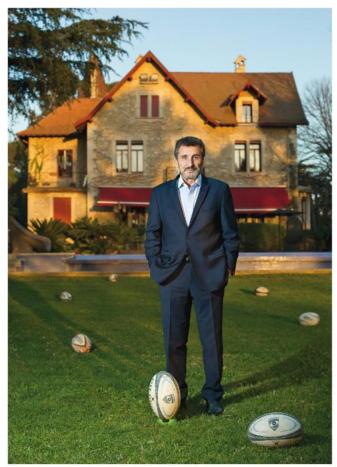
and cement mixers, earning \$144 million in net profit on \$2.4 billion in revenue in fiscal 2016. Altrad, who owns 80% of the company, has amassed a fortune *Forbes Asia* estimates at \$1.6 billion.

More than four decades after arriving in France, Altrad is a shining example of what an immigrant can bring to a new country. But even after receiving the Legion of Honor in 2005 for his accomplishments, he sometimes feels he might never be able to be French enough.

Always simmering beneath the surface, anti-Arab sentiment flared up again in France following a series of deadly terrorist attacks by French and Belgian citizens of North African descent. Campaigning on an anti-immigration platform and regularly invoking Islamophobic rhetoric, right-wing politician Marine Le Pen has become a serious contender in France's upcoming presidential election in May.

But what's happening in France isn't isolated.





Altrad, who knew nothing about rugby when he bought the struggling Hérault Rugby team in 2011, is now a huge fan of the sport.

With Islamic State terrorism and masses of Syrian refugees arriving on European shores, xenophobic attitudes are taking root throughout the continent and across the Atlantic in the U.S. Altrad sees President Donald Trump's rhetoric and his executive order banning travelers from six Muslim-majority countries as troubling developments. "It's emanating from the most powerful man in the world, so it's horrifying," says Altrad. "It's something new."

Against this backdrop, Altrad is diverting some of his attention from his scaffolding business. In 2015, President François Hollande asked Altrad to lead the newly formed Agence France Entrepreneur, a government organization promoting entrepreneurship in the country's most impoverished communities that typically rim the outskirts of cities. Altrad admits he was surprised. "I didn't know anything about it [the agency]," he says. Nevertheless, he accepted.

The agency began operations in April 2016. It focuses on 12.8 million French citizens living in 1,500 low-income communities. Altrad estimates 90% of this population are first-, second- or third-generation immigrants of Arab origin—*beurs*, in French slang. The government already sets aside nearly \$3 billion annually to help with economic development

and financial assistance, but a recent audit by the agency revealed that only 4% of allocated funds reached target communities. "It's far from being paradise to be an immigrant in France," Altrad says.

He ticks off statistics: These families are three times poorer than France's national average, and the unemployment rate is nearly three times as high at 26%. However, these communities also produce new businesses at a rate three times as high as the national average. "The problem is these companies die three times quicker," he says.

Whether Agence France Entrepreneur can make a dent remains to be seen. A page on its website, for example, helps an applicant get in touch with one of three banks for a loan and upload a business plan. Questions include "Have you done market research?" and "What is the legal status of your enterprise?" Elsewhere a slew of administrative papers are available for download to register and run a business. Besides a handful of French banks, the only major corporate partner so far is Microsoft.

"Obviously, alone we can't tackle the whole problem," Altrad says. He doesn't know if a right-wing government will affect the agency. He devotes two days a week to the initiative, overseeing a team of 35. They host meetings and offer courses on entrepreneurship to students, business owners and budding entrepreneurs.

Altrad is doing his part to give back to the country he calls home. Over the years, his links to Syria have faded. He hasn't visited in decades. "What I did in France, I couldn't do it in my own country," he says—and that's before the bloody conflict ripping Syria apart began six years ago.

These days he gets all his information about his native country through the news. Last year, after seeing a report on tens of thousands of Syrian refugees trapped at the border with Jordan, Altrad made a donation to the French humanitarian aid organization Doctors Without Borders, which provides help in refugee camps. He gave on the condition that his money go directly to those stuck at the border.

If the fighting in Syria abates, he's not sure yet how he will take part in reconstruction. He estimates it will take at least 25 years for the country to rebuild and cost hundreds of billions of dollars. "Who is going to finance it? Yes, I can contribute," he says.

Until then, as refugees continue to flee, he's unsure what future will greet them in Europe. Asked whether he could succeed today as a Syrian immigrant in France, he pauses. "Difficult to answer. Yes, in absolute terms—yes, you can succeed," he says. "There are always opportunities."

It didn't always appear that way for Altrad.

He was born in 1948, he thinks, after his father, a tribal leader in rural Syria, raped his mother, then a teenager. Altrad's only brother died from abuse at the hands of their father, while his mother died from illness when he was a toddler. His father disowned him.

His grandmother then cared for Altrad, but she forbade him from going to school. He had to tend to goats, sheep and camels. It was a nomadic existence as the tribe moved with the seasons.

Eventually, a distant relative, a man with no children of his

own, adopted Altrad. The boy went to live with him near Raqqa, now occupied by the Islamic State. Although it was still a meager existence, Altrad was able to attend school.

He graduated first in all of Raqqa on nationwide exams and received a scholarship from the Syrian government to study abroad. "I was lucky. I was the first one," Altrad says. He chose to study in France, although he did not speak one word of French.

In Montpellier, locals were suspicious of the foreigner. When French colonials were expelled from Algeria during the war, many settled in the country's south, around Montpellier. They did not care to distinguish between Arabs. "I tried to explain that I'm not Algerian," says Altrad. "They said, 'Arab is Algerian.'"

Although he was isolated, Altrad had nothing to go back to in Syria. It took him more than a year to become fluent enough in French to have meaningful conversations beyond asking for the bus route or a baguette. But then, how to fit in? "They expect you to love their culture," says Altrad. "You can't love something you don't understand."

The only jobs available to an Arab immigrant were generally low-paying ones, like cleaning streets or manning factory assembly lines—jobs that most natives refused to do. During summer breaks from college, Altrad worked in the vineyards around Montpellier picking grapes for \$15 a day.

After finishing his undergraduate degree, he immediately enrolled in a Ph.D. program in computer science, moving to Paris for his studies. He was able to work part-time while studying and secured a job as an entry-level engineer with the Compagnie Générale d'Electricité. After one year, he left to take a similar position with the aerospace and defense contractor Thomson, and he was able to qualify for citizenship. He also met a Frenchwoman who became his wife.

In 1980, shortly after finishing his Ph.D., he saw a job posting in *Le Monde* by the government of Abu Dhabi. He was intrigued by the prospect of returning to the Middle East and got hired to work in the IT department of the Abu Dhabi National Oil Company.

The emirate was not the glittering metropolis it is today. There were few restaurants, and cinemas only played Bollywood movies. He soon realized how France had changed him and always looked forward to his yearly trip back.

In 1984, his contract was up, and Altrad's wife wanted their son schooled in France. Back in Paris, he became an entrepreneur. With the help of Richard Alcock, a British colleague in Abu Dhabi, and two former classmates, he developed a portable computer. At nearly 60 pounds, it was cutting-edge at the time (that year Apple released the first Macintosh). Because they didn't have the capital to further develop the technology, the partners sold their company. Altrad made nearly \$600,000 from the sale.

A year later, he embarked on a path that would make him a billionaire. In 1985, while vacationing at his in-laws in the village of Florensac, a neighbor told him about a debt-ridden scaffolding manufacturer that was up for sale. He didn't know the French word for scaffolding but was interested. He partnered with Alcock again, and the pair bought the company for next to nothing and assumed all liabilities.

Altrad cut costs and revamped operations. Within a year, the company was on its way to profitability, but there were always reminders that, as an Arab, the odds were stacked against him. "You have to prove yourself several times more than ordinary businessmen," he says. "To be honest, Arabs in France [often] don't succeed."

When he wanted to open a company bank account, banks turned him down. Altrad suspects his name had something to do with it. Years later, when France's economy was recovering from a recession, some banks refused to give him a loan even though his company was profitable. Difficulty getting the needed financing held him back in the early years.

At the end of each fiscal year, the Banque de France required companies to provide a copy of their audited balance sheet. The bank always seemed to take a longer look at Altrad's financials. He felt singled out. "I saw that they really watched it, sometimes more than any other companies," he says.

He forged ahead, mainly by acquiring smaller competitors, and expanded beyond France into Italy and Spain. In 2003, he bought German competitor Plettac. More recently, Altrad completed the

"YOU HAVE TO PROVE YOURSELF SEVERAL TIMES MORE THAN ORDINARY BUSINESSMEN. ARABS IN FRANCE [OFTEN] DON'T SUCCEED."

takeover of the Dutch industrial-services company Hertel Group and French oil and gas contractor Prezioso-Linjebygg.

The company hired public relations strategists to build brand awareness. In a counterintuitive move, they encouraged Altrad to highlight his distinctive background because they believed it could help his company differentiate itself from competitors. So, Altrad never shied away from publicity. "Mohed became well known both as himself and as an entrepreneur," says Alcock, who retired in 2008 and sold Altrad his shares.

In 2015, Altrad won Ernst & Young's World Entrepreneur Of The Year award. It netted him an invite from then President Barack Obama to speak at a political summit in Nairobi, Kenya. Both events attracted widespread media coverage in France and a phone call from Hollande, who invited him to the Elysée Palace.

More than 20 years ago, Altrad published *Badawi* (bedouin in Arabic), a semi-autobiographical novel about his childhood in Syria and the struggle to assimilate in France. He's currently writing his fourth novel, which he hopes to publish next year. The subject? Identity.

Adapted from Forbes Middle East, a licensee of Forbes Media.

Shopping Frenzy

DMart's founder Radhakishan Damani: the unlikely retail billionaire.

BY SAMAR SRIVASTAVA AND NAAZNEEN KARMALI

n March, Avenue Supermarts, the holding outfit of DMart, an Indian supermarket chain, made its stock market debut with a bang. As investors flocked to get a piece of the company, its \$290 million IPO was oversubscribed 105 times. On listing day on the Bombay Stock Exchange, shares of Avenue Supermarts more than doubled, and they have risen even more since. With a recent market cap of \$7.6 billion, it is India's most valuable retailer.

The IPO marked a big payday for DMart's founder, Radhakishan Damani, who along with his brother owns 82% of the company. Better known as a stock market veteran and a guru to billionaire investor Rakesh Jhunjhunwala, Damani was ranked No. 896 with a net worth of \$2.3 billion in *Forbes*' Billionaires list this year. Following the IPO his wealth has soared more than twofold to \$6.4 billion.

A Mumbai stockbroker's son, the lowprofile Damani, 62, trades, like Jhunjhunwala, on his own account. His notable holdings include a 26% stake in cigarette maker VST Industries, an affiliate of British American Tobacco. With DMart's IPO, he's snatched the title of India's retail king from retailing pioneer Kishore Biyani, who had featured among India's richest until 2011. Biyani's holding in his Future Group empire (which he shares with family) is worth an estimated \$1.2 billion.

While Biyani's moves always hogged the headlines, Damani went about building DMart completely under the radar. He entered the ranks of India's richest in 2014 based on his portfolio of blue-chip investments, real estate holdings and his retail venture. When *Forbes Asia* contacted Da-



Damani is more of a quiet equities buyer.

mani at the time, he insisted that "I don't qualify" but didn't offer any details. The rising value of DMart, which filed for an IPO last September, propelled Damani, who shares his fortune with his brother, onto the Billionaires list this year.

Damani started DMart in 2002 with a single store in suburban Mumbai. Industry watchers say that in the initial years, Damani would visit wholesalers and work on striking long-term relationships with them. He is believed to have made several trips to China to personally source apparel and other goods. "It is the food offering that brings in the footfalls, and it is the rest that brings in the margin," explained Neville Noronha, DMart's managing director, at a press conference to launch the IPO.

Damani, who oversaw the company until 2011, is said to have handpicked much of the top team and instilled in them an entrepreneurial mind-set. (He also gave some of them generous stock options. Noronha's stake is now worth \$16 million.) "There was no magic elixir to DMart's success. They kept a sharp eye on costs and didn't waste money on bells and whistles," says Vinita Bali, the former CEO of consumer goods firm Britannia Industries, known for its cookies.

The retailer's high valuation—it trades at 55 times forward March 2018 earnings—is partly due to the scarcity of the stock; only 10% is available to the public. But the main attraction is DMart's track record of sizzling growth. Revenue and net profit have been growing over the past five years at compounded annual rates of 40% and 50%, respectively. Still, it's anybody's guess whether DMart's stratospheric valuation is sustainable. The shares were listed at a time when the stock market was at its two-year peak and trading at 22 times earnings.

Arvind Singhal, chairman of management consulting firm Technopak, says the investor frenzy for DMart defies logic: "Sometimes just doing the right things, as DMart has consistently done, is a virtue." Rather than attempt to become a national player, DMart concentrated on its home base of western India. It shunned expensive downtown locations in favor of stores on city outskirts and expanded into small towns. Singhal estimates that to match future growth expectations, the 130-store retail chain will need to add new stores at a much faster pace than it has done in the past.

Another factor that investors seem to have overlooked is that with cellphone data rates tumbling, consumers could move away from brick-and-mortar retailers and do their grocery shopping with e-tailers. Bali says such concerns are overblown: "India is a hugely underserved market. The runway for growth is long." **F** *Adapted from* Forbes India, *a licensee of Forbes Media*.

INTUIT CEO SPEAKS



Brad Smith has been the CEO of Intuit, the personal-finance software company, since 2008. He is only the third CEO Intuit has had since it was founded in 1983. Intuit's stock has quintupled under Smith's leadership. The following Q&A is edited from a conversation I had with Smith on March 24, 2017, at Intuit's headquarters in Mountain View, California.

RICH KARLGAARD: How does a midsize

(\$5 billion in sales), middle-aged (34-year-old) tech company like Intuit stav fresh?

BRAD SMITH: Our management style is rapid experimentation. You identify a hypothesis about customer needs and then run a rapid experiment. Then you offer proof why Intuit should invest in the outcome. We fund projects on 90-day experiments.

Employees become territorial and defensive as companies get larger. How do you guard against that?

One thing we do is use speed and transparency to knock down fences. We often consult with [retired four-star] General Stanley McChrystal, who was head of the Joint Strategic Operations Command and who wrote a great book, Team of Teams. He's consulted with us for several years. We've actually changed all of our company staff meetings and operating mechanisms to run more like Stan's did. Shared consciousness is when we broadcast live to everybody so they all hear the same information at the same time and are empowered to act. We just spent the last three days at our most recent leadership conference talking about speed as a habit. The second thing we do is reward the right things. Employees who win Intuit Innovation Awards get 50% time, which means that for six months they can either use 50% of their time to work on the project of their choice, or they can take three months off-100% of the time-to get their project out to market. They get to work on what makes their hearts beat really fast. Success can breed insularity.

That's why we study the heck out of other successful companies. I've shadowed Sheryl Sandberg at Facebook and Andy Jassy at Amazon Web Services. We had Satya Nadella come to speak yesterday on how he's leading transformation at Microsoft.

Now that's a change! Microsoft and Intuit used to hate each other.

We fought many times. They had Microsoft Money, but they couldn't beat Quicken. Microsoft even tried to buy Intuit in 1994. Yeah, when I was interviewing Satya on stage, I joked, "We used to be like the Celtics and the Lakers, man."

What has shadowing other companies taught you?

First: Use small teams that are cross-functional in nature. And by small, I really mean small. It's the Amazon rule-no bigger than two pizzas can feed. Second:

The customer breaks all ties. Third: Speed and quality are not tradeoffs. Speed forces you to focus. When you think of yourself as a leader, how do you see yourself?

Our job as leaders, or as people managers, is to remove barriers that get in the way of our teams. That is our only job! It is to reduce the friction, break the ties and get things out of the way so they can move fast. That's very similar to what Stan McChrystal teaches when he teaches CrossLead. We put a lot of energy into that. It's basically so we can break down 8,000 people into small, mission-based teams. They know what we're trying to do; they have a common cause; and they're able to move fast.

Fintech. Disruptive threat to Intuit?

Scary. You can just feel it. We see about eight trends that will fundamentally shape the next ten years for our company. I took our top 30 executives and formed them into teams of three and four and said. "Learn everything you can about these trends."

What are the trends?

Blockchain, AI, augmented reality, machine learning, speech and mobile are some of them. The U.S. isn't the leader in mobile apps. We spent time in China studying Alipay and WeChat.

The threat of disruption cuts both ways. You can react too slowly. But companies can also overreact, squandering energy, time and capital.

It helps to look at industries outside your own, to see how companies handled disruption and change. Satya talks about this. Be intellectually curious and force yourself to look outside yourself for inspiration. So many times you'll find there are solutions that apply to your industry or problem that you wouldn't have thought about if you hadn't first looked outside. We have a phrase we put particular emphasis on: "Fall in love with the problem, not the solution." The Toyota Production System teaches this, too. "You have to have seven ideas before you can narrow into one." The late Bill Campbell was on Intuit's board. He was famous in Silicon Valley as a "CEO Whisperer"-to Steve Jobs, Scott Cook, Eric Schmidt and others. How important was he to you?

My own dad passed away from a heart attack at age 58. Bill was like a second father to me.

His best advice to you?

HOMAS KUHLENBECK FOR FORBES

"Your title will make you a manager. Your people will decide if you're a leader." 💽

RICH KARLGAARD IS EDITOR-AT-LARGE/GLOBAL FUTURIST AT FORBES MAGAZINE. HIS LATEST BOOK, TEAM GENIUS: THE NEW SCIENCE OF HIGH-PERFORMING ORGANIZATIONS, CAME OUT IN 2015. FOR HIS PAST COLUMNS AND BLOGS VISIT OUR WEBSITE AT WWW.FORBES.COM/KARLGAARD.

DASSAI

ASAHI SHUZO: SMALL-TOWN BREWER GOES GLOBAL

Building on its success in winning over discerning customers at home, the Japanese sake maker eyes new markets overseas.

The chairman of Asahi Shuzo, an artisan sake brewery nestled in the quiet hills of eastern Yamaguchi prefecture, wants to take his premium Japanese sake brand Dassai and make it a fixture on menus from upmarket eateries in Manhattan to atmospheric soirees in Paris.

Dassai, which refers to otters laying their catch along the riverbank as if showing them off at a festival, represents Hiroshi Sakurai's dream that people everywhere will drink his sake and share in a feeling of happiness. And with his trademark uncompromising attitude to quality, Sakurai has introduced to his sake line Dassai 23, a flagship product designed to attract new fans in Japan and overseas.

The "23" refers to the volume of rice left after a polishing process has removed 77% of the outer shell, which contains fats and protein. Most high quality sakes only remove about 50% of the surface. Sakurai's commitment to a superior product is reflected in his company's intensive milling process, which is among the most rigorous in the industry and takes up to four days to complete.

