ZOMATO'S NEW MENU

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Forbes INDIA

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FINTECH
THE NEXT BIG BANG

GAWKER VS PETER THIEL
THE UNTOLD STORY

SUNDAR PICHAI
THE FRESHMAN CEO BETS THE COMPANY ON A.I.

GOOGLE'S NEW SUPERPOWER

THE SEARCH GIANT'S BOLD MOVE TO REINVENT EVERY DEVICE ON THE PLANET—INCLUDING YOU

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Welcome to the Forbes INDIA Tablet Edition

In Association With IBM

India-born Google CEO sees Artificial Intelligence as a means of staying ahead of the curve

Sundar Pichai's Big Bet

Smart companies and CEOs know that success at the marketplace can be a very transient thing. Think Nokia, Kodak or even BlackBerry which have been victims of rapid change. This is particularly true of tech, where obsolescence is the norm and companies need to keep working at staying relevant in an ever-changing world. It's no surprise, then, that the low-profile, professorial-looking Google CEO Sundar Pichai, 43, is doing everything he can to ensure that the iconic company he leads remains mindful to change and ahead of the curve. And he's doing that by placing his bets on the next big thing: Artificial Intelligence (AI).

AI, Pichai reckons, will be the driver of the new world and hence Google must come up with products to keep it in front of competition. But unlike other large companies which had to grapple with single challengers, today Google has to deal with competitors on multiple fronts. So if it's Apple in mobile, in advertising, video and communications it is Facebook and in commerce it is Amazon, to name just a few. Hence, maintaining a lead is a must. "We have this vision of a shift from mobile-first to an AI-first world over many years," Pichai tells *Forbes* in the fascinating inside story of Google's new vision we bring you in this issue. In its AI thrust, Google is up against Apple which pioneered the digital assistant category, Amazon, where large numbers of people are busy putting together an AI game plan, Facebook, whose smart chat bots are potential game changers, and Microsoft, which also has research teams constantly fine-tuning its AI and machine-learning thrust.

The Google story apart, this issue also features another company in transition, this time back home in India. Food tech company Zomato, led by the aggressive, straight-talking founder Deepinder Goyal, is currently putting together a new strategy to ensure the company remains relevant in a sector which has seen several startups fall by the wayside, unable to grapple with change. The retooled Zomato game plan involves adding an online delivery piece to its portfolio (something it had shied away from earlier) and downsizing its global footprint to sharpen focus on key areas. As Deepti Chaudhary and Angad Singh Thakur tell us, Goyal is confident that this strategy will bring in what the company is desperately seeking: Profits.

While the Google and Zomato stories are about change, I would also urge you to read about how billionaire entrepreneur Peter Thiel's siege against gossip website Gawker is playing out. Those engrossing details are on *page 44*.

Best,

SOURAV MAJUMDAR
Editor, *Forbes India*

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Forbes INDIA ON THE COVER

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Google CEO Sundar Pichai with US President Barack Obama at the Global Entrepreneurship Summit in Palo Alto, California, on June 24, 2016

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IIT-Delhi graduate Deepinder Goyal has had to take several difficult calls at Zomato to focus on the company's key goal: Profitability

Small-time entrepreneurs feel encouraged with fintech firms providing working-capital loans and people opting for digital payments

Along with one-time fiancé Phil Shawe, Liz Elting built TransPerfect from a dorm-room startup to a global leader with $505 million in sales

30: AMIT VERMA; 58: GETTY IMAGES; 82: HAN KOZOWYK FOR FORBES

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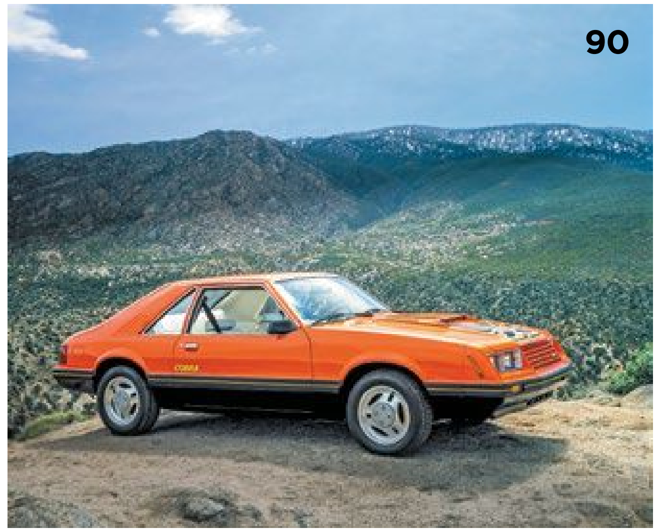

The Cobra II variant of the Mustang had some cosmetic upgrades

NR Narayana Murthy proposed to would-be-wife Sudha in a rickshaw

Richard Serra's 'Sequence' at the San Francisco Museum of Modern Art

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Editor: Sourav Majumdar

Cognitive Inventory is here.

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Readers Say

ACCOUNTABILITY COUNTS

Refer to *'Business Gets Real' (Issue dated July 8, 2016)*. While Prime Minister (PM) Narendra Modi may have announced factors that could aid innovators and entrepreneurs through the Start-Up India initiative, the programme will succeed only if the PM monitors government officers for accountability. It is essential that employees, especially those in the tax departments and public sector departments, nationalised banks, etc, are able to discharge their duties efficiently, without succumbing to corruption. The PM and his team must take strict action against those who fail to do so within a reasonable time. These details are essential for the success of the Start-Up initiative, the benefit of which will be enjoyed by existing entrepreneurs and future businessmen.

Mahesh Kumar, via email

ROOM FOR IMPROVEMENT

Refer to *'Building An Insurgent' (Issue dated June 24, 2016)*. As a hotelier working with Ibibo, it has been very nice. Their basics are right and very hotelier friendly. However, the only model that they seem to be working on is discounts. There have to be more areas where one can fill the gap. Just like what Oyo has done. Oyo needs to be a bit more hotel-centric to match or beat Ibibo's figure.

Navneet, on the web

TWO ROCKSTARS

Refer to *'How To Make $1 Billion In Your Spare Time' (Issue dated July 8, 2016)*. Excellent success story of practising dermatologists Kathy Fields and Katie Rodan. It's all because of their trust in each other and lots of hard work. They are an inspiration.

Vivek, on the web

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MUST-READ BLOGS

NO ENTRY FOR E-PURCHASES WITHOUT PAYMENT OF ENTRY TAX
The practice of levying newer taxes on online business models would render the ecommerce sector uncompetitive in the long run

THE PARODY THAT IS TEACHER EDUCATION IN INDIA
There is a need for greater investment in and the redesigning of in-service teacher training programmes in the country

NEW ARCHETYPE OF A DIGITAL BUSINESS
Organisations that are able to modernise sooner will have unprecedented competitive advantage over their peers

RECOGNITION IS A FUNDAMENTAL HUMAN NEED
Staffers who are complimented for their work are more likely to have a greater zeal for personal and organisational success

ANY FIRM CAN BECOME THE BEST IN CLASS; IT'S ABOUT WANTING TO BE ONE
People have to constantly evolve while business tools and practices have to make way for the new

APERTURE | **In the Line of Fire**

Passengers embrace outside Istanbul's Ataturk airport after a series of suicide explosions and a gun attack there on June 28 killed at least 41 people. Turkey has blamed the Islamic State for the strike and President Tayyip Erdogan has called it a turning point in the fight against terrorism

OZAN KOSE / AFP / GETTY IMAGES

LeaderBoard

$50 bln

The estimated size of the food services market in India, which is growing at 16-20 percent year-on-year

STATUS CHECK

Track Your Lunch

HyperTrack lets ecommerce enterprises, and their customers, know the location of each delivery

Holachef has signed on with HyperTrack to check the location of its delivery staff

SAURABH SAXENA, CEO OF Holachef, a food delivery service in Mumbai, faces a knotty problem every time any of his 80 delivery boys goes out on a job: He's got no way to track them. "It's annoying and leads to inefficiencies in the business," he says. Not to forget impatient customers who want updates on the status of their deliveries.

Coordinating and tracking these logistics have become imperative for a lot of businesses. Being able to know the location and status of their cab or parcel is something that customers are beginning to expect. And yet the technology required to provide this information is often not the core competency of the cab or courier company.

Enter Kashyap Deorah, a serial entrepreneur whose previous ventures Chaupaati Bazaar, a mobile phone-based marketplace, was bought by the Future Group in 2010, and Chalo, an online payment service, was acquired by San Fransisco-based restaurant reservation company OpenTable.

Deorah likens the rise of the ecommerce industry to a 'gold rush'. "Just as shovel makers made the most money during the gold rush, we wanted to do the same," he says. Along with partner and fellow IIT-Bombay alumnus Tapan Pandita, Deorah saw the opportunity for a GPS (global positioning system)-based tracking service, and they launched a private beta version of HyperTrack in November 2015.

HyperTrack uses GPS data from the smartphones of delivery boys to track their position and calculate an expected time of arrival after factoring in conditions such as traffic. This information is then available on the app of the company that has integrated HyperTrack's API (application programming interface) with its software. So Saxena, as well as his customers, can track delivery boys. "A software like this is not our core competency and we saw no need to reinvent the wheel," says Saxena, who signed on as one of the first users of HyperTrack.

HyperTrack averages about 1 lakh tracking requests per day at present

GPS-based vehicle tracking softwares are not new. But this, claims Deorah, is the first tracking software available as an off-the-shelf product for enterprises that need to track individual delivery staff. So far it has signed on ecommerce companies such as Shadowfax, PharmEasy, Scootsy, Toppr and BookMyStorage.

For now, HyperTrack, which refused to reveal their investors or how much they have raised, plans to let enterprises track the first 1,000 deliveries per day free of cost, and then charge them Rs 2.5 per tracking request. So each time a customer checks where an order is, HyperTrack gets paid; enterprises don't pay to install the tracking system on their own software. HyperTrack averages about 1 lakh tracking requests per day at present. In late June, it planned to launch a ShareETA app, a free service for individual users who want to update friends and workers on their location.

—BHAVI SHAH

MEXY XAVIER, TOP: AMIT DAVE / REUTERS

GIFT REGISTRY

Getting Hitched? Tell Your Guests What Gifts You Want

Chennai-based startup Wedding Wishlist allows couples to create lists of preferred presents and share them with family and friends

RACKING YOUR BRAIN over the ideal wedding gift? Chennai-based startup Wedding Wishlist (WW) has a solution for giver and getter alike. Started in February by Kanika Subbiah, 45, WW is an online marketplace that allows couples to curate a wish list of gifts they want for their wedding and share it with their guests on social media.

The concept of creating a 'registry' or a 'wish list' of gifts is a popular concept in the West and exists in various forms, such as wedding registries and baby registries (for expectant or new mothers).

In India, too, gift registries are now mushrooming, with the likes of For My Shaadi, Wrapp'd and Good Earth offering services similar to WW's.

"Indian gifts are more ornamental than practical. Our research shows that nearly 80 to 90 percent of gifts that a couple receives are not things they will use in their lifetime," Subbiah says. WW is a subsidiary of her self-funded, three-year-old ecommerce platform CherryTin, which provides premium personalised gifting options for all occasions.

Kanika Subbiah, founder, Wedding Wishlist

JOSHUA NAVALKAR

WW has partnered with 30 ecommerce and retail outfits who sell products and services like kitchen appliances, furniture and holiday packages. Guests can order from a "list curated for newlywed couples" following which the gifts are delivered anywhere in the country.

"India needs this concept more than the West, where it is [already] popular. With over 11 million marriages taking place annually in India, and an average of Rs 2 lakh worth of gifts given at every wedding, the potential of the gift registry is as high as Rs 90,000 crore," says Subbiah, who raised seed funding of Rs 2 crore from seven angel investors, including Renuka Ramnath, founder, MD and CEO of private equity fund Multiples, and Kirthiga Reddy, former MD, Facebook India.

WW does not charge couples for creating wish lists; it charges a commission from the seller. A 20-member team takes care of the technology, merchandising, design and customer service operations.

Having worked with various startups in the US before returning to India in 2008, Subbiah—who holds an MBA from the University of Chicago—says her experience with CherryTin helped her establish strong partnerships with manufacturers and delivery partners. With an average order size of Rs 1,700, CherryTin generates Rs 2 crore in revenues and broke even in September 2014, says Subbiah.

"I found the category and Kanika very interesting. At Multiples, I invest in much larger companies; so this is complementary to what I do in my day job," says Renuka, who was one of CherryTin's earliest customers. "I got some of the Diwali gifts for my company from CherryTin. My experience was so good that I got sold on her idea." Reddy concurs. "I am excited to see what Kanika is doing, especially as she launches the Android and iOS version of the website this year."

Subbiah is working to ensure that WW offers a seamless experience. "We are constantly incorporating feedback from couples. We are expanding the technology platform to help them build their wedding websites and do RSVP for functions," she says.

—SHRUTI VENKATESH

$2.1 tln

Value lost in stocks globally on day one after the Brexit vote

GLOBAL FALLOUT

More Storms to Emerge From the Brexit Tornado?

Indian businesses may not be spared Brexit-linked jolts—such as weakened investor confidence—in the coming months

IN THE DAYS SINCE Britons voted to leave the European Union (EU) in a referendum on June 23—what has been codenamed 'Brexit'—global financial markets were rattled and the British pound fell to a 31-year low against the dollar.

But investors and corporates—including those in India—have to face another reality: Brexit is not a singular event; related issues could create financial tremors in the coming months.

Brexit comes at a time when global economic uncertainties have not eased. Thailand-based Marc Faber, editor of the *Gloom, Boom & Doom Report*, explains the changing political dynamics. "Brexit is a symptom. Ordinary people no longer trust the government, the bureaucrats, the academics, the central bankers and the media, most of whom were strongly in the 'Remain' camp with their aggressive scaremongering campaigns," he tells *Forbes India*. "The markets declined because the 'elite' and their media and academic accomplices had all warned that Brexit would be a disaster for the global economy and for financial markets." Obviously, when it occurred, it was natural for the markets and the pound to fall.

Nigel Farage, leader of the United Kingdom Independence Party (UKIP), makes a statement in London after Britain voted to leave the European Union

Saurabh Mukherjea, CEO (institutional equities), Ambit Capital, fears that global financial flows will get disrupted and global business and investor confidence will be hurt. This, in turn, will impact foreign direct investment (FDI) and capital flows into India.

The rupee, which fell to a four-month low of 68.06 to the dollar when Brexit happened, will continue to be under pressure, experts say.

The direct impact of Brexit could be manageable for India, considering that its export economy is relatively small. But it is the next round of impacts—which will play out in the coming years—that is more worrisome, according to analysts at Ambit Capital.

"China could seize this opportunity to decisively devalue its currency and Europe will have to contend with the prospect of a drop in business confidence, which could tip the continent into recession and destroy their enfeebled banks," Ambit analysts wrote in a note to clients on June 27.

Global financial flows will get disrupted... impacting FDI into India

Deepali Bhargava, chief India economist, Credit Suisse, says: "If Brexit has a significant impact on the EU economies, the impact on India's exports could be around three times larger than that from an isolated UK downturn."

