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Forbes

$150 Million Cannabis King
BERNER

"IT'S HARD TO SELL LEGAL WEED."

MARIJUANA MELTDOWN

OVERREGULATION. OVERTAXATION. CONTRADICTIONS. AMERICA'S POLITICIANS HAVE COMPLETELY BLOWN THE EASIEST REVENUE OPPORTUNITY EVER—LEGALIZED DRUGS. BUT IT'S NOT TOO LATE TO SAVE THE $72 BILLION WEED INDUSTRY.


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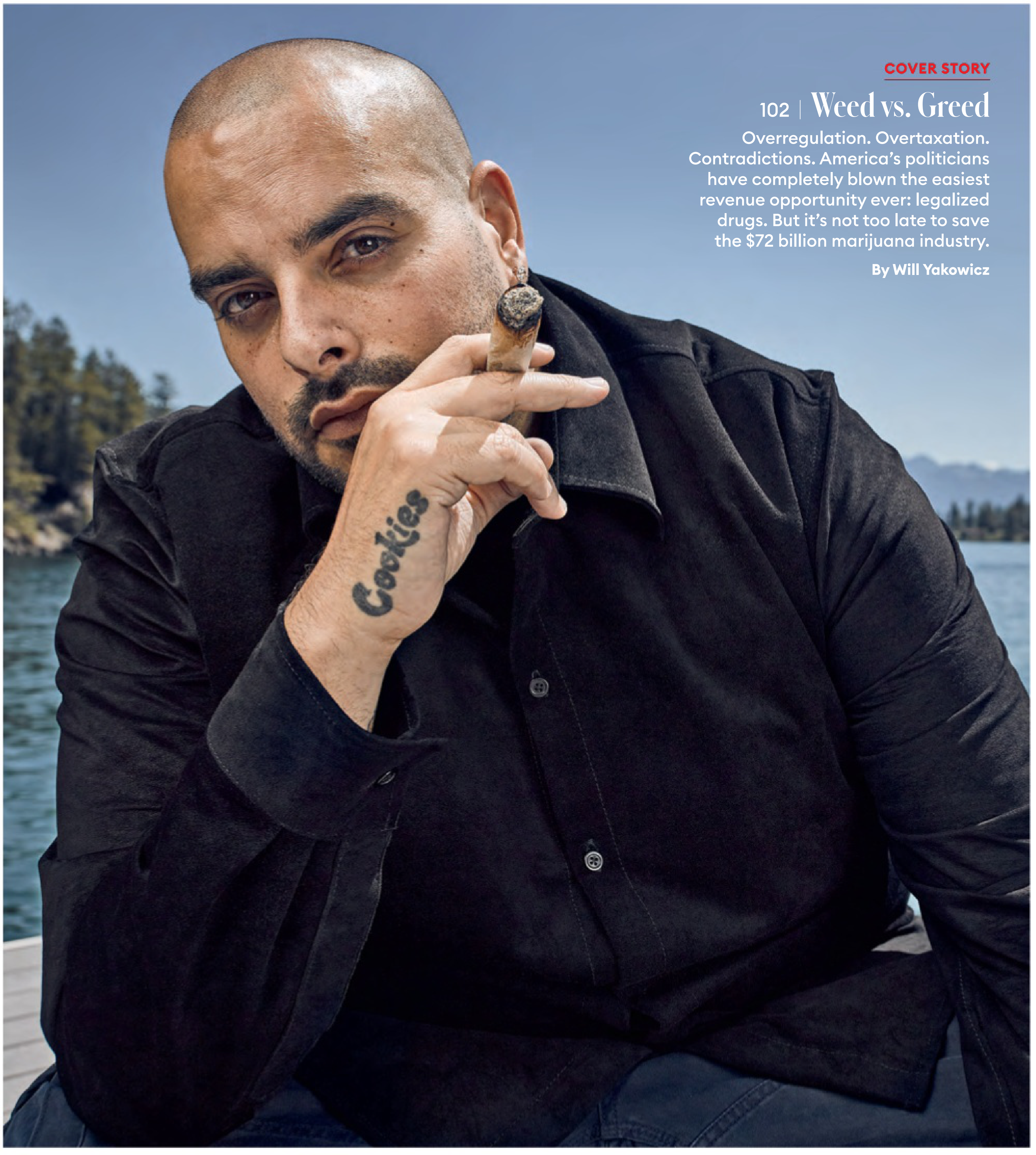
Forbes
August/September 2022
Volume 205 | Number 4

• INSIDE •



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Overregulation. Overtaxation. Contradictions. America's politicians have completely blown the easiest revenue opportunity ever: legalized drugs. But it's not too late to save the $72 billion marijuana industry.

By Will Yakowicz

BERNER BY ETHAN PINES FOR FORBES

August/September 2022

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Photography by Ethan Pines for Forbes

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BRYSON DECHAMBEAU BY CODY PICKENS FOR FORBES; FIVETRAN'S TAYLOR BROWN AND GEORGE FRASER BY JAMEL TOPPIN FOR FORBES; ILLUSTRATION BY MICHAEL HOEWELER FOR FORBES

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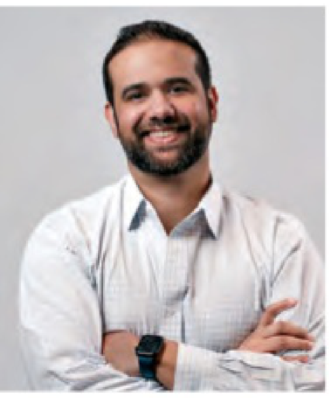
SIDELINES

Tribute to a Legend

For over a century, *Forbes* has championed entrepreneurs, and that's true internally, too. Those who have shaped and reshaped this incredible company follow the spirit of founder B.C. Forbes, a journalist-turned-entrepreneur nonpareil, who implored readers to "spend your life on something that will outlast you."

Stephen Mathai-Davis fit brilliantly into that tradition. He came from a Wall Street family, and he had an evangelist's zeal for using technology and finance to help people. Stephen started Q.ai, an AI-driven platform that offered retail investors the same advantages available to hedge fund hotshots. *Forbes* bought a big stake in it, then let him run with it in the entrepreneurial style that had made him so successful in the first place.



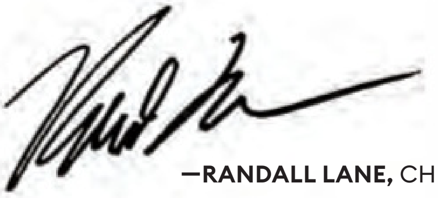
Stephen Mathai-Davis

On July 22, while preparing to shoot his new investing series on Forbes YouTube, Stephen collapsed at the office and never regained consciousness. He was 40, and he didn't waste a day.

His brain was lightning quick: Conversations with him invariably stretched your synapses. His body was equally nimble: a competitive boxer and kickboxer, he held black belts in eight martial arts disciplines. But the most vivid part of Stephen was his spirit. His enthusiasm was infectious. "Someone would bring him a concept," one colleague remembers, "and he would say 'Let's talk about this on Monday.' And by Monday he had already sketched out his full ideas on it, ready to go." He was also patient, explaining complex theories of AI and portfolio allocation in ways that made people feel like they were being brought into a special club.

People here were especially inspired by his love of his family, particularly his wife, Maria, and children, Stephanos and Sofia. In one email to his team, he dedicated the first paragraph to talking about how joyful his weekend had been, spending time with his three favorite people at the zoo. Other colleagues relished invitations to his home, where they felt like they became part of his family.

Now he'll always be part of ours. I hope that someday Stephanos and Sofia will read this and more fully understand what an awesome guy their dad was. Until then, we'll all be carrying on his legacy. The epitaph for another *Forbes* family legend, Malcolm, seems fitting for Stephen, too: *While alive, he lived.*



—**RANDALL LANE,** CHIEF CONTENT OFFICER

Forbes

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FACT & COMMENT

By Steve Forbes, Editor-in-Chief

Big Deal Decision for Liberty

Overshadowed by the storm created by its abortion ruling, the Supreme Court's decision in *West Virginia v. Environmental Protection Agency* struck a stunning, historic blow against unbridled, unaccountable bureaucratic power. The court decisively declared that the EPA had vastly exceeded its authority with regulations to force utilities to switch from fossil fuels to so-called renewables, most notably windmills and solar panels.

The Court was clear: If an unelected agency is going to issue rules that will make a major impact on society, it must have explicit authority from Congress to do so. It can't conjure up justifications based on twisted readings of laws.

In this case, the EPA several years ago began putting arbitrary caps on greenhouse gas emissions, with the ultimate goal of making it illegal to use oil, gas or coal to generate electricity. The trouble was, there was no legal mandate to impose such sweeping changes. In fact, Congress had repeatedly refused to pass such legislation.

Frustrated, extreme environmentalists resorted to getting regulators to do what they hadn't been able to get done through the democratic process. The EPA's overreach wasn't isolated. For decades federal agencies have been taking on increasing power.

Congress has gone along with this emasculation of its traditional powers because doing so has allowed lawmakers to duck accountability for unpopular decisions. In fact, many laws have been deliberately written with vague language to give bureaucrats maximum flexibility.

This neutering of Congress goes back to the late 1800s with the rise of the idea that a modern industrial society had made the Constitution obsolete and that government should be run by experts who wouldn't get bogged down by the laborious legislative process. Woodrow Wilson, our 28th president, was a prime proponent of the belief that the Constitution, with its checks on government power, had outlived its usefulness.

This notion was recently expressed by Anthony Fauci, who said that decisions made by health experts like himself shouldn't be subject to judicial review.

But our Founders wisely understood such concepts were recipes for tyranny. All those who exercise power should be held accountable for their actions.

Moreover, experts are not always right, including Dr. Fauci, who in the weeks before the March 2020 lockdown was saying that people should be more concerned with the seasonal flu than with the emerging coronavirus.

Power-hungry agencies aren't about to passively accept this decison. The SEC, for example, still plans to formally issue a 500-page ruling this spring concerning listed companies and climate change. The High Court will have to render a number of decisions reinforcing what it did with *West Virginia v. EPA*.

Baseball Shouldn't Be Snoreball

Baseball's All-Star Game in July and the attendant celebrations were a poignant reminder that there's no way the sport can occupy the overwhelming position it once had when it was truly America's favorite pastime. Affluence and innovation have given people a number of exciting alternatives, including video games.

But much of baseball's relative decline has been self-inflicted, primarily the length of time it takes to complete a Major League game. Decades ago, a contest rarely exceeded two and a half hours. Today, that would be considered warp speed. Owners' and MLB officials' efforts to hasten the pace have met with limited success. Games are still too damn long.

A faster-paced game would be a better-played game, and more people would be attracted to a sport that uniquely combines individualism and teamwork. Baseball biggies shouldn't let players and coaches deter needed reforms. Fans will cheer.

Game-saving adjustments are straightforward.

- No more coaches or managers visiting the pitcher's mound, unless it's to yank and replace the hurler. Mound visits had become ridiculously frequent. Now teams are limited to five such summit meetings a game. That's still five too many. This mound prohibition would apply to catchers as well.
- If a team wants to challenge an umpire's field call, it should be required to do so instantly. No waiting for a report from its video expert on whether a challenge might work.
- Require pitchers to throw the ball 14 seconds after receiving it, 18 seconds when a runner is on base. That rule, when tested with minor league teams, has cut more than 20 minutes off the average game time.
- Bar hitters from leaving the batter's box without just cause. Years ago, this was an ironclad custom.

Of course, these needed changes don't deal with the game's other big challenge: the decline in hitting. Batting averages are at levels not seen since the late 1960s.

One factor is the more analytical and strategic use of pitchers. Rare is the game today in which the hurler goes a full nine innings. Years back, a typical team might have eight or nine pitchers on its roster. Now a dozen or more is common.

One response might be to slightly lower the height of the pitcher's mound, as baseball did after the 1968 season.

The quality of infield defense has improved enormously, especially in the use of the "shift," where players bunch up at a particular area on the field. The once familiar ground-ball single is almost a thing of the past. One almost expects to see the catcher positioning himelf at shortstop.

One new rule should restrict the shift by requiring two players on either side of second base and four players on the infield dirt.

The Perils of Appeasing Putin

The Bell of Treason—by P.E. Caquet (Other Press, $27.99). This book should—but won't—be read by Joe Biden's national security team, not to mention the pusillanimous leaders of Germany and France. Its lesson: Appeasement of determined adversaries is a deadly dangerous game.

Take the example of the Munich Agreement. In the fall of 1938, Britain and France needlessly betrayed a crucial ally, Czechoslovakia, to Adolf Hitler. The ghastly consequence of this was the Second World War.

Czechoslovakia—today split into the Czech Republic and Slovakia—was created from the remnants of the Austro-Hungarian Empire after WWI. About 20% of the population were German-speaking Sudetens. The country, firmly and formally aligned with France, was a thriving democracy. Hitler wanted to destroy and occupy it, so he cooked up a pretext that Prague was cruelly suppressing the Sudetens, who, he claimed, desperately desired to be part of the Third Reich. This was nonsense, but the Nazis were experts at stirring up trouble, and Hitler was threatening war.

British Prime Minister Neville Chamberlain dragged the war-reluctant French to Munich, where, along with Italy, they agreed to give Hitler the German-speaking chunk of Czechoslovakia, which contained the country's sophisticated system of fortifications. "Peace for our time," proudly proclaimed the prime minister. Within months Hitler gobbled up the rest of the now-defenseless country, and a few months after that he invaded Poland, which triggered World War II.

Czechoslovakia's strategic location and the hundreds of thousands of German troops it tied down before Munich made its bloodless loss a catastrophic blow to France's security. Worse, the Czechoslovaks had one of the world's best armament works, which immensely aided Berlin's rearmament. One-third of the advanced tanks Germany used against France in 1940 came from those captured facilities.

In 1938, France and Czechoslovakia would have defeated Germany, as Berlin's rearmament was woefully incomplete.

Of course, no two periods in time are exactly alike. But China, Russia, Iran and others have made their aggressive designs clear. The initial response to Vladimir Putin's invasion of Ukraine seemed to belie their perception of Western weakness, but the resolve of the U.S., France and Germany appears to be wilting. "We must not humiliate Putin," squeals French President Emmanuel Macron, as he and others push for a Munich-like deal with the Monster of Moscow.

As in 1938, it appears democratic leaders are woefully not up to the task.

RESTAURANTS: GO, CONSIDER, STOP

Edible enlightenment from our eatery experts and colleagues Monie Begley, Richard Nalley and Randall Lane, as well as brothers Bob, Kip and Tim.

● Il Gattopardo

13–15 West 54th St. (Tel.: 212-246-0412)

This classic in the old Rockefeller townhouse continues to serve some of the best Italian fare in the city. Start with Parmigiana of zucchini with smoked mozzarella or, as a lighter alternative, the crispy salad with radicchio, frisée, carrots and radishes in a tangy red wine vinaigrette. The pasta dishes are delicious, especially the cavatelli with shellfish ragout and the linguine alle vongole with a hint of anchovy pesto. For pescatarians, pan-seared monkfish with a spring vegetable ragout and olive dressing is a must. And for dessert have either the flourless torta caprese al limoncello or the semifreddo of buffalo ricotta with pear purée.

● Sotto 13

140 West 13th St. (Tel.: 212-647-1001)

A sleekly modern space featuring black-and-white canvases of architectural vignettes and a skylight over the dining area housing the pizza oven. Everything is first-rate. To start, try the tangy tuna tartare or the luscious ball of burrata. Next up, go for the roasted boned chicken breasts in a light sauce with mashed potatoes and shredded zucchini or choose one of the city's best hanger steaks in its own flavored juices. Save room for the divine chocolate cake or the perfect tiramisu.

● Gray Hawk Grill

1556 Second Ave., between 80th & 81st streets (Tel.: 646-669-7376)

Having signed its lease the week before the March 2020 shutdown, this terrific American grill survived the pandemic's legendary openings and closings and offers delicious versions of all-time favorites. Begin with a luscious tuna tartare, a generous mound of chopped salad or an order of creamy cacio e pepe. The steak frites is perfectly cooked with bubbly sides of mac and cheese or grilled Brussels sprouts. Or try the excellent miso black cod. For the sweet tooth there's nothing more tempting than the grill's coconut cake or its version of classic cheesecake. The setting is casual, inside and outdoors, and the service impressive.

● Alice

126 West 13th St. (Tel.: 212-691-4886)

The two distinct dining areas here are separated by the bar area and the kitchen, and both have fabulous food and fast service. As with its 13th St. neighbor, Alice's burrata ball knocks it out of the park, and the harvest salad is crunchy perfection. Grilled octopus is beyond enhanced on its bed of shaved radish and caramelized onions. The steelhead salmon is so good it disappears in the blink of an eye. The torta caprese looks like an igloo housing a very dense chocolate cake, and the tiramisu is out of this world.

SportsMoney

THE WORLD'S HIGHEST-PAID GOLFERS

Thanks to Saudi Arabia's bottomless well of petrodollars, suddenly two of the world's ten top-earning athletes are golfers, with a 52-year-old southpaw leading the way.

Going for the Green

Former U.S. amateur champion Bryson DeChambeau won eight times on the PGA Tour before defecting to LIV Golf. "I love the Tour and what they've provided me. This is just a better alternative."

SPORTSMONEY BY JUSTIN BIRNBAUM. CODY PICKENS FOR FORBES

The breakaway LIV Golf tour, which is owned by Saudi Arabia's $620 billion (assets) sovereign wealth fund, is many things. It's faster than the PGA Tour, with a 54-hole ("LIV" in Roman numerals) format played over three days. It's louder, with music blaring before tee-off. It's less frequent, with one-sixth as many events. But mostly it's richer. LIV Golf is about money. Piles and piles of it.

The government of Saudi Arabia is pumping an estimated $2.4 billion into LIV over the next couple seasons to get the league off the ground, a big chunk of which is to lure top talent. In total, LIV has boosted the earnings of the ten highest-paid golfers by an estimated $370 million since May, bringing their combined haul to a record $650 million.

"I wanted to be a part of something from the ground up," says Bryson DeChambeau, who won the U.S. Open in 2020 as a 27-year-old and joined LIV in June. "The resources, the time, the rest and then the enjoyment factor were why I was able to make that jump and wanted to make that jump."

Sure. But it probably helps that he's likely getting north of $125 million as a guarantee from LIV, half of which *Forbes* estimates he received upfront. That $62 million payment has propelled DeChambeau to No. 3 among the world's highest-paid golfers, with total pretax earnings of $86 million over the past 12 months—and ranks him the 11th-highest-paid athlete on the planet, ahead of Tom Brady.

The downside? No more PGA Tour, no more Players Championships and no more international competition in the Ryder Cup. Like all other PGA Tour defectors, DeChambeau had his membership suspended. The Saudi-backed golfers should still be able to compete in the Masters and golf's three other majors, none of which are run by the PGA Tour.

Putting for Dough

Dustin Johnson, the world's former No. 1 golfer, is game for a change: "It's something new, it's exciting, a chance to bring a different kind of perspective to golf."

CODY PICKENS FOR FORBES

Two-time major winner Dustin Johnson, who finished tied for sixth at the British Open at St. Andrews this July, did even better than DeChambeau. The 38-year-old pro from South Carolina, who is married to Wayne Gretzky's daughter Paulina, pocketed $97 million in the last year, including an estimated $62 million signing bonus from LIV in May. The Saudi money makes Johnson the fifth-highest-paid athlete in the world. It was an easy choice, he says: "Play less golf, play for more money—it just made sense."

The biggest winner of all? Phil Mickelson. With six majors and 45 PGA Tour wins under his belt, the second-most-accomplished golfer of his generation was one of the first to voice support for the new tour. Back in February, he

was vilified (and took a subsequent break from playing) after seeming to dismiss Saudi Arabia's human-rights record in exchange for a "once-in-a-lifetime opportunity to reshape how the PGA Tour operates." Several sponsors dropped him. But what does he care? LIV more than made up for it, guaranteeing Mickelson an estimated $200 million, half of which he likely got upfront. In all, the 52-year-old pulled in $138 million in the past year, making him the world's highest-paid athlete in 2022, edging out soccer superstar Lionel Messi ($130 million).

There are risks. LIV Golf has no major U.S. broadcast partner or event sponsors. The LIV-curious are forced to watch on YouTube. And the tour is incinerating cash. There are limited revenues, and in addition to the enormous signing bonuses and multimillion-dollar-per-event production budgets, LIV has guaranteed $255 million in prize money for 2022. "Just like any startup, you've got a burn rate, and whether it was, heck, Amazon or Uber or whatever, they're all burning certain cash up until they reach the point of profitability," says LIV Golf president and former Tampa Bay Buccaneers executive Atul Khosla.

The PGA Tour isn't sitting still. In June, it raised the prize purses of eight tournaments by a collective $53.8 million, with the Players Championship rising to $25 million. On the flip side, the PGA Tour's hard line against giving its members permission to participate in LIV events has triggered a Department of Justice antitrust investigation.

One golfer who refuses to play LIV's game: Tiger Woods. LIV Golf CEO Greg Norman, known as the Great White Shark during his hall of fame playing career, told the *Washington Post* that Woods rejected a "mind-blowingly enormous" offer in the "high nine digits" from LIV. That decision knocked Woods, who was once the world's highest-paid athlete ten years running, into unfamiliar territory—he's now just fifth among the highest-paid golfers, with total earnings of $68 million. He has no regrets. "I just don't understand it," he said ahead of the British Open. "I just don't see how that move is positive in the long term for a lot of these players."

Additional reporting by Brett Knight

METHODOLOGY: Earnings are pretax between July 3, 2021, and July 3, 2022. On-field figures include prize money and bonuses. Off-field earnings are an estimate of sponsorship deals, appearance fees, memorabilia and licensing income, plus cash from other business ventures. Estimates are based on publicly available information and conversations with a dozen industry insiders. Agent fees are not deducted.

THE TOP 10

1. Phil Mickelson 52 • TOTAL EARNINGS: **$138 mil**
ON-COURSE: **$102 mil** • OFF-COURSE: **$36 mil**
Lefty crossed $1 billion in career earnings thanks to his LIV deal. One of only a handful of players (including Tiger Woods, Dustin Johnson, Vijay Singh and Tom Watson) to earn a lifetime membership on the PGA Tour, Mickelson had that privilege suspended after he joined LIV.

2. Dustin Johnson 38 • TOTAL EARNINGS: **$97 mil**
ON-COURSE: **$68 mil** • OFF-COURSE: **$29 mil**
Recently ranked No. 16 in the world, Johnson was the first star to jump to LIV in May, for an estimated $125 million. He cashed out his stake in BodyArmor for an undisclosed sum in November. Sponsors Adidas and TaylorMade have stuck with him after he resigned from the PGA Tour.

3. Bryson DeChambeau 28 • TOTAL EARNINGS: **$86 mil**
ON-COURSE: **$66 mil** • OFF-COURSE: **$20 mil**
He earned $560,000 from his first LIV event in July, nearly triple what he had earned in his seven prior tournaments in 2022.

4. Brooks Koepka 32 • TOTAL EARNINGS: **$69 mil**
ON-COURSE: **$53 mil** • OFF-COURSE: **$16 mil**
Koepka, who has won four majors and nurtures a fierce rivalry with DeChambeau, secured an estimated $100 million guarantee from LIV.

5. Tiger Woods 46 • TOTAL EARNINGS: **$68 mil**
ON-COURSE: **$43,500** • OFF-COURSE: **$68 mil**
Golf's only billionaire, Woods has no need for Saudi money.

6. Rory McIlroy 33 • TOTAL EARNINGS: **$43 mil**
ON-COURSE: **$9 mil** • OFF-COURSE: **$34 mil**
McIlroy has been vocal in his support of the PGA Tour, telling CBS there's "no room in the golf world for LIV Golf." It may be paying off. Workday agreed to sponsor the Northern Irishman in February, the same month the software company announced it would not renew Mickelson.

7. Sergio Garcia 42 • TOTAL EARNINGS: **$42 mil**
ON-COURSE: **$35 mil** • OFF-COURSE: **$7 mil**
The Spaniard and 2017 Masters champ was part of the first wave to join the upstart Saudi tour.

8. Jordan Spieth 29 • TOTAL EARNINGS: **$39 mil**
ON-COURSE: **$8 mil** • OFF-COURSE: **$31 mil**
The former world No. 1 reasserted his loyalty to the PGA Tour in July: "Any reports that I am contemplating competing anywhere other than the PGA Tour are categorically untrue." After signing a new deal, he will remain the face of Under Armour's golf business through 2029.

9. Patrick Reed 32 • TOTAL EARNINGS: **$37 mil**
ON-COURSE: **$34 mil** • OFF-COURSE: **$3 mil**
Reed starred for years in the Ryder Cup, earning him the nickname "Captain America." Now ineligible for the biennial Europe vs. United States contest, he's flying a new flag: The 32-year-old wore the LIV Golf logo on his hat, collar and sleeve at the British Open.

10. Charl Schwartzel 37 • TOTAL EARNINGS: **$34 mil**
ON-COURSE: **$30 mil** • OFF-COURSE: **$4 mil**
In 2011, Schwartzel won $1.4 million in prize money at the Masters, his first and only major championship win. The South African's victory at LIV's inaugural London event in June landed him more than triple that sum.

BEATING CANCER TO THE FINISH LINE.

The Leukemia & Lymphoma Society® (LLS)
is the global leader in the fight against blood cancers.

The LLS mission: Cure leukemia, lymphoma, Hodgkin's disease and myeloma, and improve the quality of life of patients and their families. Since 1949, we've invested more than $1.5 billion in groundbreaking research, pioneering virtually every blood cancer treatment breakthrough.

#1 ROOKIE CHALLENGE WINNER!

PATRIC HYLAND

Leukemia Survivor

$60,780

Fundraising total

After 12 years of battling Acute Myelogenous Leukemia, Patric's father's treatments were successful and he entered complete remission. His journey motivated Patric to complete the 70.3 Ironman in October 2021 with Team in Training and raise funds for LLS. Patric looks forward to his next event with TNT and continuing to partner with LLS to help find cures and ensure access to treatments for blood cancer patients.

#1 FUNDRAISING TEAM!

TEAM SF BAY

America's Most Beautiful Bike Ride

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Northern California

Team SF Bay has been riding together for 25 years. In 2016, the team lost Coach Jeff "Husky" Gustafson and they came together to fundraise in his memory. Seeing the impact they could make encouraged them to set big goals. This year the team rode for 14 honored teammates and ended the season setting the highest team fundraising record in TNT history.

Join us at TeamInTraining.org

LEUKEMIA & LYMPHOMA SOCIETY® | TEAM IN TRAINING®

Spanning over three decades, The Leukemia & Lymphoma Society's Team In Training started a revolution that changed endurance sports forever. As the leader in endurance sports training for charity, funding significant therapies like chemotherapy and bone marrow transplants, over 650,000 teammates have had a significant impact on blood cancer patients. **Team In Training inspires teammates to push what's possible and achieve their personal best through movement, while fundraising in support of LLS's mission.**

We are proud to honor our top fundraisers and teams who have worked hard to keep moving for blood cancer cures.

TOP TEAM FUNDRAISERS

Andy's Challenge Bicycle Club
Be Like Bob
Blackstone AMBBR 2022
Bloomberg Fall
Bloomberg Spring
CANCER CRUSADERS
Decade of Magic
Fagan's FIGHT
FIS
Greater Bay Area Triathlon
Greater LA Cycle Tour2Cure 2022
Greater LA Triathlon 2022
Heluva Good Hike!!
Hikers4Life
Hope Hustlers
IRONTEAM
Jenny Booyah and the Peachy Tribe
Jogging for June
Kailie's Krew
Les Fest
Maren's Fierce Fighters
Melius Research
Meza's Maniacs
Mile 88
Moms In Training
Pele's Pirates
Pop's Warriors
Rose Hike Team
Silicon Valley LavaTeam 2022
TEAM 209
Team 8.18
Team CHESAPEAKE
Team ChiLD
Team Fight On
Team Harder
Team KPMG
Team RaynerShine
Team Remission
Team SF Bay
Team Survivor
The IncredibLLS

TOP INDIVIDUAL FUNDRAISERS

Lynne Baczynski
Audrey Batcheller
Abigail Been
Michele Birdwell
Lauren Bogart
Melvin Bradley
Eric Brown
Charles Cariello
Justin Chueh
Coppola Family,
in memory of Meghan Rizzo
Bhavya Dabas
Lindsay DaRosa
John DeLoche
Deb Durig
Fardad Esmailian
Jamie Fagan
Phillip Falkner
Andrea Ferenchik
Susan Goss Brown
Farrell Hall
Jim Healy
Sandy Hickey
Bob Holmes
Mark Hunt
Patric Hyland
Suzanne Johnson
Richard Kaniewski
Patrick Lynch
Carol Mackenzie
Lauren Medalie
David Monn
Amanda Monteiro
Melissa Muilenburg
Phyllis Osterman
Tim Parker
Andrew Perry
Anthony Pezza
Kyle Ragsdale
Richard Rayner
Curtis Rocca
Sondra Rose
Denise Ruthven
Meghan Rypkema
Cody Scarboro
Sarah Schufreider
Becky Sherstad
Jill Smith
Jeanne Snow
Jack Spector
James Volpe
Scott Weiss
Adam Wende

New Billionaires

POLITICAL PACKAGING

Richard and Elizabeth Uihlein are working to reshape the right with profits from their shipping products empire.

As Americans increasingly ship everything everywhere, the folks selling packaging materials and industrial supplies are doing great. No one distributes more of the stuff than 76-year-old Richard Uihlein, an heir to the Schlitz beer fortune, and his wife, Elizabeth, 77, who together started a company called Uline in their basement in 1980. Today the Wisconsin-based business, which they run as CEO and president, respectively, does $6.1 billion in annual sales, enough to make the pair worth an estimated $4 billion apiece.

They may not be famous nationwide, but people know them in D.C. Both have been donating to Republican campaigns since the '90s, contributing roughly $15,000 a year on average up to 2009. In 2010, the Supreme Court blew up efforts to limit political spending with its rulings in *Citizens United v. FEC* and a couple of related cases. The Uihleins have ratcheted up their giving every cycle since, reporting more than $190 million in political donations in all. That's more than anyone not named Bloomberg, Steyer or Adelson.

In the last election cycle, the Uihleins put more than $70 million into various conservative causes. Thirty million went into Restoration PAC and Americas PAC, which in turn spent $18 million trying to get Donald Trump reelected. Another $27 million went to the free market–oriented Club for Growth super PAC, a favorite of fellow billionaire megadonor Jeff Yass.

The Uihleins' passion for politics permeates their business, too—even company catalogs. In between praise for her employees and listings for boxes and bubble wrap, Elizabeth Uihlein poses provocative questions: Is America in decline? Is China taking over? Are we spending too much on welfare programs? "Your family, your house, your yard, your own little corner of the world—these are things you can control and make better," she wrote in one letter. "You can't fix everything—the world's problems are big." But with enough money, you sure can try.

Ask a Billionaire

SEMI-AVERAGE JOES

Insights from our exclusive survey of 65 global billionaires.

Just how normal is a day in the life of a billionaire? Well, more typical than you might expect, with more than a third doing routine tasks like cooking and grocery shopping. But folding clothes? Forget about it.

Which of these activities do you do regularly?

Attend kids' or grandkids' sports games or performances: **46%**

Cook: **40%**

Walk the dog: **40%**

Take out the garbage: **38%**

Shop for groceries: **33%**

Take the kids or grandkids to school: **19%**

Yardwork: **10%**

Laundry: **8%**

NEW BILLIONAIRES BY KYLE MULLINS AND CARLOS SANCHEZ MORA. ILLUSTRATION BY NABIL NEZZAR FOR FORBES; GETTY IMAGES

BUY, HOLD, SELL

Vintage Toys

Vicky Weall

Managing Director of Vectis Auctions, Stockton, England

Bru Jeune Bébé Dolls
Handmade in late-19th-century France, their varying facial features and rarity mean fine examples of Bru dolls like "Helene Alicia" *(above)* easily fetch five figures. They'll only become more elusive–and valuable.

1980s TV and Film Toys
For '80s classics such as *Transformers* or *He-Man*, the auction action is just beginning. Get a piece of it with promotional items like this $16,000 *Return of the Jedi* store display. Collector favorites, they're sure to appreciate.

Bing Brake Cars
These vintage tin-plate clockwork (i.e., wind-up) cars from 1902 are hard to find–for now. With record-high demand, owners should shift gears while a quality example can fetch as much as $34,000.

Rosé Champagnes

Victoria James

Author, Sommelier, Director and Partner of Cote Beverage, New York

NV Jacques Selosse Brut Rosé
At $1,200 a bottle, this small-production rosé is a brilliant entry point: Its cult following will have early investors feeling in the pink for years to come.

1988 Louis Roederer Cristal Rosé
This lightning-in-a-bottle Cristal will be worth the wait. Lay it down for decades and it'll age like the fine wine it is–while its current $2,500 value soars.