"When we take Dassai overseas, what we try to tell people is that we have made this delicious sake. Please try it and enjoy yourselves. We are staking our entire reputation on this one point," Sakurai says.

Complimentary Appeal

Traditionally prepared Japanese cuisine, or *washoku*, continues to enjoy worldwide popularity because of its aesthetically pleasing presentation and healthy eating qualities. In 2013, the United Nations Educational, Scientific and Cultural Organization (UNESCO) designated *washoku* as an "Intangible Cultural Heritage."

The spread of *washoku* has clearly helped sales of Japanese sake overseas, but some critics have suggested that sake goes well only with Japanese food and not other culinary traditions.

With its taste described as clean, yet plump and fruity, the highly refined qualities of Dassai 23 in particular make it a good match not only for most Japanese food, but also for other high-end cuisines. Sakurai emphatically points out that it is not the nationality of the food that counts, but the level of expertise in the presentation that is important.

"It is not a question of Dassai not going well with non-Japanese food. It matches any food that is prepared with great care," he says.

Sakurai focuses more on the quality of his sake for his customers rather than the volume potential of any given market. He has an acute awareness of the difference between providing a meticulously prepared product that satisfies the needs of discerning customers and viewing a country merely as a market to be exploited for business purposes.

For that reason, Sakurai notes that for now Dassai is more likely to continue to seek out partners in Europe and the U.S., with development of the Asian market likely to be a topic for the future.

And Yet...

Many global brands have developed interesting backstories to promote their products, but few compare with the Dickensian drama of disenfranchisement, abandonment and resurrection that Sakurai and his company Asahi Shuzo have experienced.



At Asahi Shuzo, premium-grade rice and pure water are fermented by the power of yeast and turned into artisan sake, a delicate process that produces the brand's signature taste.

Disowned by his father in a dispute over the direction of the company, Sakurai returned in 1984 to take over the firm, which was struggling to survive in the local market, after his father died.

The local agricultural authorities would not sell him the rice he needed for production for three straight years, and then, following a failed venture into beer and a restaurant that almost ruined the company's finances, Sakurai's chief brewer quit, taking his team with him.

At this moment of despair, Sakurai had an epiphany.

He would no longer produce the sake that his chief brewer wanted to make for an indifferent local market, but instead would create a sake that he could love.

"The bank had stopped our loans and for a few months we did not know if we would sink or swim," Sakurai says. "Previously, in order to keep the company above water, I had to gauge the state of mind of the chief brewer, and the relationship with local organizations, and reactions of the local people. But we decided that from here on in, we would make only the sake that we wanted to produce, and that it was enough to have customers who really understood our product buy it."

Traditionally, it's the chief brewer, or *toji*, who creates a sake with unique character or signature. But instead of recruiting a replacement, Sakurai took a different approach and used technology to shift away from the tojiconcentric system of sake production.

It was an important move.

If the chief brewer had stayed we would probably still be making the standard sake we made at that time, Sakurai explains.

Sake making customarily has been a seasonal occupation used to supplement the income of rice farmers in winter. But left with three young staff with no knowledge about sake, one new hire and himself, Sakurai launched a year-round, data-driven technique for creating sake using only superior raw materials and an absolute commitment to quality.

Sakurai abandoned the Asahi Fuji sake brand that his father had produced and created Dassai. Cut off from local rice, he negotiated with farmers in nearby Hyogo prefecture—home to Kobe Port—to purchase *yamadanishiki*, a short-grain rice used in premium sake production. *Yamadanishiki* is an expensive raw material that increases production costs, but Sakurai's commitment to quality has resulted in Dassai consuming almost 20% of *yamadanishiki* production.

Sakurai's staff wash approximately eight tons of *yamadanishiki* every day. Normally, machines are used, but at Dassai, this task is done manually.

"Other companies would only do this with sake that they submit to competitions, but it



Throughout the year the company collects and makes use of data during the brewing process, setting it apart from other traditional sake makers. is something we decided to pursue one hundred percent," Sakurai says.

Doing so helps Sakurai and his staff maintain a specific water content in the rice that results in its signature taste.

Visitors to the brewery sometimes comment on the hygiene issue of handling the rice without gloves or masks, but Sakurai asserts it is important for his staff to directly confirm the feeling and fragrance of the rice during the production process.

"It is necessary to use all five senses in sake production," he says.

Sakurai is no enemy of mechanization, however, and says if it becomes possible to produce sake using artificial intelligence in the future, he would not be opposed to the idea. But he still believes human involvement is important at the higher levels.

It is a tribute to Sakurai's total commitment that in 2014, Japanese Prime Minister Shinzo Abe, also from Yamaguchi prefecture, selected a bottle of Dassai 23 to present to then-U.S. President Barack Obama on his visit to Tokyo.

Globally renowned chef and restaurateur Joel Robuchon calls Dassai the best sake in the world, and he and Sakurai have partnered to open a restaurant in Paris.

Things are looking up for the small-town sake maker that was forced to leapfrog over local markets to set up shop in Tokyo to survive, and whose dream has expanded to take on markets overseas.



www.asahishuzo.ne.jp/en



Building on BAS

In Indian senior living and other fields, Analjit Singh's youngest and her husband try an encore.

BY ANURADHA RAGHUNATHAN

he's all of 30, but her focus for the past six years has been on living spaces for people twice her age: Tara Singh Vachani runs Antara Senior Living, part of India's \$2.1 billion (fiscal 2016 revenues) Max Group. "For six years, Antara has been my path," says Tara, the youngest of billionaire Max founder Analjit Singh's three children. "I've not looked right, left, up or down." The commitment is shared: She and her husband, Sahil Vachani, are both in group-company management.

Early to the senior-living segment in India, Antara caters to the well-heeled, well-traveled, 55-and-older Indian. The elderly population in India is expected to hit 300 million by 2050—up from 100 million in 2012.

In scenic Dehradun in northern India, Antara has put \$80 million toward 200 residential units spread over 14 acres with lush greenery and views of the famous Mussoorie Hills. The unit within Max India (a listed group entity that's in health care and health insurance) looks to develop such communities across the country.

Antara offers "lifestyle with life care"—a gamut of services from housekeeping to plumbing to a health and wellness center. The bespoke homes have features like antiskid tiles, handrails and grab bars; large front doors to accommodate wheelchairs; and lowered kitchen sinks and work surfaces. "Tara has led the creation of a new vertical and a whole program and strategy around senior living," says Singh.

In January 2016, Tara was appointed to Max India's board—the youngest to hold that position and the only Singh offspring to have such a listed-company seat. She joined the group in 2008 but wanted to chart a path outside of the mainstream businesses (see box, p. 31).

Working within a traded company has been no cakewalk—what with cost and time overruns to account for. (Antara was inaugurated in mid-April.) "The board grilled me," Tara admits. "Tough questions, tough pushing and tough realignments."



In the bloom of youth: Tara Singh Vachani with husband Sahil Vachani at the Antara site in Dehradun.

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Analjit's close confidant: Rahul Khosla, Max Group president.

However, a chance conversation about senior-living communities during a visit to Hong Kong got her thinking about introducing the concept in India. It was at the intersection of her interests in hospitality, design, wellness and health care. Premium senior living, while pioneering, was also taboo in India, where "old-age homes" hinted at a breakdown of the extended family structure.

Tara grew up in a

tony part of Delhi, at-

tending elite schools at

home and abroad. After

National University of

majoring in politics at the

Singapore, she completed

Economics, Back in India,

wasn't 100% clear on what

was next," Tara says. "And

who likes to know what I

am doing on the 13th of

May 2018."

I'm the kind of person

Dad invited her to be "a fly on the wall" at Max. "I

a three-month program

in business strategy at

the London School of

Tara traveled to research 40 such communities in the U.S., U.K., Spain, Japan and Australia. She talked to seniors in India informally and through focus groups—asking them about everything from living arrangements to children to hobbies. Finally she developed a blueprint and chose Dehradun, where the family has ties, including a Max speciality hospital adjacent to Antara. "Month on month, year on year, I learned how to put pieces of this puzzle together," she says. Antara roped in the U.S.' Perkins Eastman, which has expertise in senior-living communities, and Spain's Esteva & Esteva for architectural design.

Antara has sold nearly half the units. But already competition is intense, with players including Ashiana and Vedaanta.

Her father, who's referred to as BAS—short for Bhai Analjit Singh ("bhai" means brother in Hindi)—worked with Tara during the conceptualization. And even before the Max Group subsumed Antara in 2012, she started reporting to group president Rahul Khosla. "I am too much like my father to work with him on a day-to-day basis," says Tara. "I am a bit headstrong like my father. I have a point of view like my father. And I, like him, cannot sit on the sidelines."

But Dad travels with her to Antara and offers input. They will argue—respectfully. "He's the most stoic person I know. He likes things to be clear, organized and clean," she says. Meanwhile, husband Vachani, 34, is managing director of another listed company, Max Ventures & Industries, which includes manufacturing and other operations plus investments in proven startups. He joined Max in 2016, at his father-in-law's behest.

Vachani hails from a Delhi business family that owned the television brand Weston. He has a British undergrad degree and spent a year with Citigroup in London. He cut his teeth in business working with his uncle in contract manufacturing and later started his own firm, sold in 2015.

In the past year, Vachani has led an investment from a subsidiary of New York Life into Max Ventures. And a Japanese conglomerate, Toppan, has taken a stake in the manufacturing business, which makes specialty films used in packaging products like chocolates and processed foods. When Vachani started out, the company had free cash of \$1.5 million. Now it's \$40 million. "Friends often tease me that the bottom line is always top of mind [for me]," says Vachani, who comes from the Sindhi community, known for its financial savvy.

He's looking to develop nearly one million square feet of mostly office space across Delhi, Noida and Dehradun. And the investment arm has taken stakes in Azure Hospitality (which runs restaurants chains for pan-Asian and Punjabi food) and online beauty and wellness company Nykaa.

Singh, for his part, senses that Max Ventures is where Max India was in the 1980s—with arrows in multiple directions. The son-in-law interacts daily with Singh. "He's one of the most important professional entrepreneurs in the country," says Vachani. "I have a very deep personal relationship with him. Very few people have the opportunity to be mentored by such a phenomenal human being." But the generations and their circumstances are different. Singh founded Max India in 1982 after an acrimonious family split. His father, Bhai Mohan Singh—the founder of drugmaker Ranbaxy—handed the pharma outfit to the oldest brother Parvinder Singh.

Analjit, the youngest of three brothers, started from scratch and built his company into a behemoth with interests in health care and insurance. (Big partners are Japan's Mitsui Sumitomo in life insurance, the U.K.'s Bupa in health insurance and South Africa's Life Healthcare for hospitals.) He started a telecom joint venture with Hutchison of Hong Kong, selling out in tranches and at a huge profit. "He's worked really hard to build this life," says Tara. "Nothing has come to him easily. He's as self-made as it gets."

Tara and Vachani also work with Singh on his private hospitality business which includes properties across South Africa, the United Kingdom and Italy. But listed-company duties come first. "It's very clear in the Max group that ownership and management are two completely separate buckets—completely separate," stresses Vachani. "Tara and I have chosen to play a role in the management part of the business and for that we are compensated from the company. Over time, I hope that we are able to earn our credibility, and merit and earn the respect of our colleagues."

No worries with the founder. "They are both growing well and they are being groomed. At the right time, they'll have the right place," says Singh.

MANAGING DAD'S DOMAIN

Max Group was restructured into three listed entities in January 2016 to unlock the value in diverse businesses. Max Financial Services, with \$1.76 billion in revenues, contains the life insurance business that's now looking to merge with HDFC Life to form the largest private insurer in the country. ing the likes of Naina Lal Kidwai, who used to chair HSBSC in India, and Arthur Seter, a high-ranking exec from New York Life. "He wants the group to run independent of him," says Ram Charan, business advisor and author, who has known Singh for four decades since teaching him at Boston University. "He has made everything transparent." –*A.R.*

The \$185 million (revenues) Max India is the second entity, with interests in hospitals, health insurance and Antara Senior Living. With 14 hospitals and 2, 300 beds, it's rapidly expanding.

The third entity, \$107 million (revenues) Max Ventures & Industries, has added real estate, education (K-12 schools) and investments to Max's legacy manufacturing.

The restructuring brought founder Analjit Singh, 63, to the *Forbes* Billionaires list, but he has relinquished most board involvement, remaining today only as nonexecutive chairman for the units— Antara and Max Ventures where daughter Tara and son-in-law Sahil Vachani are in management.

Since 2011, the entire group has been under Rahul Khosla, 57, a former international executive for financial giant Visa. As president he's the seniormost executive and board chairman of key group companies. "Analjit's been incredibly generous," says Khosla, who's become a close confidant. "There's nothing that he knows about that I don't know."

Singh has helped build strong boards for the group companies, includ-



Max Group founder Analjit Singh, now a member of the Forbes billionaires list.

Make Poughkeepsie Great Again

Can the U.S. hang on to its factories? Taylor Manufacturing is a case study in why the news is not all bad.

BY WILLIAM BALDWIN

n the debate about whether the erosion of factory employment can be stemmed, you'll find a glimmer of hope in a curious little outfit called the James L. Taylor Manufacturing Co. This business, which has been in Poughkeepsie, New York, for 106 years, makes clamps and other woodworking tools. The clamps are rather like the thing you'd use to glue the sides of a dresser drawer, but you won't find them at Home Depot. They cost \$15,000 and up.

Producers of furniture, flooring and cabinets, mostly on Taylor's home continent, are the buyers. Taylor, then, is an American manufacturer selling to other American manufacturers. In a global economy you'd think it would be doubly cursed. But it's thriving. It's solidly profitable on sales of \$12 million, says chief executive Michael Burdis. If you are mechanically adept he'd like to add you to his payroll of 37.

Make that triply cursed, New York being an especially poi-

sonous locale for goods production. Since a peak 74 years ago, the state has seen 80% of its factory jobs melt away. In the same span the whole U.S. has lost 30%.

Taylor is alive because its specialized market, a few hundred tools a year, isn't vulnerable to low-wage exporters. "If we were making 300,000 iPhones a month we couldn't compete," allows Bradley Quick, Taylor's chief engineer.

Poughkeepsie—the name refers to both a city 70 miles up the Hudson River and the surrounding town—has a glorious past. It was home to a dairy-equipment factory with 764 workers. Fiat made cars here. The Smith Brothers churned out 30 tons of cough drops a day. Apparel manufacturing was big.

The dairy-equipment people found better locales for their manufacturing. Fiat's assembly line has become a strip mall. The Smith family hung on for five generations, then sold out to



PHOTOGRAPHS BY FRANCO VOGT FOR FORBE



Taylor's Michael Burdis, chief executive, and Bradley Quick, chief engineer: Their flooring nester doesn't call in sick.

a pharmaceutical company that moved production out of New York. The Poughkeepsie Underwear Co.? Crushed by the competition. Its three-story factory was recently turned into shops and government-subsidized apartments.

International Business Machines interrupted this grim trend, for a while. It chose Dutchess County, of which Poughkeepsie is the seat, as a place to make computers. At one point IBM had 30,000 workers in Dutchess and across the river in Ulster County. But those high-wage jobs didn't last. Today the company's Hudson Valley employment is scarcely a tenth of what it was, to judge from some digging by the *Poughkeepsie* Journal (IBM won't talk).

You could blame this collapse on the decline of mainframes. But why didn't something else take their place? Because a new venture can just as easily open up in a state that is friendlier to employers. In 1982 New York tacked a "temporary" 1.18 multiplier on its already stiff income tax for businesses located in certain counties near New York City, the list including Dutchess. The multiplier remains in effect and was recently boosted to 1.28.

Burdis allows that taxes and labor costs (his machinists get between \$18 and \$30 an hour) would be a little lower in the



RESURRECTION

Schatz Federal Bearings was one of Poughkeepsie's largest employers, with 1,150 workers as late as 1956. Crippled by a 15-month strike, it went bust in 1980. It lives on, via some assets sold at the bankruptcy auction.

Housed in a building a few hundred yards from the abandoned factory of the old company is a new entity, debt-free and profitable. The 83 employees of Schatz Bearing Corp. eschew mass production in favor of custom orders, quick turnarounds and high-end products for aerospace. Some of their ball bearings are made to specs measured in microns and cost thousands of dollars apiece.

Wouldn't Texas be a lower-cost location? Yes, says president Stephen Pomeroy, who has an engineering Ph.D. from MIT. But moving would entail an arduous process of getting recertified for airplane contracts. He's going to stay put.

South. One reason he hasn't moved the company is that he and Quick like living in New York.

Quick, 54, has been in Dutchess County since he was 5. His father and grandfather worked at Taylor. Burdis, 64, grew up in Troy, New York, another has-been manufacturing town, and ended up at Taylor because, years earlier, he had dated the daughter of the owner-president. That fellow had plenty of inherited money and didn't need to squeeze every nickel out of the clamps. Toward the end of his life he had Burdis and Quick gradually acquire his shares at an affordable price.

Another anchor is Taylor's capacious factory, vacant when Burdis bought it three years ago and moved the business from cramped quarters downtown. The building used to accommodate 225 workers at a firm making parts for power lines. Heirs sold that business to Hubbell Inc. Hubbell axed the workers and moved production to Mexico.

Spread across 2 acres, Taylor's factory hands work efficiently. On a recent day one of them kept four metalworking machines busy at once. Others tinkered with a flooring nester that looks like a giant Foosball game.

To understand what this product does, it helps to know that in the floorboard mills of the Southeast "nester" usually refers to a person—someone who snatches boards coming off a conveyor belt in random lengths, hastily rearranges them so that each row of one to five pieces is just so long, and bundles the rows into a stack. Not long after Brad Quick designed a contraption to do the work and wrote 7,000 lines of C++ to run it, Burdis got a call from a desperate mill manager in Mississippi. "I have eight nesters and four of them just called in sick," he said, ordering three of the \$115,000 machines. The robotic nester plucks up 12 boards, ponders, for a millisecond, which of 1,585 combinations makes the best row, then spits out the selection.

Is there competition from Asia? Not much in the tools for cabinet factories and none in nesters. Says Burdis: "Chinese firms are happy to make rudimentary machines that are fine for employees making Chinese wages but are no good for employees making North American wages."

For his part, Burdis buys American when he can. Taylor's four numerically controlled machining centers came from California. But business is business. Two welding robots and a spanking new \$325,000 steel-cutting laser, as well as the programmable logic controllers that go into products, are all from Japan.

Taylor, of course, must not only fend off imports but also find customers who can do the same. China knocked out a lot of the North Carolina furniture factories that used to be buyers of clamping machines. It hasn't yet eliminated the American factories that make custom cabinets for kitchen remodeling jobs.