The EU accounts for 15 percent of India's goods and services exports and the UK accounts for less than 5 percent of exports, inward remittances and annual FDI flows.

Automobile and IT companies with an exposure to Europe and the UK will obviously be the most impacted. Operations of Jaguar Land Rover (JLR), which account for nearly 90 percent of the profit of parent company Tata Motors, will be watched. JLR stands to gain if the British pound continues to depreciate, because 80 percent of its revenues come from exporting vehicles. But there are fears that fresh levies on exports to Europe and imports of components [due to an end to free trade agreements] will lead to loss in revenues for the company. One will also need to watch for benefits, which Britain will provide to local companies like JLR, to boost their effectiveness.

Further, business for IT giants like TCS and Infosys from the European region could be impacted due to factors like a depreciating pound, delay in technology spending from clients and loss of business confidence.

—SALIL PANCHAL

TOBY MELVILLE / REUTERS; TOP: RUSSELL BOYCE / REUTERS

LUXURY LINEAGE

The Seersucker Suit

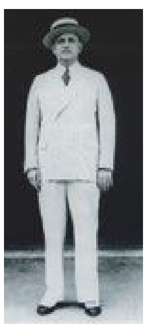
Prep for summer with a brief history of a preppy classic

SEERSUCKER MAY EVOKE IMAGES OF PATRICIAN IDYLL, but its origins are decidedly plebeian. In colonial India, where the lightweight silk originated, seersucker—from the Persian phrase *shir o shekar*, meaning "milk and sugar," due to its smooth and coarse textures—was a workingman's fabric. It was reborn in 20th-century America as a durable dimpled cotton for men who worked under hot conditions, such as Standard Oil gas attendants. By the 1930s seersucker had made its way to the Ivy League and was a symbol of reverse snobbery. "I have been wearing coats of the material known as seersucker around New York lately, thereby causing much confusion among my friends," dapper newspaperman Damon Runyon wrote in 1945. "They cannot decide whether I am broke or just setting a new vogue." But even Runyon understood that a man wearing a seersucker suit with style would ultimately be considered affluent and could "cash a check with no questions asked." Today the look is still money.

-MICHAEL SOLOMON

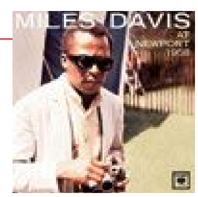
1909

The seersucker suit was born when **Joseph Haspel**, a New Orleans haberdasher, reimagined the working-class fabric as a lightweight alternative for southern businessmen. It was also easy to care for since it came pre-wrinkled.



1920s–1940s

Adopted by students at Princeton during the 1920s, seersucker went mainstream in the North when Brooks Brothers began selling suits in the 1930s. By the next decade men who wore seersucker were finally considered well dressed; even the **Duke of Windsor** wore one while on holiday in the Italian Riviera.



1958

The cool summer fabric met the Birth of the Cool when Miles Davis wore seersucker on the cover of his live album *At Newport 1958.*

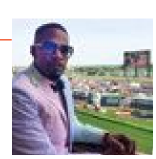
1962

When Atticus Finch defended Tom Robinson in the movie version of *To Kill a Mockingbird*, he took the heat in a seersucker suit. **Gregory Peck**'s three-piece version was fitted by Joseph Haspel Jr himself.

1996

Senator Trent Lott of Mississippi began the ritual of congressmen wearing their tropical finery to work on **Seersucker Thursday**. "It's the first day of summer, and the Senate needs to lighten up and loosen up," Lott explained. The bipartisan, coed practice was suspended in 2012 because of political gridlock, but the tradition resumed in 2014.

2014



Often derided as the "ice-cream man suit", seersucker is served up in many flavours. **Jamie Foxx** wore a multi-coloured patchwork Vineyard Vines sport jacket to the 140th Kentucky Derby.

2016

Now considered an American classic, seersucker is in countless summer collections, including **Haspel, Brooks Brothers** and **Giorgio Armani**—and each offers its own wrinkle.

CLOCKWISE FROM TOP: LAMBERT / GETTY IMAGES; KEYSTONE / GETTY IMAGES; BILL CLARK / CQ ROLL CALL / GETTY IMAGES; SILVER SCREEN COLLECTION / GETTY IMAGES; PIETRO D'APRANO / GETTY IMAGES

$7 bln

The size Gartner expects the Indian government's IT spending to grow to in 2016

DIGITALLY CONNECTED

'You Need to Respect the Specificities of the Indian Market to Succeed'

India is the most attractive emerging market and the Legrand Group can benefit from the country's digital evolution, says chairman and CEO **Gilles Schnepp**

FRENCH ELECTRICAL and digital building infrastructure major Legrand Group entered India in April 1996 with the acquisition of switchgear maker, MDS. The company, which clocked €4.8 billion in global sales in FY2015, has, over the years, expanded to include 50 product families in India. It has 6,000 employees—the most in any country—in its 12 factories and three research and development (R&D) centres in the country. Gilles Schnepp, Legrand Group's chairman and CEO, talks about the company's focus on India and what Internet of Things (IoT) means for its businesses. Edited excerpts:

Q Where does India feature within Legrand's global strategy?
Over the last two years, it has become more and more obvious that India is perhaps the most attractive market among all emerging markets. If you think of Brics, you realise that Brazil is still fighting its own issues, Russia has been suffering from a decrease in oil prices and China is in the middle of a big transformation. India is one country that is continuing

Gilles Schnepp, chairman and CEO, Legrand Group

on at a very fast pace, with a lot of potential, given its large population, economic stability and sound economic fundamentals. The success of Legrand in India shows that it is possible to grow fast here. There are specificities in the Indian market that you need to know and respect in order to succeed. I believe that the recent directions taken by the country are encouraging. Make in India makes a lot of sense. So does urbanisation and digitisation for a country of this size. Legrand can benefit from these changes.

Q How has IoT changed your business?
IoT by itself is a fantastic opportunity that is sometimes viewed only as a business-to-consumer one, whereas most of the opportunity is in business-to-business. We're developing products based on IoT to help contractors, facility managers and users of buildings, be it for energy efficiency, communication or security. This was not possible at this scale with the preceding generation of solutions, which were mostly either electro-technical or electronic. For example, having digital lighting control in a building allows the facility manager to control 10 buildings from one place, identify and monitor and intervene on any source of light. In the past, you would have to go through each room on each floor, checking each source of light.

Q Is growth in India going to be driven by a change in the way people use your products or by plain growth?
Plain growth remains a major stream for Legrand since we can grow our market share in the existing product families. But there will certainly be rapid evolution in a number of areas since digitisation of the economy is something that India is considering. The opportunity is ripe for a company like Legrand, because our products will become more connected, and with the proliferation of data generated by products there will be an increasing need for data centres and equipment.

Q Are there any acquisition plans for India in the near future?
We have organically developed three R&D centres here, and made four acquisitions in five years. If more opportunities arise, we will be glad to make more.

—ANGAD SINGH THAKUR

JOSHUA NAVALKAR; TOP: RUPAK DE CHOWDHURI / REUTERS

FUTURE WORLD

Securing the Internet of Things

THE INTERNET OF THINGS (IoT) HAS BECOME ONE of the biggest areas of concern for cyber security experts. It was among the most discussed subjects at an annual conference in Singapore in May arranged by Fortinet, a software company that provides enterprise-level next generation firewalls and arrays of network security products.

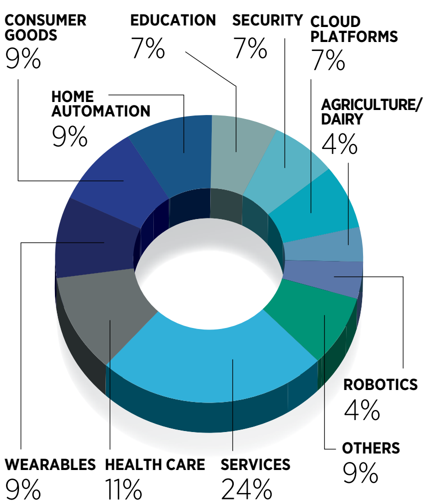
At the conference, Tyson Macaulay and Darren Turnbull, experts on network security at Fortinet, said the market was both a threat and an opportunity.

Here's why: The size of the IoT market is estimated to become more than double the size of the smartphone, PC, tablet, connected car and wearable market put together by 2019, according to Businessinsider.com, a news and research website. At the same time, IoT's sercurity loopholes can wreak havoc in our lives, from enabling terrorism to simple hacking.

Here's the opportunity and the threat in numbers.

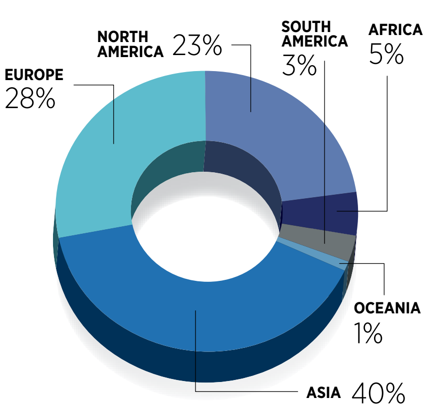
—PRAVIN PALANDE

SECTOR-WISE SPLIT OF INDIAN FIRMS WORKING ON IoT



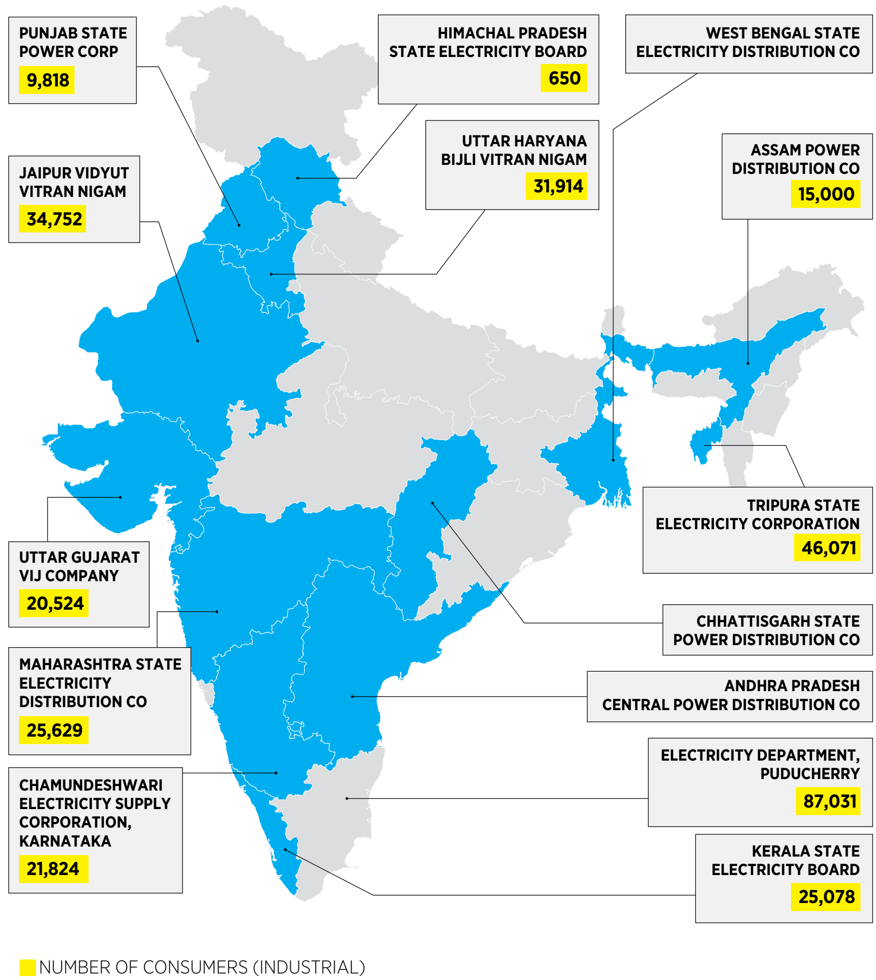
GLOBAL PICTURE

Asia leads the world in the number of developers working on IoT solutions



SMART GRIDS AND IoT

A smart grid automatically gathers and acts on information, such as behaviours of suppliers and consumers, to improve the efficiency of a power grid. It is an important market for IoT and there are 14 ongoing smart grid projects in India

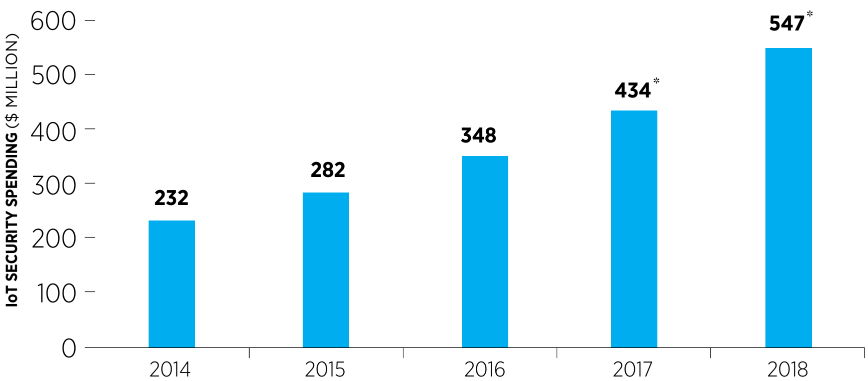


Source: *Convergence Catalyst Research*

310 mln
The number of IoT devices that will be used in food services by 2020, according to Businessinsider.com

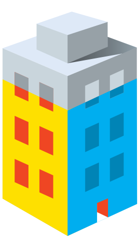
WORLDWIDE IoT SECURITY SPENDING

Globally, companies are allocating higher budgets for IoT security as they foresee more threats from the 20 billion devices that are expected to be on IoT by 2020, compared with 4.9 billion in 2015



Source: *Gartner report dated April 2016* — ** Projected figures*

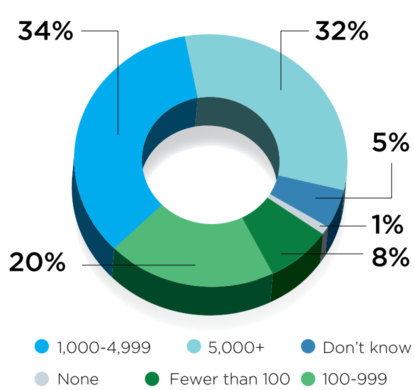
CEO POLL ON IoT STRATEGY



85%
OF GLOBAL ORGANISATIONS ARE CONSIDERING EXPLORING OR IMPLEMENTING AN IoT STRATEGY

10%
OF ORGANISATIONS ARE FULLY CONFIDENT THAT THEIR CONNECTED DEVICES ARE SECURE

How many connected devices do you have in your organisation?