1959 Dom Pérignon Rosé
This entire vintage went straight to the Shah of Iran for the 2,500th anniversary of the Persian Empire. If you have one of the few that remain, drink up–or sell for a $42,000 payday. Talk about Champagne problems.

Natural-History Objets

James Hyslop

Head of Department at Christie's Science and Natural History, London

Pure White Gogottes
These prehistoric sandstone formations are only getting rarer, thanks to a dwindling supply and their Contemporary Art appeal. Prices are evolving: A nine-inch piece went for $32,000 in 2021, four times its high estimate.

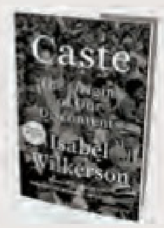
Triceratops Skulls
As dinosaurs go, the ever-popular Triceratops is a terrific investment–especially its (relatively) manageable skull: This seven-foot-long find went for $700,000 in October, and there's still plenty of room for growth.

Composite Fossils
A favorite of interior designers, individual fossils grouped to create a prehistoric scene or art piece–like this $23,000 wall hanging–are quickly going the way of the dodo. Sell them while they still have mood-board appeal.

Book Value

Leaders from the worlds of business, academia, entertainment and politics share what's on their bedside table.

Emma Grede
The cofounder of both Skims (shapewear) and Good American (size-inclusive clothing) ranked 77th on our 2022 list of the Richest Self-Made Women with a net worth of $360 million.



Caste: The Origin of Our Discontents
By Isabel Wilkerson

In August 2020, Oprah Winfrey gave this book to every CEO on the *Fortune* 500 because she believed those in positions of power should read it. *Caste* (Random House, 2020) is a nonfiction masterpiece that shows how certain groups stigmatize and dehumanize others. It becomes clear that the comparison between American society today and other caste systems over time accurately reflects both systemic problems and the historic marginalization Black people face. Wilkerson is indeed putting the correct label—caste—on America's biggest societal fissure. She beautifully lays out a clear path toward progress and solutions. The final chapter left me hopeful for a brighter future and wondering if we'll ever see Wilkerson run for public office, as she surely deserves an Oprah-size audience.

BUY, HOLD, SELL BY ISABEL LORD. ILLUSTRATIONS BY CHRIS LYONS FOR FORBES; PHOTOS, FROM TOP, LEFT TO RIGHT: VECTIS AUCTIONS (3); THE RARE WINE CO.; HEDONISM WINES; CULT WINES INTERNATIONAL; CHRISTIE'S (3); ILLUSTRATION TOP RIGHT BY SAM KERR FOR FORBES

30 Under 30

TEACHERS' PETS

Back to school with edtech tools from the *Forbes* 30 Under 30, in 30 words or less.

Meti Basiri 29

COFOUNDER, **APPLYBOARD**

After suffering through applying to grad school in Canada while living in Iran, Basiri developed ApplyBoard, a Common App for students abroad. It's now worth $3.2 billion.

Skyler Lucci 29
Ryan Neman 28

COFOUNDERS, **HEYTUTOR**

Need a study buddy? This L.A. duo launched a tutor marketplace in 2016. They now have 100,000-plus instructors and pulled in $19 million in revenue the first half of 2022.

Amrutha Vasan 26
Aditya Vishwanath 26

COFOUNDERS, **INSPIRIT**

VR science class! Inspirit lets aspiring biologists use their smartphones to peer inside the cells of everything from bacteria to bunnies. It's raised $3.6 million and serves 180,000 inquiring minds.

Nicholas Diao 26
Justin Wenig 25

COFOUNDERS, **COURSEDOG**

College schedules assembled by ink-stained registrars? No more. At 140 schools, Coursedog's AI matches classrooms with teachers' needs (whiteboards, say, or extra seating). This 'dog fetched $23 million in funding.

Trend Lines

THE LEFT STUFF

Watches for lefties—worn on the right wrist with the crown at 9 o'clock—were once a rarity. After all, why mass-produce a timepiece for roughly 10% of the population? But their novelty made them collectible: In 2013, a left-handed Rolex bought by Charlie Chaplin in the 1940s sold for $51,250 (or about $65,000 now). Today, a "destro" (meaning "right" in Italian) appeals not only to southpaws but also the ambidextrous-curious, who prefer the right wrist for comfort. This spring, Rolex surprised the watch world with a destro GMT-Master II *(left, $11,050)*, joining other left-handed watches that still get the chrono cognoscenti all wound up.

TAG Heuer Monaco
($6,950)

Panerai Luminor Left-Handed
($9,800)

Tudor Pelagos LHD
($4,725)

30 UNDER 30 BY ALEXANDRA STERNLICHT. ILLUSTRATION BY DIEGO PATIÑO

PFIZER WOMEN ARE HARNESSING THE POWER OF SCIENCE TO SOLVE PRESSING GLOBAL HEALTH ISSUES

In recent years, Pfizer has stepped up its efforts to advance and demonstrate the company's commitment to equity, diversity, and inclusion. The pharmaceutical and biotech global giant saw its representation for women at the vice president level and above increase 3.4 percentage points from 2020 to 41.5% in 2021. Pfizer has a 2025 goal of 47% parity globally for women at the vice president level and above.

by CAROLYN M. BROWN

OUALAE ALAMI

Vice President, Cluster Lead Hospital Business

Pfizer BioPharmaceutical Group

ANNALIESA ANDERSON, PH.D.

Senior Vice President and

Head of Vaccine Research & Development

JOSEPHINE WANG

Pfizer Global Procure to Pay Process Owner and

Dalian Site Lead – Global Business Services

Pfizer's corporate culture is based on four fundamental pillars: courage, excellence, joy and equity. Above all, it is equity that drives Pfizer's commitment to furthering the advancement of women in healthcare, notes Oualae Alami. She points to such company-wide initiatives as Women Inspiring Women. The year-long leadership program targets colleagues in senior roles to foster a community of leaders and accelerate their growth with tailored executive coaching, dedicated mentoring, and sponsoring, explains Alami, a benefactor of the program. She is purposeful about paying it forward. "Championing each other as women leaders and increasing men allyship across the organization are critical to change the equation," she adds.

Alami is currently leading over 200 colleagues in the Hospital Business unit across Western Europe. Her team partners with governments and scientific societies to develop and execute strategies and initiatives that advance the management and treatment of some of today's pressing global public health issues like COVID-19 and antimicrobial resistance. She is working on Pfizer's innovative oral COVID-19 treatment, authorized under emergency use in the United States for mild-to-moderate COVID-19 in adults and some at high-risk pediatric patients (see statement below). "COVID-19 accelerated and transformed how we work in the Hospital group. When you understand that your role can have an impact on patients' lives, you work at lightspeed to help patients during the pandemic," she says.

Building Upon A Strong Innovative Core

Pfizer scientist Annaliesa Anderson, Ph.D., led the development of the first authorized oral treatment for COVID-19. She is the new head of the drugmaker's 1,000-people strong Vaccine Research and Development (R&D) group. Prior, she served as Senior Vice President/Chief Scientific Officer for Bacterial Vaccines and Hospital within the vaccine R&D organization. Under her leadership, Pfizer advanced into clinical development and licensure of vaccines for the prevention of diseases due to Streptococcus pneumoniae and Neisseria meningitidis. She notes Pfizer has a reputation for having a strong, innovative core that is built from science to help bring therapies that extend and improve patients' lives.

Like many other Pfizer executives, Anderson actively mentors and sponsors colleagues, helping to advance other women's careers. "We have a lot of very accomplished, strong women in leadership positions across the organization," she says. "I think it always helps when you have that visibility; it gives people perspective that it is normal and that they can get there."

Embracing A Science Will Win Philosophy

Another Pfizer executive leading by example is Josephine Wang, Global Procure to Pay Process Owner and Global Business Services (GBS) Dalian Site Lead. The Dalian, China site houses over 600 colleagues who work on financial services, human resources operations, sourcing and enterprise solutions, as well as compliance and digital services. Wang leads the Global Procure to Pay Process team that supports all Pfizer business units in purchasing to payment related matters, including the management of global vendors, purchase orders, invoices, as well as payments for goods and services.

Wang fully embraces Pfizer's "Science Will Win" campaign, highlighting the power of science in innovating and delivering healthcare solutions to patients. "It is not only a slogan," she says. "It's also about how we transfer science into production to benefit all people. It's about how we leverage technology and science to continuously optimize our operations and the way we go to market for the benefit of patients. When I think of this, I'm fully inspired by the things we are doing."

Pfizer's oral treatment for COVID-19 has not been approved, but has been authorized for emergency use by FDA under an EUA, for the treatment of mild-to-moderate COVID-19 in adults and pediatric patients (12 years of age and older weighing at least 40 kg) with positive results of direct SARS CoV-2 viral testing, and who are at high-risk for progression to severe COVID-19, including hospitalization or death.

The emergency use of Pfizer's oral treatment for COVID-19 is only authorized for the duration of the declaration that circumstances exist justifying the authorization of the emergency use of drugs and biological products during the COVID-19 pandemic under Section 564(b)(1) of the Act, 21 U.S.C. § 360bbb-3(b)(1), unless the declaration is terminated or authorization revoked sooner. See EUA Fact Sheet: www.COVID19oralRx.com.

Pfizer


A career doesn't get much more meaningful than developing breakthroughs that change patients' lives.
Be part of something better.
It's among the most noble – and challenging – of all human endeavors. It's something everyone at Pfizer puts their heart and soul into every day.
Wherever they work and in whatever role, they're part of a global community – driven by a common purpose and striving for the same ambitious goals. They share the same uncompromising quality standards.
But most of all, they know they're making a very real and positive difference in the world.
You can be part of this work, too. Join us.
careers.pfizer.com
Pfizer
Breakthroughs that change patients' lives

WORLD OF FORBES

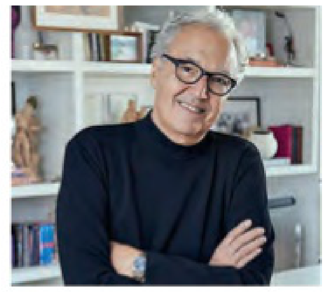
Across the planet, our 38 licensed editions span five continents, 25 languages and 13 time zones. They all share the same mission: celebrating entrepreneurial capitalism in all its forms.

ARGENTINA

Entrepreneur Eduardo Bastitta built Buenos Aires company Plaza Logística, which he cofounded in 2009, into a thriving $40 million business developing logistics and fulfillment centers. Up next: expansion to Uruguay and Colombia.

BRAZIL

Forbes Brasil's new 50 Over 50 list features successful Brazilians whose careers keep climbing as they age. On the cover: longtime advertising executive Nizan Guanaes, 64, who now runs a consultancy that helps large businesses develop disruptive communication strategies.



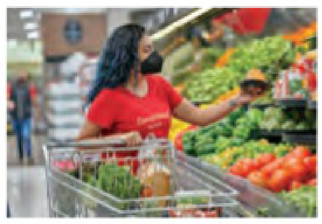
BULGARIA

"Money cannot buy the truly valuable things in life. However, it is a good means to change the environment around us."

–Tenko Nikolov, the Bulgarian cofounder of SiteGround, a global web-hosting leader that is committing more than $50 million to starting a foundation supporting education and health care.

CHILE

Venture capital investing in Chilean companies jumped from $160 million in 2020 to $2.9 billion in 2021, when two Chile-born firms reached unicorn status: plant-based dairy and meat startup NotCo and Uber-owned grocery deliverer Cornershop.



CHINA

Envision Energy fronts the latest issue as a member of the annual list of China's best employers. The country's second-largest wind turbine maker, Envision stands out for its sustainability efforts.

COLOMBIA

Mexican unicorn Kavak, valued at $8.7 billion, is arriving this year in Colombia, Peru and Chile, espousing transparency and efficiency in the used car market. CEO Carlos García Ottati cofounded the company in 2016.

ECUADOR

Ecuador's "palm king," Eduardo Berg, heads family company Danec Industries, the country's largest producer of palm plants, which are used for oils and cleaning products. The firm employs nearly 5,000 and counts 90,000 customers.

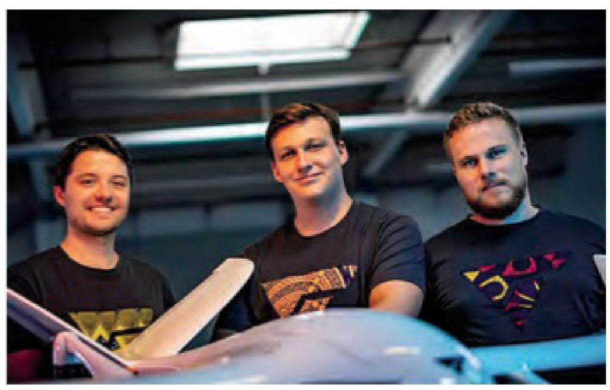
FRANCE

The face of *Forbes France*'s fourth annual influential women issue, Virginie Delalande has been deaf since birth, became a lawyer and runs Handicapower, a business in which she coaches and speaks on topics relating to disabilities.

GEORGIA

From a team of three in 2018 including founder Vako Turnava, Tbilisi-based startup Sweeft Digital has grown to some 400 employees and $3 million in revenue (2021), deploying software development and marketing tools to customers in ten countries.

GERMANY



Since 2018, Weiterstadt-based startup Wingcopter has dispatched drones on four continents carrying medicine and other aid, including HIV treatments to Malawi. CEO and cofounder Tom Plümmer *(center)* announced a $42 million fundraise in June.

GREECE

In February, the Union of Greek Shipowners elected its first female president, Melina Travlos, chair of automotive carrier Neptune Lines. She will prioritize leading the shipping industry's green transition.

HUNGARY

Kati Márton, a New York–based journalist, tells *Forbes Hungary* about fleeing her homeland at age 8 and her journalist parents, who reported on war crime trials and were imprisoned in 1955 on espionage allegations.

INDIA

Gaurav Munjal *(center)* is tasked with resolving alleged "toxic culture" at his Bengaluru test-prep startup, Unacademy, which has soared to a $3.4 billion valuation since it started as a YouTube channel in 2010. What won't change: long hours, a requisite if you want to make history, he says.

INDONESIA

Domestic travel experiences and large-scale international events–such as the annual G20 meeting, which will be held in Bali for the first time in November–are priorities for recovery from the pandemic, says Sandiaga Salahuddin Uno, Indonesia's minister for tourism and creative economy.

BY KATHERINE LOVE. BRAZIL: VICTOR AFFARO; CHILE: CORNERSHOP; COLOMBIA: FERNANDO LUNA ARCE; GERMANY: WINGCOPTER/ PETER JULLICH; GREECE: BILL GEORGOUSSIS; HUNGARY: BILLY BUSTAMANTE; INDIA: SELVAPRAKASH LAKSHMANAN FOR FORBES INDIA

ISRAEL

Actress Noa Tishby has worked on the big screen with Hollywood stars including Scarlett Johansson and director Michael Bay. She fronts *Forbes Israel's* Power Women issue for her latest role–as Israel's first special envoy for combating antisemitism.

ITALY

Iris Ceramica Group, which makes porcelain and ceramic tiles, plans to open a new hydrogen-powered factory by the end of the year. Federica Minozzi heads the firm, founded by her billionaire father, Romano Minozzi, in 1961.

JAPAN

Since 2019, retail billionaire Yusaku Maezawa has randomly chosen 1,100 people to receive about $9,000 apiece to see if money would make them happier. He says recipients reported increases in average working hours and positive motivation.

KAZAKHSTAN

Bulbul Kartanbayeva became the first Kazakh to play in North America's Premier Hockey Federation, the women's professional ice hockey league, in 2019. Now the 28-year-old trailblazer is grooming her country's next generation at the women's hockey academy she established in Nur-Sultan.

LATVIA

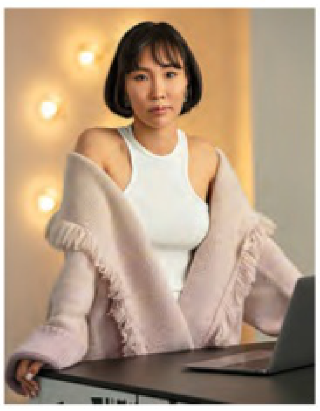
Inga Pudža, a research assistant at the University of Latvia, won a L'Oréal-UNESCO award for young women in science last year. She studies copper molybdate, which changes color in response to temperature and could be used to monitor proper cold storage for vaccines.

MEXICO

L'Oréal CEO Nicolas Hieronimus, who previously led Mexico operations for the cosmetics giant, visited Mexico City this year in celebration of the brand's 60th year there. His three key business takeaways from the pandemic: "more digital, more health and more sustainability."

MONGOLIA

Based in Ulaanbaatar, Uguuj Chikher Boov makes more than 120 different kinds of packaged sweets, totaling 60% to 70% of the country's pastry production. Gereltuya Tumengerel heads the business, which her father bought in 1997.



PANAMA

Central American nations are drafting a mobility and logistics plan that would optimize trade among 36 ports, including the Panama Canal. Francisco Lima Mena, secretary general of SIECA, an economic NGO, says the plan could enhance regional competitiveness.

PERU

Peruvian edtech Talently raised a $3 million seed round last year as it provides training and job placement for Latin American tech talent. "We want to position Latin America as a place where the best software in the world is made," says CEO Doménica Obando.

POLAND

Ekoenergetyka, a company headquartered in western Poland's Zielona Góra, did about $35 million in 2021 revenue. Cofounder Bartosz Kubik expects to install its electric vehicle charging stations in the U.S. in the next year.

ROMANIA

In an assessment of 600,000 businesses, *Forbes Romania* finds Amazon's Romanian Development Center to be one of the country's largest companies with the highest growth rate, averaging a 50% increase in annual turnover in the past decade.

SLOVAKIA

World champion alpine racer Petra Vlhova bested American rival Mikaela Shiffrin to win Slovakia's first-ever gold medal in skiing at this year's Beijing Winter Olympics. The 27-year-old fronts *Forbes Slovakia's* Sports and Money issue.

SOUTH AFRICA

Forbes Africa's eighth annual 30 Under 30 list includes Brett Lyndall Singh *(second from left),* who studied pediatric medicine in China and founded Alpha and Omega MedTech, a company that created one of South Africa's first rapid-testing kits for Covid-19.

SPAIN

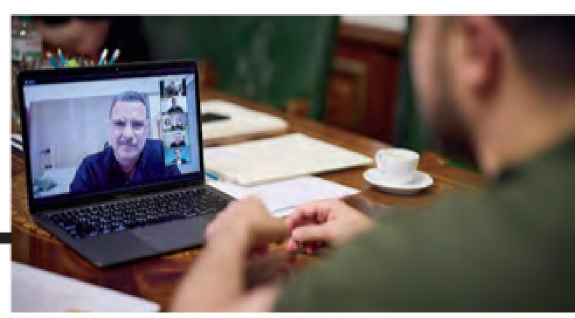
Forbes Spain's Best Gamers issue spotlights Rubén Doblas Gundersen, known as "El Rubius" to fans. The 32-year-old streamer and vlogger from Mijas, in southern Spain, counts 40 million YouTube subscribers–far more than global superstars Lady Gaga and Beyoncé.

UAE

Since taking the helm of Abu Dhabi's International Holding Company in 2019, Syed Basar Shueb has diversified its portfolio, driving its stock price from 27 cents to $75 and making IHC the most valuable company in the Emirates.

UKRAINE

UNITED24, the state-run fundraising platform to support the country during wartime, has collected more than $144 million from 90 countries since launching in May. Hollywood actor Liev Schreiber, among other celebrities, has signed on as an ambassador of the initiative.



JAPAN: JAN BUUS; KAZAKHSTAN: DANIL POTAPOV-POLICHINSKY; LATVIA: EDMUNDS BRENCIS; MONGOLIA: S.BATSAIKHAN FOR FORBES MONGOLIA; PERU: TALENTLY; POLAND: MAREK ZAWADKA; SLOVAKIA: ONDREJ PYCHA; UKRAINE: UNITED24

Conversation

STARS OF STRIPE

Creative destruction being entrepreneurial capitalism's coin of the realm, the appearance of billionaire brothers John *(above left)* and Patrick Collison on our June/July cover would seem apposite. The Irish brothers have built their online payment processor, Stripe, into a privately held fintech behemoth recently valued at $95 billion. Yet dark economic clouds and relentless competition mean nothing is secure. (Indeed, Stripe reportedly cut its internal valuation by more than a fourth after our story went to press.) The Collisons outlined their plan to navigate choppy seas ahead, including expanding into new markets and fresh tools for their existing user base. Readers were divided. Stripe is "fat and ripe for disruption, methinks," tweeted @3rdJanuary2009. Others scoffed at the contenders nipping at the brothers' heels: "Plaid is not going to disrupt Stripe," riposted @JashSayani. Some wise tech elders, meanwhile, have faith. On Twitter, Asana's Dustin Moskovitz (late of Facebook) was fulsome: "Whenever people ask me about CEOs I respect the most, I start with @patrickc. And that's just half the story."

GAS PAINS

In "Over a Barrel" (June/July), we examined the ongoing global energy crisis, bruited the possibility of $8-a-gallon gasoline (West Coasters almost experienced exactly that shortly after) and weighed the pros and cons of nuclear, solar, wind—even firewood. Readers reacted with mordant wit, weary fatalism and—how dare they!—comparisons of the U.S. to high-fuel-tax countries across the Atlantic.

@INDIGOOFFSPRING: "Welcome to the United Kingdom. Will you be staying long?"

@GOOEYMANMEDS: "You spelled $15 wrong."

PEYTON SMITH: "Nuclear is great, but my vehicle can't use it. Neither can the trucks and farm equipment that deliver our food and goods. Nor the trains. Frankly, there isn't a near-term alternative."

@SAIKOHCODER: "'Get Ready for the Next Recession.' There, I fixed your article's title."

@MSELDY: "There is no shortage of oil on this planet. High gas prices are a man-made problem."

CHRISTIAN CASTILLO: "Glad I didn't sell my Harley."

THE INTEREST GRAPH

1,720,900 The New Youngest Self-Made Billionaire

387,618 The World's 10 Highest-Paid Athletes 2022

320,148 Facebook Made This 29-Year-Old Rich. War Made Him a Billionaire

222,365 Get Ready for $8-a-Gallon Gas

166,984 The Collison Brothers Built Stripe Into a $95 Billion Unicorn with Eye-Popping Financials. Inside Their Plan to Stay on Top

96,537 How Selling $160 Sweatpants Turned a SoCal Surfer Into One of America's Richest Women

62,858 How Two Africans Overcame Bias to Build a Startup Worth Billions

11,432 **THE BOMB:** Beat the Market by Investing in Freedom–and Shunning Places Like Russia and China

BY EMMY LUCAS

THE VALUE OF HISPANIC INCLUSION

by JUDITH L. TURNOCK

HACR President and CEO Cid Wilson likes to articulate the business case for Hispanic inclusion by asking audiences:

"If I were to describe an ideal country for expanding your business:

- the seventh-largest economic power with a GDP of $2.7 trillion denominated in dollars and therefore devoid of currency risk;
- a place with a strong regulatory environment so there is no sovereign debt risk;
- a G20 country that is English dominant and the second-largest Spanish speaking economy in the world; and
- a youthful, fast-growing country with an average age of 28 and mode age of 11.

"Would you want to expand your business into a country like that?

"Everyone says, 'Of course!'" Then he tells them, "Well, I just described to you the US Latino community.

"Hispanics taken as a whole represent a stable and growing investment for multinational corporations. Yet corporate America is way behind when it comes to advancing Hispanic inclusion. We know many companies that get it, but we know we have more to do."

HACR
HISPANIC ASSOCIATION ON CORPORATE RESPONSIBILITY

HACR's Vision and Strategy

Over its three-plus decades of existence, the Hispanic Association on Corporate Responsibility (HACR) has earned premier status as the foremost advocate for Hispanic inclusion in corporate America at a level commensurate with its economic contributions. This mission has made HACR an increasingly influential part of the national conversation on diversity, equity and inclusion (DEI). HACR's work stands on the foundation of its board, comprised of 14 national Hispanic advocacy organizations, 115 corporate members and growing, and thousands of leadership advancement program participants over the decades.

What is HACR's strategy for the next couple of decades? Declares Wilson, "Nothing short of significant impact. Corporate America—large, midcap and small companies, publicly traded and private—needs to reflect our fast-growing community."

Is the vision overly ambitious? Not at all. It is a well-timed message to corporate America. The US Census projects that in just over two decades, by 2043, the US Hispanic population will exceed 30%, and the combined "minority" population will have become the majority. "Demographics is the train that's driving the economy of the future," declares HACR Board Chair Ramiro Cavazos, also chair and president of the US Hispanic Chamber of Commerce.

> "Companies that fail to recognize the changes will find themselves at a permanent disadvantage."

"People of Hispanic origin are a powerful economic block with the ability to bring very talented staff to diverse solutions—and benefits as they serve clients," agrees Julio Portalatin, a retired CEO of Mercer LLC currently serving on multiple major corporate boards, including State Street. He is a longtime supporter of HACR and a regular presence at its events.

In fact, Wilson warns, "Companies that fail to recognize the changes, will find themselves at a permanent disadvantage."

Cid Wilson, HACR President and CEO

"From Assimilation to Acculturation"

What HACR has in mind is changing the corporate environment "from assimilation to acculturation." What exactly does that mean? "When we hear companies say, 'We need to do a better job of finding qualified candidates who are a fit,' 'qualified' and 'fit' are code words that I call excuses," reports Wilson. "A company that wants to stick to its old-fashioned assimilation strategy in a growing multicultural country will not be able to retain talented employees. Companies need to create a culture of 'belonging' for Latinos and all people of color. That's how to foster greater retention."


Julio Portalatin, retired CEO of Mercer LLC

"That's not an easy sell in today's environment of assimilation," adds Portalatin. "Just scan the executive committee members and board members of major companies. You won't see a lot of diversity there, so how would members possibly know what Hispanics or any other people of color are really thinking?"

After his long corporate career, Portalatin can recognize and capitalize on teachable moments, like the murder of George Floyd. "That galvanized interest among senior leaders and prompted them to ask for some difficult conversations. They wanted to listen and learn how employees truly viewed their companies, and when they did, there were many surprises.

"They began to realize—and to feel—the difference between assimilation and acculturation. Leaders said to me: 'I can't believe this is the environment we have created for people of color.' And let's be honest," he continues, "they didn't know because it wasn't that important to them. Not like knowing if they missed their revenue and profit targets in any quarter."

"Getting into the Room"

HACR has built a reputation for making opportunities to engage with potential partners and supporters in the US and abroad, both to deliver its message about the value of Hispanic inclusion directly to the CEOs and to influence conversations in the spaces that have historically lacked diversity. Four years ago, Wilson showed up at the ***World Economic Forum in Davos, Switzerland***, and made a name for himself by asking questions at panel discussions—he calls it "disruptive tactics—getting into the room."

"Just because corporate executives go overseas," Wilson explains, "doesn't mean they can stop thinking about their commitment to diversity and inclusion." Now he is invited to meetings and to serve on panels, and, reports Portalatin, "He even sponsors panels. He's earned influence with a more global audience."

Over the last two years HACR has added the ***Milken Institute Global Conference***, the ***Aspen Ideas Festival***, the ***Cannes Lions International Festival of Creativity*** and the ***Code Conference*** to its engagement strategy. "Our goal," reports Wilson, "is to be visible and vocal where the executive decision makers are, so we are talking to those who need to hear from us about why advancing Hispanic inclusion is important to every single company."

Cid Wilson at Davos

Gisel Ruiz presenting at the HACR Latina Empow(h)er Summit™

As a company moves along the transition from assimilation to acculturation, Portalatin finds "the continuing internal conversations become much less emotional and much more pragmatic. And really listening makes sustained commitment possible."

Adds Cavazos, "It's not a sideline anymore—corporate social responsibility; it's a business imperative, a clear bottom-line advantage."

The assimilation-to-acculturation transition cannot be documented by stories alone.

> "There is a crisis of sponsorship...and when it comes to Latinas, it's really an emergency-level crisis."

Measuring results on DEI goals is necessary, and progress there proves progress on acculturation.

Below are some of the key actions HACR considers necessary to accompany the path from assimilation to acculturation—and to a company that is positioned for success in the business world of the future.

Crisis of Sponsorship

"There is a crisis of sponsorship, really a lack of sponsorship for Latinos," warns Wilson, "and when it comes to Latinas, it's really an emergency-level crisis." Hispanic representation in the C-suite and the boardroom, after decades of advocacy, remains depressingly small. "According to our Alliance for Board Diversity (ABD) Missing Pieces[1] report," says Wilson, "only 4% of board seats on the largest 500 corporations are held by Latinos, and merely 1% by Latinas. Less than 4% of Latinos are CEOs, and Latina CEOs barely register. As chair of ABD for the next two years, I really hope we can increase sponsorships and improve those statistics."

"Sponsors give voice to talent that otherwise might be lost," explains Gisel Ruiz, retired Chief Operating Officer of Walmart US and Sam's Club, who rose up the ranks of Walmart over a 25-year period. She is now a member of multiple boards, including Ulta Beauty and Univision. "Their vocal, visible advocacy highlights talent." Without those highlights, most Latinos and Latinas will not move into higher-ranking roles. They will not see or become role models, they will figure

[1]Missing Pieces Report: The Board Diversity Census of Women and Minorities on Fortune 500 Boards, 6th edition, Alliance for Board Diversity (ABD) and Deloitte, 2021. ABD is a collaboration of HACR, The Executive Leadership Council, Catalyst and Leadership Education for Asian Pacifics, to advance the inclusion of women and people of color on corporate boards.

Ramiro Cavazos, HACR Board Chair

out they are not valued, and they will look for other employment.

Wilson concludes, "If we do not incorporate intentional sponsorship into pipeline development strategies for moving Latinos, Latinas and all people of color up the corporate ladder, we will have the same conversation over and over, 10, 15, 20 years from now."

Cid Wilson addressing HACR Young Hispanic Corporate Achievers™ program participants

Positioning the Chief DEI Officer

One way to demonstrate an interest in diversity, equity and inclusion (DEI) is to hire a Chief Diversity Officer. Most of the largest companies do indeed have CDOs, but many still fail to recognize hiring is only the first step. "It's not just check-the-box and we're done. You have to look at the structure of your diversity strategy," advises Wilson.

"That strategy can't be buried inside an HR function, or any single function," reports Ruiz. "It has to be woven into your business strategy and into the responsibilities of every executive. And having a CDO with cross-functional experience and full P&L responsibility adds credibility."

Wilson goes farther: "The CDO should report directly to the CEO and sit on the Executive Committee." Portalatin agrees: "The CDO and the committee members all have to be accountable for DEI, the same way everyone there is accountable for earnings and revenue. It's that important."

"The CDO should report directly to the CEO and sit on the Executive Committee."

"Of course it's important for the CEO to state that DEI is important," says Portalatin, "but that's not enough. You have to bring everybody along for the journey, and that means generating excitement from the bottom up. All employees have to feel a sense of purpose, and leaders have to have a sensitivity to what's really happening."

Building the Pipeline

HACR sponsors a series of educational programs. "Decisions are made at the top," explains Cavazos, "so developing talent is a big part of what we do."

(continued on page 6)

Elevating Hispanic-Latino Wealth

LIKE MANY HISPANIC-LATINO FAMILIES seeking a better life, each of our respective parents made great sacrifices to secure a brighter future for us. They worked long hours to give us access to opportunities they never had, paving the way for our success.

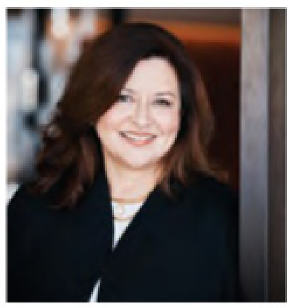
That work ethic and commitment to help the next generation succeed is the very essence of the American Dream. It has also helped make Hispanic-Latinos the fastest-growing wealth segment in the United States, accounting for $2.7 trillion in annual GDP.

For many Hispanic-Latino families experiencing first-generation wealth, there's an opportunity to empower them with education and tools to navigate the complexities of success. We speak with many clients who struggle to balance family priorities while transferring wealth, living their legacy or leaving a business to the next generation. Bank of America's proprietary research shows that helping families through the hard work of managing wealth is not just the right thing to do—it's essential to building transformational wealth.

Our experience growing up in Chicago and New York City, cities with large Hispanic-Latino communities, fuels our passion and sense of responsibility to **plant the seeds of success early**. We are proud to work for Bank of America, which is committed to investing in our communities by driving racial and ethnic equality, economic opportunity and upward mobility.

Bank of America is the bank of choice for millions of Hispanic-Latino Americans, serving 12.7 million Hispanic-Latino clients. We actively invest in organizations that provide growth capital to Hispanic-Latino business owners and drive career development opportunities for Hispanic-Latino professionals. Our company's award-winning **Hispanic-Latino Organization for Leadership & Advancement (HOLA)** employee network promotes inclusion, teamwork and professional development for nearly 20,000 members.

These and many other initiatives are how Bank of America helps Hispanic-Latinos achieve their dream of a better life. We believe that to elevate the next generation of Hispanic-Latinos, we need to empower them at **each stage of the wealth continuum**, from their first checking account to building their financial acumen to sophisticated advice that helps them build a bridge to long-term wealth. This is how we can create positive impact for our communities from the ground up.