As for a hostile buyout, Taylor is safe. Between them Burdis and Quick own 85% of the shares and have three sons in the business. It seems New York is going to have this factory for a while longer.

The Imperial Rolex

BY MICHAEL SOLOMON

IN 1954, BAO DAI, the last emperor of Vietnam, was in Geneva for peace talks when he excused himself to do a little watch shopping. The "Keeper of Greatness" selected a timepiece that lived up to his name-the most complicated Rolex made, a 6062 Oyster with a triple calendar and a moon phase. The most expensive watch for sale at the time—it cost more than \$900, or \$8,300 today—the Rolex was one of three that came with a black dial and diamond markers. (The other two feature six diamonds on odd numbers, but Bao Dai's has five diamonds on even numbers, which meant the Rolex crown logo had to be shifted down.)

WED

16

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The timepiece has changed hands just once since then-in 2002, when it sold for \$235,000, setting a thenrecord for the most expensive Rolex ever auctioned-and now Phillips will offer it for sale (along with some other rare Rolexes) in Geneva on May 13 and 14. Once again the watch is expected to set a record for a Rolex at auction, with a very conservative presale estimate of \$1.5 million. This is "Rolex's ultimate rarity in terms of complications," says Paul Boutros, head of watches for the Americas at Phillips. "But it's one of the most valuable timepieces ever produced, regardless of the brand." Given its provenance, it will surely fetch an emperor's ransom.

The triffic and

This Tiffany-signed "John Player Special" Rolex Daytona (circa 1968) has a presale estimate of \$400,000 to \$800,000.

Known as The Neptune for its dial, this rare Rolex 8382 (circa 1953) is expected to sell for \$300,000 to \$600,000.



A stainless-steel cousin of the Bao Dai watch, this Rolex 6062 (circa 1953) has a pre-auction estimate of \$600,000 to \$1.2 million.

Child of the Pledge

Ted Stanley made a fortune on knickknacks, then promised it to medical research on mental illness. His son is bird-dogging that commitment. And, yes, it's personal.

BY ASHLEA EBELING

t the age of 19, Jonathan Stanley dropped out of college and began behaving erratically. He ended up in a psychiatric unit, brought there by New York City cops called to deal with a naked young man in a deli convinced secret agents were after him. Diagnosed as bipolar with psychotic features, Jon went through what he calls a "dramatic four years" before, with the help of lithium and Tegretol, he got fully back on track. He graduated from Williams College and Quinnipiac School of Law and became an expert and lobbyist on laws affecting commitment and treatment of the mentally ill. Name a state and Jon can rattle off what's right or wrong with its laws.

Yet at 51 he has put his legal work on the back burner, going into "semiretirement," as he puts it in typically self-deprecating fashion. That's because most of his working hours are now devoted to completing his late father's \$1.4 billion charitable commitment to medical research on mental illness, as well as to dealing with more mundane details of his dad's estate. Jon figures he'll be ready for his third act by the time he's 60.

Sure, lots of aging boomers and Gen-Xers take time from busy lives to wrap up their parents' affairs. But Jon Stanley has embraced a rare filial duty as what might be called a child of the pledge. Since Bill and Melinda Gates and Warren Buffett proposed in 2010 that their fellow billionaires promise to give at least half their wealth to charity, either during their lifetime or at death, 158 Giving Pledges have been signed, including by Jon's parents, Ted and Vada Stanley. In only eight cases have both husband and wife (or a sole signer) passed away. There are likely some disappointed would-be heirs out there, but many pledgers, like the Gates, try to bring their kids in early on their philanthropic plans.

That's exactly what Ted Stanley had done—long before the giving pledge was a thing or he had a specific cause. Ted, who died suddenly in January 2016 at the age of 84, built a fortune marketing collectibles. In 1969, he launched the Danbury Mint with moon-landing medals. Its parent, MBI, now peddles everything from cubic zirconia jewelry to gilt-edged books.

Yet Ted himself was anything but frivolous or flashy. Even when he was a kid, Jon recalls, his parents took pride in donating half their income each year, and his dad made clear almost all his fortune would go to philanthropy, not family.

"In other families I would be a billionaire. I don't need to be a billionaire," says Jon, who lives comfortably in a \$1.5 million Fort Lauderdale high-rise condo.

Still, family—and more specifically his son—played a big part in Ted Stanley's charitable mission. "My own experience with mental illness was the biggest crisis in his life until my mom got sick with dementia before she died [in 2013]," Jon says. "I got real sick. Then with the right pills I got better. That gave [my father] a focus for his philanthropy." Jon, in turn, seems laser-focused on making sure Ted's charitable intent is realized, says lawyer Peter Chadwick, who is coexecutor, with Jon, of Ted's estate.

"I'm the nation's leading expert on the mind of Ted Stanley," Jon explains. "My dad was very insular, and I was one of his confidants."

In 1989, Ted and Vada gave \$1 million to seed the Stanley Medical Research Institute in Bethesda, Maryland, to study treatments for schizophrenia and bipolar disorder. Then, over time, they cut back on other giving and plowed nearly \$600 million into the institute, which ran drug trials the pharmaceutical companies wouldn't (for example, of generic medicines or off-label uses) and sponsored research into the relationship of inflammatory markers and infectious agents to those illnesses. The institute will shut down in the next few years, says E. Fuller Torrey, the 79-year-old psychiatrist who directed most of its work.

That's because a decade ago, with Torrey aging and advances in psychiatric drugs stalled, the Stanleys decided to invest in new approaches—in particular, using genome mapping to look for markers associated with mental illness. In 2007, they gave \$100 million



HOME SWEET CHARITABLE GIFT

Estate lawyer Peter Chadwick recalls the day Ted Stanley told him he wanted to make charitable arrangements for his stunning 7,000-squarefoot, hemicycle-shaped home in New Canaan. Connecticut. "Knowing it was a Frank Lloyd Wright [designed] house, and forgetting for a few minutes who I was dealing with, I asked him, 'Do you want it to be an historic-house museum?'" Nope, Stanley responded. After his death, he wanted the house sold and the proceeds used, like the rest of his assets, to fund mental illness research. So Chadwick put together papers giving the house to the Stanley Family Foundation but allowing Ted



and his wife, Vada, to live in it for the rest of their lives. The usual appeal of this "life estate" giving technique is that you get a current charitable income tax deduction, even as you continue to live in the house. The Stanleys, for their part, probably already had more charity deductions than they could use but "derived personal satisfaction knowing [the future of the house] was wrapped up," Chadwick says. –*A.E.*

advocacy, which has led 30 states to change their civil commitment laws to allow for court-supervised community treatment for the mentally ill, instead of just hospitalization and discharge. "No family has done as much to advance the cause of mental illness treatment," Snook says.

By the end of 2015, just before Ted's death, the Stanley Family Foundation had fulfilled the first \$50 million of his \$650 million pledge and held a half-billion in assets, including a portion of Ted's MBI holdings valued at \$214 million. Now the rest of his MBI stake is going to the foundation, and while Jon won't say what it's worth, it seems to be more than enough to make good on the Broad pledge. Privately held MBI says on its website it does \$350 million a year in sales.

For now, like any kid handling a parent's estate, Jon is busy talking to realtors about marketing the family's house and figuring out what to do with their stuff. Only in this case the house was designed by Frank Lloyd Wright, sits on 15 acres in New Canaan, Connecticut, beside a waterfall and pond, and is on the market for \$8 million; the "stuff" includes an ashtray with a cigar butt supposedly left by Wright himself (*see box*).

Jon is also trustee of various trusts his dad set up for family members, including a stepbrother and stepsister from Vada's first marriage. "[The trusts] are more than enough to live your life, but nobody's getting on a private jet," he says approvingly.

to start the Stanley Center for Psychiatric Research at the Broad Institute of MIT & Harvard, a Cambridge biomedical research center seeded by Giving Pledge signers Eli and Edythe Broad.

In 2014, having already given \$175 million to Broad, Ted pledged an additional \$650 million—the largest-ever gift for psychiatric research—with most of that to be funded, after his death, out of his majority stake in MBI. "What Broad created made sense to my dad, so he tagged his whole legacy into it," Jon says, adding that he sees the move as akin to Buffett's decision to leave the bulk of his fortune to the already up-and-running Bill & Melinda Gates Foundation.

As the son of a Reading Railroad brakeman, Ted Stanley was not one to waste money. In addition to saving the expense of setting up his own genome research group, Ted instructed that the private Stanley Family Foundation—through which his donations are funneled—would dissolve within a decade after his death. "Ted didn't want a foundation that perpetuated [itself] and became fat and lazy," explains his longtime business partner, Julius Friese, who serves as a trustee of the foundation along with Jon and a Stanley cousin.

Meanwhile, each trustee gets to recommend a slice of the foundation's annual giving; Jon directs \$600,000 a year to the Treatment Advocacy Center, where he worked as a lawyer and executive director and is now a guiding force on the board. John Snook, the current executive director, credits Jon with playing a pivotal role in TAC's

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ASIA'S CLASS OF 2017

The 30 Under 30 Asia list, in its second year, showcases 300 young leaders in ten industries who are rising stars in the Asia-Pacific region. They are an eclectic bunch with a broad field of interests whether improving fish farms in Indonesia or installing sanitation in rural Cambodia. Our winners were scouted by our reporters and judged by industry experts.

EDITED BY Rana Wehbe

REPORTING BY Ambika Behal, Ma Fangjing, Rebecca Fannin, Tanvi Gupta, Ralph Jennings, Iris Leung, Jason Lim, Elaine Ramirez, James Simms, Yuelun Sun, Carla Thomas, Glenda Toma, Xiang Wang and Yue Wang.

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Trang Anh Hang Lam (Suboi), 27

respect." -Carla Thomas

Vietnam's queen of hip-hop is a lyrical force to be reckoned with. She's performed with international acts like Skrillex and Lady Leshurr, was the first Vietnamese artist ever to be invited to play SXSW Music Festival in Austin, Texas, and rapped for Barack Obama—while he beatboxed. "That was a lifechanging moment," she says of the encounter that took place at a town hall meeting during his historic visit to Vietnam in 2016

The diminutive rapper has amassed 1.4 million followers on Facebook, 79,000 on Instagram and hundreds of thousands of views on YouTube. But she feels the pressure of being a woman in a maledominated industry: "I'm a female rapper. I have to work double, triple as hard just to earn the same

FORRES

Entertainment & Sports

Faisal Ali, 28 India Coach, Ali's Sports Academy

Abhinandan Balasubramanian, 26 India

Founder, Premier Futsal Beauden Barrett, 25 New Zealand Rugby player Alia Bhatt, 24 India Actress

Chan Yuenting, 28 Hong Kong Football coach

Chen Long, 27 China Badminton player Ray Chen, 28 Taiwan Violinist

Chen Ruolin, 23 China Diver

Choi Mi-Sun, 21 South Korea Archer

Fu Yuanhui, 20 China Swimmer Sharath Gayakwad, 25

India Paralympic swimmer Kosuke Hagino, 22 Japan Swimmer

Jessica Jung, 27 South Korea Singer

Ariya Jutanugarn, 21 Thailand *Golfer*

Shinji Kagawa, 28 Japan Football player Dipa Karmakar, 23 India

Gymnast Lorde, 20 New Zealand Singer

Sakshi Malik, 24 India Wrestler

Eric Nam, 28 South Korea Singer Samuel Okyere, 25

South Korea TV personality Jay Park, 29 South Korea

Singer Margot Robbie, 26 Australia

Actress Joseph Schooling, 21 Singapore

Swimmer Troye Sivan, 21 Australia Singer

Heung-Min Son, 24 South Korea Football player

Paradise Sorouri, 27 Afghanistan Singer, 143BandMusic

Trang Anh Hang Lam (Suboi), 27 Vietnam Singer

Kris Wu, 26 China Actor

Shahnawaz Zali, 24 Pakistan Filmmaker Zhu Ting, 22 China Volleyball player

JUDGES:

Mallika Kapur, international correspondent, CNN

Sharmeen Obaid-Chinoy, two-time Academy Award-winning documentary filmmaker

Sonny Bill Williams, rugby player and heavyweight boxer

Yuna, singer-songwriter and entrepreneur

THE FILIPINO, LINKING MARKETS TO THE WORLD

The **New Container Terminals 1** and **2** at the Subic Bay Freeport in the Philippines is the gateway of a bustling local market to the world. Subic's hinterland, the Norther and Central Luzon markets, has been driving a stronger Philippine economy.

ICTSI units have been operating in Subic for over two decades, proof of ICTSI's stature as the prefe partner in public-private partnerships in the port sector. NCT 1 and 2, operated by Subic Bay International Terminal Corp. and ICTSI Subic, Inc., are part of ICTSI's network of Philippine terminals offering unparalleled efficiency and exceptional service quality.



www.ictsi.com

Social Entrepreneurs

Toshiki Abe. 29 Japan Founder, Ridilover Anoka Abeyrathne, 26 Sri Lanka Cofounder, Sustain Solutions Aditya Agarwalla, 23 India Cofounder, Kisan Network Arthur Alla, 28 Australia Founder, Red Earth Ishita Anand, 27 India Founder, BitGiving Debartha Banerjee, 30 India Director, Sampurn(e)arth Environment Solutions Alice Brennan, 29 Australia Founder, SettleIn Hsi Tzu Chang, 26 Taiwan Founder, International City Wanderer Education Association Bisman Deu, 19 India Inventor, Green Wood and Colour the World Pink Surva Karki, 26 Nepal Cofounder, Divalo Foundation Ankit Kawatra, 25 India Founder, Feeding India Shougat Nazbin Khan, 27 Bangladesh Founder, H.A. Foundation Eric Ju Yoon Kim, 27 South Korea Cofounder, Dot Incorporation Hyungsoo Kim, 29 South Korea Cofounder, TreePlanet Ravi Kumar, Mia Mitchell, 29, 28 Nepal Cofounders, Code for Nepal Mohd Lutfi Fadil Lokman, 29 Malaysia, Cofounder, Hospitals Beyond Boundaries Jazz Tan Yee Mei, 27 Malaysia Cofounder, YToday Suratchana Pakavaleetorn, 28 Thailand Cofounder, Local Alike Vanessa Paranjothy, Rebecca Paranjothy, Joanne Paranjothy, 28, 20, 25 Singapore Cofounders, Freedom Cups Jehwan Park, 28 South Korea Founder, Lumir Lucas Patchett, Nicholas Marchesi, 22, 22 Australia Cofounder, Orange Sky Laundry Daroath Phav, 28 Cambodia Executive director, WaterSHED Md Mizanur Rahman, 29 Bangladesh Founder, Physically-challenged Development Foundation Anna Robson, Nirary Dacho, 29, 29 Australia Cofounders, Refugee Talent Shen Peng, 29 China. Founder, Shuidihuzhu Trisha Shetty, 26 India Founder, SheSays Wang Zi, Mo Zihao, 26, 26 China Cofounders, Ricedonate Nat Ware, 28 Australia Founder, 180 Degrees Consulting Tom Williams, 27 China Founder, WeTeach Safaath Ahmed Zahir, 26 Maldives Founder, Women & Democracy



30 UNDER 30

Daroath Phav, 28 EXECUTIVE DIRECTOR, WATERSHED CAMBODIA

Sanitation might not be the first career choice that springs to mind for many. But in 2010, more than 75% of the rural Cambodian population lacked toilets and Daroath Phav spotted an opportunity to use his business skills for the greater good.

He joined nonprofit organization WaterSHED as a project coordinator in 2011. His goal was to motivate rural families to buy household toilets. "I want to teach Cambodians we can move away from our dependence on aid. We need to set up systems so those in need can help themselves," says Phav. His team has overseen the sale of more than 150,000 toilets nationwide over five vears.

Phav now supervises all of WaterSHED's projects, including the marketing of water filters and portable sinks. His greatest joy lies in knowing that he made a difference in the lives of his fellow Cambodians. "The hard work we've put into building the market is paying off." -RW

JUDGES

AUSTRALIA

Solina Chau, executive director, Li Ka Shing Foundation

Vineet Nayar, founder, chairman, Sampark Foundation

Paul Ronalds, CEO, Save the Children Australia

TIM GERARD BARKER/MOTT VISUALS FOR FORBES

THE FILIPINO, LEADING GLOBAL INNOVATION.

The future of container terminal operations just arrived in Melbourne

Victoria International Container Terminal. One of the most innovative, sustainable, fully automated terminals in the world.

VICT is ICTSI's first entry into Australia and the larger Oceania region – extending the Company's portfolio of managed ports to 28 terminals in 18 countries.



The Arts (Art & Style, Food & Drink)

Paige Aubort, 27 Australia Founder, Coleman's Academy Sanket Avlani, 29 India

Curator, Taxi Fabric Chen Xiaoyi, 24 China Photographer

Chen Xuzhi, 24 China Fashion designer, Xu Zhi

Troy Douglas, 27 Australia Founder, Nexba

William Edwards, 28 Australia Founder, Archie Rose Distilling Seira Furuya, 27 Japan

Chef de Partie, Gakushikaikan Parris Goebel, 25 New Zealand

Director, The Palace Dance Studio Julius Holmefjord-Sarabi, Lawrence Holmefjord-Sarabi,

24, 25 Singapore Cofounders, Aureus Group Chris Huen, 25 Hong Kong Artist

Munaf Kapadia, 28 India Founder, The Bohri Kitchen Dae Young Kim, 28 South Korea Co-owner. Manimal Smokehouse

Liu Wen, 29

INTERNATIONAL SUPERMODEL CHINA

Hyun Jung Kim, 28 South Korea Artist

Kathleen Hanhee Kye, 29 South Korea

Fashion designer, KYE Ann Louie Li, 22 Taiwan Founder, annlouieli.com

Li Jiapei, 27 China Fashion designer, Andrea Jiapei Li

Denny Liu, 28 China Founder, LeChun Food & Technology

Liu Wen, 29 China Supermodel

Anais Mak, 27 Hong Kong Fashion designer, Jourden Vaishnavi Murali, 29 India

Founder, Eikowa Art Ninh Nguyen, 29 Vietnam Founder, The Coffee House Edmund Ooi, 29 Malaysia Fashion designer, Edmund Ooi Pony Park, 27 South Korea

Pony Park, 27 South Korea Makeup artist, Munmu Ronald Poernomo, Arnold Poernomo, Reynold Poernomo, 29, 28, 23 Australia Cofounders, KOI Dessert Bar Su Wei-Hsiang, 27 Taiwan Cofounder, justfont Cynthia Suwito, 23 Indonesia

Artist Akane Takada, 26 Japan Dancer, Royal Ballet Company

Sunghoo Yang, Heeyoon Kim, 30, 30 South Korea Cofounders, The Booth Brewing Co.