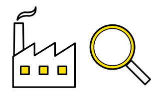
Source: *AT&T, March 2016*

THREAT AGENTS IN THE IoT

Criminals

Hacktivists

Industrial spies

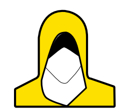


Nation states

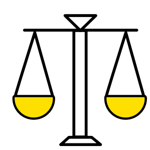
Terrorists

Insiders

Chaotic actors and vigilantes



Regulators



Source: *Fortinet*

$1 tln
Estimated global spending on security between 2017 and 2021, according to Cybersecurity Ventures. This will be driven by IoT

28.6%
The average increase in the revenue of manufacturers who employed IoT in 2014, according to a survey conducted by TCS

$1.2 bln
Amount of money Samsung plans to invest in the US, over the next four years, for research on employing more 'things' on IoT

39%
Share of German manufacturers who plan to employ robots on IoT. Germany leads the world when it comes to innovation in IoT

Source: *Digitaltrends.com*

INFOGRAPHICS: SAMEER PAWAR; TOP: SHUTTERSTOCK

'Everyone in IBM Understands Their Part in a Cognitive Future'

Harriet Green, vice president and general manager (Internet of Things, commerce and education), at the American technology giant talks about how it is transforming, yet again, to adapt to growth areas

BY DEBOJYOTI GHOSH

HARRIET GREEN
Age: 54

Career: Former CEO of Thomas Cook Group; spent early part of her career in the electronic components industry, working in Europe, the US and Asia. Was managing director, Macro Group; president, Asia-Pacific, Arrow Electronics; CEO, Premier Farnell

Education: Bachelor of Arts (King's College London), Business Psychology (London School of Economics)

Interests: Reading, fitness and yoga, theatre

Last September, global technology major IBM appointed Harriet Green, former CEO of British travel company Thomas Cook Group, to lead its new business unit, Internet of Things (IoT). For the company based in Armonk, New York, the current focus is on high-margin businesses as it gradually shifts gear to new growth areas of technology (cloud, big data, analytics, mobile, etc) from its consulting and traditional hardware business. In an exclusive interview with *Forbes India* in Tampa, Florida, Green says cognitive computing is the way forward and that it is more than just an artificial intelligence (AI) platform. Edited excerpts:

Q How has your experience at IBM been so far?
I had finished a big transformation at Thomas Cook where I was

able to raise its market capital significantly, after which I was thinking about the next step. I'm not someone you would employ in a steady state environment. I'm good in high growth, doing big stuff, moving a lot of rocks to get things done. I was looking at companies in India and China. And I have been a client of IBM for a long time.

I love technology, and the amount of change that is underway in IBM, and how well it is being done. Because we [IBM] changed once—from machines to PCs and software services—we are doing it again, around cognition: IBM's cognitive computing platform, called Watson, has the ability to learn, to reason, to correlate the patterns and communicate them in a natural language. As a transformer, as a salesperson, as a marketer, it's wonderful to have what no one else has. And there isn't another cognitive computing platform out there because Watson is more than just AI. Fusing that into the new business is a big part of what we are doing.

Q Cognitive computing is changing the way data is consumed, especially in sectors such as retail, education, health care and science. How is IBM looking at the whole spectrum of cognitive computing?

If you think about major convergences on the path to digital, the amount of data that has been generated in the world in the past two years is more than the data we have amassed in the entire history of the human race. So we are generating data at a phenomenal rate and the issue is that much of it is "unstructured data". Computer programs can't just go in, code it or reorganise it and make sense of it. One aspect of Watson is that the more [data] you give it on a subject, the more it learns. Let's take oncology. We taught everything that's been written about it to Watson. Now, Watson is going out in the wards with cancer doctors to learn more and give information. And the more information it receives, the more specialised it becomes. It is a hugely important differentiator for IBM.

Q How is Watson impacting client decision-making?

What Watson is to IBM is what search may have been to other companies. Let's give you a couple of examples. For North Face [an American outdoor product company], we helped launch totally new interactive online shopping experiences entirely powered by Watson.

This is the same with education.

Data generated in the past two years is more than what we amassed in the history of the human race

Every child learns very differently. I am incredibly pictorial about how I see things: I will remember your face forever; I may not remember your name, but I will remember your face and your gestures—that's how my brain works. The cognitive tutor completely learns about you from your reactions, responses, speed of response, the way you think about pictures.

Q IBM has recently teamed up with play school educator Sesame Street to design pre-school learning modules, making it more interactive and customised.

Not just IBM's research but researches all over the world have identified that neural behaviours, patterns and sign movements in brains between 0 and 6 years of age are a million times more responsive, and are supposed to be developed so that we can mobilise the brain. If we miss that period, it's very hard, but not impossible, to get the brain to be as receptive and learn. After 6 years, the synapses slow down, and neuro processing takes a different form. Sesame has more than 45 years of experience in using entertainment in pre-school learning and making that fun and powerful for the children not just in America but also around the world. We announced our partnership recently and it could take many different forms.

It could be an interactive cognitive tutor or an assistant in schools.

Q Do you have plans to take this collaboration outside the US, maybe to China, India and other countries?

Definitely. We simply started in North America because Sesame and IBM are headquartered here. There is a great need in North America for improved education, but this is very much a global initiative.

Q How do you plan to build on IBM's cognitive business capabilities?

I think it's wonderful having differentiation that others do not have, and being part of a transformation that is so intense, that is changing IBM yet again, not once, not twice, not three times, but four times.

For me, I have done strategic transformations many times before and the difference between success and failure, in my humble experience, is whether everyone understands their part in the transformation. Everyone in IBM understands their part in a cognitive future. F

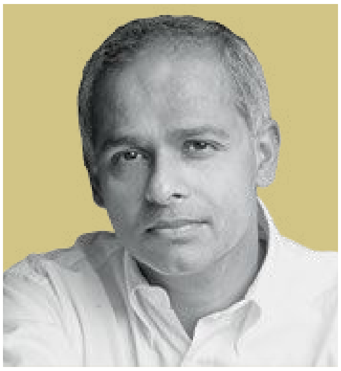
(The writer travelled to Tampa, Florida, at the invitation of IBM)

The failure of economic arguments to sway the vote may spell the end of economic rationalism

WHAT WILL HISTORY MAKE OF BREXIT?

The prospects of meaningful reform within the EU seem remote, but it will take time to see whether there are major casualties and to assess the economic and political effects of the referendum

BY SATYAJIT DAS



ASKED WHAT WAS THE MOST DIFFICULT thing about his job, former British Prime Minister Harold Macmillan is reputed to have replied: "Events, dear boy, events." Brexit may be one such event.

The only known fact is that a majority of those who voted want Great Britain to leave the European Union (EU). Everything else is conjecture.

Few political analysts, super-forecasters, pollsters, betting shops and financial markets anticipated the result. Undaunted, the same people are now confidently outlining the consequences and likely outcomes. The word 'historic' is exhausted. The new trite adjective of choice is 'uncertain'. Putative prophets may benefit from the advice of William Goldman in *Adventures in the Screen Trade*: "Nobody knows anything... Not one person... knows for certainty what's going to work. Every time out, it's a guess and if you're lucky, an educated one."

Perhaps the most interesting observation after the vote was the gallows humour of one trader: "Brexit could be followed by Grexit, Departugal, Italeave, Czechout, Oustria, Finish, Slovakout, Latervia and Byegium. Looks like only Remania will stay."

When they sit down to provide the final verdict, future generations will ponder six issues.

First, the fact that the referendum was called will be a cause of bafflement. Conservative Party leader David Cameron pledged to hold the referendum to placate anti-EU sections of his own party and outflank a perceived challenge from the UK Independence Party. He even advanced the timing by a year. Given his frequent mention of the risks of Brexit, the wisdom of calling the referendum in the first place remains puzzling.

Cameron, who did much to make the Tories electable and won a famous victory, has said he will step down as prime minister by October, leaving behind a divided Conservative Party. The Labour Party too is damaged and may acquire a new leader. Its support of the Remain campaign put it at odds with its core constituencies. The episode has also left behind a divided country, which will prove difficult to unite or even hold together.

Second, the unedifying debate will merit careful analysis. The tone was shrill and lacked civility. The shooting of one MP was a symptom of the febrile atmosphere.

The participation of respected analysts, commentators and supposedly non-political public officials brought them no credit. Facts were water-boarded to support partisan positions. A future of economic damnation and a revival of Empire outside the EU are equally illusory. A debate about immigration policy is not automatically racist in nature.

Foreign plenipotentiaries, including the US president, weighed in with advice on how the British should vote. One European government took out newspaper ads seeking to influence the vote. Only the Queen refrained from providing unsolicited advice to her subjects. There will be speculation on the effects of these unprecedented interventions on the result of the referendum.

Third, the surprise at the result among those who voted to remain will be scrutinised. The wilful ignorance of the affluent, educated and cosmopolitan on how divided and polarised British society has become is striking. The voting patterns mirrored divisions along the lines of class, economic standing, education, age, residence and ethnicity. The debate was always between economics and sovereignty (in the guise of immigration and border control). Exaggerated claims of economic losses, based on macroeconomic models which have failed repeatedly over recent years, to engender fear were rejected. Interestingly, some UK regions reliant on exports to the European Union voted strongly to leave.

For the disenfranchised, the fruits of growth, investment and international trade remain unattainable. Threats, perceived or real, to jobs and uncertainty about nationality are powerful. The inconvenience of the non-EU line at immigration, freedom of movement or ability to own a holiday retreat does not concern those who do not have those opportunities. As one voter told *The Guardian* with stunning simplicity: "If you've got money, you vote in… if you haven't got money, you vote out."

Fourth, the significance of the ultimate decision on core beliefs will be eagerly studied. The failure of economic arguments to sway the vote may spell the end of economic rationalism, which began with Margaret Thatcher and Ronald Reagan. It may be that the vote against the EU was in part a protest vote against the long-term changes in the economic structure of the UK economy, which has destroyed many working- and middle-class lives.

Insofar as the decision represents a retreat to economic nationalism and closed borders, it may highlight the diminishing appeal of globalisation. Free movement of goods and services, lowering of trade barriers and cheaper foreign labour has not benefited everybody.

Conservative American politician Pat Buchanan's observation in the *Pittsburgh Post-Gazette* on January 3, 1994, remains uncomfortably accurate: "…it is blue-collar Americans whose jobs are lost when trade barriers fall, working class kids who bleed and die in Mogadishu… the best and brightest tend to escape the worst consequences of the policies they promote… This may explain… why national surveys show repeatedly that the best and wealthiest Americans are the staunchest internationalists on both security and economic issues…"

Increasing scepticism about experts and expert advice may also be one longer-term effect. The views of the governor of the Bank of England and the Archbishop of Canterbury were disregarded equally.

In a pivotal moment in the campaign, challenged to name a single expert who thought that Brexit would economically benefit Britain, Justice Secretary Michael Gove's defiant response was: "I think people in this country have had enough of experts." Attacked for being anti-intellectual, Gove's position highlighted the fact that over-reaching and arrogant experts have been often incorrect, especially on economic matters, sometimes disastrously.

The reality is that experts no longer relate to ordinary people. Policy orthodoxy, such as free trade, de-industrialisation and, in the aftermath of the 2008 crisis, austerity and unconventional monetary policy, have not benefited large parts of the population. Ordinary people's appetite for sacrifice in return for unquantified future benefits promised by experts has waned. The gravitational pull of aspiration, central to Thatcher and Reagan's brand of conservatism, has faded as trickle-down economics has betrayed many people.

CHAITANYA DINESH SURPUR

Fifth, the obsession with financial market effects, in the aftermath of the decision, will confound posterity. Markets complacently assumed that Britain would remain an EU member and backed it with other people's money. There is no guarantee that their highly-changeable views are reliable. Ascribing a 45 percent probability to Britain leaving, in a result which was always binary, is curious. Panic from the masters of the universe at the slightest sign of uncertainty does not support their claims for perspicacity, superiority and understanding of risk.

The immediate effects on currencies and interest rates were significant. But it will take time to see whether there are major casualties as a result of the usual highly-leveraged bets or what the longer-term effects are. The real economy and political effects will take time to emerge and are highly dependent on events not yet known.

The decision to downgrade the UK's credit rating to a still very strong 'AA' was odd. The UK's ability to meet its obligations has not changed. It was never part of the single currency and has the ability to create pound sterlings to meet its obligations. With rates near zero, the effect of any change in rating is likely to be minimal.

Sixth, history will have to decide whether the vote was simply a mutiny on board *HMS Britannia* or an influential one on the shape of the modern world, the structure of society and values which resonate and lead to change in other countries. If the latter proves correct, the event will prove truly significant.

The Leave campaign may have won the vote, but there is confusion about reshaping the UK's relationship with the EU. Maintaining continued special access to European markets would require accepting many policies rejected by a majority of those who voted. The decision by Boris Johnson, an Etonian like David Cameron, and of similar background and leanings, to back the Leave vote showed ruthless calculation and accurate political sensitivities. In an editorial after the vote, Johnson, seized with post Brexit 'Bre-gret' or 'Bre-morse', suggested that wholesale changes in the relationship between the UK and the EU were now unnecessary.

The prospects of meaningful reform within the EU also seem remote. European Council President Donald Tusk, speaking for a number of Eastern European nations, admitted that the EU's utopian visions are not shared by ordinary people.

But other leaders, especially in the European Commission, do not recognise the problem. German Foreign Minister Frank-Walter Steinmeier promised that "we won't let anyone take Europe from us". The unfortunate malapropism (about the identity of the 'us'; whether it was the EU or Germany) highlighted a central, unresolved problem.

The EU is circling the wagons, painting Britain as a reluctant European and seeks to punish her to dissuade other nations from similar actions. European Commission President Jean-Claude Juncker's tart summary reflects this view: "It's not an amicable divorce, but it never really was a close love affair anyway."

The intellectual response is framed by cognitive dissonance. Chris Patten, the last British governor of Hong Kong and a former EU commissioner for external affairs, lamented that the referendum's outcome was the result of a complex question being reduced to "absurd simplicity".

Kenneth Rogoff, professor of economics and public policy at Harvard University, saw it as "Russian roulette for republics". He complained that the simple majority of those who voted (36 percent of eligible voters voted for leaving) was an absurdly low bar, although that level is significantly higher than the average winning vote proportion in recent US presidential elections. Rogoff argued that such a significant decision should not be made without appropriate checks and balances.

"It (Brexit) is not an amicable divorce, but it never really was a close love affair anyway."

— Jean-Claude Juncker

In an editorial piece for *Businessinsider.com*, American opinionist Josh Barro termed the decision "a tantrum". British voters made "a bad choice". It was an "error of direct democracy". Such major decisions should not be decided by voters, but left to "informed" elected officials.

In essence, for those who believe they are born to rule, democracy should be for those who meet some standard set by them with the proviso that the vote coincides with what they think ought to happen. For this group, Brexit signals the need to limit democracy to ensure that important decisions are left to self-certified experts.

History may well record that little changed as a result of Brexit. The long-tortured process of withdrawal and negotiation of arrangements regarding trade and other matters with the European Union left the status quo largely unchanged. Those in charge and their attendant retinues continued, as British blogger John Ward wrote in 2015, to ignore the individual, state sovereignty, debt mountains, currency realities, poverty, its responsibilities and every legal and constitutional restraint on their power.