Geena Mayback
Managing Director, Senior Market Executive New York City, Bank of America Private Bank

José Tavarez
President, Bank of America New York City
Vice Chair, Head of Wealth Management Advisory, Bank of America Private Bank

[1] Source: L'Attitude Fact Book, 2018
[2] Source: Merrill Diverse Viewpoints, July 2021

A CONVERSATION WITH

PEDRO PIZARRO

President and CEO, Edison International

Cid Wilson: How were you able to balance your Latino authenticity with Edison's corporate culture?

Pedro Pizarro: It's just who I am. Kid from Puerto Rico, grateful for my roots, grateful for my history and traditions. I was comfortable in my own skin, and I always felt accountable to the next generation, encouraging them to see the world as open to them.

CW: Beyond that personal responsibility, why are you interested in advancing Hispanic inclusion?

PP: That's easy. Almost one-third of our customers at our Southern California Edison utility are Hispanic or Latino. SCE needs an employee base that reflects that community, so we have the right perspective. That means sponsoring Hispanic employees so they move up the ladder. They need to be connected with someone who will tell them honestly, "Here are your high spots, but this other spot is a little weak." Inside knowledge and inside support create opportunities.

CW: And from the opposite perspective, what do we bring to company leaders?

PP: You need to hear honest voices, and you need to respond to what they're saying. Be transparent. We publicize our actions, responses and results in our DEI reports. You need diversity from the board on down.

> "You need to hear honest voices, and you need to respond to what they're saying... You need diversity from the board on down."

CW: Speaking of the board, how does diversity there benefit Edison International?

PP: Eight out of 11 of our board members are diverse in terms of gender, race or ethnicity. And our members all come with diverse professional backgrounds: public policy, legal, finance, safety and operational. We have all the elements in the room for broad discussions leading to the best support and oversight for Edison.

And Cid, thank you for what you do. Your support matters.

(continued on page 8)

Gender Parity at PepsiCo

Gender parity is a cornerstone of our robust diversity, equity and inclusion (DEI) agenda. Our goal is to achieve 50 percent women in managerial roles by 2025. The key to achieving our goal is supporting employees in building successful and fulfilling careers, while doing our part to support them through different stages of their life and career. The following are a few ways we are supporting our associates:

PROVIDE GREATER FLEXIBILITY THROUGH OUR BENEFITS & POLICIES:

- Facilities. In more than half of our locations worldwide with 500 or more employees, we have dedicated mother's rooms, wellness rooms or alternate space available for nursing mothers.

- Policies. We've also established policies for associates—in partnership with their manager—to have the flexibility to choose location based on role, work activities and team.

DEVELOPMENT AND RETENTION TRAININGS:

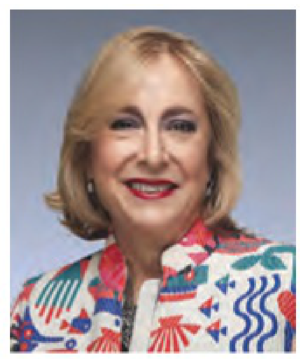
- In Latin America, our INSPIRA Talent Development Program helps to build female bench, drive engagement and reduce turnover by offering manager and executive women tools, knowledge and experiences to accelerate their growth.

BUILDING RESILIENT WOMEN-OWNED BUSINESSES:

- Our female-founded Stacy's Pita Chips brand launched the Rise Project, a program dedicated to helping women grow their businesses through funding, mentorship and community. To date, Stacy's has invested more than $300,000 to #HelpWomenRise.

AGRICULTURE AND FARMING INITIATIVES:

- In partnership with CARE, PepsiCo is supporting She Feeds the World, a program that trains female farmers around the world in everything from increasing crop yield to providing nutrition resources, so they can be successful. When we invest in women farmers, it helps uplift communities and create a more sustainable food system that benefits everyone.



Paula Santilli

CEO, PepsiCo Latin America

Leading the company's food and beverage businesses for Mexico, South America, Central America and the Caribbean

Today there are 43% women in managerial roles globally.

Our goal is to achieve 50 percent women in managerial roles by 2025.

PEPSICO

Cid Wilson addressing HACR Executive Programs participants

HACR's award-winning **Young Hispanic Corporate Achievers™** program, now entering its 16th year, Wilson reports, "has produced more C-suite leaders than any other advancement program for Latinos in the US." A selective admission process once a year chooses up to 75 participants, ages 25-40, who spend two months training in culturally inclusive leadership advancement. The HACR **Leadership Pipeline Program** positions mid-level managers for executive positions. The HACR **Executive Programs** accelerate the careers of senior-level executives, those in or ready for C-Suite roles and those looking for board membership. A newer offering, **Latina Empow(h)er Summit™**, is a three-day program specifically for Latina senior leaders.

> "CII [is] a barometer: a way of measuring and shaping a corporate identity of investing in our Hispanic community."

The annual best practices HACR **Symposium: The Power of Hispanic Inclusion™**, to be held this year in Los Angeles, September 26-28, is the Symposium's 30th year. The Symposium convenes corporate and industry thought leaders to discuss best practices, including the findings of the 2022 HACR **Corporate Inclusion Index™** (CII).

HACR Corporate Inclusion Index™

Every year HACR, through its Research Institute, conducts a survey of corporations to benchmark, measure outcomes and design a roadmap for improving their DEI results. The HACR CII reports progress and opportunities for improvement on HACR's four pillars of economic reciprocity: employment, procurement, philanthropy and governance. The 2022 CII, set to be released at the 2022 Symposium, will provide a picture of the most recent data and analyses, trends and changes affecting Hispanic inclusion. Cavazos calls the CII survey "a barometer: a way of measuring and shaping a corporate identity of investing in our Hispanic community."

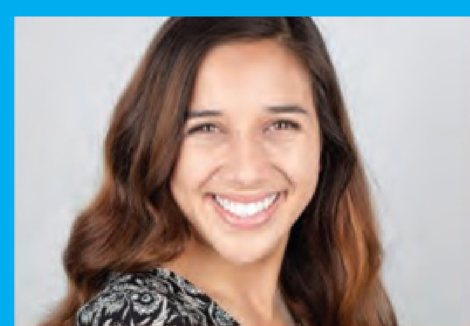
Ruiz has the last word: "I would love more companies to reach out to HACR. Cid and his team bring a wealth of knowledge and experience to solving problems—a wonderful resource."

Visit www.hacr.org for a wealth of information, including a copy of the 2021 Corporate Inclusion Index.

HACR HISPANIC ASSOCIATION ON CORPORATE RESPONSIBILITY

Aileen Iniguez was in sixth grade when she saw a flyer posted on a school hallway. It said "Free Pizza" to anyone who came to the first day of an afterschool STEM education program called Techbridge Girls, supported by Chevron.

the human energy company™



Even Aileen didn't know then that a slice of pizza was about to change her life.

Now, 15 years later, Aileen works as an analytics analyst in the IT Engineering, Data Science & Analytics Chapter of Chevron. But it was that first day at Techbridge Girls that opened a world of possibilities in STEM for her.

"I figured I'd give it a try and go for the pizza," said Aileen. Along with her parents, Mexican immigrants, and two siblings, Aileen grew up in a low-income East Oakland neighborhood. "At that time, I didn't know what STEM was, but I fell in love with it immediately. Just being in a study atmosphere with other women and girls of color was thrilling, and I warmed to the idea of science being fun."

Aileen remained in the Techbridge Girls program throughout high school and went on to the University of California, Berkeley, where she graduated with a degree in Applied Mathematics. During her job search, Aileen reached out to her network from Techbridge Girls, who connected her with Chevron.

Aileen is currently nearing completion of an early career development program named Horizons, where select employees in technical areas go through intense and rigorous training, mentoring and job experience.

"I can't say enough about the importance of Chevron's partnership with Techbridge Girls and the ways in which it helps develop the STEM skills of women like myself with nontraditional backgrounds," said Aileen, who now serves as an advisor and mentor at Techbridge Girls.

a slice of science

powering human energy with inclusion

At Chevron, we value the unique experiences that drive us all to be our best, authentic selves every day. With our 11 employee networks, we are committed to empowering employees through an inclusive culture that promotes authenticity – leading to more open collaboration and greater ingenuity.

Somos, our Hispanic employee network, puts its focus on engagement programs that create meaningful opportunities for current and potential Hispanic employees.

Fueling a brighter future

The Somos network continues to grow its 20-year legacy of accelerating the inclusion and professional development of the Hispanic community through year-round initiatives.

The Hispanic Outreach and Language Assimilation (**HOLA**) program supports recruitment efforts to drive advocacy and leadership in the Hispanic community. Its mission is to harness the power of heritage in promoting a culture of belonging, where the voices of the community can shine through.

To employ and advance more Hispanic talent into influential leadership roles, Somos developed the **Chevron LatinX Leadership Program**. The program focuses on creating cultural awareness and developing the social capital needed to lead strategic thinking, innovation and change at enterprise levels.

Exposing children to STEM learning opportunities early in life fuels their passion for STEM careers in the future. Somos' **Virtual STEM** Night, in Lost Hills, California, demonstrated hands-on STEM projects using basic household items. The event helped promote access to the world of science, technology, engineering and math to young children from underrepresented communities.

Josetta Jones, Chief Diversity & Inclusion Officer

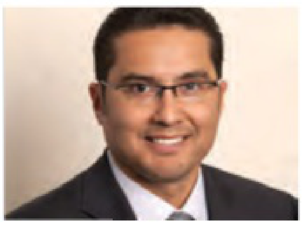
"There is power and strength in our history, and Somos has been vital to our legacy of success over the past 20 years. They will play a vital role in developing Hispanic talent essential in fostering greater innovation and ingenuity."

Creating opportunity through inclusion

Chevron's diversity and inclusion programs foster a workplace that encourages open conversation and builds authentic connections – within the organization and out in our communities.

Find out more about our efforts: https://www.chevron.com/sustainability/social/diversity-inclusion

the human energy company™



Uriel "Ose" Oseguera
VP, Upstream Finance

Glenda Valero de Silano
HR Director, Upstream

John Sanclemente
Director, Wells, Chevron Upstream, North America

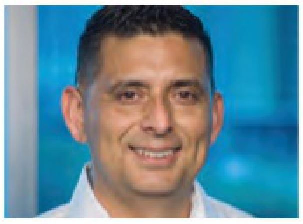
Claudia Graham
GM, Research and Development, Chevron Technical Center, Downstream Technology Services

Walter Perez
GM, Country Operations, Chevron Upstream, Eurasia Pacific

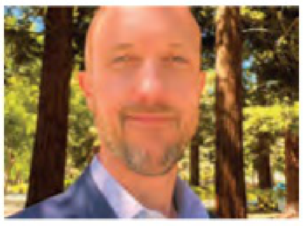
Ana Simonato
GM, Business Support Services, Chevron Upstream, North America

Monique Velasquez
GM, Exploration, Chevron Upstream, Upstream HQ

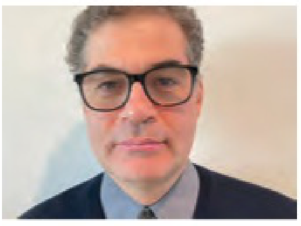
Moises Abraham
Sr Manager, Facilities Engineering, Chevron Technical Center, Facilities Design and Solutions



Aldo Aguilera
Deputy Manager, Petropiar Upgrader, Middle East, Africa, South America, MEASA



Ezequiel Massaglia
Sr Manager, Strategic Planning, Chevron Upstream, MEASA



Juan Munoz
Sr Manager, Reservoir Management, Chevron Upstream, North America

Raul Ramos
Manager, Operations & Tech Petroboscan, Chevron Upstream, MEASA

Lorraine Reyes
GM, Plant Operations, Downstream and Chemicals, Manufacturing

Luis Nino
Manager, HR Digital Office

Angel Uruchima
President, Somos Employee Network


The good
in you can
live on.
Your story doesn't have to end with you – pass along the gift of life.
Sign up online as an organ, eye, and tissue donor.
DEPARTMENT OF HEALTH & HUMAN SERVICES · USA
organdonor.gov
HRSA
Health Resources & Services Administration

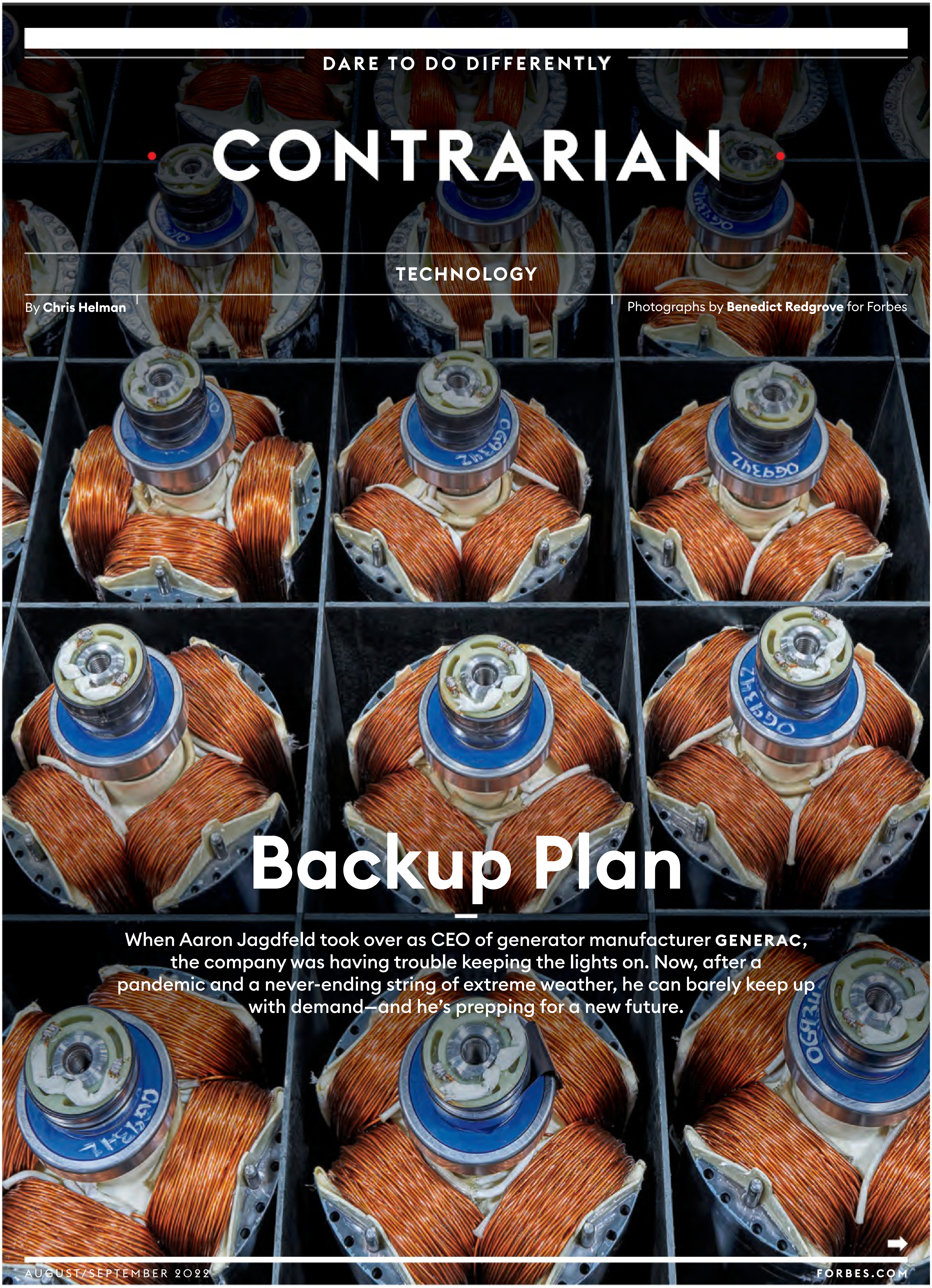
DARE TO DO DIFFERENTLY

CONTRARIAN

TECHNOLOGY

By **Chris Helman**

Photographs by **Benedict Redgrove** for Forbes



Backup Plan

When Aaron Jagdfeld took over as CEO of generator manufacturer **GENERAC**, the company was having trouble keeping the lights on. Now, after a pandemic and a never-ending string of extreme weather, he can barely keep up with demand—and he's prepping for a new future.

In 2008, things were looking grim for Generac. The 49-year-old firm, which makes natural-gas-powered backup generators, had been acquired a couple of years earlier by CCMP Capital, a New York City private equity shop. To buy out the 81-year-old founder's 70% stake, CCMP had loaded up the Milwaukee-based firm, which had just $700 million in sales, with $1.4 billion in debt.

The timing was terrible. In 2006 and 2007, only one hurricane (a big driver of generator sales) made landfall on the U.S. mainland. Then the housing crash and Great Recession scored direct hits, cutting Generac's earnings by a third *before* debt service and merger-related charges. CCMP was forced to pony up more cash to prevent a technical debt default and tapped Aaron Jagdfeld, a 33-year-old accountant who had risen internally to CFO, to take over as CEO.

The young bean counter had a surprising solution: Get more aggressive. After buying in some debt at 50 cents on the dollar, he took the company public in 2010 and began a string of acquisitions (25 since 2011). First, he bought into peripheral businesses such as cellphone transmission and outdoor light towers. Then he made additional acquisitions to realize a vision of the home as an energy efficient "virtual power plant" capable of not only keeping the lights, heat and refrigerator running when the power grid goes down, but also of selling juice back to utilities as part of a microgrid.

Demand for Generac's $20,000 generators has surged, helped along by extreme weather events, the deterioration of the nation's power grids and the pandemic, which Jagdfeld says has turned homes into sanctuaries. Between competitors' troubles (archrival Briggs & Stratton went bankrupt in 2020) and its own efforts, Generac now has an 80% market share in home backup generators and a six-month order backlog.

Over the 12 months ended March 30, the company did $4.1 billion in sales and $1.8 billion in gross profit—both double pre-pandemic levels. Non-generator sales now account for 20% of revenue. Since the company went public at $13 a share, Generac stock has been on a wild ride. It spiked to an incredible $498 last October and is now back at $250—still a hefty 33 times trailing earnings per share. Debt is a manageable 6% of enterprise value, compared to 80% after the IPO. (Jagdfeld's personal holdings are currently worth $150 million. CCMP sold out in 2013 at a profit.)

But with new housing starts falling and inflation-battered consumers growing wary of spending five figures for a machine they'll turn on only a couple times a year, Jagdfeld expects the order backlog to shrink. That's why he's got a backup plan.

Rather than selling "a product people hope they never use" and buy only after a natural disaster or grid failure, Jagdfeld wants to start marketing an "energy independence" package pairing gas, solar and batteries, all optimized with machine learning software that manages your heating and cooling with an eye toward making you money. "AI will help you export power," he says. "Your power is going to be delivered and consumed in ways you can't imagine today." F

Machine Learning

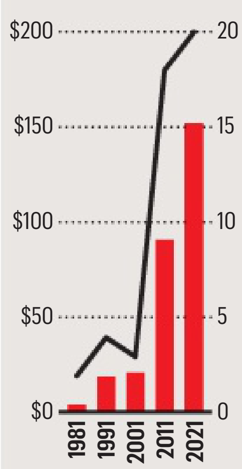
CEO Aaron Jagdfeld at Generac's Whitewater, Wisconsin, plant, where he started as an accountant and even worked some shifts on the assembly line.

Little Big Picture

RAIN CHECKS

It's not your imagination. The weather is getting worse. Last year there were 20 "billion-dollar" climate disasters in the U.S.—mostly superstorms and hurricanes—ten times more than in 1981. These ten-figure calamities cost nearly $153 billion—48 times as much as four decades ago, even after adjusting for inflation.

Inflation-adjusted cost (in billions)
Number of Disasters*



* *Includes wildfires, hurricanes, floods, winter storms, freezes and droughts.*
Source: National Oceanic and Atmospheric Administration

FINAL THOUGHT

"A WISE MAN FIGHTS TO WIN, BUT HE IS TWICE A FOOL WHO HAS NO PLAN FOR POSSIBLE DEFEAT."
—Louis L'Amour

COLORADO

FAVORABLE CLIMATE FOR STELLAR VENTURES

Colorado has an advanced, diverse and growing economy. "Opportunities exist for all here, especially those with innovative ideas and novel solutions in advanced industries," says Michelle Hadwiger, Global Business Development Director, Colorado Office of Economic Development and International Trade (OEDIT).

by SUSAN H. BURNELL

FitSmallBusiness.com ranked Colorado as the #1 state for women entrepreneurs in 2020.

Colorado's economic success story revolves around a solid core of tech talent that is about 50% more concentrated than the nation's and among the top five for STEM employment. Over the last five years, technology-related industries grew annually by about 4.2%, compared to industry growth of 3% nationally.

Entrepreneurial Ecosystem Attracts Venture Capital

Colorado set records for capital expenditure in 2021, with $6.8 billion invested, 583 venture deals and a 2.2x increase in VC funding. The state ranked 7th in the U.S. for total VC deals and total amount of capital invested.

The biggest VC deal in Colorado history so far is the 2021 spinoff of Sierra Space from Sierra Nevada Corporation. The deal will accelerate development for the revolutionary Dream Chaser Spaceplane and Large Integrated Flexible Environment (LIFE) Habitat.

Women-Owned Companies Gain Momentum

Female-led startups in Colorado made significant gains in venture backing last year, raising $1.02B in 2021 compared to $146M in 2020. Three of the top 10 largest deals were female-founded companies.

FitSmallBusiness.com ranked Colorado the #1 state for women entrepreneurs in 2020—a jump of 20 places from 2019. The surge was credited to a competitive corporate tax rate, access to technology meccas, and women's empowerment initiatives including The Women's Foundation of Colorado, The Women's Collaborative for Colorado, and the state's Minority Business Office.

"Colorado is a progressive state that offers a fantastic quality of life, so it makes sense that many entrepreneurs have called it home," says Rozhin Eskandarpour, Ph.D., CEO and Founder of Resilient Entanglement. RE is the first global women-owned R&D firm in the Quantum-Grid (QG) field.

Guild Education moved from San Francisco to Denver in 2016. "Denver offers family-friendly support syste—high quality childcare options, safe neighborhoods and schools near the office, and a community of smart women for our leadership team," says co-founder and CEO Rachel Romer Carlson. In June 2022, Guild announced a new $175 million Series F financing round, bringing the company's valuation to $4.4 billion. One of Colorado's first unicorns, Guild offers an online educational platform to help companies reskill and retain workers.

Access to Markets, Talent and Funding

From Denver International Airport, executives and company personnel can reach any major U.S. city in four hours. DEN offers direct routes to 28 international destinations in 12 countries, including London, Paris, Tokyo, Frankfurt, Toronto, Mexico City and São Paulo.

Another efficiency benefit of a Colorado-based business is the region's Mountain Time Zone, which allows for same-day communications with Western Europe and East Asia during normal business hours.

Access to resources is another reason executive decision-makers choose Colorado. "As a female investor and entrepreneur, I have come to the conclusion that access is one of the most important elements for a business to thrive," says Eskandarpour. "Businesses here have access to top-tier research institutions, opportunities to secure funding – particularly state-backed funding, and top talent that shares the same vision and enthusiasm."

COLORADO
Office of Economic Development & International Trade

CHOOSE COLORADO

#1 BEST STATE FOR WOMEN-LED STARTUPS

-MERCHANT MAVERICK 2022

#2 STATE TECHNOLOGY AND SCIENCE INDEX

-MILKEN INSTITUTE 2020

#3 BEST STATE FOR BUSINESS

-24/7 WALL STREET 2020

By **William Baldwin** | Photograph by **Tim Tadder** for Forbes

Risky Business

Need insurance against financial chaos? Fund vendors DAVID BERNS and PAUL KIM sell it, offering investors unconventional payouts from stocks and bonds.

Spring 2020. Paul Kim, a middle-aged father of three, with a house in the suburbs and a dependable job at a Midwestern insurance company, does something a little crazy. He quits the job in order to start his own company.

"It's one thing to jump in the early part of a bull market," he recollects, now on safer ground. "But people were freaking out. The market was tanking. It looked like a depression and a medical emergency."

In fact, the timing was not entirely crazy. Kim's enterprise, Simplify Asset Management, markets exchange-traded funds that protect portfolios from disasters like stock market crashes and interest rate spikes. The best time to sell such things is when the world is falling apart. As the pandemic unfolded, Kim persuaded himself that either he was going to start a company then or he was never going to do so and would go to his grave with regrets.

In the year it took him to wade through the paperwork of investment-company creation, the market recovered. If halcyon days had returned for good, the new venture would have been doomed. But happy times for the bulls did not

Beautiful Minds

Simplify CIO David Berns and CEO Paul Kim in Los Angeles. Their nominal headquarters in Manhattan is microscopic. Most of this pandemic-born company's talent connects virtually.

last. For Kim, providence arrived this year in the form of a simultaneous retreat in both stock and bond prices.

That dual collapse delivered quite a shock to retirement savers who had been led to believe that bonds would balance out the hazards of stocks. They were desperate for a different kind of risk reduction. This is what Simplify sells.

One of Kim's funds, the Simplify Interest Rate Hedge ETF, makes money when bonds sink. It's up 50% this year. Another of his funds, which owns stocks along with partial insurance against bear markets, is down this year only half as much as the stock market. Simplify has hauled in $1.4 billion to its lineup of 21 funds, each offering an atypical pattern of risks and rewards, in stocks, bonds, commodities and cryptocurrency.

Kim's cofounder and junior shareholder in this fling is David Berns, trained as a physicist. Like Kim, Berns is an escapee from the insurance industry. But they have had rather different career paths. Kim, 45, has the predictable Ivy League undergrad (Dartmouth) and Wharton MBA degrees you'd expect for a product manager at Pimco and then Principal Financial Group. Berns, 43, is the son of two New York City police officers and says he would have joined the force if not for his mother insisting on typing out for him an application to one college, Tufts.

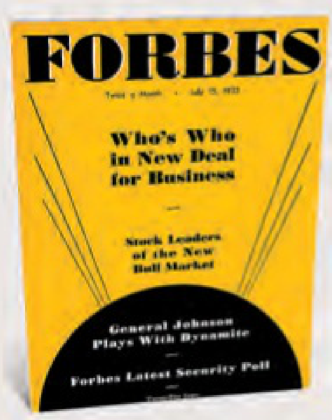
Berns got a degree from Tufts and then, in 2008, a Ph.D. in physics from MIT. His dissertation was about using superconducting circuits to make the quantum equivalent of a transistor. Classmates took jobs researching quantum computers, devices that might someday conquer mathematical tasks beyond the reach of ordinary machines. Berns veered off into theories of portfolio construction.

Physics, money—are there connections? There

The Vault

BOTTOM DOLLARS

Even the Great Depression was a boom time—for the few positioned to profit off market misery. Take Floyd B. Odlum, the "quiet, spectacled, sandy-haired financial genius" who sat out the 1929 bull run, predicting a crash, then amassed $100 million ($2.3 billion in today's dollars) scooping up distressed investments for pennies on the dollar after Black Tuesday.



If you had wanted to run $1,500 up to $10,000 during the past four years, you would have had to do just about what Odlum did. Only he started with $15,000,000 and now controls $100,000,000! He believes in spreading risk by diversification; his portfolio includes banks; utilities; chain stores; farm machinery, petroleum, biscuit, shoe and automobile companies. "But," he says, "in times like these you've got to do something else than just sit on a portfolio." When investment trust shares were kicking around the Street at as low as 50 per cent of their actual value, it was not difficult for a skillful negotiator like Odlum to buy control quietly.

—Forbes, July 15, 1933

are. The diffusion of heat over time, for example, parallels the diffusion of stock prices. Putting his research into practical terms, Berns explains that it's all about risk and how people perceive it.

Kim and Berns were taking a risk when they started a firm without an angel backing them. Maybe Kim was trying to prove something. He came to the U.S. at age 4. His parents, now retired, started out with a fruit stand in Queens, New York, and eventually built a wholesaling business. If they could succeed as entrepreneurs, surely he could. He says of his work launching ETFs at Pimco: "Once you've built a $20 billion platform, what do you have? You don't own it. It's just a job."

The duo raised enough equity from family and friends to get the business off the ground. At the half-billion-dollar mark in assets they had enough credibility to land outside money. A billionaire Kim doesn't identify stepped up with $10 million for a 25% stake.

The rate hedge fund, which has $296 million, consists in large part of bets against Treasury bonds. It owns out-of-the-money put options that hit pay dirt if, six years from now, 20-year Treasurys are yielding a percentage point more than they are currently.

Rates don't have to move past the strike point of those options for the options to become more valuable. When interest rates rise, as they have this year, long-shot puts have a much better chance of paying off, and rise in price.

Simplify offers no illusion that its rate hedge fund is, by itself, a way to make money. It's more like fire insurance. Own some of it alongside a more conventional fixed-income asset, like a portfolio of long-maturity municipal bonds, and holding onto that asset through bull and bear markets becomes more tolerable.

A different sort of strategy is built into Simplify Hedged Equity ETF. This one has the put-option antidotes to bear markets already added to the S&P 500 portfolio they're designed to protect. The combination is intended to compete with that old standby of pension investing, the 60/40 blend of stocks and bonds. So far this year, with the S&P down 16% and the overall bond market down 10%, Simplify's offering is looking good. Hedged Equity is down 8%; the Vanguard Balanced Index Fund is down 15%.

Investors have a warped notion of risk, Berns says, and wind up with portfolios they can't stick with during severe market moves. Their advisors don't always prepare them. Indeed, he adds, "people on Wall Street work hard to hide the risk of their products."

One culprit in this process is the nearly universal habit of measuring risk by a single number, the variance in the month-to-month moves in an asset's price. Variance adds up the *squares* of the distances stock prices move from their starting point. Berns cares about the *cubes.* Arcane? Not at all. Look only at variance, and you're going to love a strategy that combines a lot of small gains with the occasional big loss.

That's what you get, for example, in a junk bond fund or a fund that enhances its monthly income by writing call options. Stuff like this sells because it deludes investors into thinking they can enjoy low risk and enhanced income at the same time.

The calculation with the cubes, which statisticians call "skewness," puts a red flag on such strategies. It favors the mirror image of return patterns: many small sacrifices in return for an occasional big payoff. A positive skew is what you get in the $449 million Simplify U.S. Equity Plus Downside Convexity ETF, which owns puts that don't do much in a mere correction, of the sort stocks have had this year, but would kick into high gear in a crash. That pattern is right for certain investors, the ones who can handle a 20% decline but not a 50% decline.

Says Berns: "We sculpt return distributions. Options are the scalpel."

Simplify's ETFs cost more than plain old index funds but a lot less than private hedge funds offering customized return distributions. The rate hedge ETF has a fee of 0.5% a year; the hedged equity fund, 0.53%; the downside convexity fund, 0.28%.

"The ETF is a better mousetrap [than a hedge fund]," Kim says. "It's cheaper. It's more transparent. It's more tax-efficient."

Kim's 23-employee firm is not yet in the black, but he expects that it soon will be. "ETFs are like a movie studio," he says. "You're looking for a blockbuster to fund the business." He won't admit to praying for a catastrophic bear market in stocks or bonds, one much worse than what we've had, but such an event would probably deliver that blockbuster. Ⓕ

HOW TO PLAY IT

By William Baldwin

Eliminate risk from a portfolio? Can't be done, unless you eliminate return (Treasury bills don't even keep up with inflation). You can, however, dull the pain of a bear market. The **Simplify Interest Rate Hedge ETF** (ticker: PFIX; expense ratio: 0.5%) is a strong analgesic, this year moving up not quite five times as fast as the overall bond market went down. A $10,000 dose should roughly halve the damage done by rising rates to a $100,000 stake in a total bond market fund. If interest rates go back down, PFIX will be a loser, but that would be a nice problem to have, since your core bond fund will be doing well.

William Baldwin is Forbes' Investment Strategies columnist.

FINAL THOUGHT

"IF YOU AVOID LARGE LOSSES WITH A STRONG DEFENSE, THE WINNINGS WILL HAVE EVERY OPPORTUNITY TO TAKE CARE OF THEMSELVES."

—Charles Ellis

PATRICK WELSH FOR FORBES

By **Chris Helman** | Photograph by **Ethan Pines** for Forbes

Money Heap

Garbage was the ultimate commodity business until a young McKinsey consultant saw how **REPUBLIC SERVICES** could transform itself into a profit machine by pricing trash at a premium. Now he's CEO and Bill Gates is cashing fat dividend checks.

In the Sheep mountains just north of Las Vegas, the Apex landfill receives 8,000 tons of trash per day, delivered by 280 trucks that roll off the interstate before laboring up a winding dirt road to what's called the working face—an active zone of three acres where supersized bulldozers with spiked metal wheels crush and compact the trash. The heap is already 500 feet deep at spots, but there's enough room left to keep burying Sin City's garbage for centuries. Its owner, trash giant Republic Services, has a 15-year monopoly contract to collect trash and recyclables from the entire Las Vegas region.