Zhang Tianyi, 26 China CEO, Funiutang Food Culture Vivien Zhang, 26 China Artist

JUDGES

Jimmy Choo, shoe designer and ambassador of tourism, Malaysia

George Calombaris, celebrity chef and restaurateur Edie Hu, VP, arts advisory

specialist, Citi Private Bank Jeannie Cho Lee, master of wine

SASHA MASLOV FOR FORBI

myself that bad things would only last for a day, not a month or a year," she says. Her big break came in 2008, when she landed a spot on Burberry's runway show during Milan Fashion Week. The following year she appeared in more than 70 shows. Today Liu spends less time treading the catwalks and more on lucrative global campaigns for a host of major fashion and cosmetics brands. *Forbes* estimates Liu banked \$7 million in earnings last year, making her one of the highest-paid models in the world —*Glenda Toma*

Liu Wen has enjoyed a career filled with firsts: the first Chinese model to walk the runway at the Victoria's Secret Fashion Show, the first to appear on the front of American *Vogue* and the first Asian spokesperson for beauty giant Estée Lauder. Her journey to the catwalk was far from easy. She moved from Hunan Province in southern China to Beijing at 18 but found work hard to come by. Liu persevered: "I told

THE FILIPINO, FACILITATING SEAMLESS GLOBAL TRADE.

At Mexico's Pacific coast, the **Specialized Container Terminal-2** in Manzanillo is the most modern trade gateway in the country. At the Gulf of Mexico/Atlantic, the **Tuxpan Maritime Terminal** is set to be another world class seaport facility.

Strategically located on the eastern coast of Madagascar, the terminal, with its state of the art port equipment, facilities and technology, is key in connecting African and Asian markets Contecon Manzanillo S.A. de C.V. and Terminal Maritima de Tuxpan, S.A. de C.V. belong to the ICTSI Group's growing portfolio of 28 terminals in 18 countries across six continents.

MEXICO



www.ictsi.com

30 UNDER 30

Zhou Chenyao (Zoe), 27 PARTNER, LONGLING CAPITAL CHINA

As an international business student at Saint Louis University in the U.S., Zhou started her career in venture capital in 2014, when she joined Longling Capital, the Xiamen venture firm founded by Chinese tech billionaire Wensheng Cai. After three years as an investment manager, Zhou was promoted to partner at the firm in 2016. She now oversees more than \$140 million in funds, focusing on early-stage tech investments. Longling has made 90 investments so far, including Hangzhou's augmented-reality startup WonderLand, Beijing's blockchain company Bo Chen Techology and Xiamen's virtual reality software developer Zhi Hui Jia. -Yue Wang

Finance & Venture Capital

Vaibhav Agrawal, 30 India Associate partner, Lightspeed Venture Partners

Teguh Ariwibowo, 27 Indonesia Cofounder, Pinjam Indonesia Rod Askarov, 29 Uzbekistan Founder, Credit Exim

Maricor Bunal, 29 Philippines COO. Growthsolutions

Melvin Chen, 29 Hong Kong Founder, StarLake Group

Victor Chua, 29 Malaysia Vice president, Gobi Partners

Diao Shengxin, 28 China Founding partner, Meixin Finance

Soowon Sophie Eom, 29 South Korea

Cofounder, Solidware Gao Yutong, 22 China

Cofounder, Easytransfer Abhishek Garg, Riddhi Mittal, 28, 26 India

Cofounders, Finomena Gu Minman, 28 China

Principal, ZhenFund Jason Minkee Kim, 29

South Korea Senior associate. ActnerLab Christopher Lai, 30 Hong Kong

Investor, Horizons Ventures Vicky Lay, 27 Australia

Managing director, Artesian Venture Partners Lin Enmin, 28 China

President, INK Group Liu Yueting. 26 Australia Cofounder, Airwallex

Arjun Malhotra, Rohan Malhotra, 26. 29 India Founding partners, Investopad Jatin Malwal, Bhuvan Rustagi, 24, 29 India

Cofounders, Lendbox Nick Molnar, 26 Australia CEO, Afterpay

Marshall Pribadi, 26 Indonesia Cofounder/CEO, PrivyID

Sanghoon Seo, Joosoo Kim, 26, 26 South Korea Cofounders, HonestFund

Ashwin Srivastava, 29 India Cofounder, Idein Ventures

Wang Yuchen, 26 China CEO, HLJK System & Technology Wang Zeng, 28 China

Founder, Mujinnong Peter Wong, 28 Hong Kong Cofounder, Hummingbird Partners

Xue Benchuan, 29 China CEO, 91Zhengxin Val Yap, 29 Singapore Founder, PolicyPal

Zhang Lu. 29 China Founding partner, NewGen Capital

Zhang Xiaoliang, 29 China Cofounder, Beijing Kuaikuai Network Technology

Zhou Chenyao (Zoe), 27 China Partner, Longling Capital

JUDGES: Kai-fu Lee, CEO, Sinovation Ventures

Rui Ma. Silicon Vallev/China cross-border tech investor

FORBES

STEFEN CHOW FOR

THE FILIPINO, BUILDING, MANAGING GLOBAL GATEWAYS.

The Madagascar International Container Terminal sets the standard for trading gateways in Sub-Saharan Africa, providing world class port services to the Malagasy economy, with one of the highest productivities in the region.

Strategically located on the eastern coast of Madagascar, the terminal, with its state of th port equipment, facilities and technology, is key in connecting African and Asian markets

Madagascar International Container Terminal belongs to a network of marine and inland terminals successfully operated by ports specialist International Container Terminal Services, Inc. (ICTSI). Backed by three decades of expertise, ICTSI operates 28 ports in 18 countri

MADAGASC



Mark McDonald, Josiah Humphrey, 25, 25

COFOUNDERS, APPSTER AUSTRALIA

JAMES LAURITZ FOR FORBES

(LEFT)

TIMOTHY

ARCHIBALD

FOR

FORBES

Unlike most boys, Humphrey and McDonald became entrepreneurs by age 13. McDonald was running an online marketing business, while Humphrey had a successful online lead-generation business. They first met in person at an "Unleash the Power Within" conference hosted by U.S. motivational guru Tony Robbins. They left the event inspired and decided to partner up and go into business.

Though neither had any experience building mobile apps, they started Appster with just \$3,000 in 2011. Appster now develops mobile, Web and wearable apps. Appster has become a \$19 million company with a staff of 350. The duo has never taken any outside investment. *—Jason Lim*

Enterprise Technology

Abhinav Aggarwal, Raghav Aggarwal, 26, 29 India Cofounders, Fluid AI Bilal Athar, 27 Pakistan CEO, Wifigen Chen Yusen, 25 China CEO, Beijing Chaitin Technology Sudheendra Chilappagari, 24 India Cofounder, Belong.co Shih-En Chou, 27 Taiwan Cofounder, QSearch Trent Castella, 27 Australia Cofounder, Phoria Hrishikesh Datar, 29 India Founder, Vakilsearch Legal Solutions Guo Xiaoqian, 28 China Cofounder, Tezign Huang Haibo, 30 China Founder, Meigia Victor Liew Jia Hao, 30 Singapore Cofounder, Xfers Josiah Humphrey, Mark McDonald, 25, 25 Australia Cofounders, Appster Gian Scottie Javelona, 24 Philippines Founder, OrangeApps Joshua Kevin, 25 Indonesia Founder. Talenta Jaeseok (JC) Kim, 29 South Korea Product owner, Spoqa Junghoon Lee, 23 South Korea Information security engineer, Google Liu Guoqing, 30 China Founder. Minieve Bridget Loudon, 29 Australia Cofounder, Expert360 Jaspreet Makkar, 25 India Founder, WeDoSky Anand Prakash, 23 India Founder, AppSecure India Shahab Shabibi, 21 Philippines Cofounder, Machine Ventures Mahdi Shariff, 27 China Chief strategic officer, Sunteng Abhinav Shashank, 29 India Cofounder, Innovacce Viren Shetty, 24 Singapore Cofounder, PlusMargin Shi Yi, 27 China Founder, Avazu Holding Song Jian, 27 China CEO, Duozhun Data Technology Sopheakmonkol Sok, 27 Cambodia . Cofounder, Codingate Naofumi Yamada, 27 Japan Founder, PKSHA Technology Yao Song, 24 China Cofounder, DeePhi Technology Hiroshige Umino, 28 Japan Cofounder, Increments Xu Yi, 29 China CEO. Sobot

JUDGES Eva Chen, cofounder and CEO, Trend Micro T.M. Ravi, cofounder and managing director, The Hive Royston Tay, general manager of messaging, Zendesk

IRAQ

THE FILIPINO, BUILDING PORTS RE-BUILDING ECONOMIES.

The nation of Iraq emerges as a new and vibrant market in the Middle East. Basra Gateway Terminal (BGT) in the Port of Umm Qasr opens its berths to global trade as Iraq expands its economy and connects further to world markets.

BGT: a world class, state of the art seaport facilitating global trade and commerce in Iraq.

BGT is International Container Terminal Services, Inc.'s (ICTSI) presence in the Middle East, and belongs to a growing portfolio of 28 ports and terminals in 18 countries.

s, Inc.

30 UNDER 30

HyungCheol Lim, Goeun Choe, 26, 25

The now-engaged couple dropped out of college as teenagers to pursue their startup dream. Soon after launching Gameberry in 2011 to develop mobile games, they discovered a huge gap between app publishers and targeted advertisers. They pivoted from games to becoming an app-marketing agency, initially doing free work for local app developers. While Gameberry's first platform, Jungggle, lets advertisers connect with the right publishers, its next project, a ramped-up JungggleX, will determine the best traffic strategies for advertisers. "Money gets wasted through bad-quality traffic," Lim said. "I feel very good when, with our tech, data and platform, advertisers can earn more money with the same budget."

Gameberry has \$3 million in sales to date and is expecting to reach \$5 million next year. —*Elaine Ramirez*

Media, Marketing & Advertising

Cai Heng, Zhu Feng, 26, 27 China Cofounders, Star-Station TV

Cai Yuedong, 28 China Founder, Tongdao Uncle Culture Communication

Sodam Cho, 26 South Korea Founder, Dotface

Kovid Gupta, 28 India Author

Jacqui Hocking, 27 Singapore Founding partner, Vision Strategy Storytelling

Yusuke Horie, 24 Japan Founder, dely

Hu Na, 24 China CEO, Beijing XinLiYouShu Cultural Diffusion

Kounila Keo, 29 Cambodia Founder, When In Phnom Penh

Chan Myae Khine, 27 Myanmar Founder, Amara Digital Marketing Agency

Chih-Wei Lee, 26 Taiwan Cofounder, iCook

Inwoo Lee, 25 South Korea Director of video effectiveness, Shakr

HyungCheol Lim, Goeun Choe, 26, 25 South Korea Cofounders, Gameberry

Lu Tingting, 27 China Founder, Lando

Karl Mak, Adrian Ang Jin Yong, 29, 29 Singapore Cofounders, Hepmil Media Group

Mandovi Menon, Varun Patra, 27. 27 India

Cofounders, Homegrown

Mu Qing, Fabian von Heimburg, 27, 28 China Cofounders, HotNest Technology Lotfullah Najafizada, 29 Afghanistan Director, TOLOnews TV Carl Ocab, 23 Philippines Founder, Carl Ocab Internet Marketing Services

Rohit Pothukuchi, 26 India Founder, Standard Indian Legal Citation

Lindsay Rogers, 28 Australia Cofounder, Chello

Mohd Yazrie Mohd Shukri, 28 Malaysia

Founder, YAZ Ventures Hugh Stephens, 27 Australia Founder, Schedugram

Sun Taoyong, 29 China Founder, Weimob Group

Sandi Sein Thein, 28 Myanmar Cofounder, Digital Kaway William Utomo, Winston Utomo,

24, 26 Indonesia Cofounders, IDN Media Jan Wong, 30 Malaysia

Founder, OpenMinds Resources Prabhat Yadav, 23 Nepal

Founder, Explore Gadgets Sung Il Youn, 29 South Korea

COO, MAD Square Zhang Yijia, 26 China

Cofounder, Xtecher Zou Xiaowu, 29 China

Cofounder, Yeahmobi

Mark Britt, cofounder and CEO, iFlix

Caspar Schlickum, CEO, Wunderman APAC

Kristie Lu Stout, anchor/ correspondent, CNN



THE FILIPINO, MANAGING GLOBAL GATEWAYS.

Pakistan International Container Terminal in the Port of Karachi serves not only Pakistan but also Afghanistan, Central Asia and Western China.

PICT: a world class, leading edge trade gateway in the Indian Subcontinent.

PAKISTAN

PICT has been with the ICTSI Group since 2012, and is part of an expanding portfolio of 28 terminals in 18 countries.

Industry, Manufacturing & Energy

Nadhir Ashafiq Zainal Abidin, Chee Hau Goh, 29, 29 Malaysia Cofounders, TheLorry

Srinivas Reddy Aellala, Nalin Gupta, 25, 27 India Cofounders, Auro Robotics

Srikanth Bolla, 25 India Founder, Bollant Industries

Alfred Boyadgis, 26 Australia Cofounder, Forcite Helmet Systems

Oscar Chang, 26 Taiwan *Cofounder, Alchema*

Harrison Chen, Alexander Chen, 22, 27 China Cofounders, Trainerbotics

Matthew Cua, 28 Philippines Founder, SkyEye Analytics

Bomi Doh, 26 South Korea Cofounder, Enomad

Gibran Huzaifah Amsi El Farizy, 27 Indonesia

Founder, eFishery Jordan Grives, 28 Australia Founder, Fonebox Group

Jason Gui, 26 New Zealand Cofounder, Vigo Technologies Sunbeom Gwon, 28 South Korea

Founder, Ecube Labs He Wei, 27 China Founder, Shenzhen Vxfly Intelligent

Information Technology Tatsuya Honda, 26 Japan User interface designer, Fujitsu

Huang Chaiming, 28 China Founder, Hypereal

Chris Kelsey, Fernando De los Rios, 19, 26 China Cofounders, Cazza Li Gang, 28 China CEO, SpeedX and Bluegogo Liu Feng, 27 China Founder, Nanjing Kuailun Intelligent Technology

Adarsh Manpuria, 29 India Cofounder, FabHotels Ketan Mehta, 28 India Founder, Rays Power Infra SeGi Nam, 28 South Korea Cofounder, nthing Brandon Ng, 29 Hong Kong Cofounder, Ampd Energy Sam Ovens, 27 New Zealand Founder, Consulting.com Lisa von Rabenau, 27 India Head of engineering, ReMaterials Sudarshan Ravi, Pushkar Singh, Ankit Parasher, 26, 26, 26 India Cofounders, LetsTransport Anirudh Sharma, 30 India

Social impact technologist, Graviky Labs Song Junyi, Wu Qilin, 26, 29 Chin Cofounders, Elephant Robotics Aonghus Stevens, 24 Australia Cofounder, Measure Australia Sui Shaolong, 28 China Cofounder, RoboTerra

Zhao Ye, 25 China Cofounder, CoClean

JUDGES Romi Haan, founder and CEO, Haan Corp.

Roger Lee, CEO, TAL Group Liu Xueliang, general manager, BYD Asia-Pacific

Gibran Huzaifah Amsi El Farizy, 27

Efishery founder and CEO Gibran Huzaifah is taking a deep dive in the relatively untapped \$5.4 billionvalued Indonesian aquaculture market. Efishery uses cloud-based smart-feeding technology in 20,000 fish and shrimp farms across the vast archipelago. The Ideosource and Aquaspark-backed IoT startup doesn't just sell products, it also collects data (feeding, production, water quality and fish behavior) to create predictive analyses for farmers. "Feeding practices today are hardly efficient and make up 70% to 80% of total operating costs," explains Huzaifah. Efishery claims to minimize costs by 21%. Huzaifah's ultimate goal is to tackle global food shortages and to branch out to agriculture. "People are still doing their agriculture the same way they did decades ago, which is partly causing poverty and hunger," he says. -Iris Leung

THE FILIPINO, PIONEERING GLOBAL PORT TECHNOLOGY.

From systems and hardware, to hand-held devices and equipment, the **Baltic Container Terminal** in Gdynia, Poland uses leading edge technology to facilitate trade.

A highly advanced terminal in the ICTSI Group, BCT leads Baltic ports in the seamless facilitation of trade.



BCT, one of the first Philippine ventures in European Union, belongs to ICTSI's growing portfolio of 28 terminals in 18 countries.



30 UNDER 30

Kavin Bharti Mittal, 29

When Kavin Mittal (the son of billionaire Sunil Mittal, founder of Bharti Airtel) moved back to India in 2011, the Imperial College engineering graduate had already built two startups: AppSpark and MoviesNow. But according to Mittal it was a trip to a street-food stall with friends in New Delhi that sparked the idea for hike—an instant-messaging service designed to rival WhatsApp. Noting the prevalence of basic mobile handsets at that time, he thought of the potential impact smartphones could have on India's enormous population. "I had an iPhone 4S at that time, with apps and Edge, not even 3G.... There were all these people who had no clue what the internet actually meant," he says. "India has a population of over 1 billion people, how would they come online?"

Today, hike has over 100 million users, is valued at \$1.4 billion and has raised \$175 million. —*Ambika Behal*

JUDGES

Jenny Lee, managing partner, GGV Capital Jean Liu, president, Didi Chuxing

Consumer Technology

Liam Bates, Jessica Lam, 28, 28 China Cofounders, Origins Technology Adam Brimo, 29 Australia Founder, OpenLearning Raghav Chandra, Varun Khaitan, 27, 29 India Cofounders, UrbanClap Dai Wei, 25 China Founder, Beijing Bikelock Technology Eric Gnock Fah, 29 Hong Kong Cofounder, Klook Travel Guo Lei, 28 China Founder, Shenzhen Lianmeng Technology Hu Tao, 29 China Founder, XunQiu Kodai Kawase, 27 Japan CEO. Photosynth Min Q Kim, 28 South Korea Cofounder, Edike Yuka Kojima, 30 Japan Cofounder, FOVE Sanjay Kumaran, Shravan Kumaran, 15, 17 Indi Cofounders, GoDimensions Sharndre Kushor, Jamie Beaton, 22, 22 New Zealand Cofounders, Crimson Education Liu Jingkang, 25 China Founder, Shenzhen Arashi Vision Co. Looi Qin En, Seah Ying Cong, Oswald Yeo, 23, 24, 24 Singapore Cofounders, Glints Lu Wenyong, 29 China Cofounder, Edaixi Kavin Bharti Mittal, 29 India Founder, hike Messenger Hai Nguyen, 26 Vietnam Founder, Canavi Trung Nguyen, 24 Vietnam Founder, Lozi Sonam Pelden, 28 Bhutan Regional head of marketing, ServisHero Titipong Pisitwuttinan, Ekachat Assavarujikul, 29. 29 Thailance Cofounders, SkillLane Ahmad Shiina, 30 Japan Cofounder, Timers Inc. Adam Stone, 22 Australia Founder, Speedlancer Justin Sun, 26 China Founder Peiwo Technology Sun Tiangi, 27 China Founder, Vincross Iman Usman, Adamas Belva Syah Devara, 25, 26 Indonesia Cofounders, Ruangguru Anvitha Vijay, 10 Australia Founder, Smartkins Animals Tyovan Widagdo, 27 Indonesia Founder, Bahaso Yang Jianbo, 26 China Founder, KEYI Technology Yu Jia, 28 China CEO. UniCareet Zhang Bohan, 26 China Founder, Poputar

THE FILIPINO, SETTING A GLOBAL STANDARD IN PORT MANAGEMENT.