If the deep-seated economic and social divisions within Britain or other societies cannot be dealt with peacefully and through existing processes, the risk is that they will unleash the furies of nationalism and isolationism in unknown ways and with unpredictable results. F

Satyajit Das is a former banker. His latest book is A Banquet of Consequences *(published in North America and India as* The Age of Stagnation *to avoid confusion as a cookbook). He is also the author of* Extreme Money *and* Traders, Guns & Money

SERVING *the* MARKET

Deepinder Goyal knows what's on order for a profitable Zomato: Online delivery, downscaled global operations and continued big-picture thinking

BY DEEPTI CHAUDHARY & ANGAD SINGH THAKUR

Promoters of unlisted firms typically, and very politely, decline to share financial details of their ventures. That will not surprise you. They are the norm. And then there is the exception: Deepinder Goyal, who will even do the math for you to explain how Zomato's numbers are drawn. His now-famous openness—he regularly chronicles his startup's journey in a blog on the company website—can be a double-edged sword, we are told by people both within and outside the system. Some like his leadership skills, while others call him too blunt for his own good.

The mail that he sent to his ad sales team in November 2015 is an example of this openness. "It was a motivational mail. I write such mails all the time," he shrugs with a smile, although it was perceived as a visible sign of distress in the restaurant discovery venture at the time. The message, which found its way to the media, was titled 'Perspective for our sales team' in the subject line. The co-founder had written that Zomato was "far behind on the numbers" that it had promised to its investors for the year ending March 2016. The team did ultimately meet the target in March

PHOTOGRAPHS: AMIT VERMA

(of doubling the revenues), but Goyal had set off the alarm bells seeing the turmoil around. "The market had turned in September," Zomato's co-founder and chief executive tells *Forbes India*. "We had cash in the bank that could sustain us for six months," he continues. "We had to take several difficult calls otherwise we would put the entire operation at risk."

Casually dressed in a greyish-blue shirt with sleeves rolled up and jeans, the 33-year-old Goyal could be any other employee in his eight-year-old venture, where the average age is 25. His workspace, usually, is at the corner of a large table in an open office, shared with at least four other colleagues. But, for this interview, we are seated in a conference room at his company's 22nd floor headquarters in Gurgaon, surrounded by white glass walls that seem to be used regularly as blackboards. The scribbles, though, mean nothing to an outsider, however hard one may try to decipher them.

At least a few of them are likely to be linked to the "turn" that Goyal speaks of, which hit the Indian food tech market in 2015, on the back of a record year of investments in the industry (see table on *page 39*). In 2015, 51 food tech startups raised \$204.9 million, as per startup intelligence and market research platform Tracxn's estimates, in contrast to seven that raised \$66.3 million in the preceding year. Instead of strengthening their fundamentals, however, many firms went in reverse order, says Ash Lilani, managing partner and co-founder of Bengaluru-based Saama Capital. "They went out and focussed on building markets and customer acquisition rather than on unit economics. That model is not sustainable in any country unless you have endless capital." Investments soon dried up, and with no capital to back them as well as the nagging poor unit economics, several startups died a premature death.

But death affects the living too. And the reverberations of the events of 2015 are still being felt across the sector. Zomato was no exception. The only unicorn in the Indian food tech space, whose investors include Info Edge, Vy Capital, Temasek and Sequoia Capital, also faced the heat—as evidenced by the founder's mail—and has since been changing rapidly to stay alive and relevant.

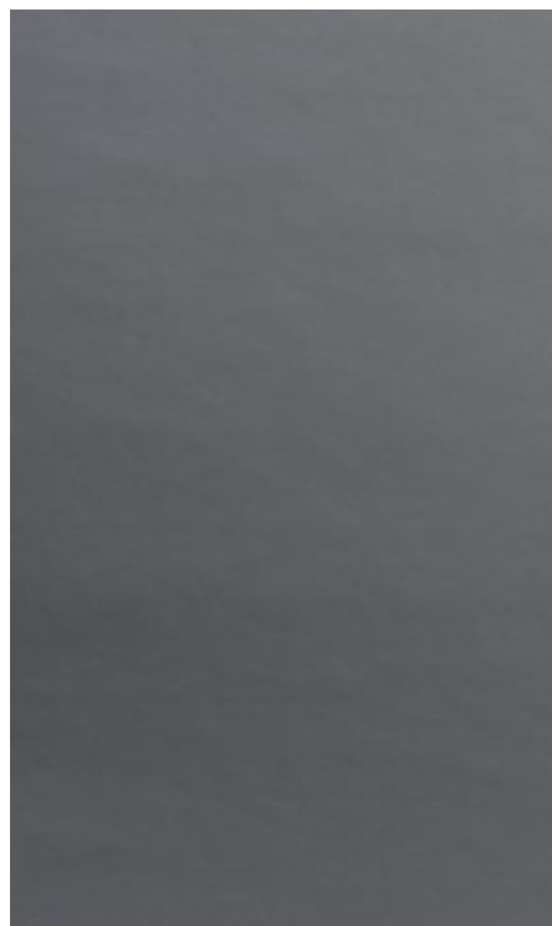
"WE ARE A GROWING COMPANY; WE ARE SUPPOSED TO HAVE LOSSES... IF YOU WERE GOING TO BE PROFITABLE THE NEXT DAY, WHY WOULD YOU RAISE CAPITAL?"

The first hint of change—or growing up, if you will—in Zomato is visible when you enter the company's new office. From a standalone four-storeyed building till about eight months ago, India's original restaurant-discovery platform is now housed in a posh high-rise where it occupies three floors. It has several big-ticket neighbours, including Apple Inc, American Express and Coca-Cola.

Its transformation, however, hasn't been limited to an address upgrade. The inability of ad sales—which contributed the lion's share to revenues—to keep up with mounting pressure from high valuations (hence, investor expectations) has proved to be the trigger for bigger changes at Zomato.

Since inception, Zomato, co-founded by Goyal with Bain & Co colleague Pankaj Chaddah, 30, under the name Foodiebay.com in 2008, had largely depended on an ad-based model, with restaurants promoting their brand on its platform. But that focus has had to change. Earlier in 2015, Zomato launched food-ordering on its platform and, later, began beefing up its B2B tech offerings in an effort to increase its transaction-based business. Then there was the tough decision of scaling down operations—for instance, in October, it shut down Zomato Cashless, its cashless payments business, just eight months after it was launched—or that of letting go over 300 employees.

Not everyone is buying into this



Pankaj Chaddah, co-founder, Zomato, is the the key driver of its online food delivery business transformation, though. In May this year, HSBC Securities and Capital Markets (India) valued Zomato at about $500 million, almost half the valuation at which the company raised its last round of funding in September. The brokerage cited concerns over the company's advertisement-heavy business model, intensifying competition in the food ordering space and capital-losing international operations for the watered-down figure. Reacting thereafter in a blog post, Goyal pointed out that the report by its own admission was an "outlier" and that this wasn't a real markdown—the investors still maintained its valuation at $1 billion. "It's like being the flavour of the month and then falling from the favour. For us, we operate in a portfolio of markets; the oldest markets are profitable, and the new markets are not. It's as simple as that," says Goyal.

What isn't as simple is the ongoing restructuring at Zomato, which has a simple but, thus far, elusive goal: Profitability. Losses have widened by 262 percent, at Rs 492.27 crore in FY16 over Rs 136 crore previously, while revenues have nearly doubled to Rs 184.97 crore, over Rs 96.70 crore in FY15. "We are a growing company; we are supposed to have losses. That's the purpose of growth capital anyway. If you were going to be profitable the next day, why would you raise capital?" says Goyal, reiterating the immediate focus on profitability through a leaner, sharper structure.

To reach its goal, Zomato has zeroed in on online food ordering as the new area of focus. It expects that the business can deliver profits in the next 6 to 9 months. The service was started in April last year and currently delivers 26,000-28,000 orders a day, as against 40,000 by market leader Swiggy. But the business has grown by 30 percent month-on-month—it delivered 750,000 orders in May—and the company expects that it will break even at 36,000 orders a day, a target it says is easily achievable.

It should be noted that for a business that has become critical for growth (online food delivery currently constitutes about 20 percent of Zomato's India revenues), it was a late, even reluctant, entrant to it. And there's a good reason for that.

Not many know that Goyal had a delivery startup called Foodlet back in 2005. It was a forgettable experience too. The biggest problem he faced was that restaurants would de-prioritise Foodlet's orders because they came from an aggregator's customers. The quality of the service, he says, was low compared to direct orders to the restaurant.

Zomato foresaw similar issues in 2011 as well. "We might go into online ordering sometime down the line," Chaddah wrote in a post on Zomato's blog, back in 2011. "But with the current state of affairs, if we enable online ordering now, we see ourselves running into problems bigger than the ones we will be trying to solve." Finally, Zomato bit the bullet in 2015 after a small pilot.

The tardiness proved to be a boon because when they did enter food delivery last year, "they did it from a position of strength," says Ajeet Khurana, angel investor, mentor and former chief executive of Society for Innovation and Entrepreneurship (SINE), a startup incubator run by IIT-Bombay. "Zomato has had the luxury of seeing the earliest entrants

ZOMATO'S GLOBAL PALATE

2008

DEEPINDER GOYAL and **PANKAJ CHADDAH** launch restaurant discovery service, Foodiebay.com

2010

Info Edge invests Rs 4.7 crore in Foodiebay.com, which rebrands to Zomato the same year. Present in five cities. "When we had named ourselves Foodiebay, we didn't notice that we had 'ebay' in our name... one should not build a business on a name which has a 5 percent chance of getting screwed in the future," Goyal writes in his blog

2011

Adds an events ticketing section to its platform

2012

Launches in Dubai; expands to 12 cities in India. "Zomato's almost four years old now. And our primary revenue model is advertising."

2013

Expands to 40 cities across 11 countries

2014

Makes five international acquisitions; expands to 16 countries. "Together, we'll be able to build the largest restaurant information resource in the region."

2015

Launches Zomato Order; joins the unicorn club and continues its buying spree, including the $52 million acquisition of US-based Urbanspoon. "We'll be moving all the most important aspects of Urbanspoon over to Zomato."

2015

Launches table reservation platform Zomato Book; scales down operations in nine countries, shifting focus to 14 core markets

fall, and it has entered the market with a huge user base, which is a strength." The market today is a saner, more mature version of itself. "What you're seeing is a rationalisation. People are saying: Let's get the unit economics right. Let's try to break even," says Saama's Lilani. And it's not just the food-tech businesses that are becoming more rational. "Consumers have started paying for delivery and restaurants are willing to pay higher commissions," says Mohit Kumar, co-founder and CEO of Runnr, the newly-formed online food delivery and logistics company (after the acquisition of Tiny Owl by RoadRunnr). "They [restaurants] understand that with increasing real estate costs, delivery is a better business to scale."

Zomato also conducts delivery operations in the United Arab Emirates (UAE). Reason: Foreign markets offer better margins in rupee terms. The contribution margin on an order in India is Rs 20 compared to Rs 50 in the UAE. (The UAE, in fact, is a big contributor to Zomato's overall revenue, accounting for about 20 percent. India is at 45 percent while the rest are accounted for by the 21 other countries where Zomato had a presence.)

"Our average order value (AoV) in this business (online ordering) is more than 1.5 times the size of our competitor," says Goyal. It stands at Rs 480 in India. "This makes our business way more viable than pretty much anyone else's. The AoV multiplied by our order volumes also makes us the largest player by GMV (gross merchandise value) in this market in both these countries (India and the UAE)." About 80 percent of Zomato's orders are delivered by restaurants, and 20 percent by the company through logistics partners such as Delhivery and Grab.

During an earnings conference call in May hosted by Info Edge, which owns Naukri.com, jeevansaathi.com and 99acres.com, and holds a 47 percent stake in Zomato, Goyal delved deeper into the problems with handling delivery. "We literally make Rs (-)2 on this 20 percent," he said of the orders that are delivered by its logistics partners. "So we actually lose money in spite of the fact that we have outsourced delivery to someone else and the delivery boys of the companies only cater to food during lunch and dinner and they do ecommerce deliveries during the rest of the day."

In reply to a question about market share and companies that had shut shop, Goyal again referenced the tough unit economics of the business, saying, "Those guys never even had market share to begin with. However, I would say that even the other guys, the way the unit economics are working, I do not think they would have more than six to nine months left."

There is, in fact, a debate raging globally as to whether the marketplaces should take control of the logistics (as global player GrubHub is starting to do) or not (like Just Eat does in the US and Canada). The marketplace business model, by its very nature, is high-margin and scalable once dominance is reached. Delivery adds the obvious cost of transportation and makes the model less flexible and difficult to expand, as it requires a large enough fleet during peak hours.

Bengaluru-based food aggregator and Zomato's primary competitor in food delivery, Swiggy, seems to be doing well on the back of its in-house logistics and focus on just a few markets within the country. Nandan Reddy, co-founder, Swiggy, says they want to ensure a friction-less experience to their customers which is possible only when the company controls the ordering and delivery itself. The one-and-a-half-year-old firm claims to be profitable on every order post-delivery in two of the eight cities it operates in. “We have never gone beyond top cities because we feel the biggest chunk of customers is there. We control demand and supply. We are increasing our efficiency; it’s important for us to increase our market share,” says Reddy, adding that food tech will be a battlefield of 2-3 players. Swiggy has a delivery fleet of about 5,500 people. It has also introduced a few measures to improve margins: A convenience fee of Rs 20 on the orders delivered as well as surge pricing, a relatively new concept in the food tech space.

In contrast, Zomato has expanded its network to even those restaurants that don’t deliver, thereby increasing the total available market. For such orders, it has collaborations with third-party delivery companies, thereby benefiting from both variability of delivery cost and maintaining control of the delivery experience. “Our value proposition is simple—we bring incremental business for restaurants and convenience for customers. Our competition is dialling in for food,” says the soft-spoken Chaddah, the key driver of the online food delivery business. “We want to be a website that people use two to three times a day,” adds Surobhi Das, chief operating officer of Zomato, who has been with the company for five years now.

The sheer potential for growth has drawn many players to the business, despite its obvious challenges: The online food aggregation business can increase from almost nothing in 2014 to $4.4 billion in 2020 in India, according to a Morgan Stanley research report released in February this year. Margins can be high in this space, the report indicated, by citing examples of global firms such as GrubHub whose adjusted operating margins have been around 30 percent, while Just Eat reported 2014 Ebidta (earnings before interest, depreciation, tax and amortisation) margins of 40 percent in the UK and Canada. Companies such as GrubHub, JustEat and Delivery Hero deliver three meals per second. The velocity, in contrast, is far lower in India, as the on-demand business really started picking up only in early 2015. “We have just scratched the surface,” says the Morgan Stanley report. “Zomato Order currently has tie-ups with 12,000 restaurants, highlighting the headroom for growth in the years to come.”

Clearly, ordering is emerging as the most important part of Zomato’s evolution, but it isn’t the only one. The company recently launched Zomato Book, a table reservations platform. With it, Zomato has entered into competition with EazyDiner and Dineout, and completed expansion into nearly all facets of India’s restaurant ecosystem. “These are a part of the expansion and growth horizontals strategy planned several years ago. We are not moving away from the old business of classifieds and ads. It’s a matter of opportunities that look good,” says Sanjeev Bikhchandani, founder and executive vice chairman of Info Edge.

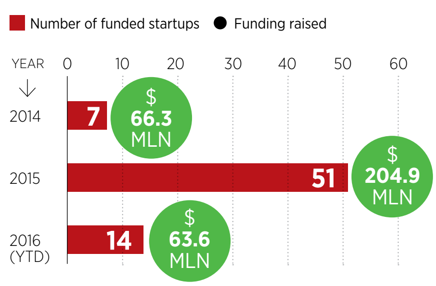
Zomato’s core proposition of restaurant discovery combined with its software at the restaurant for food delivery, restaurant point of sale (POS) and table reservations ensure that the company has deep roots into one million restaurants across the globe.