"We prefer to call it a franchise," says CEO Jon Vander Ark, 47, who kicks back 5% of contract revenue (which runs about $250 million a year) to Las Vegas County in return for exclusivity.

Republic trucks some 28 tons a day of buffet

Plastic Profusion

CEO Jon Vander Ark, shown at a Republic recycling sorting facility in Arizona, plans to build "polymer centers" around the U.S. that can produce recycled plastic fit for food packaging.

and other food leftovers from hotels and casinos to a farm adjacent to the Apex landfill, where it's boiled into a yellow-brown stew slurped by 3,500 hogs. Other organic material rots over time and gives off methane—euphemistically called landfill gas—which Republic captures and sells at a premium to industrial users. Meanwhile, a mining company pays Republic a royalty on the 150 trucks per day of pulverized mountain stone that it hauls out of the site to make room for more loads of garbage coming in. The removed rock gets mixed into concrete for Vegas sidewalks. Next up: a new regional "polymer center" to profit from food and beverage manufacturers' willingness to pay more for high-quality recycled plastic than for virgin material.

Republic, which is based in Phoenix, operates 198 landfills, 71 recycling centers and collection routes in 41 states. After a pandemic down year in 2020, volumes recovered in 2021, helping it notch a 17% increase in net income, to $1.3 billion, on $11.3 billion in sales. Its stock, trading around $131, is down only 10% from its 2021 high, compared to an 18% slide in the S&P 500.

Vander Ark's secret? Fully embracing the concept that in his business, garbage is an asset and should be priced at a premium. "Trash is worth so much more than we ever thought," he exults. Well, more than most people thought, anyway. Even back in 2009, when he began advising Republic as a young McKinsey consultant with a Harvard Law degree, Vander Ark saw the pricing power of trash. "The pandemic underscored that the only thing we control is price. We don't control volume, and we don't create demand."

"I'm a cynic about hiring consultants from McKinsey," says Michael Hoffman, managing director at Baltimore's Stifel Investments, who has followed the garbage business since 2008. "But Jon brought something that they wouldn't have figured out. Industrial waste has never priced assets as scarce. Never maximized routes."

Early on, the young consultant convinced then-CEO Don Slager that Republic wasn't charging independent trash haulers high enough "tipping fees" to dump their loads at Republic-owned landfills. The marginal cost of adding another few tons of trash to a landfill appeared deceptively low because it didn't include the high expenses of opening new landfills. In essence, Republic was selling its future profits too cheaply.

Vander Ark argued that Republic should dramatically increase its fees. Operators that couldn't afford it would go elsewhere. Those that could pay were self-identifying as profitable enough to become Republic acquisition targets. It wasn't until 2019, Hoffman says, that Houston-based archrival Waste Management (2021 sales: $18 billion) caught up with Republic's aggressive landfill pricing.

Both Waste Management and Republic (Nos. 1 and 2 in trash) are the spawn of billionaire Wayne Huizenga, who died in 2018. He got his start hanging on the back of a trash truck, then acquired hundreds of competitors before taking Waste Management public in 1971. He left that company in 1984 and repeated his roll-up play with Blockbuster Video and AutoNation. Republic was spun out of AutoNation in 1999.

When Vander Ark arrived on the scene a decade later, Republic still hadn't moved past its roll-up roots. It operated under dozens of names (everything from Duncan Disposal to Trash Taxi) and hadn't standardized truck maintenance or fleet operations. "You don't need to fix a truck 165 different ways; there ought to be one way to do it. Uptime equals profitability. You need to have a fleet that rolls," says Vander Ark, who will even fly mechanics cross-country to keep trucks moving.

Vander Ark's approach to growth—and profit—is illustrated by Republic's just-completed $2.2 billion acquisition of U.S. Ecology, which has a market-leading 36% share in hazardous waste disposal, with five landfills that entomb chemical, medical and low-level nuclear waste. He didn't hesitate to pay a 70% premium to the pre-deal stock price for a company with lower operating margins than Republic's. That's because with hazardous waste volumes growing faster than those of normal trash, and opening new hazardous waste facilities nearly impossible, he will have the power to raise prices and expand margins.

Despite such investments, Republic pays steady dividends; its largest shareholder, Cascade Investments (Microsoft cofounder Bill Gates' personal holding company), receives more than $200 million a year in dividends from its 34% stake. Hoffman figures it's a good diversifier for Gates. "Remember, we're talking about garbage," he says. "It's capital-intensive and it's not compounding at 20% per year like software, but for the big players it's become an extraordinarily repeatable and inflation-resistant business." F

HOW TO PLAY IT

By John Dobosz

Wagering on society to keep churning out trash seems a safe bet—and unless we revert to tossing our refuse into the streets, garbage trucks have a secure future. Heil Environmental Industries has been one of the world's largest makers of specialized sanitation vehicles since 1901. Workers at its factory in Fort Payne, Alabama, weld several tons of steel and machinery atop truck chassis and roll out the customized pieces of heavy-duty compacting and carting equipment to trash haulers around the world. If you want a piece of Heil, you'll have to buy shares of **Dover Corp.**, the Illinois-based mini-conglomerate that bought into the garbage truck business in 1993. It's also a big player in pumps, winches, hoists, commercial refrigerators and equipment for automotive repair. Revenue this year is expected to grow 8.3% to $8.6 billion, with earnings up 11%. Priced at 15 times earnings, Dover trades at a 22% discount to its five-year average P/E, and its dividend yield is 1.6%.

John Dobosz is editor of the Forbes Dividend Investor *and* Forbes Premium Income Report *investment newsletters.*

FINAL THOUGHT

"JUST BECAUSE PEOPLE THROW IT OUT AND DON'T HAVE ANY USE FOR IT DOESN'T MEAN IT'S GARBAGE."

—Andy Warhol

PATRICK WELSH FOR FORBES

WOMEN ON A MISSION TO CHANGE OUR VIEW OF THE UNIVERSE

AMY LO

Northrop Grumman

Deputy Space Vehicle

Director for NASA's

James Webb Space

Telescope

Growing up, Amy Lo, aspired to be a poet. But it wasn't until she attended a high school chemistry class that the trajectory of her universe changed. The experiments "were fun, exciting, and made loud booms," said Lo.

by CAROLYN M. BROWN

Now working in a Science Technology Engineering and Mathematics (STEM) career as an engineer at Northrop Grumman, Lo is changing our understanding of the universe through the release of the first images from the James Webb Space Telescope.

Women in STEM

For generations, the brightest and most creative female minds have had the opportunity to build rewarding STEM careers at Northrop Grumman. Northrop Grumman, a pioneering technology company focused on global security and human discovery, remains steadfast in its commitment to build a world-class culture. By attracting and retaining the best and most diverse talent, they help solve their customers' toughest problems.

Among the women executives leading this company mission is Amy Lo, deputy space vehicle director for NASA's James Webb Space Telescope, the largest, most complex, and powerful space telescope ever built and successfully launched into space.

"Our team was responsible for the vehicle, spacecraft, the integration and testing, and for delivering it to our NASA partner for launch," says Lo.

Altering Humankind's Understanding of the Universe

Lo began her work on Northrop Grumman's engineering team in 2012, working on the James Webb Space Telescope. "Webb is really a game changer—from the discoveries it will make for decades to come, to the very groundbreaking design, development and build," explains Lo.

The Webb telescope is 100x more powerful than its predecessor, the Hubble Space Telescope, it was designed to fit inside a rocket and deploy in space—an engineering feat never attempted before. Webb's design features a primary mirror six-and-a-half-meters in diameter above a tennis court-size sun shield that blocks overheating. The sun shield helps keep Webb to a frigid temperature of approximately 45 Kelvin or -378.67 degrees Fahrenheit.

Lo explains that being it's an infrared telescope, "it's designed to look at objects that are very far away in the universe to detect what's known as first light—the very first stars and first galaxies born in the universe." With a seat in the control room, Lo was involved in the very early phase of operation. "I had the honor and pleasure of working on the telescope for over ten years and watching it unfold. That was definitely one of the highlights of my life."

Inspiring the Next Generation of Women in STEM

Lo views herself as a lifelong learner. After high school Lo went on to earn a bachelor's degree in physics from Brown University, a Ph.D. in astrophysics from UCLA, and has established a successful career in STEM at Northrop Grumman.

Training the next generation of engineers is the biggest challenge facing the field, says Lo. "We want to ensure that we have lots of engineers and scientists to work on the next challenges that'll be facing humanity. I think that the more folks we can get interested in science, technology, and engineering, the better."

Lo notes that there have been significant gains made in recent years in the representation of women in STEM occupations. Most notably, she points to the achievements of women in academia and the aerospace industry to include current Northrop Grumman CEO Kathy Warden.

"Our CEO is a woman and having her be our lead and the face of Northrop Grumman certainly gives myself and other women (cause) to feel like the sky is the limit," said Lo.

NORTHROP GRUMMAN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Together, we're Defining Possible.
We are proud to support our team of 90,000 pioneers. People of every race, ethnicity, culture, and identity coming together to go beyond what's possible to transform how we connect and protect our world.
NG
NORTHROP GRUMMAN
ngc.com/inclusion

By **Kenrick Cai**

Photograph by **Jamel Toppin** for Forbes

Cloud Pipe Dream

Let others worry about what it all means. FIVETRAN is proving there's a fortune to be made just by piping data from place to place.

On a brilliant summer day in August 2021, George Fraser was trying to relax at his family's lakeside cabin deep in the woods of Wisconsin. Instead, the CEO and cofounder of Fivetran was worrying about his job and the company he had spent nine long years building with his childhood friend Taylor Brown, whose family also summered in the same patch of northern pines.

The two had a great idea: Help companies gather data from all sorts of disparate sources—Twitter mentions, credit card transactions—then charge them to funnel it to a big-data analytics firm like Snowflake or Databricks, which could, ideally, tell them what it all meant. Fraser and Brown had gone through Y Combinator together. They had raised about $160 million. They had spent countless hours sweating the technical details. But they still didn't

Long-Term Relationship

Fivetran cofounders George Fraser *(left)* and Taylor Brown's families have been friends for four generations. "My great-grandparents gave his grandparents for their wedding this frog doorstop," Brown says. "It's a weird gift, but we now have it as our [company] mascot."

have a product designed for large companies.

"For years it was always the big problem we needed to solve," Fraser says. "We were looking at a multiyear journey."

One of Fivetran's board members was Bob Muglia, who had been CEO of Snowflake. Muglia knew a thing or two about the stakes. He recalls that "Steve Ballmer beat the crap out of me" after he lost enterprise customers to Oracle while a president at Microsoft. (In 2011, Satya Nadella, Microsoft's current CEO, replaced Muglia.) He spent five years building Snowflake but was shown the door just a year and a half before the company had one of the largest IPOs in Silicon Valley history. Now he was warning Fraser that time was running out. "I just railed on them," Muglia says. "I said, 'Damn, there's no product here.'"

Seated behind a desk that had belonged to his great-grandfather, who had been president of Chicago Title and Trust starting in the 1930s, Fraser stumbled upon a decidedly old-school solution to his problems. He would buy his way to viability. HVR, a competitor located in San Francisco, just across the bay from Fivetran's Oakland headquarters, had been beating them to enterprise deals. He'd heard through the tech grapevine that it was available to buy for $700 million—but only if he could line up a bid before the end of the week.

The deal would get them enterprise revenue and a product they could then work to perfect. The problem was that Fivetran, valued not much higher at $1.2 billion, did not have the cash. But Fraser did have a lot of fans in Silicon Valley—and a huge reserve of brute force persistence.

"Most folks, after several years in the wrong direction, will completely shut down the company and go elsewhere," says Y Combinator president Geoff Ralston, who endearingly counts Fivetran as one of the ultimate "cockroaches" out of more than 3,800 startups that have gone through Y Combinator. "What was different about these guys is they never believed they were at a dead end."

Fraser dialed up five blue-chip tech investment firms, including San Francisco–based Iconiq Capital and New York's D1 Capital Partners, on a Saturday and told them he needed $565 million to bankroll the deal. Within 72 hours, all agreed to wire the money. "It was a bit of a rabbit out of a hat," Fraser says. "The business leapt forward by a couple of years."

The transaction upped Fivetran's value to $5.6 billion, but HVR's roughly $30 million of revenue from large companies with big tech budgets was the real prize, giving Fivetran more solid footing than many of its peers. Many of these companies, including direct competitor Airbyte (valued last year at $1.5 billion despite earning less than $1 million in revenue), say they are now considering ways to conserve cash. "We don't have that problem because our multiple is not that crazy and revenue has grown so much," Fraser says.

The company, which lands in 27th place on this year's Cloud 100 ranking, forecasts $189 million in revenue this fiscal year (ends January), more than double last year's figure. It now counts JetBlue, Forever 21 and chicken chain Nando's among its customers. *Forbes* estimates the two cofounders each own a tenth of the company, putting their net worth at about $500 million apiece (we apply a 10% discount for private companies). Martin Casado, a partner at VC firm Andreessen Horowitz, which was a lead investor on Fivetran's last three funding rounds, touts its market lead in data pipelines as "unassailable."

The top selling point? Ease of use. "It's the most brain-dead simple thing on the planet to set up," Muglia says. But that simplicity belies a great deal of complexity behind the scenes. Originally the product funneled data once a day, at midnight. Fraser made a daily ritual of staying up and monitoring the pipes. If anything broke—and early on, "things were breaking left and right"—he would spend the next few hours fixing it like a plumber. "It's very rare that you have someone as smart as George working on a problem as mundane as this," says Casado, the investor. (Among his other accomplishments, Fraser has a Ph.D. in neurobiology from the University of Pittsburgh.)

While Fivetran's war chest—it still has about $200 million in cash on hand—may seem large enough for it to survive a venture capital winter, Fraser says he plans to raise another funding round within the next two years regardless of market conditions; after that, he plans to take Fivetran public. Failure is not an option—partly because of the small-town pressures of their tiny Wisconsin cabin community.

"You hear about what everyone is up to, and there's a whole rumor mill," Fraser says. "The unexpected consequence of starting this company was that all these people knew about it. Now we really have to make this work, or we'll never live it down."

HOW TO PLAY IT

By John Buckingham

Despite its stock being off more than 20% in 2022, cloud investors should focus on Microsoft, one of the leaders in the space. Fiscal Q3 revenues for Microsoft Cloud, which includes Azure, Office 365 Commercial and parts of LinkedIn, jumped 32% to $23 billion, nearly half of total company revenue. With a gross margin of 70% on the Cloud biz, cash is raining from Microsoft's skies. Even better, Redmond's finest funneled $12 billion to shareholders via buybacks and dividends in the most recent quarter while maintaining a cash-rich balance sheet. The pullback this year, we think, makes MSFT a reasonably priced stock with terrific growth potential.

John Buckingham is Principal, Portfolio Manager of the AFAM Division of Kovitz Investment Group and editor of The Prudent Speculator.

FINAL THOUGHT

"IT IS A VERY SAD THING THAT NOWADAYS THERE IS SO LITTLE USELESS INFORMATION."

—Oscar Wilde

PATRICK WELSH FOR FORBES

THE CISO PLAYBOOK

5 Cybersecurity Strategies For A Riskier World

By Satta Sarmah Hightower

Periods of rapid innovation test an enterprise's mettle and reveal vulnerabilities.

As businesses adopt new digital tools and platforms, they also widen their attack surface. The proof is in the numbers: Cyber incidents rose sharply between 2020 and 2021, with organizations averaging nearly 25 attacks last year.

How can businesses protect themselves while digitizing their operations and business models? To help answer that question, ServiceNow, a leader in cloud-based workflow solutions, co-sponsored a global ThoughtLab study of 1,200 organizations' security strategies. Below, Ben de Bont, ServiceNow's chief information security officer (CISO), translates key insights from the study into five concrete steps leaders can take to combat rising security threats—without sacrificing growth.

Balance Innovation & Security

41% of executives say cyber risk initiatives at their organizations have not kept pace with digital transformation.

With finite resources, no company can realistically expect optimized security in every scenario, de Bont says.

"Security takes extra time. It requires expertise. It's often hard. Add to this the agility and freedom you need to quickly innovate and fail fast and then transform—it's a delicate balance," he says.

That doesn't mean organizations should accept weak security as a cost of innovation—but it does mean they'll need to make strategic, case-by-case decisions about resource allocation. De Bont suggests prioritizing security for modernization initiatives, since they are critical for the future of the business.

"If you're embarking on a new initiative or a digital transformation effort, then baking security into that may be more important than going back or continuing the cleanup that you're doing for legacy systems," he says.

Inventory Your Highest Risks

4 in 10 organizations now take a risk-based approach to cybersecurity.

A risk-based approach moves organizations beyond standard security frameworks and a reactive, compliance-driven mindset. It looks at an organization's unique goals and operating landscape to identify the most pressing security risks first and develop tailored policies, controls and procedures to mitigate them, before moving on to lower-priority threats.

"It's about: 'How is our business at risk? What are the worst types of scenarios that could occur for us?'" de Bont says. "Let's identify what those [risks] are, and let's reduce the risk of those events occurring." That may mean implementing stronger authentication methods for certain high-risk user groups or systems than for others, for example.

To successfully execute this approach, de Bont says organizations need to get their technical teams, partners and suppliers on the same page about setting priorities based on potential outcomes.

Safeguard Remote Work

67% of business-impacting cyber attacks target remote workers.

With more companies embracing hybrid work, employees' homes have become the new security perimeter.

Though many companies raced to strengthen endpoint security and implement secure VPNs at the pandemic's onset, de Bont says their threat mitigation efforts must now evolve to include not just employees but also their families, given that home networks aren't as protected as corporate networks.

Offering security awareness training for employees and their families, paying for the use of family password stores and offering antivirus or malware protection for home devices can all help protect a growing attack surface, de Bont says.

Manage Third-Party Vulnerabilities

44% of executives say their organization's growing use of partners and suppliers exposes them to a major cybersecurity risk.

To increase their agility, many companies have embedded third parties in their value chain and infrastructure—which means organizations are dependent on the strength of their vendors' security programs.

That makes it crucial for companies to have visibility into their supply chain. De Bont advises conducting a risk analysis of each supplier, through risk assessment questionnaires and technical testing. Leaders should also perform scenario-planning exercises to assess how supply chain disruptions could affect business continuity. From there, de Bont says, they can craft targeted incident response and disaster recovery plans.

De Bont says a software bill of materials (SBOM), which provides an inventory of all software components within a vendor's solution, is also essential to help companies evaluate a vendor's vulnerabilities to reduce their third-party risks.

Build Tomorrow's Cyber Workforce

46% of security leaders are investing in upskilling cybersecurity and IT staff.

Fierce competition for IT talent has led to ongoing workforce shortages.

To overcome this barrier, companies should invest in training and career development programs, says de Bont. For example, training programs focused on emerging security approaches such as Zero Trust and Secure Access Service Edge (SASE) can help security professionals keep up with industry standards.

De Bont says businesses should also adopt workflow automation tools to streamline key elements of their security program so that security and IT teams can focus on higher-value, more strategic work.

"If your security employees are doing the same repetitive, mundane task over and over again, there's a good chance they'll get sick of that and go find a job elsewhere that's more exciting," he says.

PUTTING IT ALL TOGETHER

Cyber Resilience Is Built On Collaboration

To successfully execute any of these strategies, de Bont says, everyone within an organization must view securing the enterprise as their collective responsibility. That means breaking down internal silos—especially those between security and IT teams.

De Bont says the most effective way to build empathy between these teams is to start with the "why," as in why both innovation and security are key to organizational success.

Once security and IT recognize each other's essential contributions to the company's resilience and growth, they must work to understand each other's unique objectives and collaborate to accomplish them.

"There is a happy medium…You can be successful within IT and be secure at the same time. It requires close alignment and an understanding that both sides are trying to provide value—and see the business succeed."

BEN DE BONT
CHIEF SECURITY INFORMATION OFFICER
servicenow.

THE CLOUD 100

Turbulent public markets mean the same three companies from last year stay put at the top of the Cloud 100, our definitive annual ranking of the best and brightest private companies in the cloud. The 11 businesses from the 2021 list that opted to go public all trade far below their IPO price. Another 13 of that class fell out of the ranks altogether. Elsewhere in the top 10, Miro moves up 32 slots to No. 4, while 21 newcomers break into the top 100 overall. This year's list includes eight female CEOs, inching up from six a year ago. The top 50 are below. For the full list, methodology, company profiles and more, see **FORBES.COM/CLOUD100.**

• • •

Edited by Alex Konrad. Reporters: Kenrick Cai, Michaella Huck, David Jeans, Arianna Johnson, Rashi Shrivastava

1. Stripe
CEO: **PATRICK COLLISON**
VALUATION: **$95 BILLION**
ECONOMIC INFRASTRUCTURE

2. Databricks
CEO: **ALI GHODSI**
VALUATION: **$38 BILLION**
DATA AND AI PLATFORM

3. Canva
CEO: **MELANIE PERKINS**
VALUATION: **$40 BILLION**
VISUAL COMMUNICATION PLATFORM

4. Miro *(SEE RIGHT)*

5. Figma
CEO: **DYLAN FIELD**
VALUATION: **$10 BILLION**
COLLABORATIVE DESIGN PLATFORM

6. Airtable
CEO: **HOWIE LIU**
VALUATION: **$11.7 BILLION**
APP BUILDING PLATFORM

7. ServiceTitan
CEO: **ARA MAHDESSIAN**
VALUATION: **$9.5 BILLION**
CONTRACTOR SOFTWARE

8. TalkDesk
CEO: **TIAGO PAIVA**
VALUATION: **$3 BILLION**
CONTACT CENTER SOFTWARE

9. Plaid
CEO: **ZACH PERRET**
VALUATION: **$13.4 BILLION**
FINANCIAL DATA CONNECTIVITY

10. Attentive
CEO: **BRIAN LONG**
VALUATION: **$7 BILLION****
SMS MARKETING

11. Celonis
CEOs: **ALEX RINKE, BASTIAN NOMINACHER**
VALUATION: **$11 BILLION**
PROCESS AUTOMATION

12. Grammarly
CEO: **BRAD HOOVER***
VALUATION: **$13 BILLION**
COMMUNICATION ASSISTANCE

13. Zapier
CEO: **WADE FOSTER**
VALUATION: **$5 BILLION**
AUTOMATION PLATFORM

14. Gong
CEO: **AMIT BENDOV**
VALUATION: **$7.25 BILLION**
REVENUE INTELLIGENCE

15. Checkout.com
CEO: **GUILLAUME POUSAZ**
VALUATION: **$40 BILLION**
PAYMENTS PLATFORM

16. Checkr
CEO: **DANIEL YANISSE**
VALUATION: **$5 BILLION**
BACKGROUND CHECKS

17. Gusto
CEO: **JOSH REEVES**
VALUATION: **$9.5 BILLION**
PAYROLL, BENEFITS AND HR

18. Klaviyo
CEO: **ANDREW BIALECKI**
VALUATION: **$9.5 BILLION**
EMAIL AND SMS MARKETING

19. Carta
CEO: **HENRY WARD**
VALUATION: **$7.4 BILLION**
EQUITY MANAGEMENT

20. Snyk
CEO: **PETER McKAY***
VALUATION: **$8.6 BILLION**
DEVELOPER SECURITY

KEY: UP DOWN UNCHANGED NEW RETURNEE

**CEO is not a cofounder **PitchBook estimate*

NEW AND NOTABLES

Miro • RANK: 4
CEO: **ANDREY KHUSID**
VALUATION: **$17.5 BILLION**
DIGITAL COLLABORATION

Miro has come a long way from its roots in Perm, Russia, where CEO Khusid's father once ran a small printing company and where, frustrated by the challenge of showing work to clients far from the office, he cofounded the digital whiteboard software business in 2011. In January, Miro raised $400 million at a $17.5 billion valuation; now headquartered in San Francisco and Amsterdam, it's the big mover on this year's Cloud 100 list, vaulting 32 spots to No. 4 thanks to 39 million users and clients such as Dell, KPMG and Under Armour. But when Russia invaded Ukraine in February, its origin became a liability. Miro's leaders huddled for 48 hours, then announced the shutdown of their Russian office and ceased sales in the country. "When you have to make very difficult decisions in a very short period of time, nobody has a playbook for that," says head of operations Grisha Pavlotsky *(above)*.

Calendly • RANK: 21
CEO: **TOPE AWOTONA**
VALUATION: **$3 BILLION**
AUTOMATED SCHEDULING PLATFORM

Frustrated by the number of emails it took to set up a meeting, Awotona created calendar app Calendly, which enables users to send links to a site with their calendar availability to schedule a meeting. The Atlanta-based company has both free and paid versions, and its 10 million users include eBay, Lyft and L'Oréal. Revenue hit $100 million last year. One fan: VC Marc Andreessen, who joked on Twitter this year that anyone who ignored his Calendly links for meeting requests "would be permabanned from raising capital in Silicon Valley."

Algolia • RANK: 39
CEO: **BERNADETTE NIXON***
VALUATION: **$2.25 BILLION**
SEARCH API PLATFORM

Founded in 2012 by two Frenchmen, Julien Lemoine and Nicolas Dessaigne, Algolia found a niche offering enterprise search and discovery to businesses including Medium and Slack. It debuted on the Cloud 100 in 2018 but dropped off a year later. Dessaigne soon began looking for his own replacement. In came Bernadette Nixon, former CEO of Alfresco, in May 2020. The move has paid off: Algolia now powers 30 billion search requests a week across 12,000 customers, all while launching its second-ever product, a recommendations engine, in May 2021 and reaching a $2.25 billion valuation that July. Today, Algolia is "more than just a search bar," Nixon says. "It's inspiring people by predicting what they're looking for."

AWOTONA: JAMEL TOPPIN FOR FORBES

21. Calendly ↑
(SEE PAGE 64)

22. Scale AI ↑
CEO: ALEXANDR WANG
VALUATION: **$7.3 BILLION**
AI INFRASTRUCTURE

23. Notion ↑
CEO: IVAN ZHAO
VALUATION: **$10 BILLION**
WORK COLLABORATION

24. OneTrust ↑
CEO: KABIR BARDAY
VALUATION: **$5.3 BILLION**
COMPLIANCE SOFTWARE

25. Tanium ↓
CEO: ORION HINDAWI
VALUATION: **$9 BILLION**
SECURE ENDPOINT MANAGEMENT

26. DataRobot ↑
CEO: DAN WRIGHT*
VALUATION: **$6.3 BILLION**
AUGMENTED INTELLIGENCE

27. Fivetran ↑
CEO: GEORGE FRASER
VALUATION: **$5.6 BILLION**
AUTOMATED DATA INTEGRATION

28. Postman ↑
CEO: ABHINAV ASTHANA
VALUATION: **$5.6 BILLION**
API PLATFORM

29. Collibra ↑
CEO: FELIX VAN DE MAELE
VALUATION: **$5.25 BILLION**
DATA INTELLIGENCE

30. Netskope ↓
CEO: SANJAY BERI
VALUATION: **$7.5 BILLION**
NETWORK SECURITY

31. Rubrik ↓
CEO: BIPUL SINHA
VALUATION: **$3.3 BILLION**
DATA SECURITY

32. Guild ↓
CEO: RACHEL CARLSON
VALUATION: **$4.4 BILLION**
EDUCATION PLATFORM

33. Cohesity ↑
CEO: MOHIT ARON
VALUATION: **$3.7 BILLION**
DATA MANAGEMENT

34. LaunchDarkly ↑
CEO: EDITH HARBAUGH
VALUATION: **$3 BILLION**
SOFTWARE FEATURE TOOLS

35. Intercom ↑
CEO: KAREN PEACOCK*
VALUATION: **$1.275 BILLION**
CUSTOMER COMMUNICATIONS

36. Benchling ↑
CEO: SAJI WICKRAMASEKARA
VALUATION: **$6.1 BILLION**
BIOTECH R&D CLOUD

37. Grafana Labs ↑
CEO: RAJ DUTT
VALUATION: **$3 BILLION**
DATA ANALYTICS AND MONITORING

38. Contentful ↑
CEO: STEVE SLOAN*
VALUATION: **$3 BILLION**
DIGITAL CONTENT PLATFORM

39. Algolia ↻ (SEE PAGE 64)

40. Outreach ↓
CEO: MANNY MEDINA
VALUATION: **$4.4 BILLION**
SALES INTELLIGENCE

41. Forter ↑
CEO: MICHAEL REITBLAT
VALUATION: **$3 BILLION**
E-COMMERCE OPTIMIZATION

42. Podium ↑
CEO: ERIC REA
VALUATION: **$3 BILLION**
COMMUNICATIONS AND PAYMENTS

43. Automation Anywhere ↓
CEO: MIHIR SHUKLA
VALUATION: **$6.8 BILLION**
ROBOTIC PROCESS AUTOMATION

44. OutSystems ↑
CEO: PAULO ROSADO
VALUATION: **$9.5 BILLION**
APP DEVELOPMENT

45. Cockroach Labs ↑
CEO: SPENCER KIMBALL
VALUATION: **$5 BILLION**
SQL DATABASE

46. Automattic ↑
CEO: MATT MULLENWEG
VALUATION: **$7.5 BILLION**
PUBLISHING AND E-COMMERCE

47. Workato ↑
CEO: VIJAY TELLA
VALUATION: **$5.7 BILLION**
ENTERPRISE AUTOMATION

48. Cloudinary ↑
CEO: ITAI LAHAN
VALUATION: **$2 BILLION**
MEDIA EXPERIENCE MANAGEMENT

49. Razorpay ↑ (SEE RIGHT)

50. Webflow ↑ (SEE RIGHT)

Razorpay ↑ • **RANK: 49**
CEO: HARSHIL MATHUR
VALUATION: **$7.5 BILLION**
FINANCIAL SOLUTIONS SOFTWARE

Mathur left his job as a field engineer at Schlumberger in Mumbai in 2014 and set out to improve online payments in India from his base in Bengaluru. In 2021 his fintech, Razorpay, processed some $60 billion in transactions for 8 million businesses including Facebook, the Indian video streaming firm Disney+ Hotstar and eatery Pizza Hut. Late last year, the company launched a feature called Magic Checkout to process payments even more quickly.

Webflow ↑ • **RANK: 50**
CEO: VLAD MAGDALIN
VALUATION: **$4 BILLION**
VISUAL SOFTWARE DEVELOPMENT

Cofounder and CEO Magdalin aims to "empower people to build code-level things on the web without having to learn how to code." For now, that means their own websites. Customers include Spanish-language broadcaster Univision and accounting giant PWC. Magdalin, a religious refugee from Russia who came to the United States as a child, gets investors like VC powerhouse Accel to sign a "social contract" saying they value the company's mission and employees over revenue.

Personio + • **RANK: 69**
CEO: HANNO RENNER
VALUATION: **$8.5 BILLION**
HR SOFTWARE

The German newcomer, which provides an all-in-one human-resources software bundle to small and medium-sized European companies, raised $200 million in June to help prepare for rocky markets. "We had the feeling that now was a good time, with everything going on, to prop up our balance sheet," CEO Renner, who once worked as a skipper on yachts, said in June. He cofounded Personio with three university friends in 2015. It now has 6,000 customers.

Front + • **RANK: 100**
CEO: MATHILDE COLLIN
VALUATION: **$1.7 BILLION**
CUSTOMER COMMUNICATIONS

"Maybe because I'm French, and I'm more skeptical than the average person, but I prefer underselling and overdelivering," says cofounder and CEO Collin, who sat out megawatt funding rounds to focus on quieter growth instead. But with 2,500 new customers onboard since 2020, she relented enough to take on $65 million in June, which finally made Front a unicorn. Her company's software tools help businesses including Airbnb and Shopify communicate and track correspondence with their customers.

MATHUR: GAYATRI GANJU FOR FORBES ASIA

KEY: ↑ UP ↓ DOWN ↔ UNCHANGED + NEW ↻ RETURNEE

*CEO is not a cofounder

Forbes

AMERICA'S TOP WEALTH ADVISORS

BY **JASON BISNOFF** AND **SHOOK RESEARCH**

After a decade-long bull market fueled by rock-bottom interest rates, financial advisors and their clients are now coping with geopolitical uncertainty, raging inflation and an ugly bear market—plus a recession seems inevitable. The 250 professionals honored here as Forbes/Shook Top Wealth Advisors have proven their mettle over time. Virtually everyone on our list has more than 20 years of experience; more than 80% of them have persevered for more than a quarter-century, through several bear markets. Our rankings were compiled by Shook Research, which interviewed candidates nominated by their firms.