The **Manila International Container Terminal** combines leading-edge technologies and decades of port management expertise to provide the country with port services at par with the world's best.

The MICT is one of the best examples of Public-Private Partnerships, offering the best value for the government and the Filipino people. MICT is the flagship operation of ICTSI, the Philippines' leading port operator with a portfolio of 28 terminals in 18 countries.



BANERJEE FOR FORBES

RITAM

Noor Neelofa Mohd Noor, 28

DIRECTOR, NH PRIMA INTERNATIONAL MALAYSIA

A household name in her native Malaysia, actress and TV host Neelofa's first claim to fame was winning a local teen beauty contest in 2010. Four years later, she decided to don a hijab, which inspired her to launch a modest fashion business catering to young and stylish Muslim women.

Among her handful of lifestyle brands, the Naelofar hijab line now sells in 38 countries, including her latest concession in the heart of London's upmarket Chelsea district. Her Instagram fans have played a big part in expanding the business: "Being a known figure was certainly a bonus point for me. I had zero marketing cost and mainly relied on my social media to promote the brand."

Neelofa hopes to lead a new generation of female entrepreneurs in her country: "I want to use my success as an example to inspire women not just to make money but also to have good confidence in themselves, be strong and not necessarily rely on men." -R.W.

Retail & E-Commerce

Aashish Acharya, Sabin Bhandari, 25, 25 Nepa Cofounders, WhiteSpace Tushar Ahluwalia, Shikha Ahluwalia, 29, 25 India Cofounders, StalkBuyLove Wagas Ali, 29 Pakistan Cofounder Markhor Dai Ying, 29 China Founder, Beijing Beauty of Fashion Aniket Deb, 27 India Founder, Bizongo LV (Derrick) Donglong, 28 China

CEO, 360zfw Jimmy Du, 29 Australia

Founder, Tommy Swiss

Martell Graf von Hardenberg, 29 Singapore Cofounder, Lazada Group

Huang Xiao, Huang Hao, 29, 29 China Cofounder, Xberts

Vasa lamsuri, 27 Thailand Founding partner, Fastwork Technologies

Kayla Itsines, 25 Australia Cofounder, The Bikini Body Training Co.

Byung-hoon Kim, Jukwang Lee, 28, 29 South Korea

Cofounders, Aprilskin Sunghan Kim, 30 South Korea

Senior product owner, Coupang Noor Neelofa Mohd Noor, 28 Malaysia Director, NH Prima International

Hvunseok (Paul) Park. 30 South Korea

Cofounder, B2LiNK

MUNSHI

AHMED FOR Anjana Reddy, 29 India Founder, USPL

Yusuke Saito, Masaru Ishizaki, 29, 29 FORBES

Cofounders, Empag

Jonathan Shen, Chris Hwang, 27, 26 Singapore Cofounders, The Golden Duck Shi Li, 29, China CEO, D2C Shunsuke Shimada, Yohei Yamawaki, 22, 24 Japan Cofounders, Every Denim Pranay Surana, Shreya Mishra, 26, 28 Cofounders, Flyrobe Christina Suriadjaja, 26 Indonesia Cofounder, Travelio Sasha Tan, 26 Malaysia Founder, Favful Nicolas Travis, 29 Singapore Founder, Allies of Skin Uppma Virdi, 27 Australia Founder, Chai Walli Wan Xucheng, 27 China Founder, See Mobile Technology Rajesh Yabaji, Chanakya Hridaya, 28. 27 India Cofounders, BlackBuck Vivy Yusof, 29 Malaysia Cofounder, FashionValet Abby Zhang, 29 Hong Kong Cofounder, YEECHOO Zheng Chao, 30 China CEO, Toowell Network Technology JUDGES Hiroshi Mikitani, chairman and CEO, Rakuten

Jennifer Woo, chairman and CEO, Lane Crawford Joyce Group Allan Zeman, chairman.

Lan Kwai Fong Group



AUSTRALIA

THE FILIPINO, LEADING GLOBAL INNOVATION.

The future of container terminal operations just arrived in Melbourne

Victoria International Container Terminal. One of the most innovative, sustainable, fully automated terminals in the world. VICT is ICTSI's first entry into Australia and the larger Oceania region xtending the Company's portfolio of managed ports to 28 terminals in 18 countr



Health Care & Science

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30 UNDER 30

Yuki Shimahara, 29

Cars were Shimahara's original love. But after learning about stem cells and their potential to treat diseases, he chose to study cellular biology rather than automobile engineering at college.

In 2013, Shimahara cofounded software developer LPixel, which offers a cloud-based platform with artificial intelligence to interpret and catalog medical imaging. This includes X-rays, CT scans and MRIs. "The problem today is that doctors are overwhelmed with imaging data and there are fewer doctors. I wanted to help them," says Shimahara. And because scientists constantly dump gigabytes of research data without fully analyzing it, "a Nobel Prize could be thrown away," he adds.

Spun out of Tokyo University's life sciences laboratory, where Shimahara is a Ph.D. student, LPixel received \$7 million in backing from JAFCO and carbon-fiber giant Toray in 2016. The Japanese government selected it as one of its "Next Innovators." —James Simms

THE FILIPINO, FACILITATING SEAMLESS GLOBAL TRADE.

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Steve Monaghan, chief investment and innovation officer Dr. Snehal Patel, cofounder, MyDoc; managing director, Saena

Sonny Vu, president and CTO, Fossil Group, Connected Devices

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MEXICO



SO UNDER 30

These 30/30 members are among those taking their talents abroad.



Jacqui Hocking founding partner, vision strategy storytelling singapore

Her communications company employs innovative video, virtual reality, photography and social media campaigns. The Australian is also a documentary filmmaker who founded the Singapore Eco Film Festival, which focuses on environmental issues.



Samuel Okyere

The witty exchange student gained fame as a regular panelist on a popular variety show. He also helped open a school in his native Ghana and cofounded a campaign to connect cultures through food and fashion, designing T-shirts with illustrations fusing dishes from Korea and Africa.



Lisa von Rabenau Head of Engineering, Re-Materials India

Re-Materials uses sustainable, locally sourced materials to create modular roofs for impoverished households. Started in 2014, it now has a 35-person team based in Ahmedabad. Von Rabenau, from Germany, was originally an employee and is now a partner.



John Ho assistant professor, national university of singapore singapore

Ho's research in bioelectronics—the convergence of biology and electronics—has been applied to cardiac pacing and optogenetics (controlling and treating the brain with light) in mice. Ho, from the U.S., has his master's degree and Ph.D. from Stanford University.



Shahab Shabibi COFOUNDER, MACHINE VENTURES PHILIPPINES

Shabibi's incubator hatched HeyKuya, a text-based personal assistant system with more than 35,000 users. Originally from Iran, Shabibi earlier founded two startups in music streaming and sports media—before moving to the Philippines.

POI AND

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BGT is International Container Terminal Services, Inc.'s (ICTSI) presence in the Middle East, and belongs to a growing portfolio of 28 ports and terminals in 18 countries.



IRAQ

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WHAT'S NEXT FOR ASEAN



IN THE CONCLUSION of The ASEAN Miracle: A Catalyst for Peace (NUS Press, 2017), authors Kishore Mahbubani & Jeffery Sng state: "If such an imperfect corner of the world can deliver both peace and prosperity to its 625 million citizens, the rest of the world can surely replicate ASEAN's imperfect record."

On August 8, ASEAN will be celebrating the 50th anniversary of its founding when the representatives of the original five nationsa Buddhist (Thai), a Catholic (Filipino), two Muslims (Indonesian and Malaysian) and a

"lapsed" Hindu (Singaporean)-signed the Bangkok Declaration. In view of its "miraculous" achievements over this half-century, ASEAN, the authors argue, deserves the Nobel Peace Prize.

I happened to be in Bangkok in August 1967-although I must admit I was not conscious of this momentous event. Fresh out of university, I took an extended trip through Southeast Asia. It was, at the time, the world's most hopeless and infernal hellhole. For one thing, it was dirt poor. Singapore had a per capita income inferior to that of Ghana: Indonesia's was roughly half Nigeria's. The U.S. was pounding Vietnam and Laos with bombs-including the chemical weapons napalm and Agent Orange. Indonesia had not recovered from the attempted coup in 1965, which in turn elicited an extremely violent reaction, including mass killings of the Chinese minority. Malaysia, the Philippines and Thailand faced armed insurrections. Indonesia and Malaysia were verging on war, in what was known as Konfrontasi, while the Philippines and Malaysia had a threatening territorial dispute over Sabah.

ASEAN (which now counts ten member states) is incontestably the world's most diverse region ethnically, religiously and linguistically-Indonesia alone counts over 700 living languages. The region was subjected historically to what the authors refer to as the "four waves": the Indian, the Chinese, the Muslim and the Western wave, thus making it the global crossroads of all the world's major civilizations. The authors estimate the contemporary religious demographics at 240 million Muslims, 140 million Buddhists, 130 million Christians, and 7 million Hindus, along with a not insignificant number of animists, Taoists and, of course, agnostics. If humanity's default position for civilizations is to clash, then ASEAN should have been a Sarajevo writ large.

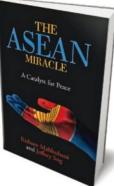
By no means, however, should it be inferred that the last 50 years have been a bed of roses. The Vietnam War continued with all its brutality until the Americans withdrew from the devastated country in 1975. As bad was the American war in Laos (1962-75), in which 10% of the population perished and 25% were made refugees. The Khmer Rouge, in power in Cambodia from 1975 to 1979, perpetrated one of the world's worst genocides. And there is the current persecution of the Rohingya Muslim minority in Myanmar. What were ASEAN's key success factors?

The geopolitical winds were, on balance, favorable. This was especially the

case after Richard Nixon's historic visit to Beijing in 1972 and the end of the Vietnam War. Even if on opposite sides of the ideological fence, the People's Republic of China and the U.S. saw it in their mutual interest to cooperate in the Asia Pacific region in light of their common enemy, the USSR. This is important for, arguably, the greatest threat to ASEAN now could be U.S.-China regional rivalry.

Also crucial were market-oriented reforms. The economies of a number of the countries grew significantly as foreign direct investments poured in, though there were laggards, notably the Philippines. In the 1980s, Thailand was known by the foreign investor community as the "standing-roomonly country," as the queues for submitting projects to the BOI (Board of Investment) were so long and competitive. Malaysia became a major hub of electronics, foreign investment and manufacture. Perhaps most dazzling is Vietnam, which, following a disastrous decade of Stalinist-style state control, undertook extensive radical reforms. Today Vietnam is one of the world's most entrepreneurial societies.

What next? ASEAN faces a number of challenges; two in particular stand out. China-U.S. tensions will have immense repercussions throughout



the world, especially in ASEAN. The South China Sea cauldron is a potential source of catastrophic conflict. And the authors acknowledge that ASEAN can be an elitist project. There may be great camaraderie between the political, thought and business leaders, but to the ASEAN men and women in the street, it does not represent very much. Greater efforts to bring ASEAN to the people need to be made.

One hopes that these challenges-and there are others, including overcoming political shenanigans and widespread corruption-will

be met. ASEAN is a remarkable success story. The narrative should continue, not just for the sake of the 625 million citizens of ASEAN but also for the 385 million inhabitants of the Middle East North Africa (MENA) region and for the world in general. The citizens of MENA have a great deal they could learn from ASEAN and its large Muslim population. Indeed, replicating the ASEAN model would be a tremendous feat. **(F)**

JEAN-PIERRE LEHMANN IS A CONTRIBUTOR TO FORBES.COM AND EMERITUS PROFESSOR AT IMD, LAUSANNE, SWITZERLAND; VISITING PROFESSOR AT HONG KONG UNIVERSITY AND NIIT UNIVERSITY, RAJASTHAN, INDIA.

Shipwrecked Kashmir

The long standoff between India and Pakistan has traumatized the sturdy people of a stunning land.

BY JUDITH MATLOFF

he causes of the enduring brutality in Kashmir began with the region's terrain. The Himalayas illustrate the curse of mountain buffer zones—frontiers too sparsely inhabited to be priorities for the plains elite. The needs and unique ways of these communities—they are generally minorities, and often indigenous—are usually overlooked or repressed by the capitals, which in turn fuels frustration. Of course, not every range that serves as a border is a site of conflict. Switzerland in its entirety is one big peaceful buffer zone for the five nations surrounding it. The Pyrenees separate Spain and France without any grumbling from either country, and in fact the two governments collaborated on cross-border crackdowns on Basque separatists going back and forth. Spain and France also share military protection of Andorra, the mountain principality that straddles their borders. This prevents either from overrunning it.

But buffer zones don't work so smoothly in the Himalayas. China and India use tiny Nepal, Sikkim, and Bhutan as bulwarks against each other. As in Nepal, the behemoths on either side of Kashmir bully the minority mountain people, ignoring their interests for strategic gain. Kashmir was historically British India's defense against China; India now uses the territory as a shield against Pakistan. And like Nepal, Kashmir has significant rivers originating in the mountains that its bigger neighbors want to exploit for their own benefit and not the locals'.

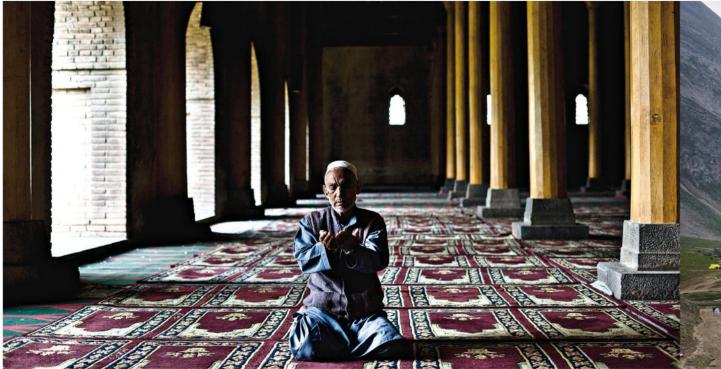
I also saw many parallels between Kashmir and Chechnya. In both, the mountain people are Sufis repressed by the dominant religious group. Radicalization has been the result, and has followed the same pattern: the hijacking of what was originally an ethnic separatist movement by international jihadists, aided by the fact that in the mountains, guerrilla fighters can more easily smuggle arms and train recruits. In Chechnya the foreign jihadists came from the Middle East. In Kashmir they were hardened Al Qaeda fighters trained in Afghanistan or Pakistan. In both cases, what was once a garden-variety secessionist movement spread from the mountains to the plains.

Unlike in the Caucasus, however, the conflict in Kashmir is not purely a case of frustrated sovereignty or collision of faiths. The many dimensions of Kashmir's imbroglio had an additional factor—two nations coveted it. Such has been the fate of Kashmir over history. Its attractive location and fertile charms have drawn a mosaic of invaders, occupiers, colonizers, and Silk Road adventurers—Mughals, Afghans, and Sikhs among them—who left traces in what became a potpourri of cultures. At different times the main faith was animist, Buddhist, Hindu, or Muslim. Modern Kashmir still includes most of these groups. The central and heavily populated Valley, the locus of today's struggle, is mainly Sunni Muslim. It was once home to many other groups, including a sizeable population of Hindu Brahmins, called Pandits,





BOOK EXCERPT



Friday prayers at the Jamia Masjid Mosque in Srinigar; Indian army soldiers returning from a training session at the Siachen base camp in Indian Kashmir.

thousands of whom have fled due to targeting by Islamic militants. Until the second half of the 20th century, the various religious communities in the Valley coexisted in relative harmony, to the extent that they even adopted bits of each other's culture. Sufi mysticism as practiced in Kashmir incorporates elements of Hindu scriptures. Worshippers of both faiths pray at the same shrines. Kashmir is the only place in India where Muslims carry the Hindu surnames Pandit and Bhat. Instead of the domes that predominate in the Islamic world at large, many Muslim shrines here have pagoda roofs, an architectural style associated with Buddhism.

When the British left, they exacerbated latent religious tensions by partitioning the subcontinent. Rarely are postcolonial transitions smooth, and this was one of the worst in the 20th century, characterized by a lack of foresight and planning. As in Palestine, Britain acted as though it was simply ceding a house to new owners, without careful attention to the competing claims. The British left it to the 562 princely states to choose whether to align with India or Pakistan. Kashmir was predominantly Muslim, and the Hindu maharajah, Hari Singh, dithered. He eventually opted to join India following an invasion of Kashmir by Muslim tribesmen backed by Pakistan. War broke out. On January 1, 1949, a cease-fire was struck, with 65% of the territory placed under Indian control (Jammu and Kashmir) and the rest under Pakistan's (Azad Kashmir). China claimed another small parcel, Aksai Chin, which led to a separate border war with India in 1962.

The de facto border between Pakistan and India, called the Line of Control, was supposed to be temporary but still remains in effect more than 65 years later. A UN-recommended plebiscite—over



accession to Pakistan or India but not independence—was never held. Two more wars erupted, in 1965 and 1971. Major fighting followed along the disputed Line of Control, in Kargil, in 1999, nearly sparking nuclear war. Kashmiris yearning for self-determination grew frustrated with Hindu hegemony, rigged elections, and the plebiscite that was never held.

The Kashmir conflict is remarkable for its complexity and for the terrain it has played out on. Since April 1984, India and Pakistan have fought sporadically over the disputed Siachen Glacier, which traverses close to the Line of Control. At nearly 20,000 feet high, the icy peak is the world's highest combat zone and conditions are extreme. Most people cannot survive for extended periods at that altitude. Oxygen starvation can prevent soldiers from sleeping, and causes them to hallucinate. Some even become psychotic. Indian troops train on the glacier for weeks, spending some portion of it at lower elevations, but even so, during their three-month tenure on



Hindu pilgrims trekking to the sacred Amarnath cave, worshipped as a symbol of the god Shiva.

the summit they lose an average of 15 to 20 pounds. More have died from exposure than from bullets; 30% to 50% of the fatalities have been from cerebral edema. Due to the fact that the glacier is too high to resupply aerially, porters carry supplies up the rock faces. Evacuation is rare because it would require nearly a dozen people to carry just one casualty out. Frostbitten toes are simply cut off; the injured usually die. Then there are avalanches. In 2012, one buried 124 Pakistani soldiers in one of the worst such incidents since World War I.