In turn, Zomato too seems to be important for restaurants. And one fundamental aspect seems to set it apart. “Zomato is bringing in customers rather than piggybacking on the restaurants’ customers,” says Khurana. This is in contrast to what many startups in the space were attempting to do. Zorawar Kalra, founder and managing director of Massive Restaurants Pvt Ltd, which runs Farzi Café, Masala Bar and Masala Library, says the value-add can be substantial to a business. “It is an enabler. It makes it easy to reach far more customers than you can seat. If you can seat 60, it’ll help you deliver to 60 more.”

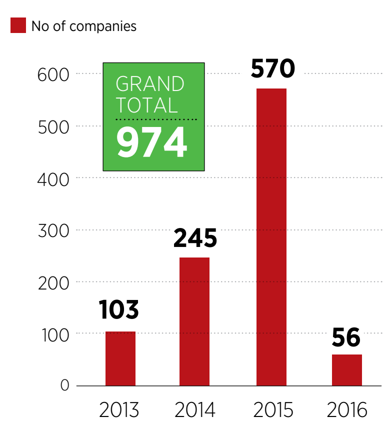
While Goyal has spent the past year restructuring the business, he has had to do it under the intense media glare that follows his company. “The one thing that differentiates an entrepreneur is the intuition (and courage) to take calculated risks. Some initiatives will fail and others will propel the company into new directions. Whether it is food ordering, international market expansion, table reservations—Zomato has demonstrated that it has the guts to try new things constantly,” says Mohit Bhatnagar, managing director, Sequoia Capital India Advisors, which invested in Zomato in 2013.

It helps that Goyal is an “overall picture” kind of guy, says Bhatnagar.

FOOD FOR THOUGHT



FOOD TECH STARTUPS



Source: *Tracxn*

INFOGRAPHICS: SAMEER PAWAR

TOP ROUNDS OF FUNDING (Y-O-Y)

2014

Zomato

INVESTORS	AMOUNT INVESTED (IN USD)
Info Edge India; Vy Capital; Sequoia Capital	60,000,000
FUNDING DATE	**ROUND NAME**
Nov 2014	Series E

2015

Zomato

INVESTORS	AMOUNT INVESTED (IN USD)
Vy Capital; Temasek Holdings	60,000,000
FUNDING DATE	**ROUND NAME**
Sep 2015	Series G

2016

Swiggy*

INVESTORS	AMOUNT INVESTED (IN USD)
SAIF Partners; Accel Partners; Norwest Venture Partners; Harmony Partners; RB Investments	35,000,000
FUNDING DATE	**ROUND NAME**
Jan 2016	Series C

*Follow up Series C round for Swiggy (Data as on June 1, 2016)

Source: *Tracxn*

TOP FUNDED FOOD-TECH STARTUPS (OVERALL)

Zomato

INVESTORS	AMOUNT INVESTED (IN USD)
Info Edge India, Sequoia Capital, Vy Capital, Temasek Holdings	223,800,003
LAST FUNDING DATE	**LAST FUNDING ROUND**
Sep 2015	Series G

Swiggy

INVESTORS	AMOUNT INVESTED (IN USD)
Accel Partners, SAIF Partners, Norwest Venture Partners, DST Global, Harmony Partners, RB Investments	60,500,000
LAST FUNDING DATE	**LAST FUNDING ROUND**
May 2016	Series C

Tiny Owl

INVESTORS	AMOUNT INVESTED (IN USD)
Nexus Venture Partners, Matrix Partners India, Sequoia Capital, Matrix Partners	27,700,000
LAST FUNDING DATE	**LAST FUNDING ROUND**
Oct 2015	Series C

*Tiny Owl is now a part of Runnr

For instance, when the board advises him to change something in the business, Goyal considers it but does not change even one individual pixel unless he sees the overall new picture. “That’s a great insight into Deepi’s mind, someone who does not lose sight of the forest for the trees,” says Bhatnagar.

It is, perhaps, this need for perspective that has guided Goyal’s recent actions. Zomato has scaled down its operations in nine countries to narrow down its focus to 14 core countries. It will manage those markets (Sri Lanka, Ireland, Chile, Canada, Brazil, Italy, Slovakia, the US and the UK) out of India. This call, of remote management, had to be taken to reduce the cash burn on the high-risk geographies they had ventured into. The month-on-month cash burn is now $1.47 million, compared to $9 million early last year.

Zomato, and its employees, have also felt the burn of churn—of several high-profile exits such as those of chief marketing officer Alok Jain, product heads Namita Gupta and Tanmay Saksena. “It’s not always [interpersonal] differences,” explains Goyal. “It can be performance related also but you will probably never get to know that,” he adds with a smile that he wears almost like a defence. “Our aim right now is attaining profitability, and that’s the only thing we think about.” Even the retrenchment of the 300 employees earlier this year is a part of the process. And of the tumult that is synonymous with the food tech system.

Take the extreme case of the bizarre hostage crisis that unfolded at the offices of restaurant delivery platform TinyOwl in November last year. According to media reports, Gaurav Choudhary, the firm’s co-founder, was restricted from leaving the office by staffers who were being laid off. Then there are examples of downscaling and even complete shutdowns. For instance, the food delivery firm Dazo which discontinued its curated food ordering platform in October less than a year after inception due to lack of funding. Bengaluru-based online food service firm SpoonJoy, which raised $1 million last year, was acquired by on-demand delivery service Grofers. And, in May, Gurgaon-based food delivery startup Yumist shut down its operations in Bengaluru, less than a year after it launched in the city. As for TinyOwl, it was acquired by hyper-local logistics startup, RoadRunnr earlier this year. The two have now combined to form the new entity Runnr, which will focus on food delivery, besides its B2B logistics service.

“This sector is definitely very competitive with very thin margins today and a lot needs to be done to make it sustainable over long term,” says Shashaank Shekhar Singhal, founder of Dazo. Consequently, food tech startups are on the hunt for business models that’ll assure scale and sustainability. There is the fully

Will the Real Food Tech Please Stand Up?

A handful of Silicon Valley startups are reshaping the way we define food tech, with innovations ranging from plant-based meat burgers to soil-free urban farming

BY MAYANK SINGHAL

The author is a technology investor and has worked at global investment firms, including Temasek Holdings and TPG. He was at Stanford Business School. Views are personal.

SAMEER PAWAR

An impossible kind of food is the next big revolution in technology: And it will arrive not on your smartphone, but on your plate. Impossible Foods, a California-headquartered startup founded by Stanford biochemistry professor Patrick Brown, is firing up a slow revolution in the way the world eats. Pat's five-year-old company creates meat burgers; minus the meat. The company's trademark burger patty is crafted using only plant extracts. That said, it not only tastes and smells like a meat patty, but also bleeds real blood. Having created perhaps the perfect recipe for meat lovers with a conscience, the company's mission is to disrupt the $50 trillion (around Rs 3,400 lakh crore) global meat industry, and maybe more.

In its audacious goal, Impossible Foods isn't alone. A slew of Silicon Valley-funded startups seeking to replicate meats, eggs and cheese with plant matter is fast emerging: Be it companies such as Hampton Creek, whose eggless mayonnaise has become a bestseller at Whole Foods Market, or Beyond Meat, which makes plant-based chicken strips. These businesses are calling livestock an 'outdated technology' and reinventing the traditional industry norm of farming animals for meat and milk. Backed by top-tier capital from Google, Andreessen, Li Ka-shing, Khosla and Bill Gates, they are turning plants directly to meat, sparing the chicken and the cow. And they are targeting a huge market—the next generation of consumers who still love their meat and dairy, but are growing up increasingly aware of the world's environmental challenges.

According to the United Nations, livestock rearing uses a third of the world's landmass and produces 20 percent of all greenhouse gases. Rearing animals for meat requires supplying them with vast amounts of food—every kilogram of meat needs 5-10 kilograms of plant feed—and water—75 trillion gallons channelled towards animal farming every year. And the direct-from-plant approach means not just less wastage, but also avoids the cholesterol, antibiotics and hormones that are byproducts of eating from the traditional food chain.

But the real question remains: Will consumers pay for these new-age meat and dairy products? Aware that they are leaving behind a lower ecological footprint, would they be willing to buy a $20 plant hamburger and not a $3.99 Big Mac? Not surprisingly, the answer remains, 'No'. If Impossible Foods wants to revolutionise the way the world produces and consumes meat, it will need to make its plant-based meat cheaper than real meat, a goal this industry is chasing fervently by marrying data scientists with biochemists to get to a $2 price tag.

The idea of a mass-market, plant-based hamburger seems so disruptive and the opportunity so big that Impossible Foods is now valued at close to $1 billion, a bold price tag for a company that's still to achieve a full commercial launch. And Google, the world's foremost contender for 'moonshot' ideas, has been eyeing an acquisition opportunity to buy them out. In fact, it even made an unsuccessful bid to buy the company in 2015.

Yet, Impossible Foods is just the tip

of the future-food iceberg. Despite its transformative potential and that of other similar companies such as Hampton Creek, what they represent is a small piece of the food tech pie. Outside of the creation of new food categories, there are attempts to transform not just the way we eat, but the way we grow. And a new crop of businesses is challenging our age-old farming practices, creating more from less and changing the face of agriculture as we know it today.

A package of plant-based chicken strips from Beyond Meat. Companies that make plant-based meat are fervently trying to make it cheaper than real meat

Freight Farms, a Boston-based startup founded in 2010, leads this charge. It designs and creates modified shipping containers that allow 'anyone to grow food anywhere', fostering the ability to pursue year-round agriculture in any environment with no dependencies whatsoever on external weather and conditions. The company, started by co-founders Jon Friedman and Brad McNamara, supplies wannabe farmers a 40' x 8' x 9.5' retrofitted container, fully loaded with technology and Wi-Fi, to grow stacks of hydroponically-farmed (a method of growing plants in water, without soil) plants and vegetables.

At $80,000 a piece, the company's product—a freight-truck-sized farm-in-a-box, with all the necessary equipment and storage required to grow produce—can yield as much produce as an acre of land, and uses 90 percent less water than a conventional soil-based farm, also replacing the need for natural sunlight with specially-designed LED strips. The box is fully insulated from the outside, thus producing the exact same crop in climates ranging from the long winters of Ontario to the sweltering heat of Texas. As a result, climate change is hardly a worry.

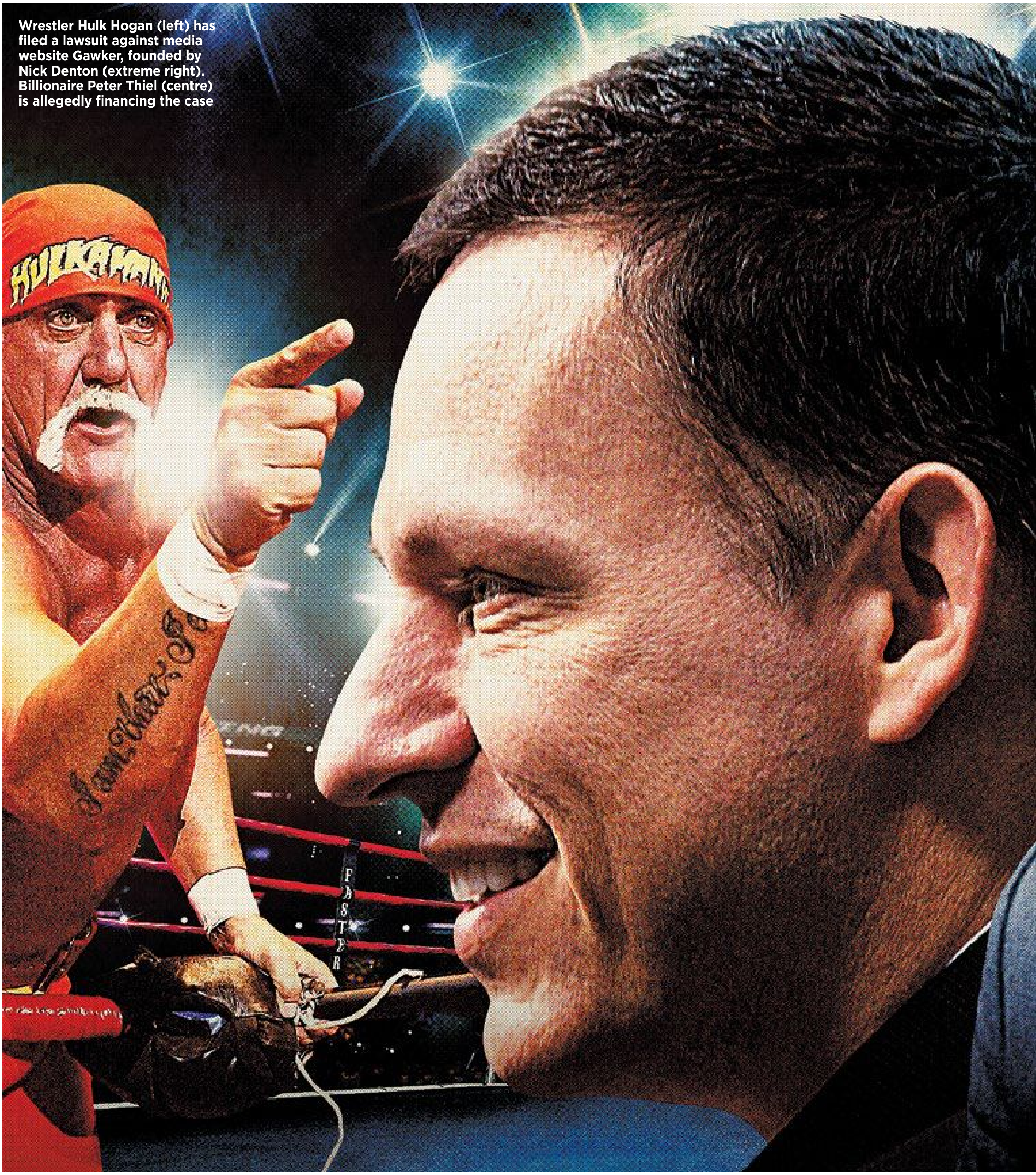
Beyond resource efficiency, the company is introducing a whole new wave of remote farming. Using technology, farmers can monitor and intervene real-time through a smartphone app, and every detail—such as temperature, lighting, humidity and CO_2 levels—is transmitted back to the phone as well as to the company's central servers. Just as Google becomes more powerful as more people use it, each Freight Farms owner benefits from insight gained across the network. Buyers, many of whom are first-time farmers, are trained in a two-day course and connected by a private online forum where they share everything from data on crop selection to marketing ideas.

Freight Farms also sees itself as a key driver in the urban food revolution. Away from traditional farmlands, most of their modern-day farms are parked in the interstitial spaces of cities, from warehouses and underneath highway overpasses to alleyways behind the restaurants where their crops are served. The result is truly hyperlocal produce, which sometimes travels just a few feet from farm to table. The idea is to produce fresh local produce year round.