1. Jeff Erdmann
Merrill Private Wealth Management
GREENWICH, CT
$12.6B

2. Brian Pfeifler
Morgan Stanley Private Wealth Management
PALM BEACH, FL
$9.6B

3. Mark Curtis
Graystone Consulting from Morgan Stanley
PALO ALTO, CA
$184.2B

4. Christopher Errico
UBS Private Wealth Management
NEW YORK, NY
$3.3B

5. Greg Vaughan
Morgan Stanley Private Wealth Management
MENLO PARK, CA
$44.9B

6. Charles Zhang
Zhang Financial
PORTAGE, MI
$4.8B

7. Rod Westmoreland
Merrill Private Wealth Management
ATLANTA, GA
$4.5B

8. Lyon Polk
Morgan Stanley Private Wealth Management
NEW YORK, NY
$21B

9. Raj Sharma
Merrill Private Wealth Management
BOSTON, MA
$6.4B

10. Jason Katz
UBS Private Wealth Management
NEW YORK, NY
$3.9B

11. James Hansberger
Morgan Stanley Private Wealth Management
ATLANTA, GA
$3.5B

12. Randy C. Conner
Churchill Management Group
LOS ANGELES, CA
$7.6B

13. Drew Freides
UBS Private Wealth Management
LOS ANGELES, CA
$9.2B

14. Scott Siegel
Morgan Stanley Wealth Management
BOCA RATON, FL
$6.1B

15. Scott Stackman
UBS Private Wealth Management
NEW YORK, NY
$8.5B

16. Michael Valdes
Merrill Private Wealth Management
TAMPA, FL
$8.1B

17. Steve Hefter
HLM Capital Wealth Management
HIGHLAND PARK, IL
$3.8B

18. Ira Walker
UBS Private Wealth Management
RED BANK, NJ
$1.2B

19. Richard Jones
Merrill Private Wealth Management
LOS ANGELES, CA
$25.2B

20. Reza Zafari
Merrill Private Wealth Management
LOS ANGELES, CA
$25.2B

21. Martin Halbfinger
UBS Wealth Management
NEW YORK, NY
$2.7B

22. Richard Saperstein
Treasury Partners
NEW YORK, NY
$21.2B

23. Marvin McIntyre
Morgan Stanley Private Wealth Management
WASHINGTON, DC
$5.1B

24. Michael Poppo
UBS Wealth Management
NEW YORK, NY
$1.8B

No. 25

RON BASU

MORGAN STANLEY PRIVATE WEALTH MANAGEMENT
New York, NY • **$10.4 billion**

"Growing up in an emerging market and seeing currency depreciation and all kinds of instability really taught me the idea of diversification. . . . Trying to predict markets is hard, but predicting geopolitics is impossible."

25. Ron Basu
Morgan Stanley Private Wealth Management
NEW YORK, NY
$10.4B

26. Colleen O'Callaghan
J.P. Morgan Wealth Management
NEW YORK, NY
$2.7B

27. Mark Douglass
Morgan Stanley Private Wealth Management
MENLO PARK, CA
$44.9B

28. Adam Epstein
UBS Private Wealth Management
NEW YORK, NY
$3.4B

29. Rebecca Rothstein
Merrill Private Wealth Management
RENO, NV
$4.2B

30. Kevin Peters
Morgan Stanley Wealth Management
PALM BEACH, FL
$2.6B

31. Raj Bhatia
Merrill Private Wealth Management
CHICAGO, IL
$2.8B

32. Jeffrey Fratarcangeli
Fratarcangeli Wealth Management
BLOOMFIELD HILLS, MI
$2.8B

33. Brian Frank
Morgan Stanley Private Wealth Management
ATLANTA, GA
$2.3B

34. Craig Chiate
UBS Private Wealth Management
LOS ANGELES, CA
$6.1B

35. Alan Whitman
Morgan Stanley Wealth Management
PASADENA, CA
$2.5B

36. Andy Burish
UBS Wealth Management
MADISON, WI
$4.8B

37. David Hou
Evoke Wealth
LOS ANGELES, CA
$24.5B

38. Andy Chase
Morgan Stanley Private Wealth Management
MENLO PARK, CA
$12.7B

39. Kent Pearce
Merrill Lynch Wealth Management
TOWSON, MD
$2.4B

40. Susan Kaplan
Kaplan Financial Services
NEWTON, MA
$2.6B

41. Hank McLarty
Gratus Capital
ATLANTA, GA
$3.2B

42. Peter Princi
Graystone Consulting from Morgan Stanley
BOSTON, MA
$4.9B

43. Michael Klein
Baird
MILWAUKEE, WI
$6.3B

44. John Barrett
Merrill Lynch Wealth Management
NEW YORK, NY
$2.8B

45. Jordan Waxman
Nucleus Advisors
NEW YORK, NY
$2.7B

46. Ron Vinder
Morgan Stanley Private Wealth Management
NEW YORK, NY
$4.3B

47. Peter Rohr
Merrill Private Wealth Management
PHILADELPHIA, PA
$4.9B

ILLUSTRATIONS BY MICHAEL HOEWELER FOR FORBES

48. Shawn Fowler
Morgan Stanley Private Wealth Management
DENVER, CO
$7.9B

49. Nestor Vicknair
Merrill Lynch Wealth Management
HOUSTON, TX
$6.5B

50. Laila Pence
Pence Wealth Management
NEWPORT BEACH, CA
$2B

51. Troy Griepp
Morgan Stanley Private Wealth Management
SAN FRANCISCO, CA
$26.8B

52. Brian Bennett
UBS Wealth Management
NEW YORK, NY
$1.2B

53. Adam Carlin
Morgan Stanley Private Wealth Management
CORAL GABLES, FL
$4.2B

54. Mark Schulten
TSG Wealth Management
LONG BEACH, CA
$4.6B

55. Jesse Bromberg
Morgan Stanley Wealth Management
SAN FRANCISCO, CA
$2.2B

56. Brian Hetherington
Merrill Private Wealth Management
NEW CANAAN, CT
$4.3B

57. Michael Matthews
UBS Private Wealth Management
BELLEVUE, WA
$2.1B

58. John Olson
Merrill Lynch Wealth Management
PALM BEACH, FL
$2.4B

59. Brian Strachan
Morgan Stanley Private Wealth Management
BOSTON, MA
$1.4B

60. David Singer
Merrill Private Wealth Management
CINCINNATI, OH
$6.8B

61. Drew Zager
Morgan Stanley Private Wealth Management
LOS ANGELES, CA
$10.8B

62. Terry Cook
Parcion Private Wealth
BELLEVUE, WA
$2.2B

63. Steven Schultz
UBS Wealth Management
PHOENIX, AZ
$2.3B

64. Noel Weil
Merrill Private Wealth Management
NEW YORK, NY
$16.2B

65. Jonathan Beukelman
UBS Private Wealth Management
DENVER, CO
$5B

66. Shawn Rubin
Morgan Stanley Private Wealth Management
NEW YORK, NY
$2.3B

67. Daniel Fries
Merrill Lynch Wealth Management
CHICAGO, IL
$1.6B

68. William Greco
UBS Wealth Management
HARTFORD, CT
$4.9B

69. Scott Magnesen
Morgan Stanley Wealth Management
OAK BROOK, IL
$5.6B

70. Gerard Klingman
Klingman & Associates
NEW YORK, NY
$3B

71. Louis Chiavacci
Merrill Private Wealth Management
CORAL GABLES, FL
$3.6B

72. Jeff Grinspoon
VWG Wealth Management
VIENNA, VA
$1.9B

73. William Corbellini
Merrill Private Wealth Management
DALLAS, TX
$4.7B

74. Scott Tiras
Ameriprise Financial Services
HOUSTON, TX
$2.2B

75. David Ellis III
UBS Private Wealth Management
CINCINNATI, OH
$2.5B

76. Elaine Meyers
J.P. Morgan Wealth Management
SAN FRANCISCO, CA
$4.5B

77. Richard Zinman
Morgan Stanley Private Wealth Management
NEW YORK, NY
$3.6B

78. Kevin Myeroff
Sequoia Financial Group
CLEVELAND, OH
$1.7B

79. Thomas Sullivan
Merrill Lynch Wealth Management
GARDEN CITY, NY
$3B

80. Louise Gunderson
UBS Private Wealth Management
NEW YORK, NY
$4.2B

81. Bonner Barnes
Corda Investment Management
HOUSTON, TX
$1.5B

82. Tommy McBride
Merrill Lynch Wealth Management
DALLAS, TX
$1.6B

83. Sal Tiano
First Republic Investment Management
JUPITER, FL
$3B

84. Charles McKinney
Morgan Stanley Private Wealth Management
DALLAS, TX
$1.4B

85. Erin Scannell
Ameriprise Financial Services
MERCER ISLAND, WA
$3B

No. 121

CHRISTINA BOYD

MERRILL LYNCH WEALTH MANAGEMENT
Wayzata, MN • **$1.9 billion**

"It's a tough market because both equities and bonds are down, and clients have a hard time understanding bonds—sometimes even more than stocks. As interest rates go up, bonds traditionally go down."

86. Dan Schwartz
UBS Private Wealth Management
PARAMUS, NJ
$3.2B

87. Lori Van Dusen
LVW Advisors
PITTSFORD, NY
$2.1B

88. Leo Stevenson
Merrill Lynch Wealth Management
WYANDOTTE, MI
$1.1B

89. Michael Kanigher
UBS Private Wealth Management
LOS ANGELES, CA
$9.2B

90. Bill Oliver
Wells Fargo Advisors
CHARLOTTE, NC
$2.1B

91. Robert Waldele
Merrill Lynch Wealth Management
NEW YORK, NY
$4.2B

92. Mark Binder
UBS Private Wealth Management
LAS VEGAS, NV
$6.1B

93. Joe Montgomery
Wells Fargo Advisors
WILLIAMSBURG, VA
$1.5B

94. David Kudla
Mainstay Capital Management
GRAND BLANC, MI
$3.8B

95. Shane Brisbin
Morgan Stanley Private Wealth Management
SAN FRANCISCO, CA
$8.2B

96. Leigh Cohen
Merrill Private Wealth Management
NEW YORK, NY
$9.2B

97. Randy Carver
Carver Financial Services/ Raymond James
MENTOR, OH
$2.2B

98. Rob Metcalf
UBS Private Wealth Management
WAYZATA, MN
$3.9B

99. Ron Hughes
Merrill Private Wealth Management
ATLANTA, GA
$1.5B

100. Debra Brede
D.K. Brede Investment Management Co., a GW & Wade, LLC Co.
NEEDHAM, MA
$1.4B

101. Charles Day
UBS Private Wealth Management
NEW YORK, NY
$1.3B

102. Benjamin Klein
Merrill Lynch Wealth Management
NORTHBROOK, IL
$1.3B

103. Joseph Jacques
Jacques Financial
ROCKVILLE, MD
$1.6B

104. George Papadoyannis
Ameriprise Financial Services
SAN MATEO, CA
$4B

105. Craig Findley
Venture Visionary Partners
SYLVANIA, OH
$3.8B

106. Frank Seminara
Morgan Stanley Private Wealth Management
PALM BEACH, FL
$2.5B

107. Troy Nelson
Edward Jones
BISMARCK, ND
$863M

108. Bud King
UBS Private Wealth Management
ST. LOUIS, MO
$1.7B

109. Nick Kavallieratos
Morgan Stanley Wealth Management
NEW YORK, NY
$11.3B

110. Evan Steinberg
Morgan Stanley Private Wealth Management
NEW YORK, NY
$2.7B

111. Jason Stephens
UBS Private Wealth Management
NAPLES, FL
$1.8B

112. Josh Malkin
Morgan Stanley Private Wealth Management
NEW YORK, NY
$1.9B

113. Wally Obermeyer
Obermeyer Wood Investment Counsel
ASPEN, CO
$2.3B

114. Sean Yu
Morgan Stanley Private Wealth Management
PASADENA, CA
$1.9B

115. Mitchell Wickham
UBS Private Wealth Management
CHARLOTTE, NC
$16.3B

116. Greg Cash
UBS Private Wealth Management
CHARLOTTE, NC
$16.3B

117. Devin Condron
Morgan Stanley Private Wealth Management
BOSTON, MA
$5.5B

118. Steve Hollomon
Merrill Lynch Wealth Management
SEATTLE, WA
$2.8B

119. Jason Dworak
UBS Private Wealth Management
LINCOLN, NE
$1.5B

120. Jim Detterick
Graystone Consulting from Morgan Stanley
NEW YORK, NY
$30.9B

121. Christina Boyd
Merrill Lynch Wealth Management
WAYZATA, MN
$1.9B

122. Jonathan Kuttin
Ameriprise Financial Services
HAUPPAUGE, NY
$5.5B

123. Rich Abrams
UBS Wealth Management
NEW YORK, NY
$3.9B

124. Darrell Pennington
Ameriprise Financial Services
HOUSTON, TX
$1.1B

125. Scott Wilson
Morgan Stanley Private Wealth Management
NEW YORK, NY
$8.9B

126. Eric Gray
Merrill Private Wealth Management
LOS ANGELES, CA
$36.7B

127. Amir Mossanen
Truist
BEVERLY HILLS, CA
$926M

128. Sharon Oberlander
Merrill Lynch Wealth Management
CHICAGO, IL
$1.8B

129. Michael Ricca
Morgan Stanley Wealth Management
FLORHAM PARK, NJ
$5.3B

130. Brian Tramontano
Merrill Lynch Wealth Management
SAN ANTONIO, TX
$1.1B

131. James Stack
Stack Financial Management
WHITEFISH, MT
$1.7B

132. Joseph Matina
UBS Private Wealth Management
NAPLES, FL
$2B

133. Mark Thorndyke
Merrill Lynch Wealth Management
CHICAGO, IL
$1.9B

134. Patti Brennan
Key Financial
WEST CHESTER, PA
$1.7B

135. Mike Sawyer
Morgan Stanley Private Wealth Management
NEW YORK, NY
$3.3B

136. Bruce Munster
Merrill Private Wealth Management
LOS ANGELES, CA
$2.8B

137. Don d'Adesky
The Americas Group of Raymond James
BOCA RATON, FL
$4.4B

138. Judy Fredrickson
UBS Private Wealth Management
WAYZATA, MN
$3.9B

139. Jack Wong
Morgan Stanley Wealth Management
MOUNTAIN VIEW, CA
$1.5B

140. David Magrone
Merrill Private Wealth Management
NEW YORK, NY
$5.1B

141. Sean Dillon
UBS Wealth Management
BOSTON, MA
$2.2B

142. Dwight Emanuelson Jr.
Merrill Private Wealth Management
DALLAS, TX
$4.7B

143. Kyle Chudom
Morgan Stanley Wealth Management
OAK BROOK, IL
$1.2B

144. Melissa Corrado Harrison
UBS Private Wealth Management
DENVER, CO
$1.2B

145. Barry Garber
Alex. Brown/ Raymond James
BALTIMORE, MD
$2.9B

146. Mary Mullin
Merrill Lynch Wealth Management
BOSTON, MA
$1.8B

147. Mary Deatherage
Morgan Stanley Private Wealth Management
LITTLE FALLS, NJ
$2.6B

148. Randy Garcia
The Investment Counsel Company
LAS VEGAS, NV
$1.5B

149. Glenn Degenaars
First Republic Investment Management
NEW YORK, NY
$4.9B

150. Mark Moore
UBS Private Wealth Management
AUSTIN, TX
$2.3B

151. Charles Noble III
Janney Montgomery Scott
NEW HAVEN, CT
$1.4B

152. Johanna Walters
Merrill Lynch Wealth Management
BLUE BELL, PA
$6.4B

153. R. Scot Smith
Morgan Stanley Wealth Management
DALLAS, TX
$1.1B

154. Emily Rubin
UBS Private Wealth Management
NEW YORK, NY
$2.3B

155. Margaret Starner
The Starner Group of Raymond James
CORAL GABLES, FL
$1.5B

156. Tristan Caudron
Wells Fargo Advisors
ALEXANDRIA, VA
$2B

157. Greg Onken
J.P. Morgan Wealth Management
SAN FRANCISCO, CA
$5B

158. Tim Emanuels
Morgan Stanley Private Wealth Management
SAN FRANCISCO, CA
$16.7B

159. Brian Cooke
Cooke Financial Group at Sanctuary Wealth
INDIANAPOLIS, IN
$2.4B

160. Chris Cooke
Cooke Financial Group of Sanctuary Wealth
INDIANAPOLIS, IN
$2.4B

161. Harold Trischman
Morgan Stanley Wealth Management
GREENWICH, CT
$2.9B

162. Paul Ried
Paul R. Ried Financial Group
BELLEVUE, WA
$1B

163. Brian Firring
Wells Fargo Advisors
BEVERLY HILLS, CA
$3.4B

164. Rich Petit
Morgan Stanley Private Wealth Management
MENLO PARK, CA
$16.7B

165. Malcolm Makin
Professional Planning Group/Raymond James
WESTERLY, RI
$1.3B

166. Bill King
Merrill Lynch Wealth Management
VERO BEACH, FL
$1.4B

167. Trevor Fried
Morgan Stanley Wealth Management
FORT LAUDERDALE, FL
$1.3B

168. Brian Werdesheim
Oppenheimer
LOS ANGELES, CA
$2.5B

169. Jeffrey Werdesheim
Oppenheimer
LOS ANGELES, CA
$2.5B

170. Robert Dyer
Merrill Private Wealth Management
NEW YORK, NY
$1.9B

171. Gregory Smith
Baird
RESTON, VA
$2.8B

172. Raj Pathak
Morgan Stanley Wealth Management
BOSTON, MA
$1.7B

173. Fotios Piniros
Morgan Stanley Private Wealth Management
NEW YORK, NY
$10B

174. Tom Vacheron
Merrill Private Wealth Management
FAIRFIELD, CT
$2.5B

175. Jay W. Williams
UBS Private Wealth Management
MEMPHIS, TN
$2.9B

176. Buck Wiley III
Merrill Private Wealth Management
ATLANTA, GA
$3.1B

177. Michael Warr
Morgan Stanley Private Wealth Management
TUSCALOOSA, AL
$2.5B

178. Dean Braun
Morgan Stanley Private Wealth Management
SEATTLE, WA
$6.2B

179. PJ Schwarz
Morgan Stanley Private Wealth Management
NEW YORK, NY
$5.8B

180. Jeffery Price
Merrill Lynch Wealth Management
SOUTHLAKE, TX
$1.5B

181. Ryan Sprowls
Wells Fargo Advisors
ALEXANDRIA, VA
$1.7B

182. Mark Fendrick
UBS Wealth Management
MOUNT LAUREL, NJ
$1.7B

183. Marcos Douer
Morgan Stanley Wealth Management
NEW YORK, NY
$3.6B

184. Todd Silaika
Merrill Lynch Wealth Management
CLIFTON PARK, NY
$1.8B

185. Christopher Aitken
UBS Private Wealth Management
PONTE VEDRA BEACH, FL
$1.1B

186. Adam Goldstein
Ameriprise Financial Services
CALABASAS, CA
$925M

187. Dana Locniskar
Merrill Private Wealth Management
TROY, MI
$4.2B

188. Seth Haye
Morgan Stanley Wealth Management
WESTLAKE VILLAGE, CA
$1.5B

No. 104

GEORGE PAPADOYANNIS

AMERIPRISE FINANCIAL SERVICES
San Mateo, CA • **$4 billion**

"What keeps me up at night is receiving an email or a phone call one day with a client asking me to cash them out of the market. . . . I try to remind my clients that this too shall pass. I sympathize with their pain, because I feel their pain—my portfolio is down just like theirs."

189. Valerie Houts
Merrill Lynch Wealth Management
SAN FRANCISCO, CA
$39.8B

190. Thomas Hutson-Wiley
Merrill Lynch Wealth Management
SAN FRANCISCO, CA
$39.8B

191. Stacy Oster
UBS Wealth Management
BELLEVUE, WA
$941M

192. Jim Moriarity
Morgan Stanley Private Wealth Management
PALM BEACH, FL
$3.1B

193. Christopher Cook
Merrill Lynch Wealth Management
FLORHAM PARK, NJ
$2.2B

194. John Cultra
William Blair
CHICAGO, IL
$5B

195. Stephen Fish
UBS Wealth Management
CINCINNATI, OH
$1.7B

196. Jay Canell
J.P. Morgan Wealth Management
NEW YORK, NY
$2B

197. Neil Canell
J.P. Morgan Wealth Management
NEW YORK, NY
$2B

198. Curtis Eustis
Merrill Private Wealth Management
NEW ORLEANS, LA
$1.4B

199. Lisa Detanna
Global Wealth Solutions Group of Raymond James and DH Consulting Group of Raymond James
BEVERLY HILLS, CA
$2.3B

200. Victor Livingstone
Morgan Stanley Private Wealth Management
BOSTON, MA
$5.2B

201. Keith Apton
UBS Wealth Management
WASHINGTON, DC
$2.5B

202. Simon Hamilton
Baird
RESTON, VA
$2.8B

203. Bruce Burrows
Morgan Stanley Wealth Management
GARDEN CITY, NY
$20.6B

204. Timothy Long
Merrill Lynch Wealth Management
GRAND RAPIDS, MI
$6.5B

205. William Sullivan
UBS Private Wealth Management
BOSTON, MA
$1.6B

206. Peter Bermont
The Bermont Advisory Group of Raymond James
CORAL GABLES, FL
$3.2B

207. Gabriel Jay
UBS Private Wealth Management
WALNUT CREEK, CA
$1.8B

208. David Bieber
Morgan Stanley Private Wealth Management
NEW YORK, NY
$1.4B

209. Jason Babb
First Republic Investment Management
NEW YORK, NY
$4.9B

210. Tim Pagliara
CapWealth
FRANKLIN, TN
$1.3B

211. Chris Clifford
UBS Private Wealth Management
SAN FRANCISCO, CA
$2.2B

212. John Perry
Morgan Stanley Wealth Management
INDIANAPOLIS, IN
$1.1B

213. Corby May
Merrill Lynch Wealth Management
GARDEN CITY, NY
$1.6B

214. James Whitney
Graystone Consulting from Morgan Stanley
CHICAGO, IL
$4.2B

215. Rick Gordon
First Republic Investment Management
SAN FRANCISCO, CA
$3B

216. Hugh Beecher
First Republic Investment Management
SAN FRANCISCO, CA
$3B

217. Andrew Schultz
Morgan Stanley Private Wealth Management
MIAMI BEACH, FL
$966M

218. Ryan Long
UBS Private Wealth Management
DALLAS, TX
$4.2B

219. David Briegs
Merrill Lynch Wealth Management
BRIDGEWATER, NJ
$2.3B

220. Thomas Frame
Morgan Stanley Private Wealth Management
GREENWICH, CT
$2B

221. Todd Battaglia
MG&A Wealth
PLANTATION, FL
$1B

222. William Wheatley
Merrill Lynch Wealth Management
NEWPORT BEACH, CA
$1.3B

223. Matt Fryar
Wells Fargo Advisors
CLIVE, IA
$1B

224. Ned Gibbons
Morgan Stanley Private Wealth Management
MENLO PARK, CA
$4.4B

225. Eric Payne
Merrill Lynch Wealth Management
INDIANAPOLIS, IN
$2.7B

226. John Adelman
UBS Private Wealth Management
NEW YORK, NY
$2.4B

227. Moss Crosby
Twickenham Advisors
HUNTSVILLE, AL
$1.7B

228. Scott Mahoney
Morgan Stanley Private Wealth Management
MORRISTOWN, NJ
$1.6B

229. Charles Balducci
Merrill Lynch Wealth Management
NEW YORK, NY
$3B

230. Blair Cornell
UBS Wealth Management
MIAMISBURG, OH
$1.6B

231. Frederick Keator
Keator Group
LENOX, MA
$811M

232. John Acker
UBS Wealth Management
LOS ANGELES, CA
$1.9B

233. Jeff Traum
Morgan Stanley Private Wealth Management
MENLO PARK, CA
$2.7B

234. Philippe Hartl
Merrill Private Wealth Management
LOS ANGELES, CA
$7.9B

235. Xi Qiao
UBS Wealth Management
SAN FRANCISCO, CA
$1.8B

236. Mark Tobias
Morgan Stanley Wealth Management
NEW BRUNSWICK, NJ
$878M

237. Rob Siracusano
Wells Fargo Advisors Financial Network
NAPERVILLE, IL
$900M

238. Jim Rimmel
UBS Wealth Management
PITTSBURGH, PA
$2B

239. Carl Cafaro
Merrill Lynch Wealth Management
NEWTON, MA
$4.4B

240. Leslie Lauer
UBS Private Wealth Management
ATLANTA, GA
$4.5B

241. Jim Greenfield
Morgan Stanley Private Wealth Management
SAN FRANCISCO, CA
$2.3B

242. Sonny Kothari
Merrill Lynch Wealth Management
BREA, CA
$1.4B

243. Ira Kravitz
UBS Wealth Management
PLANO, TX
$1B

244. Glen Strauss
Wells Fargo Advisors
LOS ANGELES, CA
$1.8B

245. Virgil Kahl
Spring Ridge Financial Group
WYOMISSING, PA
$1.1B

246. Ted Davis
Morgan Stanley Wealth Management
CHICAGO, IL
$859M

247. Michael McCain
Wells Fargo Advisors
NAPLES, FL
$3.1B

248. Jacqueline Willens
UBS Private Wealth Management
NEW YORK, NY
$1.1B

249. Greg Marcus
UBS Private Wealth Management
BETHESDA, MD
$814M

250. Mihir Patel
Morgan Stanley Private Wealth Management
NEW YORK, NY
$2.1B

For the full ranking, please visit: forbes.com/top-wealth-advisors

Safe and Sound

Landing founder Bill Smith in front of the 1912 bank vault that serves as a boardroom in his company's headquarters.

THE LIST

SWEET HOMES, ALABAMA

After selling Shipt, his same-day delivery service, to Target for $550 million, **BILL SMITH** launched his third consecutive big act from his native Birmingham. **LANDING,** his three-year-old furnished-apartment business, hit $83 million in sales in 2021 and expects $200 million this year by catering to the work-from-anywhere generation.

BY **AMY FELDMAN**

PHOTOGRAPH BY **JAMEL TOPPIN** FOR FORBES

BILL SMITH

STEERS HIS MIDNIGHT SILVER TESLA X THROUGH THE STREETS OF DOWNTOWN BIRMINGHAM, ALABAMA, AND PULLS INTO A LOW-RISE APARTMENT COMPLEX.

"This used to be a brothel 100 years ago," he says with a smile.

Today, it's a modern, renovated building, one of dozens in this old industrial city where his company, Landing, rents fully furnished flexible-lease apartments. A thin man with intense blue eyes, Smith, 36, steps into a sunny one-bedroom with a railroad layout. It goes for $1,800 a month, a 20% premium to what it would rent for empty. It's decorated with innocuous furniture, inoffensive linens, even taupe dishware, all designed and manufactured by his team. "Someone wants to move into an apartment in five days, we have to be able to acquire it and make it beautiful in a short period of time," he says, "It looks really simple on the outside, but it's very complex."

As the way Americans live and work has changed, Landing offers its members (who pay $199 a year) fast access to move-in-ready apartments with the flexibility to rent for as little as one month. Cheaper than a hotel or a corporate apartment and more predictable than an Airbnb, Landing markets itself to Millennials with the flexibility to work remotely, as well as to others (traveling nurses, empty nesters, those new to a city) who don't want the hassle of figuring out housing and buying furniture for a temporary stay.

The bulk of Landing's $200 million revenue (2022, projected) comes from its markup, typically 30% to 40% over what it pays to lease apartments from owners of multifamily buildings, including mega-landlords American Landmark and Northwood Ravin. It operates in 81 markets across the country, but its biggest are fast-growing Sun Belt cities like Las Vegas, Phoenix, Austin, Atlanta, Nashville and Tampa.

Smith sold his previous company, online grocery delivery service Shipt, to Target for $550 million in 2018. He sees a much bigger opportunity with Landing: According to his aggressive estimates, perhaps 10% of the 40 million Americans who live in apartments could choose furnished, flexible-stay homes within a decade.

"Covid pulled forward a change in living that I thought would take five years," he says. "We think we'll be doing $1 billion in revenue by 2025 . . . and we'll still be just scratching the surface of the opportunity."

Landing has raised $237 million in VC funding, including $75 million (previously undisclosed) at a recent valuation of $475 million. Not bad for a company whose revenue hit $83 million in 2021, up sixfold from a year earlier—but not as much as he hoped, especially given his track record and revenue growth. "If it was December, we'd already be in the billion-dollar club," he notes, adding that raising money in this market has "not been fun." One silver lining to remaining a non-unicorn: Landing still qualifies for a spot on this year's Forbes Next Billion-Dollar Startups list as one of 25 venture-backed companies we think are most likely to reach a $1 billion valuation.

As WeWork's rise and fall showed, there's both huge potential in new models of real estate—and enormous risk. Smith is working to manage the risk and operational complexity with data, and lots of it. Which cities have both demand and potential profitability? How can he cut installation costs? Adjust pricing and marketing for seasonality? "This needs to be tech-driven and not people-driven," says Smith, who relies on his firm's data and its proprietary algorithm. "I truly believe this is the only way this model will work."

> **"Bill Smith is very unassuming, very different from your Adam Neumanns and your Travis Kalanicks."**

Smith, who owns roughly one-third of Landing and is worth more than $400 million including cash from Shipt, is up for the challenge. "I get bored

really easily," he says. "I'm attracted to solving these complicated problems."

Smith grew up in Birmingham, the son of a Cellular One agent and a medical transcriptionist. He recalls asking for a briefcase for his fifth birthday and later lugging his desktop computer to his dad's home for weekends after his parents divorced.

He wasn't much interested in school ("I hated it, I really did") and dropped out when he was 16. He'd been selling Nextel phones after school, bringing in $5,000 or more a month, a tidy sum for a teenager in Alabama. In 2009, he founded Insight Card Services, offering reloadable prepaid Visa cards. Five years later, at 28, he sold that business to bank-holding company Green Dot for tens of millions.

A high school dropout, Smith is worth more than $400 million from his startups Shipt and Landing.

As a young millionaire, he started snapping up local real estate. He showed up at an auction to buy 33 condos (since sold), then decided on the spot to bid for seven floors in a prewar former bank headquarters known as the John Hand Building. His winning bid: $510,000. "I'm like, 'Oh my gosh, what did I just win?'" he says. "The luck was that I started Shipt and was able to fill it up." (It's now Landing's headquarters.)

In 2014, Smith launched Shipt to offer same-day delivery to customers who ordered groceries online, investing $3 million of his own money. By 2016, Shipt was available in 25 cities across eight states—challenging Amazon and Instacart, especially in smaller markets. With an ownership stake of roughly 50% at the time of the $550 million sale to Target, he was now seriously rich. "It didn't feel like a huge life change, even though from the outside it would appear that way," he says. "I live in the same house and go to the same places and do the same things I did before."

Smith keeps a list of 30-some ideas for businesses in his phone, and after he left Target (as part of the deal, he worked for the retailer for a year and a half) he started thinking about which one to tackle next. Venture capitalists were eager to finance whatever he selected. "If he told me he was doing moon exploration, I probably would have given him money," says Greycroft's Ian Sigalow, who led Shipt's first outside funding round at a pre-money valuation of $45 million and subsequently invested in Landing.

His first try, called Homesie, targeted homeowners who needed repairs, letting them text for help. "It was a total flop," he says. "We tested it for a few weeks, and literally no one signed up." Smith shuttered it almost immediately and moved on, transforming the website's operations and concept into Landing. "Consumer companies are either a rocket ship or they're not, and if it's not a rocket ship I don't want to waste any time on it."

The basic idea for Landing had been in his phone for years. During his brief stint as landlord of those 33 condos, he had seen how often medical residents at the University of Alabama at Birmingham would take apartments they needed for just a year. And his own experience moving temporarily to San Francisco, one of America's toughest housing markets, in 2016 while building Shipt, rankled. "I was on Craigslist trying to find a place that was going to work for my family, and it was just a huge headache," he recalls.

As people gained more flexibility on where to live, he wanted to make it easier for them to pick up and move to furnished, flexible-lease apartments that didn't cost corporate rates. As with Shipt, Smith put up some initial cash, ultimately investing $15 million.

Landing's launch was tough. Smith was personally juggling the demands of a startup with those of his youngest child (he has three), who was born with special needs in June 2019 and required multiple surgeries. Then, in March 2020, the pandemic emerged, offices shut and Landing's fate hung in the balance.

All this has helped keep him humble. "Bill Smith is very unassuming. He's very different from your Adam Neumanns and your Travises," says Landing CFO Casey Woo, referring to WeWork's founder (and Woo's former boss) and Uber's mercurial founder, Travis Kalanick. "You generally get the ego or you get less killer instinct."

While Landing's potential is enormous, it faces plenty of competition—from venture-backed startups in the flexible, furnished rental space, like New York City–based Blueground and San Francisco's Zeus Living, to hotels that have moved further into extended-stay options. Even Airbnb is pushing long-term stays for remote workers, with durations of 28 days or more its fastest-growing category in 2021.

Running a business like this is also capital intensive. In addition to the equity raised, Landing has secured $230 million in debt, of which it has drawn down $80 million, to help pay for everything from leases and technology to furniture and shipping. To maximize profitability, it uses its algorithm to help fill apartments, constantly gauging demand, scouting locations and setting prices in real time. Right now it says it has 7,000 apartments rented, with occupancy rates hovering around 90%, but admits profitability is still a few years away.