It was four years earlier when I made my reporting trip to Kashmir. Because the glacier is so heavily militarized, and hard to ascend—I would need training and climbing entailing several months—Indian authorities ignored my requests to accompany the troops. That meant I would spend my time thousands of feet lower down, where in any event most of the explosions, fatalities, and cross fire were occurring.

My trip would have to be restricted to the main city, Srinagar, and its environs. It was winter, and the sky was overcast with oppressive clouds, the streets filthy with diesel fumes and slush. It gets dark early, extending the night curfews that trap people inside their unheated homes.

Yet the Himalayas are dazzling. Kashmir's foremost bards write

OS PICTURE:

about the beauty of their mountains, and the frustrated aspirations of those living in their folds. Perhaps they take the massifs that exceed anything on earth for granted, leaving it to a South Korean poet, Ko Un, to capture the sheer scale of the world's highest mountains' peaks:

> In the Himalayan world ordinary peaks go unnoticed. Only peaks of 7000 meters, Or 7500, have been given one name or another.

In the 17th century, the Mughal emperor Jahangir gazed upon the Valley of Kashmir and exclaimed in ecstasy: "If there were paradise on earth, this was it." This rapturous ode tends to pop up in tourist ads, as if anyone needs to be convinced of the enchanting scenery. Immensely fertile, the Valley bounded by the Great Himalayas and Pir Panjal ranges is 6,158 square miles of magnificence. Peaks crowned by pristine snow soar over purple saffron meadows, orchards, lakes, and alpine forests. Mulberry trees grow in profusion, feeding worms that spin silk for the region's prized carpets. Mountain goats with the finest hair supply the cashmere textile industry. The earth pops with delicacies: walnuts, apricots,



A Kashmiri patient at the Psychiatric Diseases hospital in Srinigar (photographed in 2015).

apples, cherries, and almonds, to name just a few. Such luxuries have lured merchants since the days when Kashmir was a popular stopover on the ancient Silk Road. Kashmir's admirers included the 13th-century traveler Marco Polo. He was particularly struck by the stunning women and sorcerers who could, he was told, change the weather. Polo was in awe of the inhabitants' spirit, too. "The people have no fear of anybody, and keep their independence, with a king of their own to rule and do justice," he wrote.

Kashmiris may be as strong-willed as ever, but Shangri-La the Valley is not. My flight landed with a jolt, onto a tarmac that was white with ice and dark with uniforms. The profusion of security forces reminded me of Chechnya. This being a police state, I knew my every movement had to be calibrated. In the name of optimal transparency, the driver, who had long experience working with foreign reporters, pasted a large "PRESS" sign on the windshield of the rented jeep. As soon as I checked into the hotel, a chilly nondescript establishment in Srinagar, security policemen arrived for a few questions. The hotel was geared to the violence, I appeared to be one of the few guests, which gave the hotel staff plenty of free time to follow me into the business center whenever I sent e-mails. I assumed the room telephone was tapped, owing to the fuzzy sound

of interference on the line.

I spent nearly all my time in town, because of the snow. My sense of being restricted—trapped, even—was enhanced by the claustrophobic feel of Srinagar, whose surrounding mountains seemed to mock the misery below with their ice-capped beauty.

Due to alarming levels of unemployment, capable translators were in ample supply, and I had the privilege of hiring a 20-something scholar grossly overqualified for the task. Wajahat was a charming political scientist with excellent English and expertise on ethnic nationalism, who should have been teaching at a university rather than interpreting interviews for journalists.

Srinagar was once the summering spot of the British Raj, who retreated there to escape the lowland heat. Their refuge was situated at a green edge of town where the mountains provide a spectacular background to terraced Mughal gardens and the mirror-like Dal Lake. Rock stars in the 1960s favored staying there on houseboats with intricately carved porches. George Harrison studied sitar on a floating hotel, and Lou Reed, rarely one to wax lyrical, said that his stay on the water "regenerated manhood and introspection." Bollywood likes to film romantic scenes by the lake, but the violence has scared off the hippie tourists who once flocked to the zone. Shuttered houseboats bob forlornly on the water, which has grown



An Indian soldier stands guard after a gun battle with militants in September of last year.

choked with lilies and pollution.

There was nothing remotely charming about getting about the chaotic streets by car, however. Military checkpoints slowed down traffic, so we had to budget time for random questioning by uniformed patrols. You could wait an hour if stuck behind a vehicle being searched by soldiers. And then there were the protests, which could close off a street at a moment's notice. One time we missed an appointment because of a clash between "stone pelters" and security forces. We made a wrong turn into a street where bandanaclad youths had set up a barricade of burning tires; shops clanged down their gates as the demonstrators hurled Molotov cocktails at a truck of uniformed men. We had to wait until more security forces arrived to teargas the lot, and by that time we just went back to the hotel and drank tea in the chilly lobby. The sense of gloom deepened with the low heavy clouds, whose gray matched the uniforms, the dirty snow, and the spirits at the government psychiatric hospital, which I visited nearly every day for three weeks.

I intended to observe the psychic cost of repressed and denied autonomy in a place that historically had shown no disposition for mental illness. But I hadn't adequately prepared myself for such an unfathomable degree of crisis. By my visit, the psychiatric center was drawing 100,000 patients a year. The clinic had not received sufficient support, and the blue sign in front hung upside down on a last hinge. Inside, it smelled of iodine and sweat. The walls were streaked with grime, the floors with mud. Moaning and dazed patients filled the corridors, kneeling, leaning. Some rocked back and forth and muttered to themselves. People traveled from mountain villages hours away, patients with relatives, for a five-minute audience with my contact Arshad Hussain, a homegrown young physician running the ward. Arshad's resources are so stretched that some people got a single, cursory session, with little or no follow-

up. The only thing in generous supply, surprisingly, was medication, 47 different varieties of antidepressants and antipsychotics whose available supply was listed on a large blackboard.

My first day in the halls, we heard a loud clunk: a woman had collapsed on the dirty floor. Her uncle tried to lift her. "She gets like this," he said. Her name was Farida Sunderwani, she was 34, and like so many patients had come from higher up the slopes to see the doctor. Her hamlet had no clinic. She experienced anxiety headaches so severe that she ripped out her hair. She suffered a collapse after a stray bullet killed her husband, and her in-laws kicked her out of the house.

I pushed through the human thicket to the consulting room. Arshad was easy to spot: a remarkably placid man of about 30 with thick curly hair who exuded calm amid the bedlam. Like most buildings in Srinagar, the hospital was unheated, and Arshad had forsaken white doctor's garb for a leather coat and scarf. He sat at a table chin in hand, while patients and their assorted relatives swarmed about, all talking at once. In the space of 20 minutes, Arshad took a call on his cell phone from a suicidal patient and handed a box of pills to a woman who thought her murdered brother was following her around. A former detainee, too scared to stay home alone, wanted to talk, as did a widow who fainted at the memory of her husband's shooting. Meanwhile, several men desperate

to refill their tranquilizer prescriptions tried to barge into the office. Arshad apologized to me for not serving the salted tea that is traditionally given to guests. "It's a bit busy today," he said dryly.

At that moment the guards let in a middle-aged man with vacant eyes. Arshad lit up with recognition and gestured for him to sit. He explained to me that Abdur Rashid Kawdar was on a suicide watch. Kawdar had wandered like a restless ghost ever since he found his brother's body by the river, his throat slit. Then Indian soldiers killed his brother-in-law. The murders had occurred back in 1991, but Kawdar still feared being caught in a dragnet. Unable to hold down a job, he visited the psychiatric clinic every day.

"There's no sense of security in any conflict zone. Here the political turmoil undermines other things, like their sense of identity. The sense of a solution has not arrived and that creates immense frustration. They are in limbo," Arshad observed.

The word "limbo" was apt. His patients were mostly civilians caught in the middle, on a sort of existential border, a psychological buffer zone offering no resolution or relief.

I asked him how he powered on.

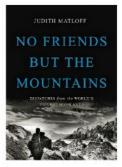
He looked surprised, as though he hadn't considered the matter for some time. "There is a good question. How do I keep up spirits? Seeing someone get well after six weeks gives me such satisfaction. You have to focus on those cases."

But what about all the people he couldn't help? He gave an enigmatic smile. "I can't change the political situation." This was 2008. Arshad assures me conditions remain the same in Srinagar today.

Indeed, I thought, Kashmiris were right to refer to their district as an "island" in the sky. With its geographic isolation, challenging topography, and desperate, dangerous, unending

geopolitical quagmire, it's indeed like a lonely island, cut off from the rest of the world. The hundreds of patients I saw at the hospital were emissaries from Kashmir's 10 million shipwrecked souls.

Excerpted from No Friends but the Mountains: Dispatches from the World's Violent Highlands, *by Judith Matloff* (©2017, Basic Books, an imprint of Hachette Book Group)



Can Craigslist Be Killed?

Two well-funded startups are battling to build a smartphone-based alternative to Craigslist, the 22-year-old online dinosaur that's been a cash machine for founder and billionaire Craig Newmark.

BY RYAN MAC

t's nearing bedtime for Asher Huzar, but on a Tuesday night at 7:30 he ducks the rules, wriggles out from the dinner table and disappears to the basement for playtime. By the time his father, Nick Huzar, checks in on him, 3-yearold Asher has inflated his indoor bounce house, which provides him and his sister, Ava, with 15 minutes of entertainment before they pinball onto the next activity. Raising kids can be taxing, but at least for Huzar and his wife it has been relatively inexpensive. He bought the bounce house secondhand for \$100. Huzar then points to Ava's princess mirror, which he scored for \$70. Asher's Black & Decker toy tool set that supposedly came new from Santa? Just \$50.

Huzar is the cofounder and CEO of OfferUp, so it's no surprise he's raising his children on hand-me-downs bought on the classifieds service he started six years ago. It's been a dizzying rise for OfferUp, which has outgrown its own playpen days, morphing into a stealth powerhouse that's on track to facilitate the sale of more than \$20 billion worth of goods this year. That's nearly a quarter of what was sold on eBay in 2016. With a valuation of \$1.2 billion, OfferUp has established itself as one of the strongest and most credible challengers ever to Craigslist, that messy website of crowded blue hyperlinks whose iron grip on the online classifieds business represents one of the most unlikely monopolies of the internet era.

In the technology industry, where survival depends on constant innovation, conventional wisdom suggests Craigslist should have vanished long ago. Launched by Craig Newmark in 1995, the website, which has kept roughly the same design through the years and now has some 55 million visitors a month, has not only survived but also thrived. It is the cock-





roach of the internet age, an ugly but effective e-commerce platform that decimated the newspaper industry by wiping out print classifieds sections and emerged unscathed from technology shifts that crippled mightier contemporaries like Netscape and Yahoo.

Craigslist's effectiveness cannot be understated. Don't be fooled by the ".org" that punctuates its domain or the accusations leveled at CEO Jim Buckmaster of running the company like a "socialist anarchist." Craigslist is no nonprofit. In fact it's a virtual ATM. Last year, it took in upwards of \$690 million in revenue, according to an estimate by the AIM Group, a research firm in Altamonte Springs, Florida. With only around 50 employees, some server costs and a few legal bills, Craigslist converts most of those sales into profit. Based on valuations of comparable publicly traded compato his iPhone. "This device," he says.

It's virtually impossible to calculate how many transactions Craigslist facilitates, but a good proxy for the potential of its business (if it were run to maximize profit) is the U.S. newspaper classifieds industry, which reached about \$18 billion annually in the late 1990s—or about \$27 billion in today's dollars. That Craigslist pulls in more than \$500 million in profit a year without trying illustrates the mouthwatering potential for OfferUp and its competitors.

OfferUp allows users to list almost any item for sale by simply snapping a picture, selecting a price and posting a short description. Interested buyers can browse local goods in a Pinterest-style photo feed, haggle with a seller through the app and then arrange an in-person transaction. "If you look at the amount of stuff that is sitting there in our homes

TOGETHER, OFFERUP AND LETGO HAVE RAISED NEARLY \$600 MILLION, BUT THERE IS A REAL POSSIBILITY THAT CRAIGSLIST WILL SIMPLY REFUSE TO DIE.

nies, *Forbes* estimates Craigslist is worth at least \$3 billion. That makes Newmark, 64, who owns at least 42% of the company, worth \$1.3 billion. Neither its CEO nor its founder would speak to *Forbes* for this story. A company spokesperson said in a statement that "we don't comment on numbers that are bandied around by media, analysts or others, and never have."

While Newmark and Buckmaster are getting richer by the day, they are more vulnerable than ever. Despite its success, Craigslist has shunned innovation, refusing to create a mobile app and litigiously pursuing third-party developers that have tried to improve the experience. Huzar argues convincingly that Craigslist's lock on the secondhandgoods market is coming to an end. When asked how he can be so sure, the dimple-chinned 40-year-old Seattleite stops smacking his gum and turns an icy stare and businesses, in our garages and storage units, I think Craigslist is actually small," Huzar says. "Ninety percent of what we can't see is just sitting there waiting to be sold."

The multibillion-dollar question is whether OfferUp can persuade the owners of all that stuff to sell on its platform. Investors such as Andreessen Horowitz and T. Rowe Price have plowed \$220 million into OfferUp, betting that it is poised to become the Craigslist of the mobile era, despite its negligible revenue so far. But it's not the only one vying for that lucrative moniker. Other competitors include Letgo, which has raised \$375 million, mainly from its majority owner, the South Africa-based internet giant Naspers, and Facebook, which launched its Marketplace service last year. Both are hoping to overtake OfferUp in what many see as a winner-take-all battle. Whichever has the most buyers and sellers on its platform, or what economists call "liquidity," will eventually corner the market, leaving competitors bankrupt and buried. "The classifieds business is about having a natural monopoly," says Fabrice Grinda, a serial entrepreneur whose startup was acquired by Letgo.

FOR NOW, CRAIGSLIST remains the rival to beat. Started in 1995 as a mailing list for San Francisco events, the company has flouted just about every maxim taught in business school. By the early aughts, it had assumed the austere layout people are now familiar with: plain-Jane text links to categories like jobs, personals, for sale and housing. "We have no intent of what people call monetizing this," Newmark, a former code monkey at IBM and Charles Schwab, told the *San Francisco Business Times* in 2001.

In an era of dial-up internet connections and limited bandwidth, Craigslist's simplicity quickly attracted users, and it grew as more and more people came online. It was one of the first websites to demonstrate a strong network effect, a phenomenon by which a service gains more value as more people use it. As buyers flocked to Craigslist because it had the most listings, sellers did so in turn because it had the most buyers. Even at wildly successful eBay, some executives eyed this perpetually self-reinforcing economic engine with envy. "There was so much intrinsic momentum from the network," says Jeff Jordan, a former eBay senior vice president. Now a general partner at Andreessen Horowitz, Jordan sees an opportunity: "I think Craigslist has been largely unmanaged for a decade."

Though the vast majority of Craigslist is used for free, it's not a socialist endeavor. Early on, to cover costs, the company implemented a \$25 charge for posting help-wanted ads in the Bay Area and over the years has instituted fees for select categories, including New York apartments, automobiles offered by dealers and "therapeutics," a section with offers for massages and other services that law enforcement officials have said are a magnet for illegal prostitution. Those fees were originally implemented to counter spammers, former employ-

THE UNIVERSAL LANGUAGE OF SUCCESS

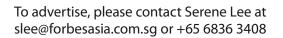




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FORBES ASIA CHASING A GIANT

ees told *Forbes*, but they quickly turned into an extremely profitable business. Job postings netted some \$40,000 a day just from the San Francisco region in the early 2000s, says a former employee.

The times of unfettered profits, however, may slowly be winding down. In recent years, entrepreneurs have found opportunities to build businesses around certain Craigslist categories by providing better features and services. They range from Airbnb for temporary housing, Redfin for real estate services and Ok-Cupid for personals. Collectively, they're taking their toll. In February, 54.9 million people visited Craigslist, down from says. "A lot of people say, 'I don't have the time' or, for women, 'I don't trust it—I'm scared."

Those hesitations are summed up in the corny but plain principles that guide OfferUp: simplicity and trust. Posting has to be easy, to lure sellers away from Craigslist, Huzar says, and OfferUp's four-step process makes it possible to list anything from a set of skis to a car in less than a minute. The marketplace also has to be safe, and with Craigslist's reputation as a potential place for crime—one blog has counted 110 murders with alleged ties to the site since June 2007—OfferUp has implemented buyer and seller

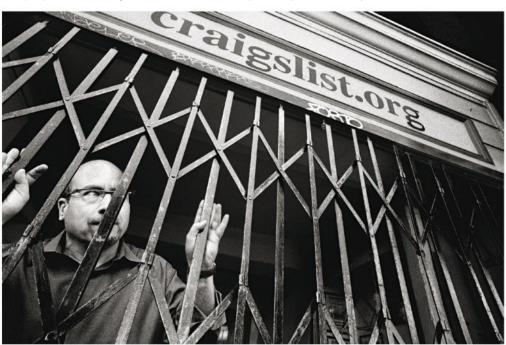
Alec Oxenford, the affable salt-andpepper-haired 48-year-old Argentine who runs Letgo, loves to lob the occasional grenade in his rival's direction, often repeating that his company launched only in 2015 but is on course to facilitate the sale of more than \$23.4 billion worth of goods in between June 2016 and June 2017 in the United States and elsewhere. (Letgo, unlike OfferUp, is active in some overseas markets, including Turkey and Norway.) "We are clearly growing faster than almost anybody in the U.S.," Oxenford says. "Other players launched six years ago. . . . We believe [our lead] is becoming clearer

> and clearer, and we are becoming very comfortable." For its part, OfferUp says it will handily surpass \$20 billion in goods sold this year, with about half coming from car sales.

EVERY FEW YEARS, SOMEONE in Silicon Valley looks at Craigslist and thinks he or she can do better. In the late 1990s, the startled newspaper companies tried collaborating with one another on various projects, and in 2000, Geebo launched as the "safe" Craigslist. In 2004, there was Oodle, a well-financed website that later tried to incorporate Facebook identities. All these efforts basically came to naught. Even

mighty eBay has stumbled. It bought a 28.4% stake in Craigslist 2004 and spent years trying to clone it. That led to a seven-year legal battle, which was settled when eBay sold its shares back to Craigslist for an undisclosed amount in 2015. These days, eBay has its own OfferUp clone, though usage peaked at a few million people a month, and the company has been shopping it around for an acquisition, according to one source. (Ebay declined to comment.)