Truly disruptive in nature, companies such as Impossible Foods, Hampton Creek and Freight Farms are all part of a rapidly expanding set of high technology food startups that are helping reshape the way the world will feed its 9 billion citizens by 2050. And there's a whole list of them, including Cambridge-based Indigo, which is trying to develop the ideal microbiome—bacteria that live symbiotically inside plants to make them hardier and more resistant to environmental factors. These businesses have together received over $5 billion in funding in 2015.

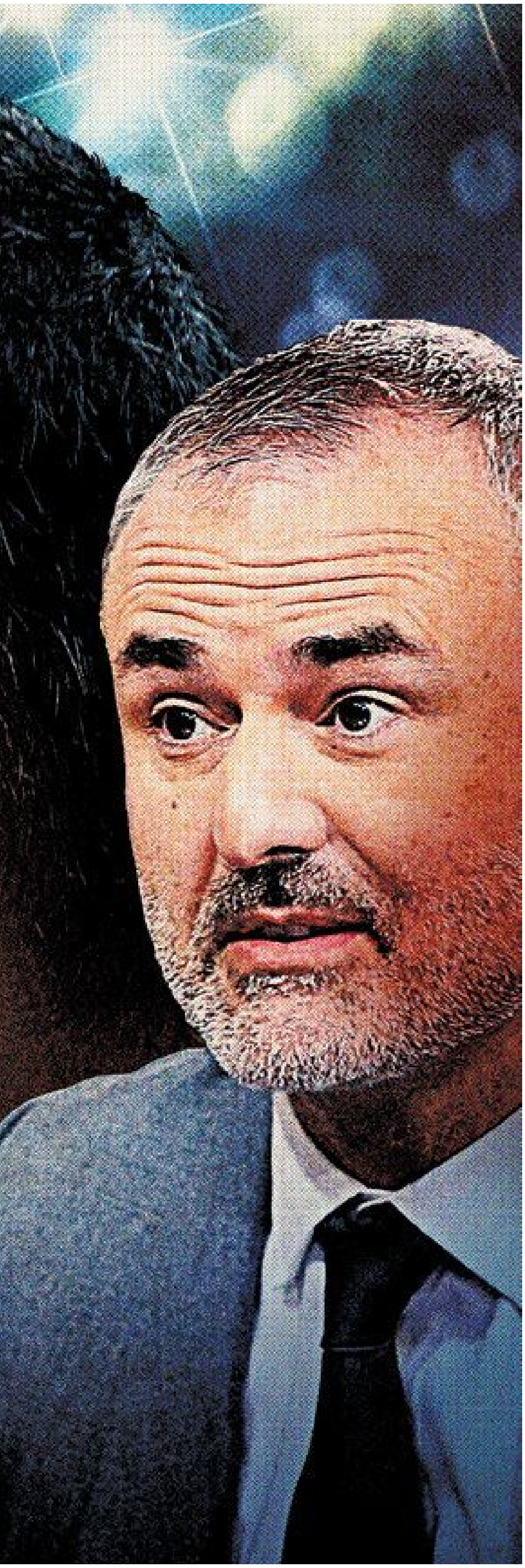
But while these businesses epitomise food tech, they also spring up a question, far, far away for us in India. Is it food tech that we've been living and breathing the last two years with more online menus, deeper discounts and better food delivery, or is ours just not the real food tech?

GETTY IMAGES



Wrestler Hulk Hogan (left) has filed a lawsuit against media website Gawker, founded by Nick Denton (extreme right). Billionaire Peter Thiel (centre) is allegedly financing the case

SEAN MCCABE FOR FORBES



A Billionaire's Blueprint for Killing an Enemy

Peter Thiel's war on the gossip website Gawker goes back longer than previously realised. Here's the untold story of his siege

BY RYAN MAC AND MATT DRANGE

It's voting season for the Emmy Awards, which means that electioneering in the form of billboards rising into the haze dominates the Los Angeles skyline. Hollywood's elite driving down Sunset Boulevard are first beckoned to support Netflix's *Jessica Jones*. Next up is Amazon's *Transparent*. Towering over them all: A 12-storey banner extolling HBO's *Silicon Valley*, which lampoons the culture and excesses of America's technology industry.

And lording over that advertisement: The Hollywood Hills mansion of billionaire Peter Thiel, an early Facebook investor who also inspired one of the HBO show's most incisive characters, Peter Gregory, a mix of awkward eccentricity and reserved ruthlessness.

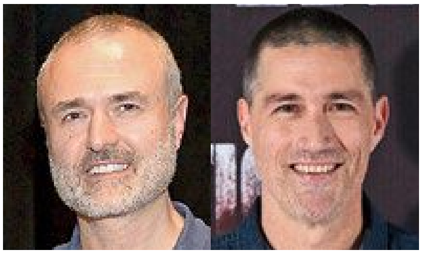
As the past few weeks have shown, the real Thiel is even more eccentric and ruthless than his fictional alter ego.

As *Forbes* revealed in late May, Thiel is the clandestine financier of numerous lawsuits targeting Gawker Media, the New York-based company whose biting style of journalism has grated on the egos and sullied the reputations of some of the world's most powerful people. The most damaging lawsuit—an invasion-of-privacy case revolving around a sex tape of the wrestler Hulk Hogan (real name, Terry Bollea)—recently resulted in a $140 million jury award and a national debate on the rights of celebrities versus the rights of a publication to disseminate what it considers to be newsworthy.

The revelation that Thiel paid Hogan's lawyers—to the tune of about $10 million—has transformed that discussion. Gawker, supported by free-speech advocates like eBay founder Pierre Omidyar and Amazon.com's Jeff Bezos, has denounced Thiel's gambit as an attempt to permanently snuff out an unpopular media outlet through aggressive litigation. Thiel, lauded by a host of other Silicon Valley heavy hitters who have felt Gawker's wrath, from Chris Sacca to Vinod Khosla, has described his efforts as "one of my greater philanthropic things", helping those who have been wronged by a "singularly terrible bully".

THIEL VS GAWKER: THE MOVIE

Who should portray Nick Denton, Hulk Hogan, Peter Thiel and others in the Hollywood version of the saga? *Forbes* plays casting director



Gawker founder Nick Denton (Matthew Fox)

Hulk Hogan (Nick Offerman)

Former Gawker editor AJ Daulerio (Charlie Day)

Billionaire Peter Thiel (Sean Hayes)

Billionaire Pierre Omidyar (Fisher Stevens)

Gawker plaintiff attorney Shiva Ayyadurai and wife Fran Drescher (Naveen Andrews and Barbara Hershey)

Thiel has been deliberately vague, granting just one interview—to the *New York Times*—and refusing to talk to *Forbes* about this subject. But over the past two weeks, which has included interviews with more than 50 people, *Forbes* has pieced together the kind of narrative that a site like Gawker used to feast on. Rather than simply play the vigilante, available to help those who have been publicly attacked by a company even the most ardent press advocates must hold their noses to defend, Thiel secretly declared a multifront war against Gawker, seeking to crush it by any means necessary.

Specifically, while Gawker has found itself defending numerous Thiel-backed lawsuits attacking its kind of journalism, there has also been an orchestrated effort to initiate a class-action labour suit against it. Some in the Los Angeles legal community talk openly about a coordinated strategy against Gawker. And at least one Silicon Valley billionaire has quietly pursued the concept of a Gawker buyout by indirectly reaching out to former staffers.

Thiel's level of involvement in each of these initiatives remains opaque. What isn't: The impact of this attack on Gawker. The $140 million judgment, which isn't covered by insurance, could prove fatal to the company if it's upheld—and could serve as a blueprint for any billionaire who wants to lay siege against a media outlet.

The fateful dance between Thiel and Gawker can be traced back to 2002. That's the year Nick Denton, a former *Financial Times* journalist, founded Gawker. That's also the year Peter Thiel and his legendary "mafia", which includes Elon Musk and Reid Hoffman, took PayPal public, giving Thiel the kind of cash to be able to shell out $500,000 for 10 percent of a raw startup called Facebook, and then to launch Palantir, the data-mining giant that's now worth some $20 billion.

But those big successes had yet to take hold with the general public when Gawker.com first made passing mention of Thiel in March 2006. More than two dozen blog posts quickly followed, before the site declared, in a December 19, 2007, headline: "Peter Thiel is totally gay, people." While some dispute whether the article actually outed the billionaire (Thiel said in past interviews that his friends had known since at least 2003), it certainly broadcast his sexuality to the rest of the world, something those close to Thiel say he was very uncomfortable with.

Over the ensuing years, Thiel's prominence and wealth—*Forbes* estimates he's worth $2.7 billion—rose in lockstep with Gawker's influence. The website, which had a heavy focus on media and gossip, spawned spin-offs like Deadspin (sports), Jezebel (feminism), Gizmodo (gadgets) and Valleywag (Silicon Valley). All shared the mother ship's formula of snarky, aggressive commentary, breaking news and click-friendly headlines. At its best, Gawker could prompt a Congressman to resign (Christopher Lee did so after sending shirtless pictures to a Craigslist paramour) or synthesise the assault accusations against Bill Cosby. At its worst, it was a spiteful, bile-fuelled gossip rag whose decisions of questionable newsworthiness

STEVE NESIUS/AP; JASON LAVERIS / FILMMAGIC / GETTY IMAGES; JOHN PENDYGRAFT-POOL / GETTY IMAGES; JEFF KRAVITZ / FILMMAGIC / GETTY IMAGES; GUSTAVO CABALLERO / GETTY IMAGES FOR SHOWTIME; CARLOS ALVAREZ / GETTY IMAGES; NEILSON BARNARD / GETTY IMAGES FOR NEW YORK TIMES; ANGELA WEISS / GETTY IMAGES; ANDREW HARRER / BLOOMBERG; MICHAEL OCHS ARCHIVES / GETTY IMAGES; DIMITRIOS KAMBOURIS / GETTY IMAGES FOR TONY AWARDS PRODUCTIONS; FOTOS INTERNATIONAL / GETTY IMAGES included posting a video of a heavily intoxicated woman having sex in a public bathroom and publishing what appeared to be a clumsy attempt by a then obscure—and married—media executive to solicit a gay encounter.

Gawker and Valleywag made Thiel a favourite subject. He gave them lots of material: The libertarian proposed building ship-bound communities in international waters to escape national governments, including the US, and began funding promising teenage entrepreneurs on the explicit condition they skip college to start companies.

"To the extent that there are contradictions, I am much more aware of them than people whose views fit into a very standard matrix," Thiel told *Forbes*, as part of a cover story in 2011.

The following October, Gawker published a short video clip of Hogan having sex with his friend's wife, Heather Clem. The next day, Hogan's personal lawyer, David Houston, requested that Gawker take down the post. When it refused, Hogan sued, filing paperwork in a Florida court with a new, Beverly Hills, California-based lawyer, Charles Harder. A celebrity attorney with clients like Sandra Bullock and George Clooney, Harder held a press conference in Tampa, Florida, on the day of the filing, claiming that the publication's actions were "illegal" and "exceeded the bounds of human decency".

Harder failed to mention that there was another party involved with the case, the one who would finance the legal battle with Gawker: Peter Thiel.

For much of this year, Gawker's Denton floated rumours that someone was behind the Hogan lawsuit. Too many things didn't add up. How could Hogan, who had recently gone through an expensive divorce, afford a high-powered celebrity attorney on what seemed to be a long-shot case? Why didn't he accept several settlement offers? And why did he drop his claim involving negligent infliction of emotional distress—thus freeing the real deep pockets, Gawker's insurance company, from paying any part of a potential recovery?

Denton even maintained a list of at least three billionaire suspects. Sources close to Gawker say that Denton entertained the names of former Facebook President Sean Parker, whose over-the-top wedding in Big Sur, California, was skewered by Valleywag (Parker has told BuzzFeed he's not involved with the lawsuits), and IAC Chairman Barry Diller, who Gawker has long insinuated is gay (Diller's spokesperson denies involvement in the suits). "There was no way of knowing, really," Denton told *Forbes*.

Then there was Thiel. In a 2009 interview, he called Valleywag the "Silicon Valley equivalent of al Qaeda." And true to the man behind Palantir, whose software reportedly helped track down Osama bin Laden, he waited for his moment to strike.

"Most wouldn't think of litigation as a chess game," says a Silicon Valley VC who knows Thiel but wasn't aware of his plan. "But he's also a chess master, and he's incredibly patient. He did three years in law school, and he knows enough to be dangerous." According to one person close to him, Thiel began airing the idea of backing lawsuits against Gawker with some members of his VC firm, Founders Fund.

Enter the new attorney, Harder, who has made pursuing Gawker a focal point of his new firm, Harder Mirell & Abrams. According to a former employee of Harder's, someone in Thiel's camp cold-called Harder at his previous law firm, Wolf Rifkin Shapiro Schulman & Rabkin, "looking for an entertainment lawyer". By mid-October 2012, Harder had taken on Hogan as a client. Two months later, even though he was a partner at Wolf Rifkin, the 46-year-old left to set up his own shop, taking the wrestler's case with him. When Harder announced his new company in January 2013, he made his firm's first filing on behalf of Hogan.

It gets weirder. According to multiple sources, Harder never had any direct contact with Thiel. And, these sources claim, Harder didn't even know who was funding the litigation until *Forbes* broke the news in May. What he surely did know: The cheques cleared. And there was presumably more where that came from, if he could find more cases.

Beverly Hills' glitzy Rodeo Drive is exactly the kind of cliché address that the Gawker empire loves to mock. It's out of Harder Mirell's nondescript office here that the Thiel-fuelled war machine churns on.

Beyond Hogan, who filed a second suit against Gawker in May alleging extortion in the dissemination of his sex tape, Harder has taken on at least two other clients with cases involving Gawker's reporting. In January 2016 Harder filed suit against Gawker on behalf of Ashley Terrill, a writer who originally came to Gawker with a story involving the co-founders of dating app Tinder. Gawker writer Sam Biddle, in turn, published an unfavourable piece on Terrill, highlighting her own alleged inconsistencies and personal issues.

Harder also represents Shiva Ayyadurai, a former lecturer at the Massachusetts Institute of Technology who claims to have invented email. In 2012, Biddle published a story on Gizmodo that undermined that assertion and called Ayyadurai a fraud.

Ayyadurai, who is married to actress Fran Drescher, says no lawyer would take his case—until he presented it to Harder. He denies that any third party is paying his bills. "To the best of my knowledge, I'm not seeing any money in my account coming from Peter Thiel," he says.

While Harder's firm publicly represents those two clients, *Forbes* has found at least two other cases—Gawker is currently a defendant in at least a dozen lawsuits—in which Harder Mirell has worked quietly behind the scenes. One involves soliciting plaintiffs in cases that, contrary to Thiel's claims that he's defending those who have been wronged by the site, have nothing to do with its journalism.

Dating back to January 2013, emails obtained by *Forbes* show that Harder was actively vetting unpaid interns for a labour case against Gawker. A former journalist named Phil Linsalata was emailing former Gawker interns at the time, saying that he was working on academic research "focusing on labour conditions in digital media". After speaking with them on the phone, he would send them to Harder's firm for what he framed as a free "consultation".