Rather than sign leases with landlords upfront, risking vacancies if no one rents, Landing relies on software to list apartments first (it has 20,000 in its database), then signs leases and furnishes them within a few days

once a renter is in place. Having learned from WeWork's troubles with long-term leases, Landing inks one-year leases with property owners, allowing it to quickly reset prices or exit properties that no longer make sense. "What's made Landing so successful is that we operate on demand," says Marcus Higgins, the company's chief operating officer, who previously worked for SoftBank-backed Oyo Hotels. "This is a giant Rubik's Cube, and as soon as you get a couple of things right, you have to turn it and do it again."

That's particularly challenging given the itinerant nature of its clientele. Kendyl Cochran, a 25-year-old business development director at Gartner, spent most of the past year living in Landing apartments with her boyfriend and dog after learning about the company on TikTok. "We wanted to do 12 cities in 12 months," she says. After an initial Airbnb stay, they hopscotched among Landing apartments in Atlanta, Baltimore, Austin, Dallas, Denver, Tucson and Salt Lake City, typically spending $2,200 to $2,400 a month on rent. It was great for them, but each time they moved out, Landing had to find tenants to move in for the remainder of the lease.

As for the apartments' cookie-cutter design, that's one key to keeping costs down. The firm manufactures its furniture at factories in Vietnam, where costs are lower. It then ships them back to a 280,000-square-foot warehouse in Moody, Alabama. It also has smaller warehouses in Las Vegas, Austin and Phoenix.

Controlling design meant flexibility when ocean freight costs skyrocketed: Landing's kitchen chairs are now stackable, allowing it to jam more of them into a shipping container. A new line of furniture in the works includes coffee tables and side tables that will be assembled in Alabama rather than shipped that way, to save on freight. By using its own trucks and drivers and standardizing everything, Landing has shaved installation costs by more than 50% since launch, according to CFO Woo.

The big question, of course, is how many people will want to live month to month in temporary housing, and whether the mobility of the pandemic for white-collar workers will not only continue but remain popular enough to make the financials work. "The world of work right now [is in] a massive period of experimentation," says Steve Cadigan, a future-of-work consultant and author of *Workquake*, who was LinkedIn's first chief HR officer. "The digital nomad has a shelf life until you want to settle down and have kids. The older we get, the more we like continuity."

Smith, of course, is much more bullish, figuring that the housing market is so big that capturing even his own small sliver will be a huge home run. "Not everyone is going to live like this, and not even the majority will," he says, "but millions of Americans are going to live flexibly." F

NEXT BILLION-DOLLAR STARTUPS 2022

For the eighth year in a row, *Forbes* teamed up with TrueBridge Capital to search for the country's 25 venture-backed startups most likely to become unicorns. Our track record has been stellar: Of the 175 companies to make this list over the years, 116 have become unicorns; another 22 were acquired, and nine went public before hitting the mark. Just five imploded or shut down. This year is likely the most challenging yet, with markets down, tech investors skittish and some would-be list members getting cut due to significant layoffs. These 25 companies, in alphabetical order, represent the ones we think have the best chance of becoming future stars.

• • •

Edited by Amy Feldman. Reporters: Nina Bambysheva, Igor Bosilkovski, Elisabeth Brier, Kenrick Cai and Will Yakowicz

0X LABS

FOUNDERS: **Amir Bandeali (co-CEO), Will Warren (co-CEO)**
EQUITY RAISED: **$85 million**
ESTIMATED 2021 REVENUE: **$5 million**
LEAD INVESTORS: **Greylock Partners, Pantera Capital**

This San Francisco–based firm enables developers and businesses to create new markets for their crypto tokens on major blockchains and helps traders optimize costs via its search engine, Matcha. In April, 0x partnered with Coinbase, the U.S.'s largest cryptocurrency exchange, to power Coinbase's new marketplace for NFTs.

ATOB

FOUNDERS: **Harshita Arora, Tushar Misra, Vignan Velivela (CEO)**
EQUITY RAISED: **$100 million**
ESTIMATED 2021 REVENUE: **$2 million**
LEAD INVESTORS: **Bloomberg Beta, Elad Gil, General Catalyst**

Three years ago, Velivela, 32, who had previously worked as a robotics engineer at self-driving car company Cruise, teamed with Misra (ex-Uber) and Arora (who had developed a cryptocurrency price-tracking app) to launch AtoB, an Uber for buses. After Covid hit, they pivoted to setting up a Stripe or Square for truck drivers. The dashboard they built tracks fuel prices and expenses, connecting it all with fleet-tracking software that makes everything more efficient and less costly—and helps prevent fraud.

ASTERA LABS

FOUNDERS: **Sanjay Gajendra, Jitendra Mohan (CEO), Casey Morrison**
EQUITY RAISED: **$85 million**
ESTIMATED 2021 REVENUE: **$35 million**
LEAD INVESTORS: **Avigdor Willenz Group, Fidelity, Sutter Hill**

The cofounders met at Texas Instruments, where they came up with the idea for a new chip business to help clear bottlenecks throughout data centers. In 2017 they quit their jobs to start the Santa Clara, California, com-

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2022 NATIONAL TOP FUNDRAISERS

THE ANSWER FOR CANCER

(From left to right)

Jordan Loughran
Alice Voigt
Barrett Hight

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CANCER-FREE FUTURE.

2022 NATIONAL RUNNERS-UP

MISSION TO REMISSION

(From left to right)

Charley Schumacher
Katelyn Eberwein
Sydney Yee

Congratulations To Our National Top 5 Fundraising Candidate Teams:

TEAM THE ANSWER FOR CANCER Alice Voigt, Barrett Hight, Jordan Loughran / *Atlanta Campaign*

TEAM MISSION TO REMISSION Charley Schumacher, Katelyn Eberwein, Sydney Yee / *Las Vegas Campaign*

TEAM PANTHERS AGAINST CANCER Abri Iaquinto, Emily Ahmed / *Washington D.C. Campaign*

TEAM JUST BEAT IT! Fletcher Jones, Kailee Olliges / *Las Vegas Campaign*

TEAM RAISE HOPE TOGETHER Grace Sherner, Jack Sherner, Theo Weiman / *Washington D.C. Campaign*

Learn more or nominate a candidate

CloudTrucks CEO
Tobenna Arodiogbu

JAMEL TOPPIN FOR FORBES

pany, which designs its chips in the cloud. The firm's revenue is expected to reach $100 million this year.

ATMOSPHERE

FOUNDERS: **Michael Grisko, John Resig, Leo Resig (CEO)**

EQUITY RAISED: **$140 million**

ESTIMATED 2021 REVENUE: **$25 million**

LEAD INVESTORS: **S3 Ventures, SageView Capital, Valor Equity Partners**

Nearly four-year-old Atmosphere offers what CEO Leo Resig, 42, describes as "audio-optional" videos from YouTube, Snapchat, TikTok and other sources for bars, beauty salons, doctors' offices and other businesses. Free for such facilities, the service is supported by ad revenue from clients such as Jack Daniel's, DraftKings, government agencies and state lotteries. The Austin, Texas–based outfit now streams in more than 30,000 venues, capturing some 35 million unique visitors a month.

BOULEVARD

FOUNDERS: **Matt Danna (CEO), Sean Stavropoulos**

EQUITY RAISED: **$130 million**

ESTIMATED 2021 REVENUE: **$16 million**

LEAD INVESTORS: **Bonfire Ventures, Index Ventures, Point72, Toba Capital**

After waiting too long to get a haircut and forgetting to call until late at night, Stavropoulos wondered why getting an appointment for a trim wasn't as easy as ordering a pizza. Soon he and Danna were going door-to-door interviewing salon owners in Santa Monica, California. They quit their jobs at social content firm Fullscreen and started Boulevard in 2016 as a booking platform. Today, the Los Angeles–based company, which operates in all 50 states, assists more than 2,000 hair salons, spas and nail salons, and generates most of its revenue from handling payments. Its biggest customer is a high-end department store chain.

CELONA

FOUNDERS: **Vinay Anneboina, Ravi Mulam, Rajeev Shah (CEO), Mehmet Yavuz**

EQUITY RAISED: **$100 million**

ESTIMATED 2021 REVENUE: **$3 million**

LEAD INVESTORS: **DigitalBridge Group, Lightspeed Venture Partners, Norwest Venture Partners, NTT Venture Capital, Qualcomm Ventures**

Celona provides technology that helps companies deploy, operate and integrate 5G cellular technology with their existing IT infrastructure. "We are on a journey of making cellular as accessible to enter-

prises as WiFi has been over the last 15 to 20 years," says CEO Shah, 44. The Cupertino, California–based company, which counts Verizon and Google as clients, expects revenue to triple this year.

CLOUDTRUCKS

FOUNDERS: **Tobenna Arodiogbu (CEO), George Ezenna, Jin Shieh**

EQUITY RAISED: **$142 million**

ESTIMATED 2021 REVENUE: **$4 million**

LEAD INVESTORS: **Caffeinated Capital, Craft Ventures, Tiger Global**

Nigerian immigrant Arodiogbu, 31, cofounded CloudTrucks after selling self-driving car startup Scotty Labs to DoorDash in 2019. While other startups focus on digital freight, CloudTrucks, based in San Francisco, helps truckers, especially small owner-operators, manage operations. For instance, it offers insurance at a lower cost than a one- or two-man trucking operation could otherwise get. "We don't just help them on transactions," Arodiogbu says. "We help them generate more revenue, improve cash flow, lower costs and meet compliance, which is more challenging these days." With 3.4 million truck drivers in the U.S., Arodiogbu, who had been a product manager at HR firm Zenefits before it crashed in 2015 and at tech-enabled real estate firm Opendoor in 2016, has bigger plans, including such tools as a no-fee credit card for truck drivers. "We have invested a lot in the software and data science to help them," he says.

COWBELL CYBER

FOUNDERS: **Trent Cooksley, Rajeev Gupta, Jack Kudale (CEO), Prab Reddy**

EQUITY RAISED: **$123 million**

ESTIMATED 2021 REVENUE: **$20 million**

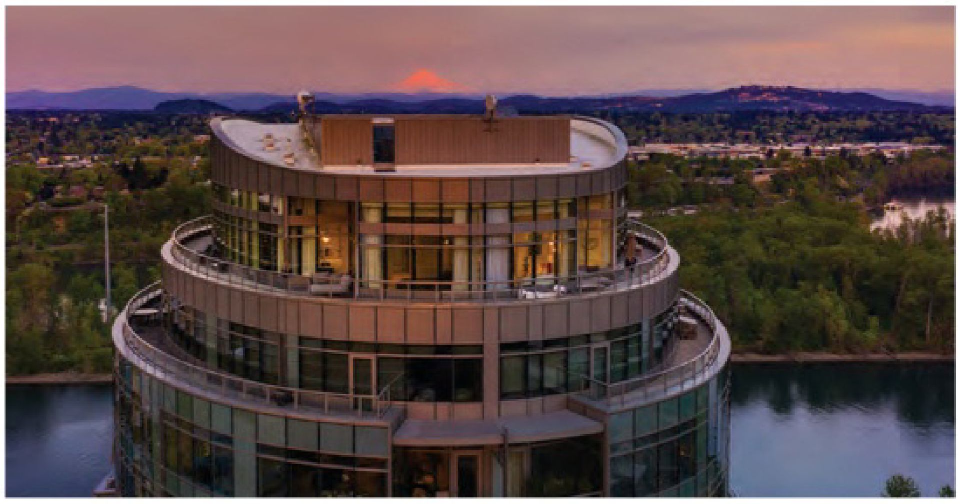
LEAD INVESTORS: **Anthemis Group, Brewer Lane Ventures, Manchester Story Group**

CEO Jack Kudale, who was formerly the chief operations officer of a cloud-security company, spent 100 days at a startup accelerator in Des Moines, Iowa, working on the launch of his own cyber insurance shop. Founded in January 2019, Cowbell, located in Pleasanton, California, uses AI to identify risks and has signed on more than 18,000 small and midsize businesses as policy holders.

Instawork CEO Sumir Meghani

ROBERT GALLAGHER FOR FORBES

Forbes
GLOBAL PROPERTIES



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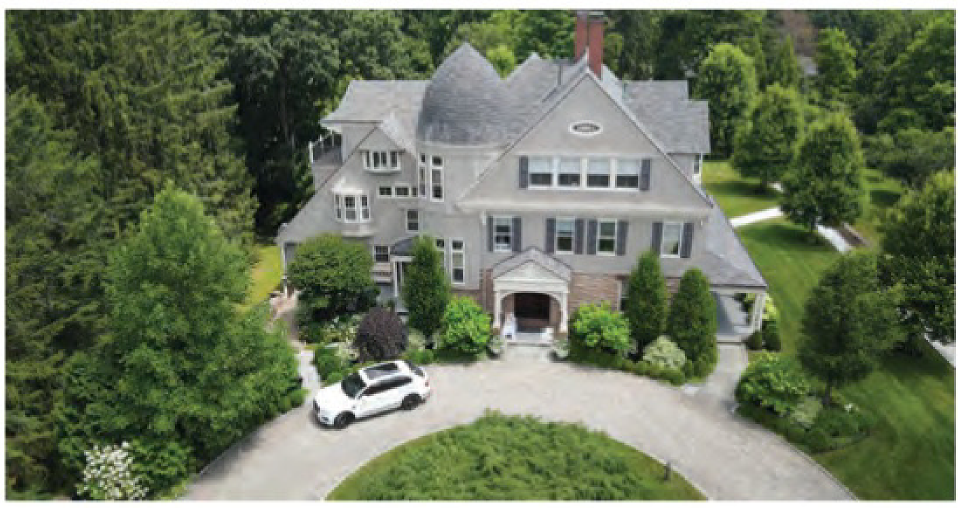

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DOMINO DATA LAB

FOUNDERS: **Nick Elprin (CEO), Chris Yang, Matthew Granade**

EQUITY RAISED: **$228 million**

ESTIMATED 2021 REVENUE: **$50 million**

LEAD INVESTORS: **Coatue, Great Hill Partners, Highland Capital Partners, Sequoia Capital, Zetta Venture Partners**

Elprin, 38, started Domino Data Lab with two colleagues from billionaire Ray Dalio's Bridgewater Associates. Having worked with the world's largest enterprises at the hedge fund, the trio built Domino with the same customers in mind. Bayer and Lockheed Martin, for instance, have hundreds of data scientists who use Domino to accelerate research and speed deployment of AI models. The venture arm of cloud giant Snowflake recently invested in the nine-year-old startup.

EQUITYBEE

FOUNDERS: **Oren Barzilai (CEO), Oded Golan, Mody Radashkovich**

EQUITY RAISED: **$87 million**

ESTIMATED 2021 REVENUE: **$5 million**

LEAD INVESTOR: **Group 11**

Israeli immigrant Barzilai, 38, launched two companies in his 20s. Like many founders, he offered his employees equity as part of their compensation but noticed few actually exercised their options. For his third act, Barzilai started EquityBee in 2018 to help employees understand their options and cash out by connecting them with accredited investors. So far it has helped thousands of employees at more than 100 startups.

FIRSTBASE

FOUNDERS: **Trey Bastian, Chris Herd (CEO)**

EQUITY RAISED: **$65 million**

ESTIMATED 2021 REVENUE: **$5 million**

LEAD INVESTORS: **Alpaca VC, Andreessen Horowitz, Kleiner Perkins**

Herd, 32, tried to build a fintech company in his native Scotland but couldn't get top staffers to relocate. In 2019 he shifted gears, launching FirstBase to streamline equipment management for remote workers. The firm now serves more than 100 clients, which pay an average of $12 a month per employee for its software.

FOUNTAIN

FOUNDERS: **Jeremy Cai, Keith Ryu, Sean Behr (CEO)**

EQUITY RAISED: **$225 million**

ESTIMATED 2021 REVENUE: **$40 million**

LEAD INVESTORS: **B Capital, DCM Ventures, Origin Ventures, SoftBank, Uncork Capital**

Fountain helps businesses including Deliveroo, Stitch Fix and Sweetgreen find hourly workers. To do so, the San Francisco–based company relies on robotic process automation. It nudges applicants with texts that start with the basics ("Are you over 18?") to find people who match the job and keep them engaged, then offers those candidates on-the-spot interviews.

Insurify CEO Snejina Zacharia

INSTAWORK

FOUNDERS: **Sumir Meghani (CEO), Saureen Shah**

EQUITY RAISED: **$100 million**

ESTIMATED 2021 REVENUE: **$100 million**

LEAD INVESTORS: **Benchmark, Craft Ventures, Spark Capital**

More than 70 million people work hourly jobs as dishwashers, cooks, forklift operators and the like. Meghani, 41, who previously managed a sales team of 150 at Groupon, founded Instawork, located in San Francisco, in 2015 to match these workers (it has 2 million in its system) with open positions using its own algorithm. Job applicants get access for free, while customers (including the stadiums of the New York Yankees and Mets) pay various percentages depending on the job type. "I spend a lot of time thinking about what a LinkedIn for hourly workers would look like," Meghani says. He had earlier tried to start a company that made educational games, but the seed of the idea for Instawork came while talking to the owner of an Italian restaurant in San Francisco's North Beach neighborhood about how hard it was to hire dishwashers. Instawork paid its placed workers an average hourly rate of $19.68 in June; they can opt to receive the money on a debit card almost immediately after clocking out of a shift. Even if the economy should fall into recession, Meghani figures Instawork will continue to do well matching part-timers with companies that might no longer want permanent employees.

INSURIFY

FOUNDERS: **Giorgos Zacharia, Snejina Zacharia (CEO), Tod Kiryazov**

EQUITY RAISED: **$128 million**

ESTIMATED 2021 REVENUE: **$40 million**

LEAD INVESTORS: **MassMutual Ventures, Motive Insurtech, Nationwide Ventures, Rationalwave, Viola FinTech**

In 2012, Snejina Zacharia, then an MBA

INSURIFY

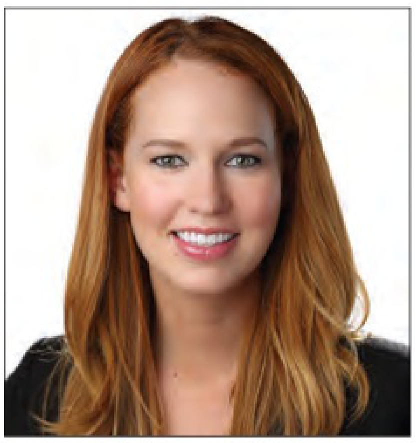
MAKING THE WORLD SAFER AND MORE SECURE EACH DAY THAN THE ONE BEFORE

Elite Cyber Women At Palo Alto Networks

by **CAROLYN M. BROWN**

ZEYNEP INANOGLU OZDEMIR, PH.D.

Chief Marketing Officer



WENDI WHITMORE

Senior Vice President, Unit 42

MEERAH RAJAVEL

Chief Information Officer

Silicon Valley tech companies in recent years pledged to propel their diverse workforces. Global cybersecurity giant Palo Alto Networks has led the charge with its advancement initiatives, Cybersecurity Academy, Girl Scouts Cybersecurity badges, and sponsorship of the National Center of Women Technology Summit. In the area of gender parity, the firm raised its female representation to 36%. Its executive leadership team is at 40% women and its diverse board is now 33% women. Palo Alto Networks chief marketing officer Zeynep Inanoglu Ozdemir, Ph.D., notes comparatively that industry data shows women occupy 25% of all cyber roles globally.

Setting Ozdemir apart from typical corporate marketing executives is that she spent the first half of her career as a software engineer and research scientist. Before becoming CMO in 2021, she worked on Palo Alto Networks XDR security threat detection and incident response tool. In her current role, she bears responsibility for informing and educating the industry on critical developments in cyber threats and the technologies used to combat them.

In an effort to raise public awareness of everyday cyber risks, the company recently launched its Zero Trust ad campaign, demonstrating how it is making each day safer than the one before so that in today's digital world, people can work and live without the fear of cyber attacks. "Back in the day, we would all go into one office. That office perimeter was well protected," says Ozdemir. "With more people working remotely (in the wake of the pandemic) and many of the SaaS applications people rely on today on a public cloud, we are more vulnerable to cyber attacks than ever, leading to a proliferation of threat vectors from ransomware to supply chain attacks."

Leading A Top Notch Squad To Fight Cyberthreats

As a teen, Wendi Whitmore wanted to be a fighter pilot. She was in the Air Force ROTC at the University of San Diego when she saw "the woman in black"—a special agent—at an alumni career day. That encounter led to Whitmore's career as a Special Agent conducting computer crime investigations with the U.S. Air Force Office of Special Investigations. Today, Whitmore heads a unique team that blends intelligence and incident response to help organizations tackle complex cyberthreats from ransomware to espionage.

"Most of the problems we're trying to solve are related to national security issues," explains the senior vice president of Unit 42 (taking its name from The Hitchhiker's Guide to the Galaxy). "We're bringing in threat detection and response technology that's going to answer our clients' questions as quickly as possible, and moving forward, to prevent future attacks," adds Whitmore, who is a member of the employee resource group Woman in Technology and organizations like WiCyS (Women in Cyber Security), and represents Palo Alto Networks on the DHS Cyber Safety Review Board.

Charting A Career Path To Success In Tech

Palo Alto Networks' chief information officer Meerah Rajavel believes the tech landscape is getting better for women. "When I look at CIOs, we were 7% over a period of five years. Now, about 21% of CIOs are women." Also, women hold 17% of chief information security officers roles at the nation's top corporations.

Rajavel started out as a software engineer, spending over a decade in R&D departments building products. She was introduced to computers as a teen growing up in a small town in the southern part of India. When her high school couldn't find faculty to teach computer science as part of the curriculum, the self-starter taught herself and others. She fell in love with coding.

In charting their career path, Rajavel, suggests women follow three guideposts: "one, don't get intimidated. Go for your goals and just make sure that whatever you do, your heart is in it. Two, get your support system right (mentors, sponsors, and trade organizations). Three, be a continuous learner to stay on top of your game."


Building
What's Next
in Cybersecurity
Complex connectivity. Mountains of data. An expanding cloud environment. And always-evolving cybercriminals. That's why we create, disrupt and innovate, ensuring the world is ready for whatever the future holds. See how we can help your organization move forward with confidence. See how We've Got Next.
WE'VE GOT NEXT
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student at MIT, had a car accident that caused her insurance premiums to spike. She searched online for more than three hours and called agents and carriers directly. After filling out the same forms multiple times, she learned she could lower her premiums only by tripling her deductible. "Insurance shopping is complicated, it's fragmented, people don't have an easy way to search all carriers in one place," says Zacharia, 45, a native of Bulgaria who came to the U.S. in 2003. So she started Insurify to enable users to search, compare, buy and manage their car, home and life insurance policies all in one place. She cofounded the company with her husband, Giorgos Zacharia, 48, a native of Cyprus who is now president of travel firm Kayak, and Kiryazov, 37, former director of digital strategy at Northeastern University. Today, the Cambridge, Massachusetts, firm has 160 employees, nearly one-third split between Pakistan and her hometown of Sofia. Zacharia says success hasn't come easy: "It's much harder when you're a foreigner, and double harder when you're a female founder."

KIN INSURANCE

FOUNDERS: **Sean Harper (CEO), Lucas Ward**
EQUITY RAISED: **$227 million**
ESTIMATED 2021 REVENUE: **$30 million**
LEAD INVESTORS: **500 Startups, August Capital, Commerce Ventures, Flourish, Hudson Structured Capital, Senator Investment Group, QED Investors**

Kin Insurance uses machine learning to offer better, cheaper home insurance. It runs aerial photographs through an image-processing algorithm and analyzes databases like the multiple listing service to come up with an accurate determination of the state of the house to be insured. Traditional insurance companies "price too high for homes that are less risky and price too low for homes that are more risky," says CEO Harper, 42.

LANDING

FOUNDER: **Bill Smith (CEO)**
EQUITY RAISED: **$237 million**
ESTIMATED 2021 REVENUE: **$83 million**
LEAD INVESTORS: **Delta-v Capital, Foundry Group, Greycroft**

Smith, 36, sold his membership-based online grocery service Shipt to Target for $550 million in 2018. Now he's back with Landing, another member network—this one for furnished apartments with flexible leases. *(See story, page 76.)*

LEAFLINK

FOUNDERS: **Zach Silverman, Ryan Smith (CEO)**
EQUITY RAISED: **$131 million**
ESTIMATED 2021 REVENUE: **$28 million**
LEAD INVESTORS: **Founders Fund, L2, Lerer Hippeau, Nosara Capital, Thrive**

In 2016, Smith, 31, and Silverman, 38, realized they could transform the burgeoning wholesale legal cannabis market with software. Until then, the industry had largely relied on an old-school daisy chain of phone calls, meetups and bags of cash. Today, New York City–based LeafLink's wholesale marketplace helps 8,300 retail outlets across 30 states buy cannabis products online from 3,400 brands.

LINKSQUARES

FOUNDERS: **Chris Combs, Vishal Sunak (CEO)**
EQUITY RAISED: **$162 million**
ESTIMATED 2021 REVENUE: **$11 million**
LEAD INVESTORS: **G Squared, Hyperplane, Jump Capital, Sorenson Capital**

Sunak, 38, and Combs, 39, founded LinkSquares in 2015 to offer AI-driven software to help businesses manage contracts. Sunak, an engineer by trade, spent a year and a half building the software before signing on his first customer. It's now used by more than 600 companies including Fitbit, Wayfair and TGI Fridays.

MODERN ANIMAL

FOUNDERS: **David Bowman, Steven Eidelman (CEO), Ben Jacobs**
EQUITY RAISED: **$150 million**
ESTIMATED 2021 REVENUE: **$5 million**
LEAD INVESTORS: **Founders Fund, True Ventures**

Former Bain consultant Eidelman, 37, set up this members-only veterinary service in 2019; it has four locations in Los Angeles, seven more in L.A. and San Francisco on the way and a mobile app through which users can set up in-person appointments or get 24/7 virtual care. It has 20,000 members and a waitlist of thousands more.

NOVO

FOUNDERS: **Tyler McIntyre, Michael Rangel (CEO)**
EQUITY RAISED: **$136 million**
ESTIMATED 2021 REVENUE: **$8 million**
LEAD INVESTORS: **Crosslink Capital, Stripes, Valar Ventures**

This Miami-based fintech focuses exclusively on small businesses, offering them easy, affordable banking that includes no monthly fees or minimum balances, re-

(From left) R-Zero founders Eli Harris, Ben Boyer and Grant Morgan

funds on all ATM fees, mobile apps and exclusive perks. Not a bank itself, it partners with Middlesex Federal Savings. Rangel, 35, founded Novo in 2016. It has signed up more than 100,000 customers since.

OCROLUS

FOUNDERS: **Peter Bobley, Sam Bobley (CEO), John Guerci, Victoria Meakin**
EQUITY RAISED: **$127 million**
ESTIMATED 2021 REVENUE: **$27 million**
LEAD INVESTORS: **Bullpen Capital, Fin Capital, Laconia, Oak HC/FT**

Ocrolus uses automation to analyze financial documents. It can classify them, capture key data, detect fraud and examine

ETHAN PINES FOR FORBES

cash flows. On top of that, the eight-year-old New York City company has more than 700 staffers who verify the data. PayPal, SoFi and Plaid are among its customers.

PETAL

FOUNDERS: **Jack Arenas, David Ehrich, Andrew Endicott, Jason Gross (CEO), Berk Ustun**

EQUITY RAISED: **$240 million**

ESTIMATED 2021 REVENUE: **$26 million**

LEAD INVESTORS: **Brooklyn Bridge Ventures, Tarsadia Investments, Valar Ventures**

Using machine learning to analyze bank transactions, Petal offers credit cards to people who might previously have been disqualified. It has two no-annual-fee cards—one for those with fair or poor credit, one for those with thin or no credit—that reward on-time payments with cash back starting at 1%. Since its 2017 launch, the company, headquartered in New York City, has issued more than 270,000 cards. It won't disclose default rates.

R-ZERO

FOUNDERS: **Ben Boyer, Eli Harris, Grant Morgan (CEO)**

EQUITY RAISED: **$170 million**

ESTIMATED 2021 REVENUE: **$13 million**

LEAD INVESTORS: **CDPQ, DBL Partners, World Innovation Lab**

The trio founded R-Zero in April 2020 in an effort to use ultraviolet-based disinfection to slow the spread of Covid-19. Helped by chief scientist Richard Wade, who had worked in the areas of air pollution and public health since 1975, R-Zero developed affordable UV-based hardware that disinfects, software and sensors that gauge certain risks to air quality and a dashboard to provide analytics. Its low price, in turn, enabled it to sell to schools, restaurants, hotels and corporations. Today, the company, located in Salt Lake City, hopes to use its technology to change how people think about indoor air quality long after the pandemic has receded from view. "I think we can come out of Covid and build a safer, healthier new normal," says Morgan, 33, who was previously vice president of engineering at startup iCracked and worked on stent development at Abbott. R-Zero's revenue is on track to triple this year.

SECUREFRAME

FOUNDERS: **Shrav Mehta (CEO), Natasja Nielsen**

EQUITY RAISED: **$78 million**

ESTIMATED 2021 REVENUE: **$6 million**

LEAD INVESTORS: **Accomplice Ventures, Base10 Partners, Gradient Ventures, Kleiner Perkins**

CEO Shrav Mehta, who developed more than 15 apps as a teen, cofounded Secureframe in January 2020 at age 23 after facing delays when trying to pass complex security reviews and certifications for his previous employer. "I thought maybe we can automate this in a couple different ways," he says. Today the San Francisco–based company provides security and compliance automation services that integrate with a company's human resources, IT systems and cloud services.

SETTLE

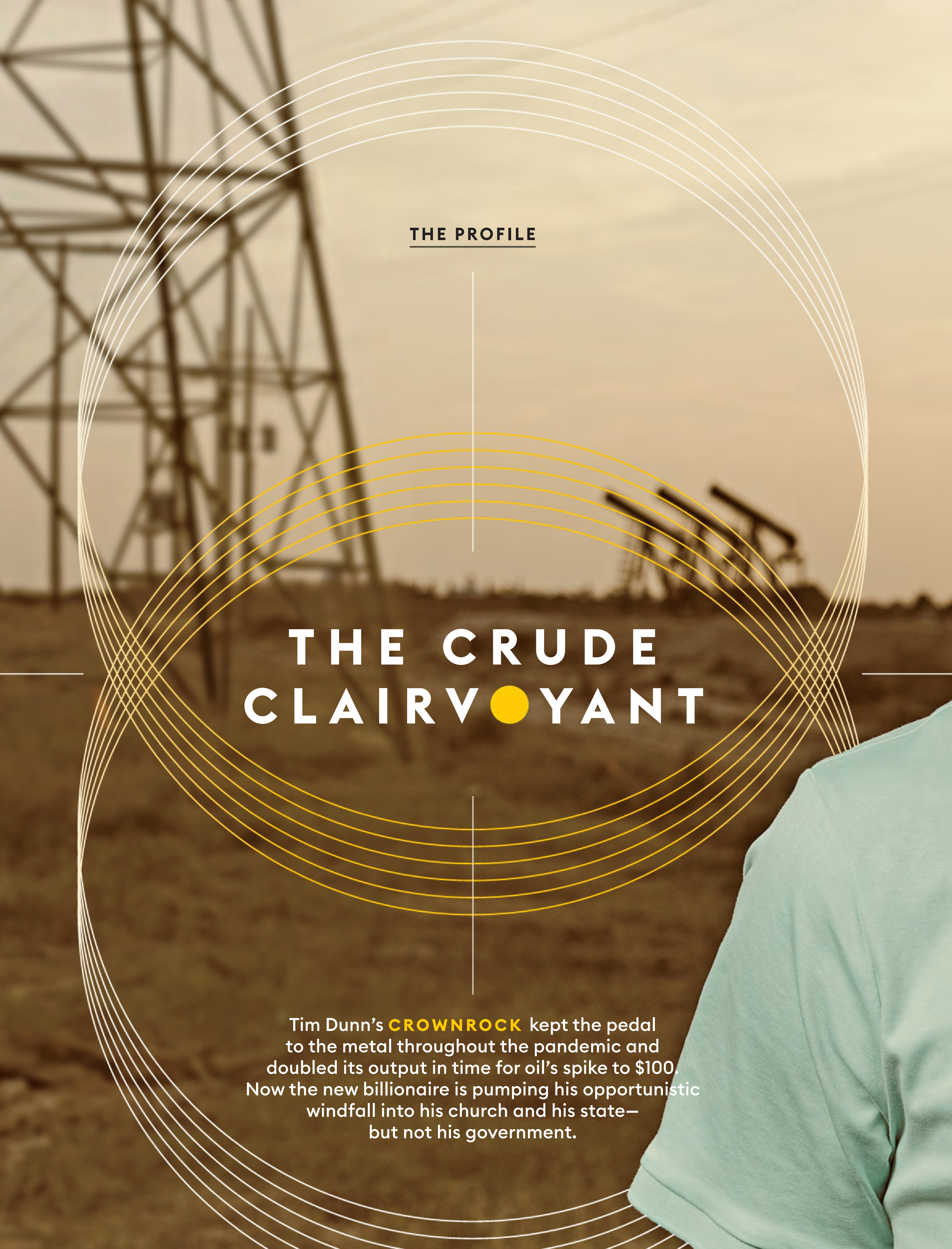
FOUNDER: **Aleksander Koenig (CEO)**

EQUITY RAISED: **$82 million**

ESTIMATED 2021 REVENUE: **$14 million**

LEAD INVESTORS: **Founders Fund, Kleiner Perkins, Ribbit Capital, SciFi Ventures**

Settle, headquartered in San Francisco, is a cash flow management firm that mostly helps small e-commerce brands that sell cookware, furniture and a host of other items. Its big differentiator, Koenig says, is that it has its own working capital, so customers can choose to pay for items such as inventory and marketing with their own money or with Settle's, then pay Settle back once they generate order revenue. Koenig, 36, a Polish immigrant and Johns Hopkins grad, worked as head of credit for fintech Affirm until 2019.