Huzar has distanced himself from the Valley and its past failures, establishing OfferUp in the Seattle suburb of Belle-



Craigslist founder Craig Newmark has kept his site virtually unchanged for 22 years.

60.9 million for the same month in 2016, according to comScore.

Still, while startups have homed in on subcategories to compete, none have succeeded yet by going head-to-head with Craigslist's core "For Sale" section, where users can buy and sell anything. Offer-Up is the first to make significant headway. The company says it had 14 million monthly users in March, about a fourth as many as Craigslist. Huzar claims his company is already larger than the incumbent in certain markets. "Yes, a lot of us have bought things on Craigslist, but not a lot of people sell there," Huzar ratings. Users can also choose to "verify" their accounts by using their Facebook profile or a driver's license.

It's not perfect. For the uninitiated, the app's main shopping window can seem like an endless feed of junk ranging from cans of infant formula to counterfeit Ray-Bans. There have been accounts of muggings during OfferUp transactions, and banned items like marijuana are easy to find. Huzar says it's an "endless pursuit" to eliminate bad actors but one he is forced to endure—a single bad experience can send a user over to Letgo, which offers a similar design and experience. vue. The son of a Boeing-engineer father and a physical-therapist mother, he was born and raised in Washington. While attending Washington State University, he became obsessed with the computers his Delta Sigma Phi fraternity brothers used to play videogames like Quake and Duke Nukem, so he bought his own with a \$2,200 student loan.

Having picked up some coding skills, Huzar landed a job at a frat brother's startup before bouncing into product management roles at Microsoft and T-Mobile. By 2006, he had become tired of life as a middle manager and started a professional networking website called Konnects. He spent four years constantly raising money to survive, while watching a rising startup called LinkedIn eat his lunch.

By 2010, Huzar threw in the towel, and he and his wife were expecting their first child, Ava. As the couple went into "nesting mode," Huzar ran into a predicament while clearing out space for his incoming daughter's nursery: He had plenty of valuable stuff to get rid of, but no time to list it on Craigslist. Instead, he unloaded his stuff at Goodwill, where the parking lot always seemed full. "I asked the people handling the stuff, 'When do the cars stop?' " Huzar says. "The workers said, 'They don't."

From that Goodwill parking lot, Huzar wrote the first lines of code for what would become OfferUp. Cofounder Arean van Veelen, a former Konnects employee who no longer works at OfferUp day to day, calls this period their "chicken and egg" phase as they struggled to create a two-sided marketplace with a critical mass of buyers and sellers.

The company greased the wheels by buying products from other users and relisting them on the app. On Huzar's 36th birthday, he and Van Veelen filled a truck with balloons to canvass suburbs, but the outing was cut short when one of the hired hands was accidentally thrown off the truck. Huzar paid a minor hospital bill and dodged a potential lawsuit that could have ended the company. The efforts started to pay off, gradually, as users outside of their immediate network began listing and buying items. Two and a half years in, on his 15th trip down to the Bay Area in search of funding, Huzar could finally show that his marketplace was on its way to sustainability and secured a \$2.8 million investment led by Jackson Square Ventures. The days of worrying about grocery money were over.

TOGETHER, OFFERUP AND Letgo have now raised nearly \$600 million, but there is still a real possibility that Craigslist, which never took VC money, will simply refuse to die. The vast majority of people who visit Craigslist don't think about online classified ads until it's time to sell their old bike or tattered couch. But they know it's there and will likely meet their buying or selling needs—dusty text links and all. Do you need a slick app for something that isn't part of your daily routine?

OfferUp may be changing habits. In her annual Internet Trends report last June, Mary Meeker, the famous Wall Street analyst turned venture capitalist, said the average OfferUp user spends about 25 minutes a day on the app, usually browsing, on par with the likes of Snapchat and Instagram. Apparently having a digital swap meet at your fingers can be habit-forming. Last year, when OfferUp's total volume hit \$14 billion after five years, Meeker noted it took eBay three years longer to pass that mark.

Those numbers come with a few caveats, namely that OfferUp, which currently charges nothing to either buyers or sellers, makes no money. This year the company has begun experimenting with monetization strategies like in-app payments, ads and promoted posts, but its executives know that meaningful revenue can come only when it cements mindshare. That may be impossible as long as Letgo persists.

While OfferUp employs more than 180 people in an expansive Bellevue office decorated exclusively with items from the service, Oxenford's app is run by teams split between Barcelona and New York. With a sugar daddy in Naspers, a publicly listed company that last year posted more than \$12 billion in revenues, and a television-centric marketing strategy that has worked for Naspers-owned OLX, a sister company whose classifieds sites serve Brazil, India and 43 other countries, Letgo has a plan to flood the American consciousness.

In 2016, Letgo spent an estimated \$100 million on TV ads in the U.S. compared with less than \$1 million by OfferUp—according to the advertising analytics firm iSpot. This year, as Huzar went on the defensive and bought \$5.5 million worth of TV ads in the first quarter, Letgo spent \$32 million. "Our competitors by now should probably know that we will do whatever it takes to win," Oxenford says. "It's not like we're operating under disguise. We're completely visible, and it's working, no?"

It depends on whom you ask. App Annie says Letgo had 7.3 million monthly active users in February, compared with OfferUp's 6.3 million. But the stat can be juiced by high download rates affected by ad spending, and both companies report much higher usage. Offer-Up says it had 14 million monthly active users on mobile in the U.S. in March; Letgo says it had 13.4 million. The backand-forth trash talk from the two entrepreneurs suggests the race is close. Huzar dismisses his free-spending competitor as a company that's "just trying to get us to the table." Oxenford counters: "Momentum is on our side, and growth is on our side."

Neither can discount Facebook, which has largely blundered in commerce efforts but needs to engage only a fraction of its 1.86 billion users to make a dent in the market. "Our strength is that we know what people are interested in and we can tailor Marketplace to show your interests," says Mary Ku, Facebook's head of commerce products.

While he keeps an eye on Facebook and Letgo, Huzar knows the biggest obstacle on his path to classifieds riches is 22-year-old Craigslist. Can someone finally topple one of the last true mammoths of the dot-com era? His answer is classic entrepreneurial bravado: "I don't lose much sleep at night over it." He's counting on OfferUp being around in a decade, when it's time to buy Ava her first car. *As* Forbes' *September 2017 centennial approaches, we're unearthing our favorite covers.*

March 1, 1948: A Fortunate *Time*

BY ABRAM BROWN



THE EDITOR'S DESK Marshalling Assistance

B.C. Forbes worried that the Marshall Plan would degenerate into a vast money pit, and he urged its namesake, General George Marshall, to delegate its implementation to an army of businessmen: "Bureaucrats are totally unfit to supervise wisely the spending of billions of dollars."

AT AGE 49, Henry Luce commanded a media empire that reached some 8 million people. He had founded it 25 years earlier when he published the first issue of *Time* and had since expanded it to include *Life*, *Fortune* and *Architectural Forum*. *Time* alone sold more than 1.5 million copies a week, and the combined company, Time Inc., brought in \$8 million in annual profit (roughly \$80 million today).

Luce, though, had detractors, who variously labeled him a "Wall Street mouthpiece" and an imperialist. While *Forbes* described his success as "Lively, Timely and Lavishly Fortunate," we couldn't resist one shot at our rival: "Although it has been charged that many people buy *Fortune* for living room décor, it's safe to assume that each copy is read in part by several people."

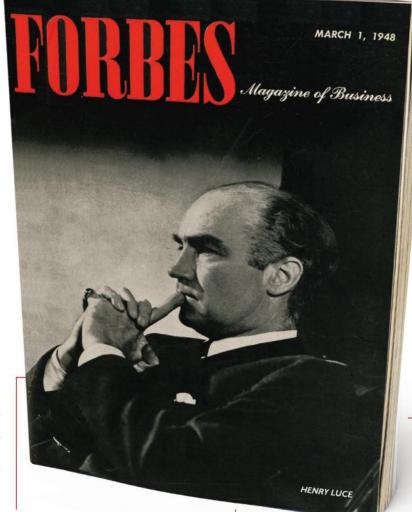


FAST-FORWARD Department of Desertion

1948: Department stores are a \$10 billion-in-sales industry (roughly \$100 billion today). Even little chains, such as Bright's in rural eastern Pennsylvania, flourish.
2017: The last Bright's closed more than two decades ago, a few years before e-commerce started to take off. Web shopping now generates \$295 billion in annual revenue, almost double the amount of departmentstore sales, and big chains such as Sears and Macy's are cutting jobs and shuttering stores.

FORGOTTEN FIGURE Pipe Dreamer

President Truman had bestowed the federal government's newly created Certificate of Merit on W. Alton Jones, the head of what's now Citgo; Jones had constructed two crucial oil pipelines in the U.S. after German U-boats imperiled shipping lanes across the Atlantic Ocean.



AMAZING ADS

Truck Tech

a four-speed

Chevy's new 1948

pickup came with

transmission and

a foot-operated parking brake. A

"fresh air heating"

as an option, too.

system was offered



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South Korea's 50 Richest

BY GRACE CHUNG AND JOHN KOPPISCH

Weathering the Storm

A year of trouble and trials for chaebols test top fortunes.

president jailed, the chief of the biggest conglomerate facing a landmark criminal trial, a missiledefense system against the North that has infuriated China—South Korea has had one tumultuous year. Leaders of the country's top chaebols were questioned in connection with the presidential scandal in an unprecedented hearing at the National Assembly. Five of them are on our list.

Yet the market hardly flinched. The country's benchmark Kospi returned 6% over the past year, thanks to Samsung Electronics, which accounts for 22% of the exchange's total market cap—its share price jumped by more than 60%. That made the country's richest person, Lee Kun-Hee, this year's biggest gainer in dollar terms and more than twice as wealthy as the runner-up. Thanks to his stake in the flagship, Samsung's chairman was up by \$4.2 billion. But his son, Jay Y. Lee (No. 3), who's now behind bars (see p. 70), gets the bulk of his fortune from Samsung C&T—the family's holding company—so his fortune was flat at \$6.2 billion. The second-biggest gainer in dollars was online-gaming tycoon Kwon Hyuk-Bin (No. 4), who saw his wealth rise by \$1.2 billion, to \$6.1 billion.



Taking the stand: Top chaebol leaders were questioned before the National Assembly in December.

Three new people landed on the list: mobile maven **Bang Jun-Hyuk**, who joins as a billionaire at No. 24 *(opposite)*; **Ham Young-Joon** of instant-food giant Ottogi at No. 47 *(see p. 74)*; and **Cho Hyun-Sang** of industrial conglomerate Hyosung at No. 49 (his older brother is at No. 46).

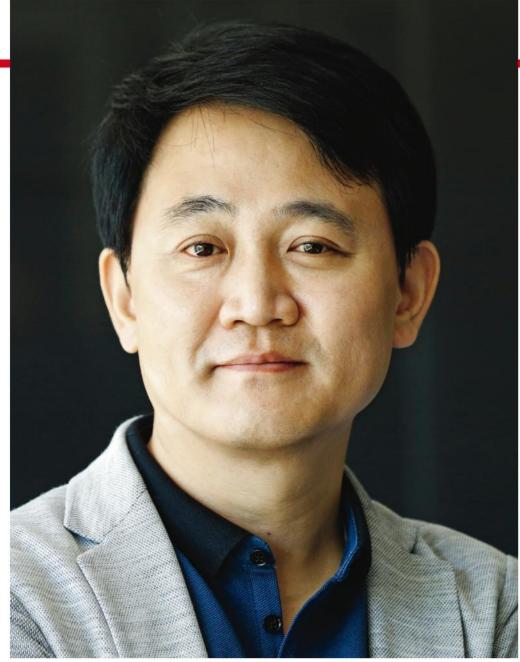
No. 38 **Michael Kim** of private equity firm MBK Partners breaks into the billionaire ranks after his fourth investment fund collected \$4.1 billion. He's listing his ING Insurance Korea this month and is expected to raise \$1.2 billion in the second-biggest initial public offering of the year so far. It will be the first time a company wholly owned by a private equity firm will list on the Korean exchange.

Most people from last year saw their net worths take a hit. One was **Lim Sung-Ki**, the biggest loser in percentage terms. The pharmaceutical tycoon shed 56% of his fortune, largely because of delayed clinical trials and canceled or amended contracts with three multinationals. Shares of his Hanmi Science, which specializes in cancer and diabetes drugs, plunged 54%, wiping out \$4.5 billion in market cap from a year ago. But he's still a billionaire, coming in at No. 15.

Net worths were based on stock prices and exchange rates as of the close of markets on April 14. — *With Forbes Korea*



For when you want to secure your legacy.



BANG JUN-HYUK: GOING PUBLIC

After generating a record \$1.3 billion in revenue last year, South Korea's largest mobile-gaming company, Netmarble, is gearing up for the country's most anticipated IPO of the year. With a May 12 share offering expected to raise up to \$2.4 billion—which would make it the country's second-largest listing ever—Netmarble could be valued at \$12 billion. That means Bang, who started the company and will retain a 24% stake, could see his fortune double. He debuts on the list this year at No. 24, with \$1.43 billion in wealth. It's been a long way up for the high school dropout who grew up poor. Ever keen to expand his global footprint—51% of 2016 sales came from overseas—he says he plans to use the IPO proceeds to pursue large acquisitions.

THE LIST

LEE KUN-HEE \$16.8 BILLION A SAMSUNG AGE: 75

2 SUH KYUNG-BAE \$6.7 BILLION ▼ AMOREPACIFIC AGE: 54

> 3 JAY Y. LEE \$6.2 BILLION SAMSUNG AGE: 48

4 KWON HYUK-BIN \$6.1 BILLION ▲ SMILEGATE AGE:43

5 CHUNG MONG-KOO \$4.5 BILLION HYUNDAI MOTOR AGE: 79

> 6 CHEY TAE-WON \$3.6 BILLION SK GROUP AGE: 56

7 KIM JUNG-JU \$3 BILLION ▼ NEXON AGE: 49

8 PARK HYEON-JOO \$2.7 BILLION ▲ MIRAE ASSET AGE: 58

9 CHUNG EUI-SUN \$2.4 BILLION ▼ GLOVIS & HYUNDAI MOTOR AGE: 46

> 10 LEE JOONG-KEUN \$2.3 BILLION BOOYOUNG AGE: 76

11 LEE JAY-HYUN \$2.1 BILLION ▼ CJ GROUP AGE: 57

12 SEO JUNG-JIN \$1.9 BILLION ▼ CELLTRION AGE: 59

13 KOO BON-MOO \$1.8 BILLION LG GROUP AGE: 72

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



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South Korea's 50 Richest

Samsung Under a Spotlight

BY DONALD KIRK

or the mighty Samsung empire, things couldn't be worse... or better. The venerable Lee Kun-Hee, the richest Korean by far, has been hospitalized for three years. His only son, Jay Y. Lee, 48, who had been running the group, is in jail facing bribery and embezzlement charges (he denies all wrongdoing). But led by its seemingly unstoppable flagship, Samsung Electronics, the group is riding high. With an estimated first-quarter operating profit of \$8.7 billion, up 48% from a year earlier, Samsung Electronics shares have gained 60% over the past year. Last month Samsung introduced the Galaxy S8-an answer to the embarrassing failure of the fire-prone Note7 last year.

While a battery of lawyers fought to defend Jay Y. in a packed Seoul courtroom, Koh Dong-Jin, Samsung Electronics' president of mobile communications, heralded the wonders of the S8 before equally packed gatherings in New York and Seoul: "The Samsung Galaxy S8 and S8+...are our testament to regaining your trust." He did not need to mention the fiasco of the Note7, but the message was clear.

Did it matter that the Korean media regularly showed Jay Y., the Samsung Electronics vice chairman, with his wrists bound in ropes like a common criminal? Were investors concerned that both father and son, their caricatures on signs held aloft during marches, were the target of demonstrators calling for reform of the chaebols?

In the confines of his cell, Lee (No. 3) can see his lawyers but otherwise is allowed only three ten-minute conversations a day with visitors through a grated window, all monitored by prison guards. The judge granted the prosecutor's request to keep him behind bars during the trial on the grounds that he might "destroy the evidence."



For Samsung the evidence that counts is the value of the group's 60 companies, which is roughly equivalent to 25% of South Korea's \$1.4 trillion gross domestic product. During a tumultuous transition, that value is holding up quite well, even without the presence of the chairman and vice chairman.



Supporting your growth ambitions.

THE LIST



Trials and tribulations: Jay Y. Lee's court case continues.



LEE KUN-HEE, the Samsung Electronics chairman and head of the Samsung Group, suffered a heart attack in 2014 and remains on the top floor of Seoul's Samsung Medical Center. His condition is "stable," says an aide, but "he is not in a condition where he can participate in management." Samsung officials say they have no word on whether he is able to communicate or is conscious. There have been no photos of him made public since he was stricken. Treated for years for lung cancer, Lee had long since arranged to divide his empire among Jay Y. and daughters Boo-Jin (No. 17) and Seo-Hyun (No. 18).

HONG RA-HEE, 72, Samsung's first lady, resigned in March as director of the Samsung Museum of Art, known as Leeum, and the Ho-Am Art Museum. Aides cite "personal reasons," considering that her husband is bedridden and her son in jail. Hong is an arts graduate of Seoul National University, and both museums contain collections from her father-inlaw, Samsung founder Lee Byung-Chull. Leeum comes from Lee's name and the last syllable of "museum"; Ho-Am, the patriarch's pen name, means "lake rock," for his breadth and strength. One of her brothers, Hong Seok-Hyun, published *JoongAng Ilbo*, a top daily newspaper, and now his son does. Another brother, Hong Seok-Joh, runs the country's biggest convenience-store chain and ranks No. 22.



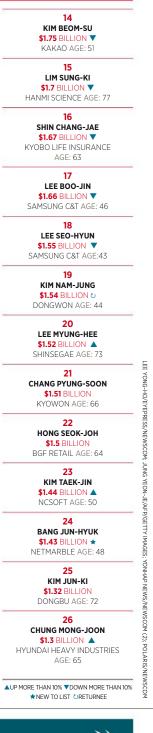


LEE BOO-JIN appears to live a charmed life as the country's richest woman. She's president and chief executive of Hotel Shilla, one of Seoul's top lodging and conference centers, and a big shareholder in Samsung C&T, a holding company for the Samsung empire. But she's in the middle of a messy divorce from Im Woo-Jae, who revealed this year that he was her bodyguard when they met and not a Samsung office employee, as the company had claimed. Nevertheless, after he was forced to go to school in the U.S., he was made vice president of Samsung Electro-Mechanics. They've been separated for five years and have a 10-year-old son. Im has asked for \$1.04 billion in the divorce settlement but is expected to receive much less.