A former Gawker intern, David Matthews, even signed a retainer agreement with Harder Mirell. Ultimately Harder passed the interns off to a New York-based law firm specialising in labour claims, which brought a class action against Gawker in June 2013 that has been privately settled. Matthews claims that the lawyers misrepresented their intentions and now says he feels "the sense of being a pawn or an item in a ledger".

Harder's web appears to extend to a federal court in Chicago, where a plaintiff named Meanith Huon, a lawyer and former life insurance salesman, sued Gawker in 2011 for allegedly implying that he had sexually assaulted a woman he had met through Craigslist. He was later acquitted of rape but sought action against legal news blog Above the Law and Gawker-owned Jezebel for suggesting that he was a serial rapist. In a hearing last year, Huon said that he had decided to settle with the former—but continue his crusade against Gawker in a higher court even after a judge dismissed claims of defamation. According to Steve Mandell, an attorney for Above the Law, Huon told the judge in open court that he wasn't worried about his appeal because he was "getting support from Hulk Hogan's lawyers in California". Huon and Harder declined to comment on the case.

Harder takes issue with the idea, circulating in Los Angeles legal circles, that suing Gawker has become his firm's "bread and butter". "We represent numerous businesses and individuals in a plethora of legal matters that have nothing whatsoever to do with Gawker."

Nor would Harder discuss the specifics of his arrangement with Thiel. "If a person has been wronged, he or she is entitled to be made whole. This is true whether the person pays their own legal bill, or has a law firm on contingency, or is represented by a public interest law firm, or an attorney on a pro bono case, or has someone else helping with the costs."

Silicon Valley is circling Gawker in at least one other way. In January, as numerous executives and editors departed the embattled media company, some former employees were contacted by Scott Sonnenblick, a partner at corporate M&A law firm Linklaters, who said he was looking to discuss the possibility of buying the company. Sonnenblick specifically told some of these ex-employees that he was calling on behalf of at least one Silicon Valley heavyweight.

"Most wouldn't think of litigation as a chess game. But Thiel's also a chess master, and he's incredibly patient... he knows enough to be dangerous."

There's nothing unusual about making a bid by approaching former executives, who bring insiders' knowledge and outsiders' hunger. But having a Silicon Valley billionaire circle a private New York media company under siege from a Silicon Valley billionaire is certainly unusual. Sonnenblick and Thiel's camp declined to comment.

Regardless, Denton needs help. While Gawker has since been able to secure funding from Russian billionaire Viktor Vekselberg's Columbus Nova Technology Partners, the company remains under attack. The $140 million verdict, while widely expected to be reduced or eliminated on appeal, hangs over Gawker's head like a guillotine, and numerous legal expenses are draining its resources.

During an interview with *Forbes*, Denton says that Gawker recorded revenue of $50 million last year and would have broken even absent legal fees. However, with fees, which have totalled about $10 million in the Hogan case alone, 2015 and likely 2016 will end up in the red. Gawker already initiated a small number of layoffs to reduce costs.

Gawker has changed, post-Thiel. The company has shuttered Valleywag and its celebrity rumour mill, Defamer, and Denton said last November that the Gawker flagship would refocus on politics. "For a long time, the lawsuits seemed like karmic retribution for skating so close to the edge," says a current Gawker employee. "But for once, Nick Denton's conspiracy theories turned out to be true."

In an age where media assets have become a strategic hobby for non-media billionaires, whether they wear white hats (Jeff Bezos and the *Washington Post*) or black hats (Sheldon Adelson and the *Las Vegas Review-Journal*), the idea that a media entity can be systematically sued into submission by an aggrieved subject is an ugly long-term prospect.

In the short term, Denton is doing what he needs to do to survive. After sitting down with *Forbes*, Denton scurries off to his next meeting, garnering sympathetic greetings as he walks to the lobby of a five-star oceanfront resort in Rancho Palos Verdes, Calif. He's more than ten minutes late by the time he arrives. He quickly extends his hand to Sameer Deen, the senior vice president for digital at Univision—a company reportedly interested in investing in Gawker, headaches and all. F

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COVER STORY

Google Is About to Change Everything Again

New CEO Sundar Pichai is a brainy product guy who aims to reinvent the world's second-most-valuable company—and pretty much every digital experience—with a heavy dose of Artificial Intelligence

BY MIGUEL HELFT

FOR MUSIC FANS, THE 22,000-SEAT SHORELINE amphitheatre in Silicon Valley is iconic. Legendary concert promoter Bill Graham designed it with inspiration from the Grateful Dead logo, and that band played here 39 times. Neil Young, the Bee Gees, Bruce Springsteen—they've all graced the Shoreline stage. A few weeks ago, accompanied by bouncy electronica music and arcade-inspired videos flashing across giant screens, so did Google CEO Sundar Pichai.

It would be an exaggeration to say he looked comfortable as he walked on stage. The cerebral 43-year-old is built like a straw, his eyes darting behind rectangular glasses, more Carl Sagan than Carlos Santana. No matter. At the annual Google I/O conference, he was a rockstar, the headline act. As he took in the hoots and cheers from the crowd of software developers, his face eventually settled into a smile. "We live in very, very exciting times.

ETHAN PINES FOR FORBES

Computing has had an amazing evolution," Pichai said in his South Indian accent, stretching amaaaaazing as a way to get the crowd going.

Okay, not exactly Steve Jobs. Or even Mark Zuckerberg or Jeff Bezos or Tim Cook. Pichai is the classic insider CEO, a low-profile, methodical brainiac who would rather geek out over the future of computer science than whip up a crowd of software developers with choreographed product demos. And that's exactly what Google co-founder Larry Page was after when he handpicked Pichai last year to take over one of the greatest tech franchises of all time.

The task at hand is monumental. With a market cap of roughly half a trillion dollars, Google, or rather its parent, Alphabet, is the world's second-most-valuable company, dominating vast swathes of the tech industry, including search, digital advertising, mobile and video. But Page and Pichai know all too well that tech behemoths often lose their way when they are strongest. And while earlier tech giants, from IBM to BlackBerry, were felled by a single foe, Google faces a bruising multifront war with the other four superpowers in tech. It's fighting Apple in mobile and Facebook in advertising, video and communications. It's pitted against Amazon in commerce, a resurgent Microsoft in business software, and Amazon and Microsoft in cloud services.

Pichai wages all these battles amid a fundamental technological shift. As Google continues to navigate the transition from desktop to mobile, computing is already moving to multiple screens and in some instances—such as with Amazon's surprise hit Echo smart speaker—no screens. Interactions with devices and apps are quickly becoming two-way conversations, sometimes employing smart "bots" promoted by Microsoft, Facebook and others. Unlike apps, these bots run atop communications services like Facebook's Messenger (900 million users) or Microsoft's Skype (300 million users). Google has the wildly popular Gmail (more than 1 billion users), but it lacks the kind of modern messaging system that the younger set favours.

Pichai, however, believes this new tech world is tailor-made for Google because of one thing: Artificial Intelligence (AI). Pretty much everyone can program simple, rudimentary conversations—Apple's Siri was among the first—but to go beyond flashy "demo-ware" you need more sophisticated algorithms. And Artificial Intelligence has been in Google's wheelhouse for years. The company invested in fundamental building blocks such as voice recognition, language understanding and machine translation long before most of its rivals. And after years of preparation, Pichai says, the company is ready to bring all that work together in compelling products that will keep the company ahead of the competition. "We have this vision of a shift from mobile-first to an AI-first world over many years," Pichai tells *Forbes*.

> **"There is a renewed sense of focus on our mission and on transforming the company using machine learning and Artificial Intelligence."**

On stage at the Shoreline, Pichai unveiled the early fruits of those efforts: A smart speaker called Google Home that is aimed squarely at Amazon's Echo (and perhaps at an upcoming one Apple is rumoured to be developing) and a messaging app called Allo. Powering both is a new service that Pichai calls the "Google assistant", the company's own take on conversational computing.

Think of it as Search 3.0—a new, interactive way to communicate with Google itself. With it you'll be able to order a ticket, book a flight, play music, schedule a task, reply to a message; the Google assistant might even write it for you. It might prompt you to order flowers ahead of Mother's Day or to pack for your upcoming trip, and it might be able to pick up an earlier conversation from where you left off. In other words, it will be there, ready to help, in your phone, your speakers, your television, your car, your watch and eventually everywhere. "You are trying to go about your day, and in an ambient way, things are there to help you," Pichai says. Making sure this assistant lives up to its full potential will take years, and building it will be harder than it was for Page and co-founder Sergey Brin to create search itself. Adds Pichai: "In every dimension, it is more ambitious."

The cheers of the Shoreline crowd weren't enough to distract anyone from the obvious. The release of Allo glaringly reinforces the reality that Google is nowhere in messaging and that it badly needs to get somewhere fast. Google Home suggests that no one at Google saw the smart-speaker wave coming—Amazon had to show the way. And these deficiencies underscore one of Pichai's most significant challenges: While no one disputes that Google excels at complex technologies like AI and machine learning, it is not always a leader when it comes to turning those technologies into killer products.

"The risk for Google is that their ability to do really hard AI leads them to overlook simple opportunities to create good-enough user experiences," says Tim O'Reilly, the founder of O'Reilly Media. Google Home will be a test, though the results remain a few months away. What's more, if conversations and messaging, rather than the desktop or even your smartphone's home screen, are to become the new conduits for bots and other digital services, Google needs to lure those services quickly and effectively, just as Facebook, Microsoft, Amazon and perhaps Apple try to do the same. “In the end, every third-party developer will not connect to every platform,” says Harvard Business School’s David Yoffie, a respected student of the tech industry. “The question is who is going to be most successful.”

Pichai’s job is to ensure that the answer is Google, while keeping a company of some 60,000 employees and $75 billion in annual revenue humming. This enormous task underscores why Page went for substance over style. Pichai’s to-do list starts with monetising a sprawling digital empire that spans search, Android, maps, YouTube, Play and many lesser properties. It includes maintaining the cohesion of the disparate coalition of competing companies that make up the Android world; unifying Google’s two operating systems, Android and Chrome; and grappling with antitrust and tax investigations in Europe and elsewhere.

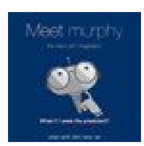
Pichai says he’s ready to lead Google’s metamorphosis. “Personally, there is a renewed sense of focus on our mission and on transforming the company using machine learning and Artificial Intelligence,” he says.

AI BATTLE ROYAL

AMAZON: After four-year AI push, more than 1,000 people are working on its Alexa intelligent assistant, which powers the Echo family of products and can be embedded by third parties into their devices. Outside developers can teach it new ‘skills’

APPLE: The company pioneered the digital assistant category with Siri, which already lets users do things like search through photos, set reminders and get directions. Apple is busily expanding Siri’s capabilities as it seeks to catch up with rivals that leapfrogged it. It is widely expected to open Siri to third-party developers soon

FACEBOOK: Fast-growing AI research team developing “M” virtual assistant and smart chat bots built atop Messenger. More than one in four engineers tapping company’s AI ‘backbone’



MICROSOFT: Large AI and machine-learning research group. Created ‘cognitive services’ and ‘bot framework’ to allow third parties to use its AI-powered tools and is integrating AI into its Azure cloud computing services

If you ran the clock back three or so decades, you might find Pichai standing on the front of a motor scooter, his father holding the handlebars, his mother perched on the passenger seat with his younger brother on her lap as the family navigates the chaotic traffic of Chennai. That’s where Pichai grew up, in a simple two-room house. By Western standards, his father, an electrical engineer, and his mother, a stenographer, were of modest means. For years they didn’t own a television, a telephone or a car.

But his parents put a strong emphasis on education, and Pichai earned a spot at the prestigious Indian Institute of Technology in Kharagpur. After graduating with an engineering degree, he won a scholarship to Stanford, where in 1993 he began graduate studies in materials science and engineering with the goal of a PhD and an academic career—his parents’ dream. As with so many at Stanford, though, Silicon Valley beckoned, and after his master’s, he latched on to chip-industry pioneer Applied Materials. An MBA from the Wharton School and a consulting gig at McKinsey & Co followed.

Pichai landed at Google in 2004, when the fast-growing search company still considered Microsoft its most formidable foe. Pichai was thrown into the trenches of the company’s battle with the software giant. From the very beginning, he exhibited a methodical and strategic approach to decision making that propelled him through Google’s managerial ranks. He was put in charge of an unglamorous but critical piece of software, the Google Toolbar, which allowed people to search directly on their browsers without having to go to Google’s home page.

Pichai’s strategic work on the toolbar led to his next big bet: The Chrome browser. The project was controversial inside Google, where some feared it would unnecessarily irk Microsoft, whose Internet Explorer dominated the browser market. Pichai argued that Google could build a better browser and that it risked losing a substantial chunk of its search revenue if Microsoft, as many feared, tweaked Explorer to make it more difficult for users to access Google. With a small team, Pichai, who at the time worked for Marissa Mayer, now the CEO of Yahoo, developed the product quietly. While its carefully orchestrated launch in 2008 was a PR fiasco, courtesy of a German blogger who obtained marketing materials and broke the news early, Pichai’s browser was slicker and faster than anything else in the market, and his team managed to keep it ahead even as rivals raced to catch up. By 2012, Chrome had become the No 1 PC browser, and thanks to the growth of Android, it’s also the most popular on mobile devices.

Chrome’s improbable victory cemented Pichai’s reputation as a product whiz and, even though he never started a company, something of an entrepreneur, and it set him on a vertiginous ascent up Google’s corporate ladder. “There is a part of Google that has a professorial style, and Sundar fits that perfectly,” says a former senior executive. “But people underestimate how deeply technical and how entrepreneurial he is. He’s

SIRI IPHONE: KAREN BLEIER / AFP / GETTYIMAGES very, very good at that stuff."

His responsibilities grew as some of his would-be rivals fell out of favour. Mayer, his one-time boss, was sidelined and left for Yahoo. In 2013, Pichai, who had gone on to develop an operating system and a set of laptops based on Chrome, was handed control of Android, one of Google's crown jewels, after Andy Rubin, its creator, was pushed aside. A year later, Vic Gundotra, the senior exec who led Google +, the company's expensive and ill-fated push into social networking, was forced out as well.

Throughout it all, Pichai remained unflappable, burnishing his reputation as a collegial executive and, more important, earning the trust of Page. "He will make tough and difficult decisions, but there is not much swirl around them," the former senior executive says. "People love the lack of drama and the thoughtfulness. It's led to more cohesion." At a retreat for Google's top brass last spring, Pichai was asked to sketch a vision for how apps would evolve in a multiscreen world. When he was done, a beaming Page stepped up to say he couldn't have painted a clearer picture of the future, according to a person who was there. "They really see eye to eye on what the future will look like," this executive says. A few months later, when Page reorganised Google into a holding company called Alphabet, he named Pichai CEO of Google. It accounts for 99 percent of Alphabet's revenue and all of its profits.

Ground zero of Pichai's push into an AI-first world is a nondescript two-storey building across the street from the centre of the company's sprawling Googleplex headquarters in Mountain View, California, where a skunkworks, appropriately called Google Brain, develops much of the intelligence that will bring Google and its products into the future.