THE PROFILE

THE CRUDE CLAIRVOYANT

Tim Dunn's **CROWNROCK** kept the pedal to the metal throughout the pandemic and doubled its output in time for oil's spike to $100. Now the new billionaire is pumping his opportunistic windfall into his church and his state—but not his government.

BY **CHRIS HELMAN**

PHOTOGRAPH BY
GUERIN BLASK FOR FORBES

JUST A COUPLE YEARS AFTER THE PRICE OF OIL BRIEFLY FELL BELOW $0, DUSTY, SWELTERING MIDLAND, TEXAS, IS A BOOMTOWN AGAIN.

Hotels are at full capacity and there are 50% more rigs dotting the fields surrounding the West Texas city of 140,000, all thanks to crude prices above $100 per barrel. The Black Rifle Coffee shop (think Starbucks for gun aficionados) is bustling, and the wait for a table at Chuy's Tex-Mex runs about two hours.

Inside the 60,000-square-foot headquarters building of Midland's CrownQuest Operating, chief executive Tim Dunn is relaxing in jeans, sneakers and a golf shirt. He's surrounded by his three sons who work for the family business. Wally, 35, is a geologist; Luke, 42, heads engineering and operations; eldest son Lee, 43, is in business development. It's a warm environment—the four have a habit of completing one another's sentences—but when it comes to assessing the energy markets, Dunn *père* offers cold comfort. "Oil is going to get more expensive," he says simply. "We are reaching the end of where we can keep increasing supply."

Still, no one can blame Dunn for the current petroleum shortage. The 66-year-old, who has spent his entire life working in and around Midland's oil fields, has never stopped drilling, never quit exploring. Since the end of 2019, CrownRock LP, owner of the wells operated by CrownQuest, has doubled its output to 140,000 barrels per day, good for 12th place among privately owned U.S. oil companies. Incredibly, CrownRock kept four rigs drilling right through the worst of the pandemic downturn.

"Two years ago, Wall Street was telling us 'We don't need you, we're going to run everything off

Vox Dei

Tim Dunn strums a treasured Gibson mandolin at his Midland, Texas, home. He has recorded a series of Beatles covers with his son David, who is a professional musician, and plays in his church band. "I view praising God as a lifestyle."

sun and wind and reindeer and unicorns,'" Lee Dunn scoffs. Tim Dunn knew better. He had an unshakable belief that prices wouldn't stay low for long, and he knew that equipment and workers are cheap when demand dries up. So he kept investing. This sort of persistence by producers like Dunn has led to the trebling of U.S. oil production to 11 million barrels per day in just a decade. "We have blown a big hole in the trade deficit and lowered energy costs for the entire world," he says.

Not that it has garnered them any love in Washington. As prices rebounded—West Texas Intermediate is up 40% over the last 12 months—energy producers have become convenient political targets. In June President Biden said that the profits being made by oil companies "in a time of war" were "not acceptable." Senator Elizabeth Warren (D., Massachusetts) is busy crafting a windfall profits tax. Dunn doesn't appreciate either sentiment. The global energy business is a multifaceted megalith, projected to post $4 trillion in profits this year. Individual players are "price takers" that don't enjoy margins nearly as fat as those of, say, Apple or Microsoft. Dunn was miffed by a recent Biden tweet demanding that gas station owners lower their prices. "Most gas stations break even on the gas and make their money selling ice cream cones," he says.

Dunn himself is doing far better. Thanks to the oil price surge, CrownRock will likely earn upward of $1.5 billion on revenue surpassing $3.5 billion in 2022. If it were a publicly traded company, the operation would have an enterprise value on the order of $8.3 billion. After accounting for debt, the Dunn family's roughly 20% stake is now worth about $1.2 billion, double what it could have fetched 18 months ago.

Tim Dunn has no interest in being the face of windfall oil profits, but he isn't shy about defending the fossil fuel industry, either. "The extremists want to deindustrialize America," says Dunn. "They want to live in huts around a campfire."

Dunn grew up in Big Spring, Texas, about an hour from Midland, in the heart of what was once Comanche territory. His parents never graduated from high school; they worked on farms and factories in California during the Great Depression and World War II. After the war, Dunn's father moved to Texas and turned to insurance sales. The youngest of four boys, Tim settled down early. The Eagle Scout went to Texas Tech, where he majored in chemical engineering, got married and had his first child by the time he graduated in 1978. After a brief stint at Exxon, he went to work on oil deals at First City Bancorp in Midland. When oil went bust in the mid-'80s, Dunn was tasked with examining the books of small oil companies that had gone belly-up. It was a crash course in risk management.

"The number one objective of an oil company is just to stay in the phone book," he says.

In 1987 Dunn left the bank and joined Midland-based oil producer Parker & Parsley, where he eventually rose to chief financial officer. Toward the end of his eight years at the company, Dunn partnered with a fourth-generation West Texas oilman named Bobby Floyd, who was experienced in buying and selling drilling leases. In 1995, Dunn left Parker & Parsley to set up CrownQuest Operating with Floyd. The mission? To lease land and drill in West Texas' Permian Basin, America's largest oil field, which currently produces 5 million barrels a day, about half of total U.S. output.

The pandemic wasn't the first difficult time Dunn bet big. In 1998, when the Asian financial crisis pushed oil's price down to $12 a barrel, Dunn sold his family's horse ranch and used the proceeds to double his stake in CrownQuest. His sons remember him sitting the family down and telling them that oil this cheap was an opportunity they couldn't pass up.

"'The best time to buy is when things look darkest,'" Lee recalls his father telling him. "I was sad that I couldn't ride horses anymore." It was well worth it. The ranch proceeds were "the only real cash equity we ever put into it," Dunn says. When they wanted to drill, they tapped GE Capital for financing. Then in 2007 came CrownQuest's big break: $97 million from Houston private equity firm Lime Rock Partners to form CrownRock LP to drill traditional wells into conventional oil reservoirs. Dunn's operations made prodigious returns, selling seven oil fields to Linn Energy and BreitBurn Energy between 2010 and 2013. The BreitBurn deal alone was worth $280 million.

Then the game changed, literally beneath their feet. Although hydraulic fracturing, or fracking, has been around since the 1940s, it wasn't until about 2008 that the North American fracking boom got underway. Enticed by record-high oil prices, entrepreneurs began to try new techniques in an effort to get oil and gas out of ever deeper, tighter, thinner layers of rock. Drillers invented steerable drill bits that enabled them to go two miles down, then turn horizontally and bore directly into thin layers of shale in which oil and gas lay trapped. The infamous fracking process involves a fleet of trucks blasting millions of gallons of water mixed with sand down into the wellbores, where it breaks up the rock and props open fissures, allowing oil and gas to seep out and up the well. Within five years this process spawned giant shale fields with names like the Barnett (Texas), Bakken (North Dakota), Marcellus (Pennsylvania) and Haynesville (East Texas/Louisiana).

No one thought the new techniques would work in the Permian, because its deep layers of oil-soaked rock didn't look like other shale formations. No matter. In 2013, Houston's EOG Resources, fresh off a massive drilling campaign in the Eagle Ford shale of South Texas, was the first to try horizontal drilling and fracking of two-mile-deep Permian carbonate layers. At first these horizontals were not as fruitful as CrownRock's cheaper vertical wells. "We weren't going to do that," Dunn says with a smile.

But companies kept drilling more horizontals closer to Dunn's acreage. And they got better at it. "They were drilling wells that we never thought could be drilled," Dunn says. "It completely changed our way of looking at it." Instead of going after a handful of shallow targets, CrownRock now drills a smorgasbord of wells at up to a dozen different depths. Says Floyd, who serves as president of CrownQuest, "Basically, it was serendipity."

D**riving up to** the Dunn family's 17-acre Midland compound, visitors are welcomed by a small herd of free-range golden retrievers running across an expansive green lawn. Under the swimming pool's water slide is the "Hobbit House," a kid-friendly grotto that offers welcome shelter from temperatures that routinely reach triple digits. Nearby is a lush vegetable garden with melons, zucchini and tomatoes growing under the searing July sun. It's an oasis in arid West Texas, but just a quarter-mile away you can see the flames from excess methane being burned off at wellheads.

Five of the Dunns' six children and 17 of their 19 surviving grandkids live in Midland, several in newly built homes in the compound, exemplars of the "modern farmhouse" trend. Dunn bought the land 25 years ago when his family's homeschooling efforts inspired him to found Midland Classical Academy, a K-12 Christian school that sits just on the other side of the fence and now boasts 655 students and a waiting list.

Down the street is the Midland Bible Church, where Dunn taught Sunday school for 20 years and is a member of the "pulpit team," occasionally preaching to the congregation. In his oilpatch twang, Dunn refers to the Good Book as "the *Baaa-bul.*"

Christian ideals are a big theme at CrownQuest. All new employees, including roughnecks, are handed the book *Servant Leadership,* a system for managing organizations based on Biblical principles. "It's always a question of how much we can get them to read," Dunn says. The book's author, David Kuhnert, is a retired U.S. Army sergeant major who heads up training at CrownQuest. Dunn sums up the book's philosophy: "Love other people as you want to be loved. If you're against that, you're for exploitation."

In 2015 tragedy struck the family when Dunn's 2-year old granddaughter Moriah died suddenly. Dunn turned his grief into a book, *Yellow Balloons: Finding Power to Live Above Our Circumstances,* and launched a website and podcast offering daily inspirational messages. This has led to another site, thebiblesays.com, dedicated to helping the Bible—and life—"make sense to the ordinary person." Staunchly anti-abortion, Dunn funds adoption services in the West Texas region and supports foster homes for more than 300 children.

"If you're not giving anything, you're taking a risk that your money is going to own you," warns Dunn, whose definition of philanthropy is broad enough to include his forays into politics.

In 2010 he cofounded Citizens for Self-Governance, a project to revise the U.S. Constitution and promote personal responsibility. His head schmoozer at the Capitol in Austin is Michael Quinn Sullivan, former advisor to Representative Ron Paul and publisher of the right-wing website Texas Scorecard. Federal Elections Commission data show that Dunn has made more than 300 political donations since 2008. Recent checks include $250,000 in April to the Club for Growth Action, a PAC devoted to cutting taxes, and $100,000 to the American Greatness PAC, a conservative opinion generator best known for attacking former FBI director James Comey. In early November 2020 Dunn gave $50,000 to the Trump for Victory PAC. "I view investing in politics as a philanthropic exercise," he says. "I pay dues to lobbyists to prevent bad regulation."

"People assume he's an angry firebrand, handing out torches and pitchforks, but he's anything but that," says businessman Ryan Sitton, who owns Pinnacle Advanced Reliability Technologies, a Houston firm specializing in oil-patch engagements and who, with Dunn's support, won election in 2014 to the Texas Railroad Commission, the state's oil and gas regulator. Sitton insists Dunn is not interested in being a kingmaker; he just wants to see progress on halting regulatory creep. "He operates with a calm humility, from the idea that what he believes is right. And he's comfortable doing things that may piss people off."

To minimize his company's interaction with federal agencies like the Federal Energy Regulatory Commission and Bureau of Land Management, Dunn is careful to keep most of his operations within Texas' borders. He would like to see the Environmental Protection Agency dismantled and its "permit by decree" system, which mandates that a federal bureaucrat must sign off on new projects, scrapped. In its place he would replicate the approach taken by his allies at the Texas Railroad Commission, known as "permit by rule"—in which operators get penalized only if they get caught running afoul of regulations.

Dunn has also come out against such actions as the addition of the dunes sagebrush lizard and the prairie chicken to the endangered species list. "The lizard thing is a scam," Lee Dunn says. "There's lizards all over the place."

Says an indignant Tim Dunn, "People who live in Washington, D.C., are telling us, making rules for us, on how to clean up the place where we live. We live here!"

Outside observers tend to focus on Dunn's religious beliefs and his heavy-handed right-wing "philanthropy," but within the company they aren't the subject of much discussion. Instead, he and his management team focus on what they call a culture of "relentless optimization." Translation: Drill, baby, drill—or, more specifically, frack, baby, frack.

Given that full-scale horizontal drilling requires a lot of upfront investment before the cash flows kick in, CrownQuest issued $1 billion in senior notes in 2017 and a year later sold $475 million in preferred equity to Evanston, Illinois' Magnetar Capital and Washington, D.C.–based EIG Global Energy Partners. To date, private equity fund Lime Rock has made an estimated 40-fold return on its initial 2007 investment in CrownRock. In 2018, it raised $1.9 billion to cash out limited partners who had been in since the beginning. It still owns 60% of the venture. Late last year, Goldman Sachs raised $200 million to finance Dunn's acquisitions of oil field royalty trusts, which pay a dividend of roughly 20% on each barrel pulled out of the ground.

Global demand for petroleum now stands at nearly 100 million barrels per day, and Dunn is looking to produce as much of that black gold as he can from the 90,000 Permian acres his company controls. CrownQuest is now spacing its wells together as tightly as possible despite the risk of having adjacent wells run into each other, or "communicate," which can cause pressure problems and reduce output.

"HE OPERATES FROM THE IDEA THAT WHAT HE BELIEVES IS RIGHT. AND HE'S COMFORTABLE DOING THINGS THAT MAY PISS PEOPLE OFF."

"Our incentive is to maximize this value because we're not going to get another one of these things," Lee Dunn says, referring to their prodigious acreage, acquired at a tiny sliver of its present value.

The Permian Basin's operators need to drill, frack and pump more than 2,000 wells every year just to supply the 2 million barrels a day of new capacity needed to balance out natural production declines. It's not an easy task. The industry is struggling with shortages of manpower, horsepower and drilling equipment. Relief will be slow to come. Oil field services giant Halliburton said in mid-July that it was "sold out" and couldn't take on any new customers for the rest of the year.

Dunn has an advantage here too, though. He kept operating and cutting paychecks when everyone else was firing folks and shutting down wells. That has bought him a great deal of loyalty.

"They'll sponsor guys to set up their own companies, promising that CrownRock will buy services from them," says J. McLane, Lime Rock's chief investment officer. "They aren't cutthroat. They won't grind contractors down in tough times, but they expect to maintain preferred access during [boom] times like now."

Exactly how long the boom will last this this time around is anyone's guess. How much longer will Vladimir Putin prosecute his vicious war in Ukraine? How aggressively will Europe wean itself off Russian energy? Is there a global recession on the horizon? More Covid-19 lockdowns in China? A newer, deadlier coronavirus variant? Dunn isn't worried: "When has the world *not* been energy transitioning?" And he has enough acreage to keep fracking for a decade.

Big High Country

"This is part of history," says Berner, CEO and cofounder of the Cookies cannabis brand, at his Montana vacation home. "I can die saying I helped kick the doors down."

WEED VS GREED

By **WILL YAKOWICZ**

Photograph by **ETHAN PINES** for Forbes

THE TREND

OVERREGULATION. OVERTAXATION. CONTRADICTIONS. AMERICA'S POLITICIANS HAVE COMPLETELY BLOWN THE EASIEST REVENUE OPPORTUNITY EVER—LEGALIZED DRUGS. BUT IT'S NOT TOO LATE TO SAVE THE $72 BILLION MARIJUANA INDUSTRY.

FIVE HOURS NORTH ON ROUTE 101

from San Francisco to Humboldt County, through a few cool redwood groves, Johnny Casali turns on a woodchipper and empties 55 pounds of pot into the chute. Casali grew cannabis illegally under the California sun for four decades. Now a state-licensed grower, he's destroying what used to be his cash crop.

"It doesn't matter how good your product is; there's so much supply in California that it's a race to the bottom," says Casali, founder of the Garberville-based Huckleberry Hill Farms, which produces about 500 pounds of craft cannabis a year from the two small greenhouses in his backyard in America's weed country. "It feels like I'm a lettuce farmer right now—I'm working on the smallest of small margins."

Cannabis legalization was supposed to make a slew of entrepreneurs rich—including "legacy" operators, a coy euphemism for what used to be called drug traffickers, dealers and illegal growers. It was supposed to take something used widely and erase the criminal element from it. But of course, America's politicians are blowing it. Thanks to overregulation, overtaxation and state-by-state inconsistencies, the biggest no-brainer in the history of capitalism—legalizing the world's most popular illicit drug—is turning into a massive market failure.

Some 95% of California cannabis cultivators operated at a loss last year, according to Jonathan Rubin, CEO of New Leaf Data Services, an institutional-grade wholesale price tracker. With the wholesale price of pot per pound in California down 52% since 2017, the year before legal recreational sales started in the state, squeezing out a profit is nearly impossible. The trouble boils down to simple supply and demand. It's easy enough to get a permit to grow marijuana, a crop that proliferates abundantly if you know what you're doing. Many farmers therefore began growing it in search of green riches. But gaining approval to sell it is complicated for retail outlets. First, there's Nimby-ism: Even in weed-friendly California, nearly two-thirds of municipalities have refused to allow legal dispensaries within their borders. Second is regulation: Many states make dealing with weed more complex than handling weapons-grade plutonium. Third is the continued federal ban on marijuana, which makes building a business extremely difficult and limits access to the mainstream banking system. As such, most dispensaries are cash-only—a dangerous absurdity in an increasingly cashless world.

One result is that California is home to just 1,000 dispensaries—one for every 40,000 residents. With so much pot chasing so few retail outlets, a lot of the extra weed funnels into the black market, which was supposedly going to

ETHAN PINES FOR FORBES

Green Acreage

Glass House Brands' 1.5 million-square-foot greenhouse in Camarillo, California, will eventually bring 200,000 pounds of pot to market, enough to influence the wholesale price of bud.

be eradicated when marijuana went legit. Thus, legal prices are plummeting—by 35% in California in the second quarter alone compared with the year before. In the United States' largest cannabis market, consumers spent $5.1 billion on legal weed last year—and an estimated $15 billion on *illegal* bud. The numbers nationally are similarly tilted toward the black market, with $25 billion worth of pot sold legally last year and almost twice that much moved the old-fashioned way, according to research from investment bank Cowen Inc.

Despite the fact that 60% of Americans support legalization for recreational use and 91% for medicinal purposes, the Drug Enforcement Administration recorded 6,606 marijuana arrests in 2021, a 25% *increase* over the prior year, with Black and brown people making up a majority of those arrested. So much for "legalization."

Amid collapsing prices, the legal weed industry shoulders a tremendous tax burden that its illicit competitors don't. State taxes on retail sales are as high as 37%. And although marijuana remains illegal under federal law, Uncle Sam still holds out his hand for a big cut; pot companies are not allowed to take most normal business deductions, leaving them with an effective tax rate of 60% or more.

Illinois, for example, brought in $467 million in tax revenue from marijuana in the fiscal year ended this past June, compared to just $320 million from liquor—yet the stock prices of publicly listed cannabis companies have crashed between 50% and 70% over the last year. Now *that's* reefer madness.

Nonetheless, 43-year-old Jason Gellman stands in one of his six light-deprivation greenhouses in his backyard in Humboldt, surrounded by elbow-high purple pot plants.

Purple Kush

Kim Rivers, CEO of Tallahassee-based Trulieve, doesn't see legalization as a red state or blue state issue. "Our target customer aligns with who goes to CVS," she says. "Everyone."

GUERIN BLASK FOR FORBES

He's been growing weed and running from helicopters in the hills since he was 16. He says that going legal—he incorporated as Ridgeline Farms—was the only path toward a future that didn't involve scheduling visits with his wife and kids from inside a penitentiary. But he adds that he would have cleared almost $1 million from his crop in the days before legalization—today he makes about $100,000 before costs, and he's barely in the black, much less making a living income. "This whole thing is a fucking scam," Gellman says. "It's set up for us to fail."

"THERE IS NO LEGALIZATION," SAYS KIM RIVERS, CEO OF FLORIDA-BASED TRULIEVE. "WE'RE TAXED THE SAME AS IF WE SOLD HEROIN."

I**f you want** to get a look at the current state of the legal marijuana industry, come to the 1,200-square-foot commercial kitchen of Oakland-based MAKR House, which produces pot-infused edibles and other offerings. More than a dozen mandated cameras record high-definition video of the production line. Because cannabis businesses can open only in designated "green zones," rent is far higher than what a different commercial entity would pay, says Amber Senter, CEO of MAKR. To top it off, the operation has been broken into twice this year.

"What is legalization doing to small business owners like myself? It's killing us," Senter says. "It's *crushing* us." By "legalization," of course, she means regulation. Everyone loves the idea of a fair, transparent market. It's the mandates and fiats that are killing legal weed—more specifically, the balkanized nature of those regulations. Without federal legalization, anyone trying to create a marijuana business at scale has to ponder 38 sets of rules, reporting standards and tax regimes.

Things are so bad that even Steve DeAngelo, the "father of the legal cannabis industry" (as former San Francisco Mayor Willie Brown once called him), calls the whole effort a "failure." DeAngelo, a former dealer turned dispensary owner, was the driving force behind Proposition 64, which legalized recreational cannabis in California in 2016, unleashing a state-by-state legalization gold rush. Recreational pot is now legal in 19 states; it's permitted for medical use in another 18 plus the District of Columbia.

"We legacy folks, over the course of 50 years, built a market which was fair, which was resilient and which served everybody in the market very well," says DeAngelo, who founded Oakland-based Harborside Health Center, one of the country's first licensed cannabis dispensaries. "And now we've had this hand of government intervention completely disrupt it."

Compare the difficulty of working within a state, across multiple states and amid a thicket of tax regimes with the established black market, which has to deal with none of that, and you can see why the typical person smoking a joint probably obtained it illegally. "There's an economic disincentive to participate in the legal market," says Emily Paxhia, who cofounded Poseidon, a San Francisco cannabis investment firm with $200 million in assets under management.

In the middle of this mess, the lines blur. Many companies in the legal industry regularly divert product into the black market, and vice-versa. "There is cannabis flowing in both directions all the time," says Rubin, the industry tracker at New Leaf.

Working with the illicit market, many cannabis entrepreneurs say, is the key to staying afloat right now. Jonathan Elfand has been growing and selling marijuana since he was 17 and has the rap sheet to prove it. He and his father were arrested in 1998 and convicted of running a large pot grow house in Brooklyn, a crime for which the younger Elfand was sentenced to 10 years.

Today he runs Empire Cannabis Club, one of New York City's many gray-market adult-use dispensaries that operate openly thanks to a legal loophole that state legislators accidentally created. Elfand's shelves in New York are filled with products from California and other states in


You can't replace wildlife once it's gone.
San Diego Zoo Wildlife Alliance
sdzwa.org

which cannabis is legal. "Every single company has a back door," he says.

In the Maywood neighborhood of Los Angeles, at the Cookies-branded dispensary, the laws of supply and demand seem to be working surprisingly well. On March 16, three days before Cookies dropped its newest strain of designer weed, a 41-year-old who goes by the *nom de cannabis* Smokey Vanilla parked his Toyota Camry in the Cookies dispensary parking lot and set up camp. For the next 72 hours, Smokey slept in his car, the way a sneakerhead might for a Yeezy shoe drop or a Baby Boomer might have decades ago for Rolling Stones tickets—all so he could be one of the first to get his hands on a half-ounce of Céreal à la Mode. The potent strain took Cookies two years to develop.

"There's nothing like Cookies and their flower," says Smokey, who has made a pastime of traveling to store openings and strain drops. "I felt like, what's a couple days outside?" Others agreed: Hundreds of people showed up early, settling into a line that snaked around the block.

Within hours of the release, Cookies' inventory was sold out. "I know the power of good weed," says the company's cofounder, a prolific 38-year-old rapper known as Berner (né Gilbert Milam Jr.). For Berner, the lines and empty shelves are all by design—he's found a way to sidestep the insane economics wrecking the rest of the industry. "It's like Steve Jobs revealing a new product, but with the Supreme crowd," he says from the deck of his $2.7 million Montana vacation home, taking a drag on a joint as thick as his index finger at 10 a.m.

Berner, like the farmers in Humboldt, comes from the illicit market. In the early aughts, the San Francisco native met underground cannabis cultivator Jai Chang, who was known for producing an immaculate version of a strain known as OG Kush in his Sunset District garage. Chang had also developed a hybrid that he thought tasted like Thin Mints, so he dubbed it "Girl Scout Cookies." Berner sold the pot to his friends, including hip-hop artist Wiz Khalifa, and Girl Scout Cookies became a sensation. After the Girl Scouts of America reportedly sent cease-and-desist letters to medical dispensaries that stocked Chang's creation, the duo launched their brand in 2011 as simply Cookies, which included a cult streetwear line in addition to cannabis strains. "You can go to Japan, you can go to Dubai, you can go to Mexico," Berner says. "Everyone knows the word 'cookies.'"

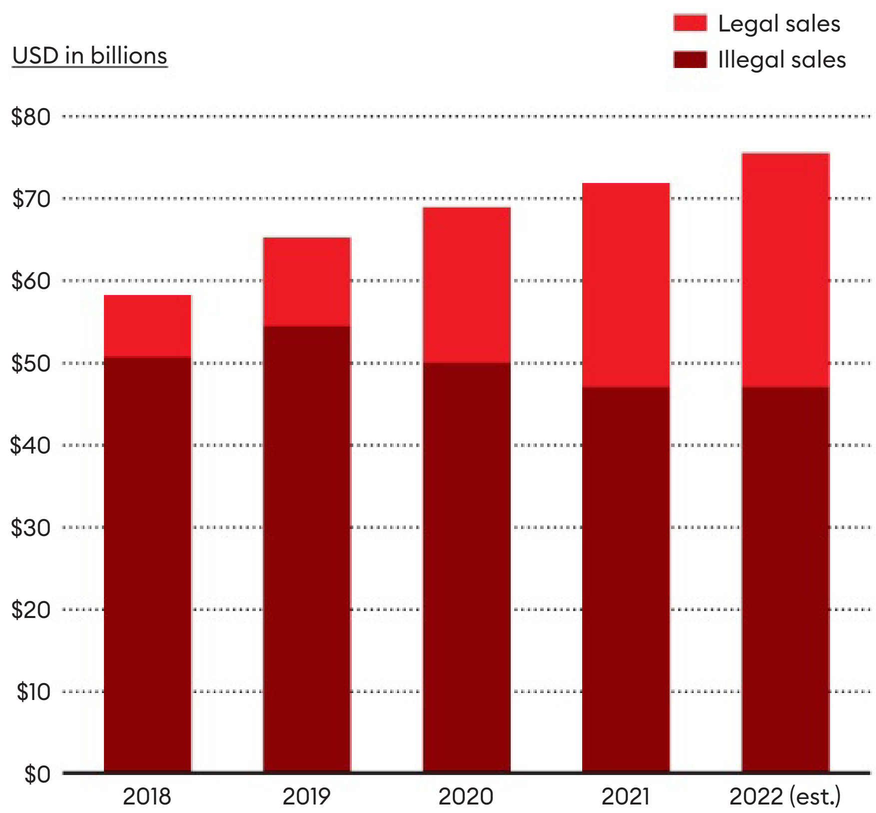
Today, Cookies has 51 licensing deals with branded retail shops across the world—from Los Angeles and Las Vegas to Worcester, Massachusetts, and Be'er Sheva, Israel. It plans to open one of Thailand's first branded legal dispensaries in August. With an estimated $400 million in gross merchandise sold last year, *Forbes* figures that Cookies generates around $50 million in annual revenue, and with high margins, is conservatively worth $150 million. Along with its shrewd knowledge of how branding can sidestep the marijuana industry's terrible economics, the Cookies team also understands licensing. They don't actually grow cannabis—they just take up to a 20% cut from the farmers who use their seeds. Nor do they sell it—they garnish another 5% to 15% of gross revenue from every branded dispensary, knowing that they have the name customers will camp out in their cars to buy. They have the prices to match, too—an eighth of an ounce of BernieHana Butter costs $60, perhaps 50% more than a generic strain, while a Cookies hoodie will run you $100. In an industry dysfunctional at both ends of the supply chain, they are the low-risk middleman. "This is survival of the fittest," Berner says.

Ask Kim Rivers if legalization in America is a failure, and she laughs. "There *is* no legalization," she says, explaining that under federal law the whole industry is technically a vast but visible criminal enterprise.

That's quite a statement from one of the most powerful people in pot. Rivers is the CEO of Tallahassee, Florida–

STREET VALUES

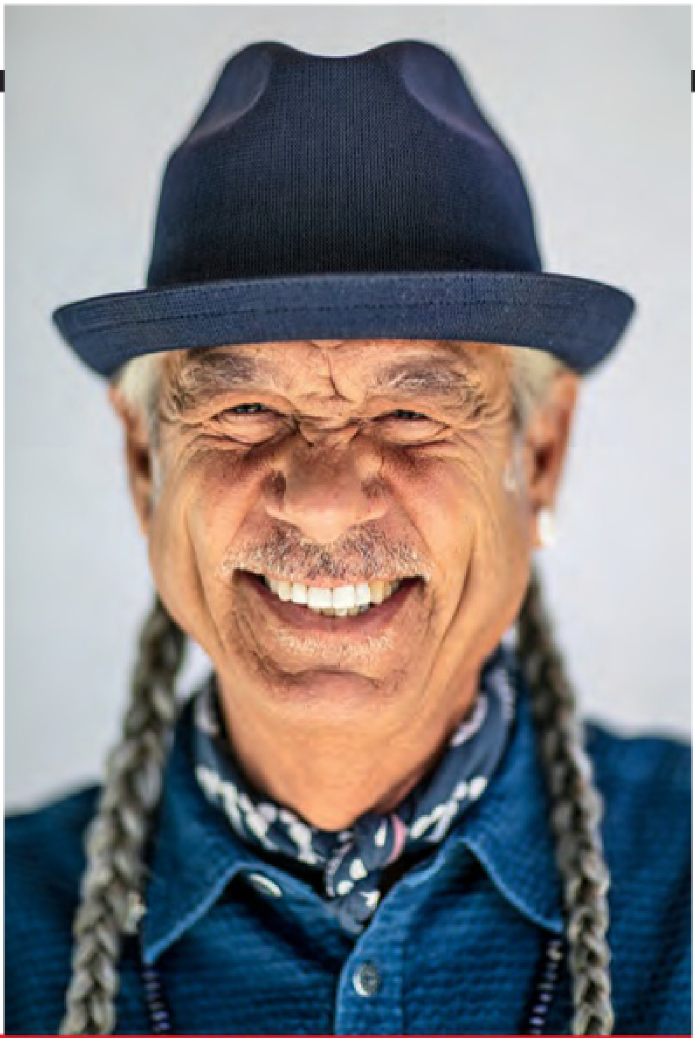
DESPITE LEGAL AND REGULATED MARKETS IN 38 JURISDICTIONS, THE ILLICIT CANNABIS BUSINESS STILL DWARFS LEGAL SALES.



***Source:** Cowen Inc.*

based Trulieve, a $2.5 billion (market cap) company with 173 dispensaries and 17 cultivation facilities across 11 states. According to Rivers, scale isn't about growth, but rather a matter of survival.

"We're taxed the same as if we sold heroin," she says. Ironically, while the federal government outlaws weed, it still wants a taste: Businesses that touch the plant are taxed under 280E, a section of the tax code created to prevent drug traffickers from taking normal deductions besides the cost of goods sold. This means cannabis companies are taxed on their gross profit, resulting in an effective tax rate of 60% or more. According to Rivers, whose company did $938 million in sales last year, Trulieve paid $85 million more in taxes than if it had sold, say, furniture.



Cannabis Godfather

Having championed legalization in California, Steve DeAngelo now admits it has failed the Golden State, as legal weed flows freely into the illicit market so companies can stay in business.

Long Beach, California–based Glass House Brands similarly focuses on scale and driving down the cost of goods sold. Its largest cannabis facility grows 400,000 plants across 1.5 million square feet of greenhouse space. Launched by Sonos founding team member Graham Farrar and former police officer turned real estate entrepreneur Kyle Kazan, it reaped its first harvest in June, with a cost of goods around $189 per pound. Farrar plans to push the company's costs down to $100 per pound soon. Glass House, which is publicly listed on Canada's Neo Exchange, generated $69 million in revenue in 2021 but reported a $44 million loss.