The future of Samsung Electronics seemed to hang in the balance when the company was forced last September to recall the **GALAXY NOTE7**, at the time the latest, highly touted Samsung smartphone, after the batteries in some of the phones exploded and caught fire. Attempts at correcting the problem failed, and Samsung stopped production the next month. By January, Samsung had figured out what was wrong: Batteries made by two suppliers



were positioned incorrectly, short-circuiting the phones. The disaster cost Samsung many billions of dollars before it moved on to the Galaxy S8, which went on sale last month. Samsung reports that "the initial response has been very strong."





Investment Banking at Credit Suisse.

The Wrath of China

Lotte learns how much damage Beijing can do when it's mad.

BY DONALD KIRK

South Korea. Polite young staffers smile anxiously at the occasional customer. Ask where the crowds are and the answer is simple: The Chinese have stopped coming.

China has banned tour groups from going to South Korea, and that's just one of several devastating blows Beijing is inflicting on the Lotte Group, the country's fifth-largest chaebol. China is punishing Lotte in South Korea and China for handing over a golf course southeast of Seoul so the U.S. could install an antimissile battery. The system is capable of shooting down a North Korean missile up to 90 miles overhead, and China has been protesting ever since South Korea's conservative government agreed to it over a year ago. But Beijing waited until the first components arrived from the U.S. in March before retaliating. China is worried that the system, known as THAAD, for Terminal High Altitude Area Defense, will also track whatever it's flying or firing.

On the mainland, Beijing shut 74 of Lotte Mart's 99 outlets, citing fire violations. Then Lotte, finding that "the atmosphere is not very good," as a spokeswoman delicately put it, closed another 13. A discounter that sells everything from clothing to home appliances, Lotte Mart racked up \$1 billion in revenue in China last year, and Chinese accounted for nearly half of the million customers that poured into its stores around Asia every day.

As if those penalties weren't enough, Chinese authorities for a month shut down Lotte Shanghai Foods, a 50-50 joint venture with U.S. chocolate company Hershey. They also suspended construction of a Lotte shopping complex in Shenyang, citing fire violations.

Other Korean companies, especially Hyundai Motor, Kia Motors, Amorepacific, LG Household & Health Care and CJ Entertainment, have also felt the fallout of the Chinese actions. Officials at the Chinese embassy in Seoul had no comment.

The timing could not have been worse for Lotte. While absorbing the blows from China, the group's founder, 94-year-old Shin Kyuk-Ho, bound to a wheelchair, and his sons, Lotte chairman Shin Dong-Bin (No. 30 on the list) and Shin Dong-Joo (No. 28), were in Seoul District Court facing charges from last year of fraud. embezzlement and tax evasion. Then last month Dong-Bin was indicted on a bribery charge in connection with the presidential scandal (see p. 70). The brothers' older half-sister, Shin Young-Ja, already in jail for accepting kickbacks,

was in court again on an embezzlement charge. And the founder's de facto third wife, Seo Mi-Kyung, 58, who was Miss Lotte in 1977, stands accused of tax evasion. All five family members deny all of the charges. The brothers' fortunes have each fallen dramatically. Their father turned over most of his wealth to family members, so his \$560 million fortune falls short of making the list.

How long will China punish South Korea, and Lotte, for THAAD? The



MAGINE CHINA/NEWSCOM

For your next generation.



Collateral damage: one of 74 Lotte stores shut down by China to protest antimissile deployment.

authorities did not shut down Lotte's five department stores in China—a sign that perhaps the storm will blow over. Back in Seoul, Lotte last month opened the 123-story Lotte World Tower, the world's fifth-tallest building, on the 50th anniversary of the founding of the empire.

Dong-Bin, who wrested control of the empire from his brother in a bitter battle and will make the tower his headquarters, attributed the difficulties with China to a "misunderstanding." Lotte, he has said, had no choice but to go along with the government's demand for the golf course. A group spokeswoman denies any arrangement in which prosecutors and judges would go easy on the family in return for Lotte's cooperation on THAAD. Lotte Duty Free lost 15% of its sales in March, compared with March of last year, says a Duty Free spokesman. "We will get back our Chinese customers—it is a matter of time," he says. "We are projecting it will go on six months."

CREDIT SUISSE

36 LEE SANG-HYUK

\$1.05 BILLION

YELLO MOBILE AGE: 45

37 CHO CHANG-GUL

\$1.01 BILLION A

HANSSEM AGE: 77

38

MICHAEL KIM \$1 BILLION ▲

MBK PARTNERS AGE: 53

▲ UP MORE THAN 10% ▼DOWN MORE THAN 10%

Succession Planning Experts at Credit Suisse.

South Korea's 50 Richest



HAM YOUNG-JOON: ALL THE NOODLES

The food industry executive breaks into the list for the first time, at No. 47 with a \$725 million fortune. He inherited most of his father's shares in the family's instant-food behemoth, Ottogi, after the patriarch, Ham Tae-Ho, died in September at age 86. That boosted his stake to 29%. The younger Ham, the family's only son, took over the business in 2010, building its market share in instant ramen. He now serves as chairman, and last year the listed company generated \$1.7 billion in sales and \$114 million in net profits. The first in the country to manufacture ketchup and mayonnaise, Tae-Ho started the precursor to Ottogi in 1969 and later moved into threeminute meals and frozen foods. Today, many of Ottogi's products are No. 1 in their category in South Korea and the company is the only condiment supplier to the country's McDonald's. The family's Ottogi Foundation, set up by Tae-Ho in 1996, provides financial aid to college students. The late founder was also a generous giver to health care programs for children.

KIM JUNG-JU: GAME NOT OVER

The founder of Nexon, the country's largest online-gaming outfit, won a reprieve in December when a Seoul court found him not guilty of bribery charges after he was indicted in July. He was accused of giving money to a top prosecutor, Jin Kyung-Joon, a close friend he had met at Seoul National University, in return for favors. While Kim did admit to giving money to Jin, both were acquitted on the lack of evidence that any favors were granted, though prosecutors plan to appeal. He issued a public apology after the indictment and resigned from Nexon's board. Kim, No. 7 on the list, remains chairman of NXC, Nexon's holding company, which is traded in Tokyo. His net worth tumbled 27% over the past year.





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A BUSINESSMAN RUNS FOR PRESIDENT

Rising Star

Here once styled himself the Bernie Sanders of South Korea, but that label hardly fits the richest man in Korean politics. Ahn Cheol-Soo, casting himself as a moderate, is running for president of South Korea in the May 9 special election with a vision of "a new future" in "a country ... where self-made young people abound not heirs who benefit from everything."

If that sounds like a populist call for reform, it's not because Ahn is antibusiness. Armed with a medical degree from Seoul National University, he founded AhnLab in 1995 and made a fortune with an anti-computervirus software program. A decade later, he resigned as chief executive, got an M.B.A. from Wharton and then became a professor and later a dean of convergence science and technology at his alma mater before leaving academia and diving into politics.

AhnLab's stock soared in March as Ahn's campaign gathered steam and ahead of the company's announcement that net profits jumped 26% in 2016. That doubled the value of his 18.6% stake to \$245 million. But that's still well short of the cutoff for breaking into the country's 50 richest.

Ahn's candidacy is the latest twist in a drama touched off by the scandal that led to President Park Geun-Hye's impeachment and arrest. Corruption charges put her and 30 others, including Samsung heir Jay Y. Lee (*see p. 70*), behind bars. They deny the charges.

Ahn's People's Party broke away from the main opposition Minjoo, or Democratic,

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Ahn Cheol-Soo, the richest man in Korean politics.

Party, winning 38 seats in the National Assembly a year ago. His bloc joined the overwhelming majority of the assembly's 300 members in voting for Park's impeachment in December, and since then Ahn has been challenging the Minjoo candidate, Moon Jae-In, for the Blue House.

Making his second run for president, Ahn, 55, still trails Moon in the polls but is ahead of the conservative candidate. At his party's nominating convention last month, his plea was simple: "This country doesn't belong to progressives or conservatives," he shouted. "It belongs to the people. I won't ask you to help me. I will be the one to help you." *—Donald Kirk*

LEE HWA-KYUNG \$970 MILLION V ORION AGE: 61 40 KOO BON-SIK \$960 MILLION A HEESUNG & LG AGE: 58 41 ВОМ КІМ \$950 MILLION COUPANG AGE: 38 42 LEE JOON-HO \$930 MILLION NAVER & NHN ENTERTAINMENT AGE: 52 43 LEE HO-JIN \$920 MILLION V TAEKWANG INDUSTRIAL AGE: 54 44 LEE SANG-IL \$910 MILLION A ILJIN AGE: 78 45 KOO BON-JOON \$900 MILLION LG GROUP AGE: 65 46 CHO HYUN-JOON \$890 MILLION HYOSUNG AGE: 49 47 HAM YOUNG-JOON \$725 MILLION * OTTOGLAGE: 58 48 KOO KWANG-MO \$720 MILLION U LG GROUP AGE: 39 49 CHO HYUN-SANG \$700 MILLION * HYOSUNG AGE: 45 50 KWON HYUK-WOON \$670 MILLION ℃ IS DONGSEO AGE: 66

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FORBES INDIA MARCH 31

Prathap Reddy fronts the family-business issue with his four daughters, who help the 84-year-old founder run Apollo Hospitals Enterprise, or AHEL. Two granddaughters of the onetime India rich-lister also are in management. (forbesindia.com)



FORBES THAILAND APRIL

Yuengyong Opakul, 62, is better known as Aed Carabao, a celebrated folk musician. His band is part of Carabao Group's remarkable promotion—sports also play a big role—of its branded "energy" drink in a sector that's become a Thai specialty. The Carabao Daeng beverage has put cofounder Sathien Setthasit on *Forbes Asia*'s Thailand rich list, and Aed—a company director and executive—and a third founder aren't far from the cutoff. (forbesthailand.com)



FORBES JAPAN JUNE

An issue devoted to economic growth in Japan's regions features Daisuke Yanasawa, CEO of Kayak, a Web-content developer that recently sponsored Kamacon, a project to revive towns through the power of IT. (forbesjapan.com)

FORBES MONGOLIA MARCH

Orkhon Onon is the CEO of Trade & Development Bank of Mongolia, the country's largest financial entity, with assets exceeding \$3 billion. The Wales M.B.A. joined the private TDBM in 1997 and has led it since January 2016.



After Fukushima

How a disaster taught a great deal about risk management in cybersecurity. BY WILLIAM H. SAITO

n March 11, 2011, a massive earthquake ripped across the northeastern coast of Japan. Terrible as it was, the tsunami that followed led to an even more terrifying event: the crippling of the Fukushima Daiichi Nuclear Power Plant. The release of radiation, meltdowns and evacuations that followed prompted a massive investigation into what went wrong.

I was appointed chief technology officer for the Fukushima Nuclear Accident Independent Investigation Commission (NAIIC), an ad hoc body reporting to the national legislature. The job gave me a unique opportunity to examine this catastrophe in detail and see its multiple causes. Looking at the long chain of errors and misjudgments behind it made me consider security and risk management. How could the risks have been generally discounted and so ineptly managed? What steps were taken after the accident to limit damage and what systems were established to prevent a similar situation?

After the disaster, my perspective had changed, and I began to view the whole field of IT security through the broader lens of risk management. I realized that talking about security from a purely technical perspective misses the big picture. My primary task had been to design a new, secure communication system and collaboration platform for the NAIIC team of close to 150 personnel. My background in entrepreneurship and cybersecurity would certainly be tested.

The NAIIC was Japan's very first independent accident investigation authority established by the legislature. It was met with a lot of skepticism, and I had to push bureaucrats beyond their comfort zone to create a new entity and new ways of doing things. One of my biggest goals was maintaining the cybersecurity of the investigation with outsiders who were suddenly thrown into this activity, where IT literacy was all over the map and there was no time for education and security training. To speed the workflow, I had to allow people to use familiar tools and applications such as printing, emailing and file sharing. I also had to assume we were going to be criticized by media and other interests and that people would naturally be careless and misplace USB sticks, lose laptops and forget cellphones. While investigating a disaster, I was trying to create a resilient system from scratch on a very limited budget. Ultimately, we were able to create a very secure working environment that used everything from digital certificates to encrypted laptops, while maintaining a high level of efficiency. Even more importantly, when dataloss incidents occurred, people quickly reported them-this helped

create an atmosphere of trust, which strengthened our security.

One moral of this story is that it's possible to do security on the cheap without sacrificing usability. But implementing IT security is not enough. It misses the critical component of risk management. Real security lies in maximizing our field of view and expanding our thinking.

Not being a nuclear safety or risk management expert, I also tried to contribute to the NAIIC by studying historically significant disasters as varied as the sinking of the *Titanic*, the *Challenger* explosion, nuclear crises at Three Mile Island and Chernobyl, and many others. In the *Titanic* sinking, for instance, a raft of failures apart from collision with an iceberg—from inferior construction methods to equipment shortages to management and regulatory errors—has been blamed for the loss of over 1,500 lives. But what I realized was that all these catastrophes had one factor in common: all came with tell-tale signs. Managers had tried to achieve a false level of "perfection," in the process losing valuable time and a thorough grasp of the big picture. In each case the relevant engineers saw the potential for problems and warned their superiors, who in turn dismissed warnings due to normalcy bias.

Normalcy bias has been described in studies of disaster psychology as an unwillingness to recognize the urgency of a crisis or acknowledge that a crisis could happen. It can manifest in situations of survival as well as planning for the worst. In the September 11, 2001 terrorist attacks in the U.S., 90% of survivors did not immediately evacuate the World Trade Center after it was struck by planes, instead choosing to save their work, shut down their computers or go to the washroom, according to a three-year academic study.

In the case of Fukushima, warnings had been issued and ignored, and a catastrophe ensued. The commission concluded that the plant operator, the government and regulatory bodies "all failed to correctly develop the most basic safety requirements" for such a disaster. What Fukushima taught me, and what I continue to remind myself, is that in terms of cybersecurity, Japan does not have a monopoly on this type of culture. People will always take shortcuts. That's why we must take to heart the a priori precepts of risk management: (a) people make mistakes, (b) machines eventually break down and (c) accidents inevitably happen.

With that in mind, some lessons we all must learn as we grapple with how to prevent cyberattacks and manage risk in security:

We can't spend forever trying to make things perfect. We waste a lot of time and miss the forest for the trees. Murphy's Law is a con-



Real-risk management becomes a challenge in how best to respond and recover from all types of accidents, breakdowns and system failures.

stant. Resilience is key to dealing with those precepts defined above. We can't change certain human behaviors. People aren't perfect, and they make mistakes. Humans step in mud, trip over their shoes, forget their car keys—and click on malicious links in email and on websites. Security must be human-centric. We can't have an environment where an overabundance of PEN (penetration) testing and anti-phishing exercises slows productivity to a crawl. We overcome unhealthy paranoia by making security first and foremost about enhancing resilience, and then by making it integrated, transparent, automatic, efficient, prevention-focused and cost-effective. We educate humans, but we make our systems resilient enough to protect us from our humanness.

If resilience is the starting assumption, real-risk management becomes a challenge in how best to respond and recover from all types of accidents, breakdowns and system failures, both foreseeable and as yet unimagined, by taking action at the earliest stage and assessing what is preventable next time. With the growing dependence on information communications technology in our society today, these lessons become increasingly important for cybersecurity. *William H. Saito, contributor to Forbes.com, is special advisor to the Cabinet Office for the Government of Japan and vice chairman for Palo Alto Networks Japan.*

THOUGHTS ON

Property

"If the world went to hell in a handbasket—as it seemed to be doing—you could say goodbye to everyone and retreat to your land, hunkering down and living off it." —JEANNETTE WALLS



"A pickpocket is obviously a champion of private enterprise. But it would perhaps be an exaggeration to say that a pickpocket is a champion of private property."

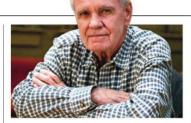
-G.K. CHESTERTON



"We come and go, but the land is always here. And the people who love it and understand it are the people who own it—for a little while."

-WILLA CATHER





"At one time in the world there were woods that no one owned."

-CORMAC MCCARTHY

"Few things in my life have had a more genial effect on my mind than the possession of a piece of land." -HARRIET MARTINEAU "It might turn out that without the right to possess, we are not really sure we have the right to speak and to be."





"A HUMAN BEING NEEDS ONLY A SMALL PLOT OF GROUND ON WHICH TO BE HAPPY AND EVEN LESS TO LIE BENEATH." -JOHANN WOLFGANG VON GOETHE

"If any could desire what he is incapable of possessing, despair must be his eternal lot." --WILLIAM BLAKE



"An object in possession seldom retains the same charm it had in pursuit." -PLINY THE YOUNGER

"DO NOT MOVE YOUR NEIGHBOR'S BOUNDARY STONE SET UP BY YOUR PREDECESSORS IN THE INHERITANCE YOU RECEIVE IN THE LAND THE LORD YOUR GOD IS GIVING YOU TO POSSESS."

-DEUTERONOMY 19:14

SOURCES: CHILD OF GOD, BY CORMAC MCCARTHY; THE OUTLINE OF SANITY; BY G.K. CHESTERTON; THE SORROWS OF YOUNG WERTHER, BY JOHANN WOLFGANG VON GOETHE; SALESMAN IN BELJING, BY ARTHUR MILLER; O PIONEERSI, BY WILLA CATHER; HALF BROKE HORSES, BY JEANNETTE WALLS; THE LETTERS OF THE YOUNGER PLINY; BY PLINY THE YOUNGER; YOU AND ME, BABE, BY CHUCK BARRIS; GONE WITH THE WIND, BY MARGARET MITCHELL; THE COMPLETE POETRY AND PROSE, BY WILLIAM BLAKE.

"As a man is said to

have a right to his

property, he may

be equally said to have a property in

-JAMES MADISON

his rights."



FINAL THOUGHT

"A home of one's own is realizing the American dream. The fact that homeownership mostly turns out to be a good investment makes for added happiness." –MALCOLM FORBES

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Seeking for your inner peace is not an easy journey, especially if you're overwhelmed by your daily routines without ever taking your mind seriously. Time to unwind and reach out to the path of enlightenment on an eye-opening journey, by experiencing the **Vesak Day** celebration in Borobudur Temple (May). Uncover the life, the wisdom, and the end of the great Buddha through a ritual performed by thousands of Buddhists. Then, seek more out of this marvelous temple through the local's graceful dances in **Borobudur Masterpiece Ballet (August)**, or through their unique cultural arts & crafts in **Borobudur International Festival (July)**. Time to fully immerse in our cultural wisdom, because our world will welcome you with all its wonders.











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