Ultimately, Farrar says, the massive operation is a "call option" on federal legalization, at which point he expects to be allowed to sell some of his giant harvest across state lines, like California wine.

Federal decriminalization—removing cannabis from the list of controlled substances—is, by all accounts, the magic bullet. It would remove the 280E tax penalty, allow normal access to banks and facilitate more interstate sales.

"When those walls come down, this greenhouse is not going to feel big anymore," Farrar says. "One greenhouse will be for Florida, another will be for New York and one of them will be for Texas. It's going to be California cannabis on the shelves of all the dispensaries across the rest of the country."

WORKING WITH THE ILLICIT MARKET, MANY CANNABIS ENTREPRENEURS SAY, IS THE KEY TO STAYING AFLOAT. "EVERY SINGLE COMPANY HAS A BACK DOOR."

In late July, Senate Majority Leader Chuck Schumer (D., New York) and Senators Cory Booker (D., New Jersey) and Ron Wyden (D., Oregon) introduced a bill to end federal cannabis prohibition. If passed, it would remove marijuana from its Schedule I status under the Controlled Substances Act and regulate it like alcohol and tobacco. Freshman Congresswoman Nancy Mace (R., South Carolina) has a competing bill with a lower federal excise tax, while the Charles Koch–founded group Americans for Prosperity has been lobbying hard to legalize cannabis at the federal level.

Until Congress acts, there will be carnage. In July, California, belatedly recognizing the mess its politicians created, repealed a tax on cultivators. But it's too late to save Golden State producers from shredding their product in the woodchipper rather than selling it at a loss.

Berner, for one, is not optimistic that Congress can get much of anything done right now, much less legalize cannabis nationally. But having recently beaten colon cancer, he sees the world through rosier lenses. "This is part of history—I can die saying I helped kick the doors down," he says. "Being a Latino kid who had been selling weed since I was 12, it's working. Legalization is just getting started."

While sitting on his dock, floating on the marine-green water, surrounded by the Mission Mountains and smoking another two-gram joint, Berner is focusing on his next big acts: opening Cookies dispensaries in Thailand and Miami this summer, then a Cookies clothing store with a lounge and a "Cookies University" near Macy's in Manhattan. Eventually, he hopes to transform the New York store into a licensed dispensary, which would give him a cannabis empire that stretches from Melrose to Broadway.

"It's going to play out like alcohol played out—there's only going to be a few players," Berner says. History concurs. Prohibition ushered forth a decade of crime and dysfunction, while repeal led to the emergence of great, profitable American industries and brands. Congress, are you listening?

ROBERT GALLAGHER FOR FORBES

THE INVESTIGATION

THE 45TH PRESIDENT WAS CHAINED TO MONEY-LOSING REAL ESTATE AND DROWNING IN DEBT WHEN HE LEFT OFFICE. NOW, MAGICALLY, HE IS FLUSH WITH CASH AND FREE TO DEAL—THANKS TO A LITTLE HELP FROM POWERFUL FRIENDS.

DONALD TRUMP'S GREAT ESCAPE.

BY **DAN ALEXANDER**

ILLUSTRATION BY **WESLEY BEDROSIAN** FOR FORBES

The day Donald Trump left the White House, his business was facing $900 million of debt coming due in the next four years. Working through those loans would have been a significant undertaking for any firm, but the Trump Organization was contending with additional challenges. Deutsche Bank, Trump's longtime lender, was reportedly looking to end its relationship with the real estate mogul. Two other financial institutions, Signature Bank and Professional Bank, had spread the word that they were cutting ties in the wake of January 6, 2021. Meanwhile, the Manhattan district attorney was getting close to charging the Trump Organization with a series of financial crimes, including falsifying business records, conspiracy and fraud.

Soon plenty of people were trumpeting the end of an era. "The indictment of the Trump Org will likely result in its destruction as a viable entity," Richard Signorelli, a former federal prosecutor in the Southern District of New York, tweeted in June 2021. "No bank will ever do business with an indicted company," Dan Goldman, a onetime prosecutor who served as lead counsel during Trump's first impeachment trial, said on MSNBC, calling an indictment "almost a death blow to the Trump Organization."

Those predictions turned out to be dead wrong. In the last 15 months, the Trump Organization—under indictment, with its founder characterizing the charges as part of a "political Witch Hunt by the Radical Left Democrats"—has managed to rework almost all $900 million of the debt it had coming due. Two of its most troublesome Deutsche Bank loans, totaling $295 million, are now off the books. The former president sold his money-losing hotel in Washington, D.C., to an investment shop connected to former Major League Baseball star Alex Rodriguez and retired boxing champion Floyd Mayweather, thanks to help from a firm tied to computer billionaire Michael Dell. Trump also refinanced $125 million of debt against a Miami golf resort and reworked a $100 million mortgage at Trump Tower.

Trump's business still has plenty of debt—an estimated $1.1 billion in all—but now most of it doesn't come due until 2028 or later. Two loans that haven't been refinanced—a $13 million mortgage against a property on Third Avenue in Manhattan and a $45 million loan against a tower in Chicago—mature in 2024. But neither of those should be too difficult to pay back. After all, Trump now has an estimated $375 million in cash on hand, more than three times the sum he had at any point during his presidency, thanks to the spate of dealmaking.

How did he manage to pull all this off? First, he got some help from Steven Roth, his near-billionaire business partner, who has a sterling reputation in the real estate world. Then Trump cut a miraculous deal with a murky investment firm called CGI Merchant Group. Finally, he found a Kushner family–connected lender to replace Deutsche Bank, which for years had financed his projects and overlooked his shortcomings. "Every business in the world is completely morality-agnostic when it comes to moneymaking opportunities," says Mike Offit,

Money Pit

The Trump International Hotel in Washington hemorrhaged cash and regularly needed bailouts. The buyers hope the new Waldorf Astoria brand will attract patrons of all political stripes.

BRIAN IRWIN/ALAMY

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Franklin Templeton · FS Investments · Global Atlantic Financial Group · Invesco QQQ · Pacific Life · Principal · ARK Invest · Resolute Investment Managers · Susan G. Komen who started Deutsche Bank's relationship with Trump in the 1990s after the future president came off a series of bankruptcies. "He'll always have lenders. Yes, it may be expensive. But there will always be entities that will lend to him."

Donald Trump needed cash. It was June 2020, and the president had an estimated $95 million on hand, only $65 million of which he could freely access and $30 million of which was under Steven Roth's control. Ninety-five million would have been plenty for most people, but it was not enough for Trump, a tycoon with $900 million in debt nearing maturity who also happened to be in the midst of a presidential campaign.

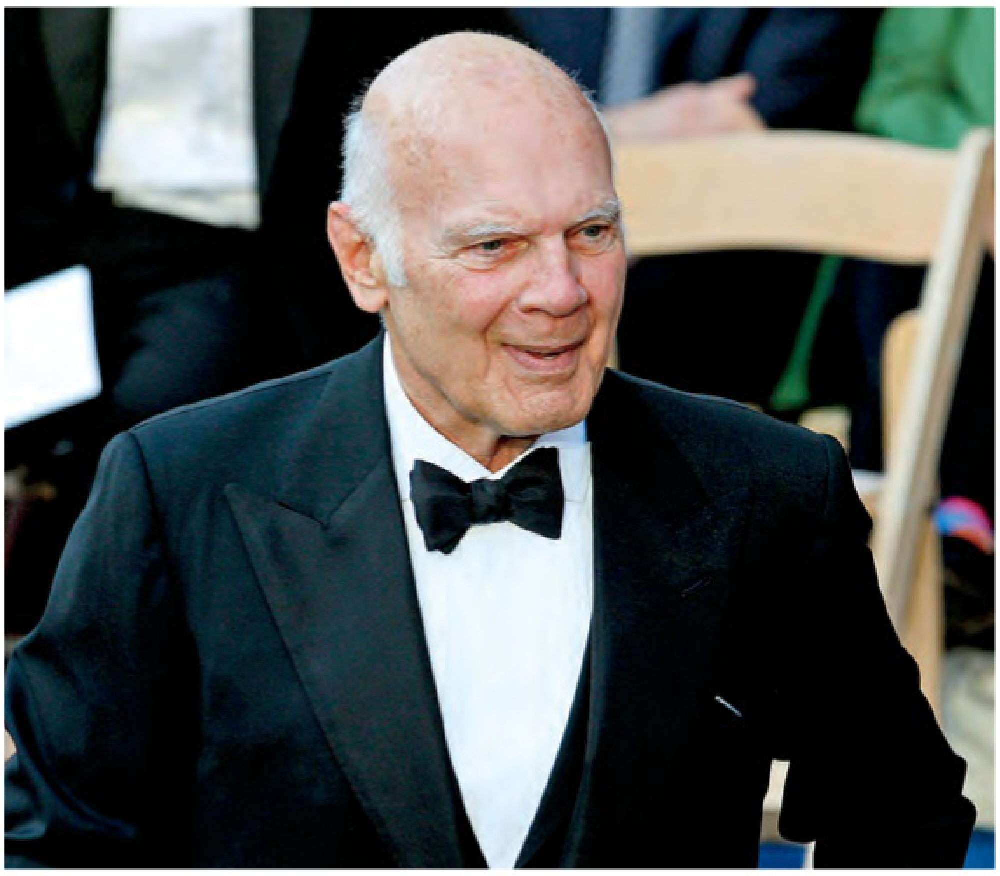
Fortunately, Roth, who had been Trump's business partner for more than a dozen years, was there to help. His publicly traded company, Vornado Realty Trust, made it clear that same month that it was looking to sell or refinance two buildings, 555 California Street in San Francisco and 1290 Avenue of the Americas in New York, that it controlled in a 70-30 partnership with the president. "It's kind of interesting that these two are on the block," analyst John Kim of BMO Capital Markets said at the time, referring to the fact that Roth's real estate firm owns more than 50 buildings. "I mean, the way Vornado said it was they're in control of the decisions, like Trump is more like a silent partner. But it seems like a strange coincidence that these are the two assets [for sale]."

Vornado, which declined to comment for this article, failed to find a buyer, so it settled on refinancing. With Roth in control, the nation's biggest bank, JPMorgan Chase, jumped at the opportunity, helping Vornado and Trump replace their $950 million mortgage against 1290 Avenue of the Americas with a new loan of the same size. At 555 California Street, the bank helped raise $1.2 billion in May 2021 to replace a $533 million mortgage, allowing the partners to suck out more than $600 million of cash, while pushing the maturity back to 2028. Trump's estimated cash boost: $162 million.

Around the same time, Trump was looking to unload his hotel in Washington, D.C. The financials underpinning the property, which Ivanka Trump initially pitched to her father, had never made much sense. In exchange for the right to lease a government-owned building for 60 years, the Trump Organization agreed to spend $200 million on renovations, then pay $3 million in annual rent going forward.

Building Buddy

Steven Roth and his Vornado Realty lord over nearly 20 million square feet of premium office property, 3.8 million of which is owned with longtime partner Donald Trump.



THANKS TO ALL THIS DEALMAKING, TRUMP NOW HAS $375 MILLION IN CASH, MORE THAN THREE TIMES WHAT HE HAD DURING HIS PRESIDENCY.

Trump cut the ribbon at the grand opening on October 26, 2016, 13 days before he won the presidency. Supporters filled the place during the inauguration, when Trump allegedly charged his own inaugural committee more than $1 million—payments that later prompted a lawsuit from the D.C. attorney general, and ultimately a $750,000 settlement. Despite the bump around the time of the inauguration, business eventually fell off. In the 12 months ending August 31, 2018, operating income was just $900,000—not nearly enough to cover the $6.2 million that the Trump family owed Deutsche Bank in interest. To keep the operation afloat, the Trump Organization shifted $4 million from another of Donald Trump's companies into the hotel. The next year, that small operating profit became a $2.1 million loss. Meanwhile, since the Federal Reserve had increased rates, interest expenses jumped to $7.5 million. Trump's business had to inject another $9 million.

Against this backdrop, the Trump Organization came up with a bold plan: to sell the place for an outrageous sum. The Trump family brought the idea to the market in an unorthodox manner, not with a traditional listing but with a story on the front page of the *Wall Street Journal* on Octo-

STEVE MACK/ALAMY

ber 26, 2019. The paper printed the family's fibs without evincing any skepticism: "People are objecting to us making so much money on the hotel," Eric Trump was quoted as saying, "and therefore we may be willing to sell." Anonymous sources suggested the Trumps might be willing to accept $500 million—about twice as much as independent real estate experts thought the property was worth.

Announcing a sale is easier than actually closing a deal, especially with that kind of price tag. One bidder, a local investor named Brian Friedman, offered $175 million, 35% of the proposed price but more in line with what industry sources believed the place was worth. The Trumps turned him down. The pandemic hit shortly thereafter, and on April 3, 2020, the Trump hotel laid off 237 employees. Things stayed mostly quiet for a year and a half until October 2021, when rumors began swirling that Trump had found a buyer willing to pay around $375 million, a long way from $500 million but still well above independent appraisals.

Who would be willing to overpay for the former president's property? The buyer turned out to be CGI Merchant Group, a small Miami firm with limited experience in the hospitality business, whose investors reportedly include Rodriguez and Mayweather. Hilton, which CGI brought on to manage the hotel under its Waldorf Astoria brand, also put some money in. But the full roster of CGI's investors remains secret. The firm did not even share the names with the General Services Administration, the federal agency that oversees the lease on the hotel, according to a letter that members of the House Committee on Oversight and Reform sent to CGI. The investment firm did not respond to a list of questions about the deal.

THE TRUMP ORGANIZATION CAME UP WITH A BOLD PLAN: SELL THE WASHINGTON HOTEL FOR AN OUTRAGEOUS SUM—ABOUT TWICE AS MUCH AS EXPERTS THOUGHT IT WAS WORTH.

But the huge purchase price prompted speculation. After all, Trump couldn't even produce enough income to sustain a $170 million loan. "Oh, my God," said Friedman, the investor who had previously tried to buy the hotel, when he first heard about reports that the place could fetch roughly $375 million, wondering whether there might have been some sort of side deal involved. "That asset loses money."

To finance the purchase, CGI borrowed $285 million from two entities connected to MSD Partners, which invests the assets of computer billionaire Michael Dell, who is the country's 16th-richest person, worth some $52 billion. A small internet-based bank called Axos, which MSD had worked with on other deals, also took an interest in the loan. The transaction closed in May, providing the former president and his family with enough money to pay back its Deutsche Bank debt, which had been set to mature in 2024. Plus, Don Jr., Ivanka and Eric, each of whom held a small stake in the hotel, received an estimated $13 million apiece. Their father's payday, meanwhile, added up to an estimated $135 million.

The little-known bank Axos played a key role in Trump's financial redemption. Flush with cash, the former president now had the financial strength to tackle his debt, but his previous banking relationships had fallen apart. Deutsche Bank had recently lost Rosemary Vrablic, the high-profile banker who had helped him borrow hundreds of millions of dollars before she resigned from the firm. Meanwhile, Ladder Capital, a real estate investment trust that had also helped lend huge sums to Trump, got wrapped up in an investigation involving Trump's indicted CFO, Allen Weisselberg, and his son, Jack, a director at Ladder. (Weisselberg plans to fight the charges in court.)

Trump needed new lenders. Enter Axos. A small institution, Axos has $16 billion in assets, making it an afterthought on Wall Street, where lenders like JPMorgan Chase oversee trillions. Founded in 2000, Axos in its early days largely focused on residential loans. The San Diego–based bank slowly expanded other lines of business, accumulating $61 million of commercial real estate loans by 2015. Then things took off. By March of this year, Axos had $4.3 billion of commercial real estate debt on its books, the biggest segment in its portfolio.

Still, Axos isn't the sort of institution you'd expect to find restructuring a billionaire's balance sheet. Classified as a savings association, Axos has limits on how much it can lend to any one borrower. As of June 2021, the bank said it was not allowed to dole out more than $204 million to any individual. Its biggest outstanding balance, the bank disclosed, totaled $145 million.

But Axos did do business with some big fish, including the family of Jared Kushner, Ivanka Trump's husband, who had introduced his father-in-law to Rosemary Vrablic at Deutsche Bank. Axos wanted more. Via a mortgage bro-

kerage firm, it learned about an opportunity to refinance Trump Tower, Donald Trump's most iconic property. Ladder Capital had helped Trump secure $100 million against it in 2012, but that loan was set to mature in September 2022.

Unfortunately for Trump, the building wasn't performing very well. The Trump Organization reportedly extended its lease with Gucci, its anchor tenant, in 2020, the year the coronavirus crisis turned Fifth Avenue into a ghost town and six years before the Gucci lease had been set to expire. The terms of that deal remain unknown (representatives for the Trump Organization did not respond to requests for comment), but profits at Trump Tower tumbled after the ink dried, according to Securities and Exchange Commission filings. Operating profits in the first half of the year had averaged about $5.5 million before the pandemic. By the midpoint of 2021, however, they had dropped to $4.1 million, the sort of decline that could make banks nervous.

Axos was undeterred. The bank's CEO, Greg Garrabrants, and its chief credit officer, Thomas Constantine, liked Trump enough to donate to his campaign. In addition, Trump Tower was worth more than twice as much as the $100 million Trump needed to pay off his previous loan, offering secure collateral should something go wrong. In February 2022, Constantine personally signed the documents, and Axos loaned the former president $100 million. In a statement, the bank suggested the deal was strictly about business: "Axos does not discriminate against borrowers because of their political beliefs."

Trump also needed to refinance an estimated $125 million of Deutsche Bank debt against his golf resort in Miami, coming due in 2023. The property, Trump National Doral, had once been a money gusher, throwing off $12 million of annual net operating income. But business soured once Trump took office and turned off its largely liberal, northeastern customers who for years had made a habit of jetting down for a few winter rounds. Sales fell 14% in 2017, and profits dropped to just $4.3 million. Revenue barely budged from there until the pandemic, when it plunged more than 40%.

No matter. In May, Axos lent Trump $125 million to take care of his Deutsche Bank debt. The new deal brought Axos' total loans with Trump to $225 million—not counting anything related to the D.C. hotel. Lending limits would have prevented Axos from giving $225 million to a single person last year. But by this spring, the bank's capital had apparently increased enough, barely, to give it clearance to hand over the money. Donald Trump had found his new Deutsche Bank.

He still has a few lingering loans. There are two liabilities totaling an estimated $58 million coming due in 2024, plus a $130 million one expiring in 2025. Given that Trump is now sitting on $375 million, he could theoretically pay it all back with his own cash. He has already pulled that move recently, paying off a small loan against a Park Avenue building and wiping out others against golf courses in New Jersey and Virginia. It seems just as likely, however, that he'll try to borrow more money, simply because he can. Even if Axos has nearly maxed out its lending limits, there should be plenty of other entities interested in lending to a former (and potentially future) president.

DEBT MAGIC

SINCE DONALD TRUMP LEFT OFFICE, HIS BUSINESS HAS PAID OFF LOANS ON FOUR PROPERTIES AND REFINANCED ANOTHER FOUR, CLEANING UP AN ESTIMATED $875 MILLION OF LIABILITIES. HERE'S WHAT REMAINS.

Year	Property	Est. Remaining Principal
2024	Trump International Hotel & Tower (Chicago)	$45 million
2024	Trump Plaza (New York)	$13 million
2025	40 Wall Street (New York)	$130 million
2026	Trump International Hotel & Tower (New York)	$6 million
2028	555 California Street* (San Francisco)	$360 million
2028	1290 Avenue of the Americas* (New York)	$285 million
2029	Seven Springs (Bedford, New York)	$6 million
2048	1125 South Ocean Blvd. (Palm Beach, Florida)	$10 million
Unknown	Trump Tower* (New York)	$100 million
Unknown	Trump National Doral* (Miami)	$125 million
Unknown	Trump International Hotel & Tower (Chicago)	$50 million
TOTAL		**$1.1 billion**

****Refinanced since January 2021.*** *Source: Forbes research*

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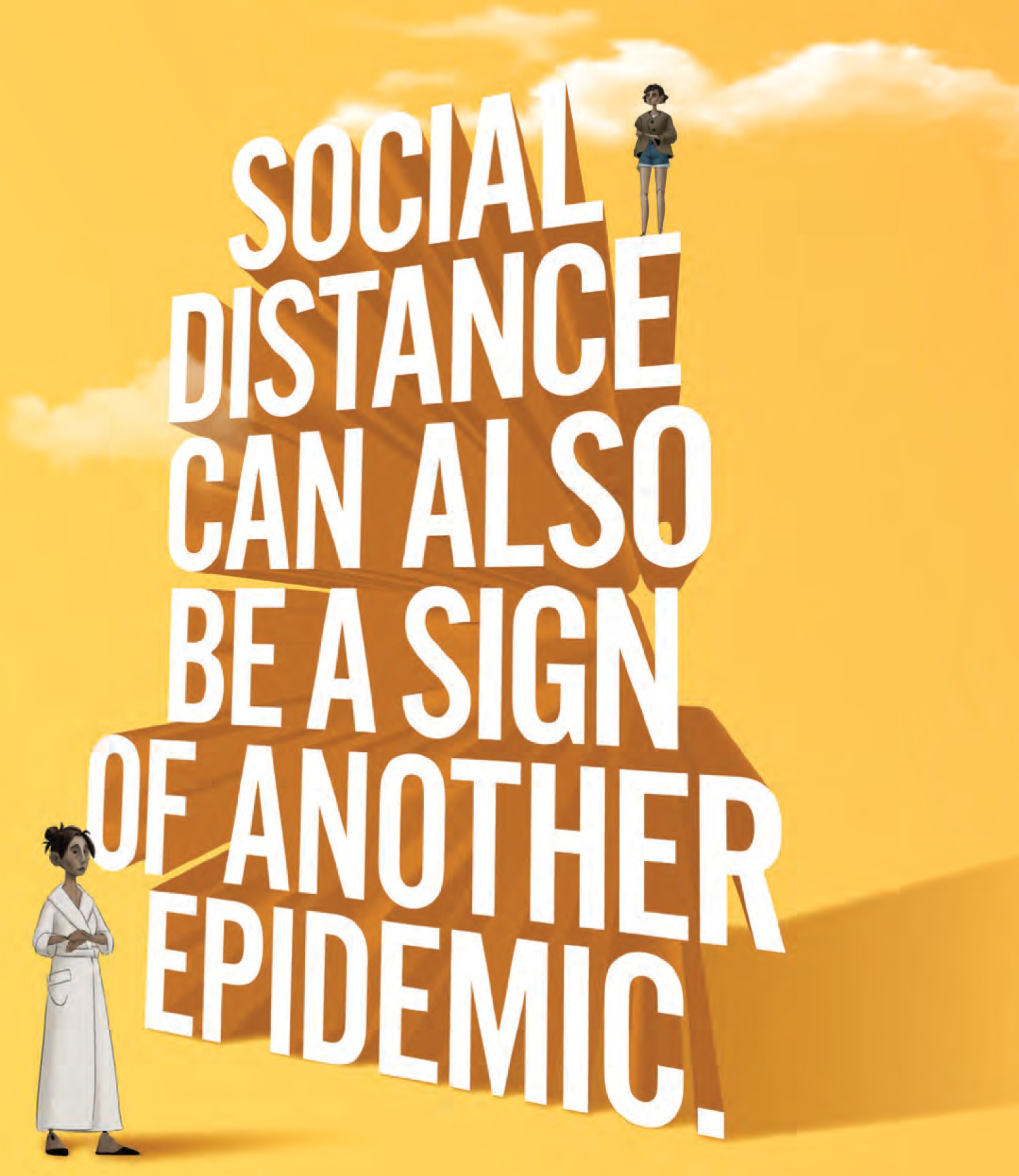

SOCIAL
DISTANCE
CAN ALSO
BE A SIGN
OF ANOTHER
EPIDEMIC.

Tolerance

"Unlimited tolerance must lead to the disappearance of tolerance."
—Karl Popper

"We see the world not as it is, but as we are."
—Anaïs Nin

"In order to practice tolerance on behalf of the pursuit of truth, you first have to value and believe in not merely the pursuit of truth but Truth itself."
—Willmoore Kendall

"The mark of a moderate man is freedom from his own ideas."
—Lao Tzu

"Resolve to be tender with the young, compassionate with the aged, sympathetic with the striving and tolerant of the weak and the wrong. Sometime in life you will have been all of these."
—George Washington Carver

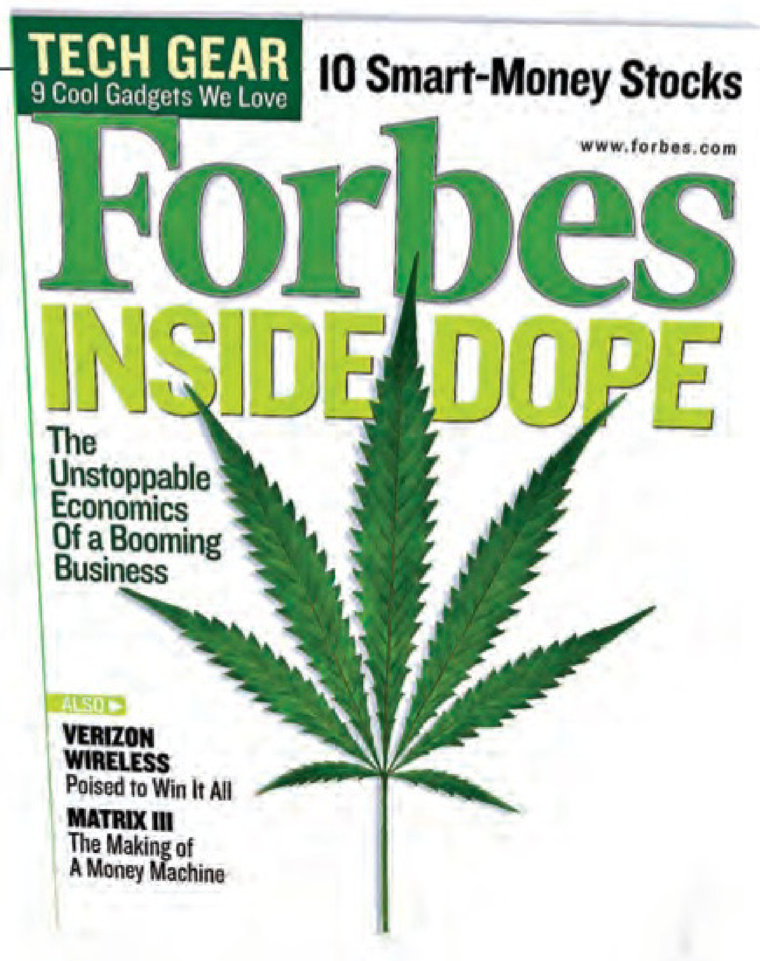
"Difference is an accident of birth and should therefore never be the source of hatred or conflict."
—John Hume

"In the practice of tolerance, one's enemy is the best teacher."
—Dalai Lama XIV

"Think for yourself, and let others enjoy the privilege of doing so too."
—Voltaire

"Tolerance of intolerance is cowardice."
—Ayaan Hirsi Ali

"The test of courage comes when we are in the minority. The test of tolerance comes when we are in the majority."
—Ralph W. Sockman



Greener Grass

November 10, 2003

The war on weed was alive and well in early-aughts America, with around half a million arrests made each year for cannabis crimes. Medical marijuana was legal in just nine states, and none allowed recreational use. Up in the Great White North, however, it was a different story: Years before legalization, cannabis was already an estimated $7 billion crop in Canada and the country's most valuable agricultural product. Canada's population was **"more cannabis-tolerant,"** thanks to its "army" of independent producers who smuggled tons of bud over the border, then funneled their profits back into the local economy. Robert Smith, a furniture store owner in Grand Forks, British Columbia, estimated that "of the money coming through my door, 15% to 20% comes from cannabis—we'd be on welfare without it." Rollie Woods, head of narcotics for the Vancouver police department, was frank: "If it wasn't for pressures from the U.S., we'd just regulate this." In 2018, Canada did just that.

SOURCES: THE "OPEN SOCIETY" AND ITS FALLACIES, BY WILLMOORE KENDALL; THE TREATISE ON TOLERANCE, BY VOLTAIRE; THE TAO TE CHING, BY LAO TZU; THE OPEN SOCIETY AND ITS ENEMIES, BY KARL POPPER; LIVING PEACE, BY ALARIC HUTCHINSON; LIBERALISM: THE CLASSICAL TRADITION, BY LUDWIG VON MISES; LONG WALK TO FREEDOM, BY NELSON MANDELA; JANE EYRE, BY CHARLOTTE BRONTË.

"It is the mark of an educated mind to be able to entertain a thought without accepting it."
—Aristotle

"More dangerous than bayonets and cannon are the weapons of the mind."
—Ludwig von Mises

"People must learn to hate, and if they can learn to hate, they can be taught to love—for love comes more naturally to the human heart than its opposite."
—Nelson Mandela

"Prejudices, it is well known, are most difficult to eradicate from the heart whose soil has never been loosened or fertilized by education. They grow there, firm as weeds among stones."
—Charlotte Brontë

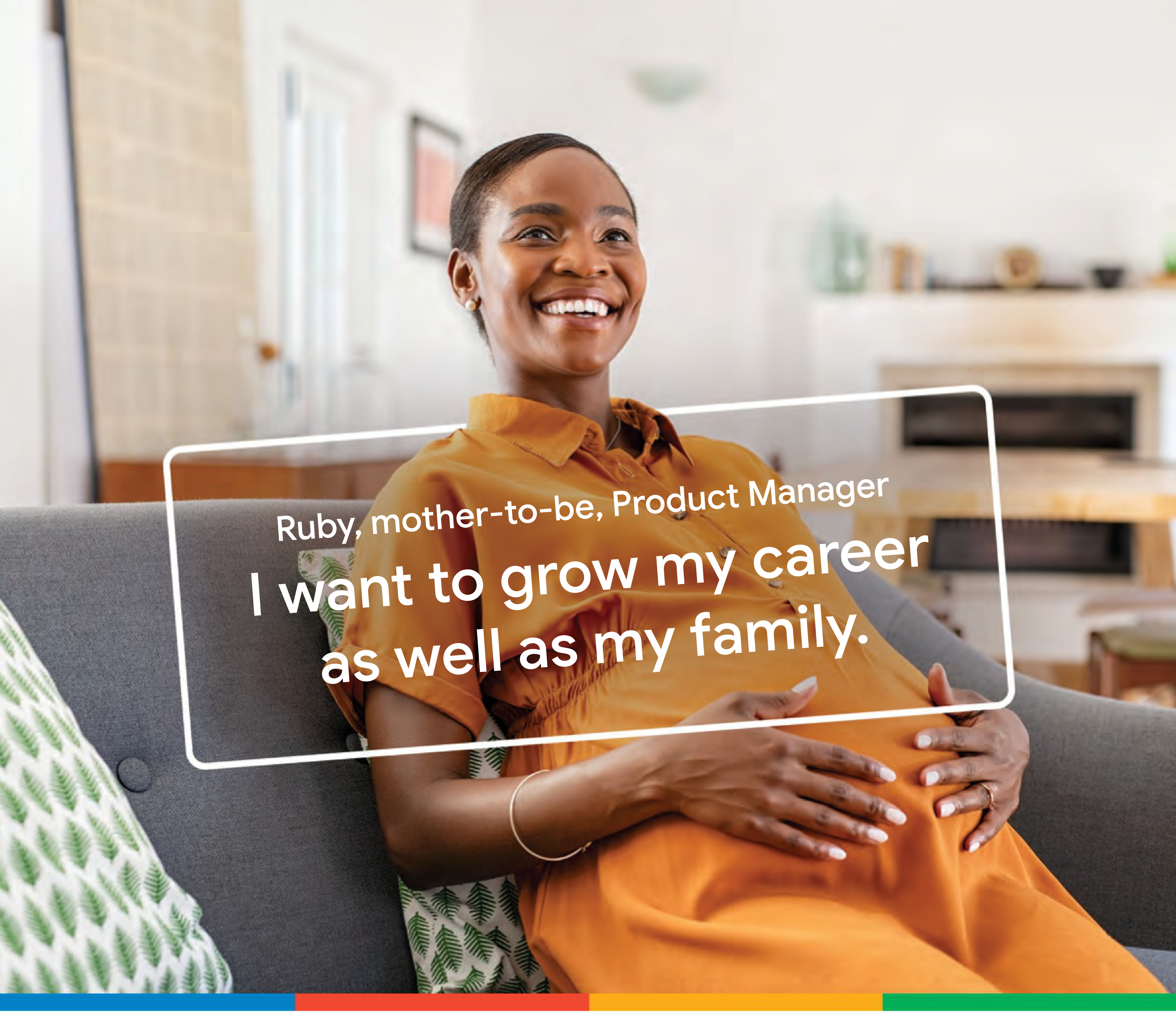
"Respect everyone who crosses your path, even if you feel they don't deserve it."
—Alaric Hutchinson

"Finally, all of you, be like-minded, be sympathetic, love one another, be compassionate and humble." **—1 Peter 3:8**

FINAL THOUGHT

"Let us reconcile ourselves to compromises not wholly ideal from our viewpoint."

—B.C. Forbes



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