The group was formed about four years ago as something of a research experiment involving a set of AI programming techniques called deep learning and neural networks. Computer scientists had developed the techniques years earlier, but they hadn't been properly tested because they required massive amounts of computing power. Google had that power, so it brought one of its leaders in large-scale computing systems, engineer Jeff Dean, together with AI experts. They trained the systems on the task of recognising images, and the results were immediately encouraging, delivering huge improvements over Google's existing methods.

Google Photos, released a year ago, brought those improvements to the masses and wowed the tech world with its ability to recognise and search images and to automatically organise them. You can search for a person, a type of animal or images of people hugging. Despite intense competition from rival products, Google Photos now has 200 million users. To Pichai, it's a classic example of how better AI can help Google win. "Were people using other photo products?" Pichai asks. "Yes. Have we seen tremendous adoption and traction with Google Photos? The answer is yes."

What worked for image recognition turned out to work when applied to voice recognition, translation and other similar tasks. When Dean's systems were trained to recognise speech, accuracy jumped dramatically. That means there are far fewer times when an "OK Google" query on an Android phone is misunderstood. It also means that Google is more likely to understand someone like Pichai, with his lilting accent, or to detect what is being said in a noisy bar and do it in more than 55 languages.

"The risk for Google is that their ability to do really hard AI leads them to overlook simple opportunities to create good-enough user experiences."

Similarly, the techniques used to recognise images in Google Photos are able to power StreetView's ability to "read" signs and Project Sunroof's ability to identify rooftops that are suitable for solar panels based on aerial images. It's also enabling a small experimental team at Google to effectively detect diabetic retinopathy, an eye disease that can lead to blindness, by looking at iris scans. "It's a pretty significant shift," Dean says. "Word is spreading

The Googleplex headquarters in Mountain View, California

throughout the company that there is this new capability to solve problems in this way," he says, in reference to the new AI techniques.

What started as a research project with a handful of people has grown to perhaps hundreds—Dean refuses to say how many—who have developed algorithms, computer systems and, more recently, Google's own chips, all customised for these AI approaches. (Google Brain's software tools are known as TensorFlow and the chips as Tensor Processing Units.) As a result there are now more than 2,000 projects inside the company applying Google Brain's capabilities to scores of products. Dean's group has held machine-learning office hours, and thousands of Google engineers have gone through internal courses that can last weeks. "It went from being a research project to a mainstream engineering activity," says John Giannandrea, an AI expert appointed by Pichai to lead the company's search efforts.

To see the immediate potential of machine learning to create a new generation of digital products—ones that could change how humans themselves live—Allo, which won't be publicly available until later this summer, is a good place to start. Despite a mature and saturated market for communications apps, Pichai bets that, as with Photos (and with his Chrome browser), a few smart features will help it gain a following.

One of them, Smart Reply, automatically suggests three different pre-written answers to a message based on its content. Google developed Smart Reply in less than a year and first tested it in Inbox, a mobile email app. It allows users on the go to select one of the answers and reply with a single tap. With Allo, Google went one step further, blending Smart Reply with image recognition, so it can suggest responses to photos sent via message. Send your friend a picture of yourself skydiving and Allo may suggest replies like "awesome", "brave" or "scary"; send a picture of a kid or pet, and it may suggest "cute". In Allo, the Google assistant might also pop up in the middle of a conversation to help you book a restaurant or plan a trip.

Google's rivals are also rushing into an AI-powered world. Microsoft has an initiative similar to Google Brain that involves pushing machine-learning techniques into scores of products; its CEO, Satya Nadella, recently showcased conversational bots built atop its Cortana digital assistant. Facebook's Zuckerberg has quickly built a team of hundreds of AI researchers who have made breakthroughs in image recognition and language understanding, and he's demonstrated bots built atop Messenger. Amazon's Bezos has more than 1,000 people working on the family of products tied to Alexa, the conversational interface that powers the Echo smart speaker. Apple is busy expanding Siri's capabilities and is expected to open it up to third-party developers soon.

Pichai is convinced Google is further along than its competitors. He cites AlphaGo, which recently defeated the world's best Go player—and may someday be applied to more practical problems—as the kind of investment that will keep it at the head of the pack. "When you look at machine learning and AI, there are things you can do now, some in two to three years and some that are deeper and will take more time to do," Pichai says. Observers like Harvard's Yoffie agree that Google is well-positioned to lead the transition to an AI-powered world. "Sundar is jumping on the right categories and making a lot of good decisions," Yoffie says. Then he adds: "But he hasn't really been tested yet." F

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'To Scale Value, the Platform Model Should be Open'

Sangeet Paul Choudary, founder and CEO of Platform Thinking Labs, says the platform model is an opportunity the networked world has presented. But traditional Indian companies are yet to warm up to it

BY N MADHAVAN

Uber, the world's largest taxi service provider, does not own a single cab. Apple sells iPhones, but does not create any of the apps. Airbnb, the world's largest accommodation provider, does not own any real estate. Technology is changing the way business is done and throwing up new models. A platform-based approach to business is one such model that is increasingly being accepted across the world and is fast making the traditional 'pipeline' model look insufficient. Sangeet Paul Choudary, founder and CEO, Platform Thinking Labs, who was selected among the 'Top 30 business thinkers globally most likely to shape the future' by Thinkers50 speaks to *Forbes India* about the platform approach, how it helps businesses and the pitfalls to avoid while making the transformation. Edited excerpts:

Q Why is the world adopting a platform-based approach to business?

To answer your question, I would first like to define the platform model. Traditionally, what we have had is a pipeline-based approach where you create something and push it out and things move in a straight line. What is unique about this approach is that you own all the production and there is someone at the end of the pipe who accepts everything coming out of it. What happens in a platform model is that you may own some part of the production, but you don't assume that to be the entire value that needs to be produced and given to the customer. There are different types of platforms. Uber, for instance, does not own anything and just ensures it gets all of the cars on board in real

time to solve consumers' problems. There are platforms like Apple which will own the phone, but not the apps that will customise the phone. It will ensure that an ecosystem of app creators come on board. The platform model is an opportunity that a networked world has presented.

Q What else is driving this change?

Quite a few things. The internet is one, but even the idea of the internet has changed over time. Initially, the internet was just a place to create content—a web of pages. Then post-Facebook, it has become a web of people—a place where people have a real identity. And post-smartphones, it has become a part of you. So, how we are connected and the fact that we can participate as real people on the internet has led to new business models. Uber and Airbnb would not have happened without real identity coming into the picture or without the smartphone or digitisation of your real world location. Digitisation, that way, is the key driver.

Q What has the adoption of the platform model been like in recent years?

There are two kinds of ways in which platforms are coming up: From the startup side—Uber, Airbnb or Facebook. And there are those coming from the legacy business side, which is a pipeline model and a platform needs to be built around it. Here, the platform will create a higher engagement, first to improve the consumption of products and services and, over time, create a larger value from the ecosystem. Over the last 10 years, we have seen many examples of the first kind.

Q What about legacy businesses trying to embrace the platform model?

Very few legacy companies have made the shift from a pipeline to a platform model. In the last few years, we have seen Nike, Burberry, John Deere and McCormick becoming platforms. Very often, when we work with companies that are making the transition from a pipeline model to a platform one, the critical element is how to create a roadmap that helps us solve the short-term business case and also helps us take the right direction for a longer-term ecosystem. Otherwise, in this world of quarter-to-quarter results, the concept will not fly.

Q What are the attributes of a versatile platform that can scale up fast and deal with technological obsolescence?

The goal of a platform is to scale value. And to do that, it is important for the platform to be open. This is where many traditional companies go wrong as they are scared of the word 'open'. They have thrived on the basis of closed control. But not everything needs to be opened up. To monetise effectively, you need to have control of critical elements of your business. When Android was launched, it was an open source software and then Google realised that Samsung and Amazon were coming and creating their own versions of it. At that point, Google realised that open source platforms are good for the world but not for the business. It separated the operating system and reinstated control over Android by taking out critical systems like Maps and user data and re-branded that as Google Play. Creating that point of control is one of the most important things in building a versatile platform. The next aspect is that when a platform is monetised, the network effect should not be killed. It is because of this that startups today go to the other extreme and say we will not monetise at all. Technological obsolescence can be handled by building a thin layer of technology, like how Uber has done, on top of a technology stack that has already been created by third parties.

Q How are Indian companies embracing the platform model?

In India, the health care and FMCG space offer huge opportunities. We are already seeing Apollo Hospitals moving in the direction of telemedicine. Marico, in the FMCG space, has declared that it wants to go in that direction. There is a lot that can happen in the infrastructure space. For instance, new airports are coming up and existing ones are being rebuilt. A connected airport offers immense value to a traveller. In banking, a lot can be done using a platform model. But we are yet to see big successes in the platform model in India. F

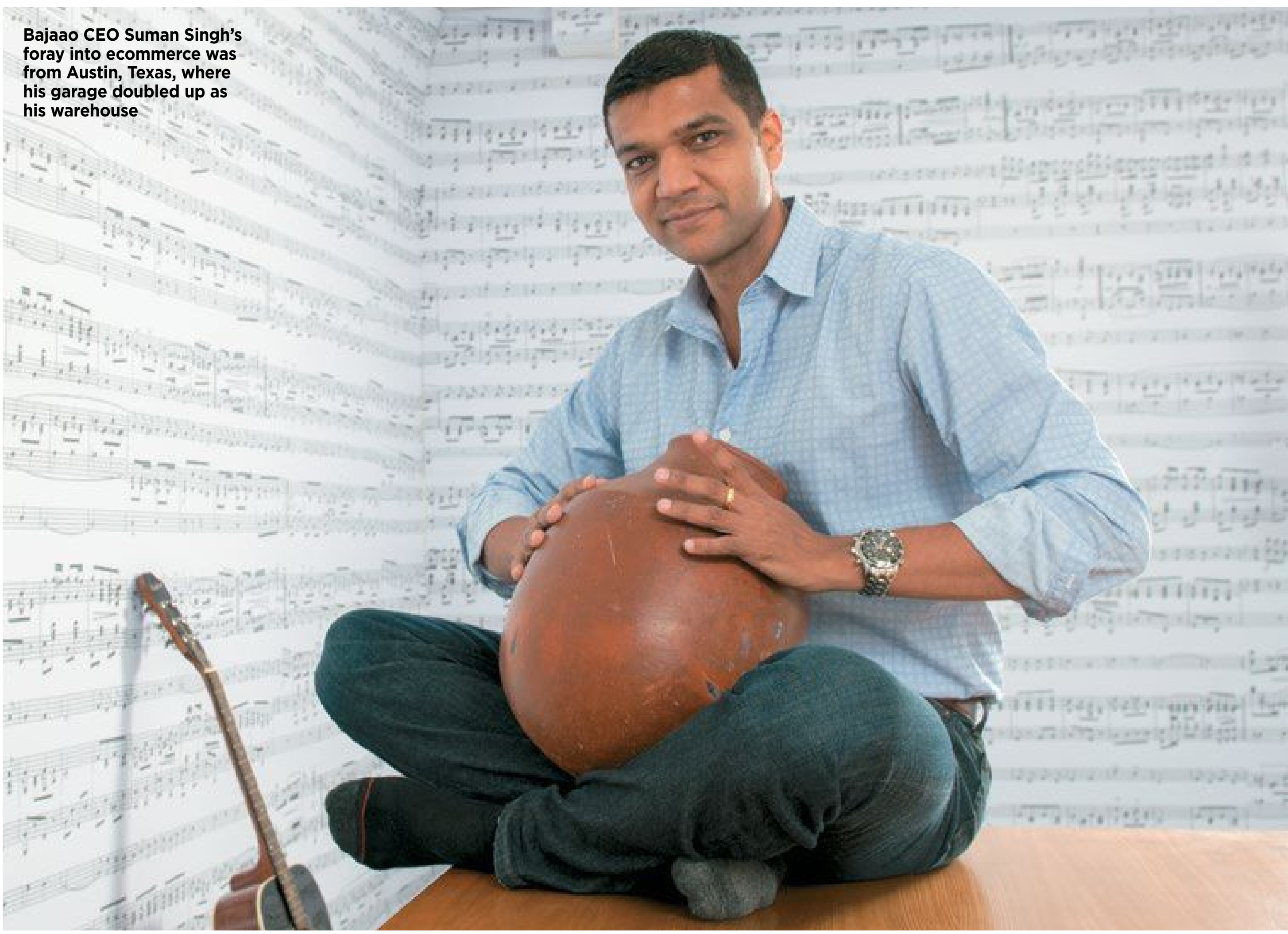
Seeking the Right Notes

CEO Suman Singh is transforming Bajaao from a musical gear and instruments e-tailer to a 360-degree music company

BY SHRUTI VENKATESH & AISHWARYA TENDOLKAR

With guitar music emanating from a quaint corner, 'Mission 50' cards—declaring a target to place 50 percent of all orders through phone calls by next year—hanging above every desk and high enthusiasm among its employees, the office of Bajaao, an ecommerce platform for retailing musical gear and instruments, in Andheri, Mumbai, is just a microphone and audience short of being a live music show.

The conductor of this symphony is Suman Singh, 38, who sits with a *ghatam* (a percussion instrument) aptly atop his desk. Since taking charge as CEO in January 2015, Singh has doubled Bajaao's employee strength to 120, revamped its website's interface and automated shipping and inventory.



Bajaao CEO Suman Singh's foray into ecommerce was from Austin, Texas, where his garage doubled up as his warehouse

PHOTOGRAPHS: MEXY XAVIER

Currently, the company retails over 7,000 products across 500 brands. And, under Singh's watch, Bajao has nearly quadrupled revenues to Rs 55 crore in FY16 from Rs 15 crore a year earlier. "We will be profitable this financial year," he says.

Singh is no musician though. After completing his bachelor's in engineering in 1999 in Mumbai, he pursued his master's in computer engineering from the University of Texas before plunging into the corporate world. He kick-started his career with Nortel Networks and later joined Dell. "But I soon got tired of corporate life," says Singh.

His first venture into ecommerce was in 2005, when he was based in Austin, Texas. Singh observed that though Austin is the live music capital of the world, it is an under-served market for amateurs who don't know much about instruments. "Music stores in Austin are very elitist. If you walk into one and do not know much about an instrument, it gets kind of intimidating. My personal experience in these stores was horrible and I wanted to fix that," says Singh.

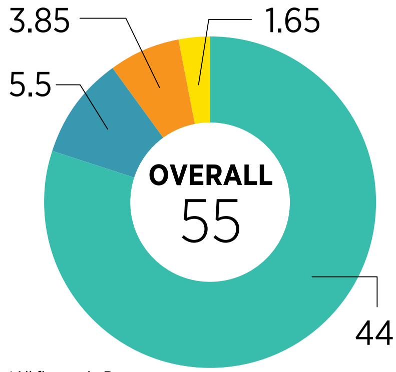
With a $5,000 credit card loan and his own garage doubling up as a warehouse, he started Austin Bazaar, an ecommerce platform for selling musical instruments to beginners. The instruments were sourced locally, says Singh, and "within the first year, we made over a million dollars in sales and had to move out of the garage as it could not house all the instruments". Today, Austin Bazaar—which Singh continues to helm alongside Bajaao—employs 40 people and rakes in around Rs 230 crore in revenue annually.

Around the same time that Singh started Austin Bazaar, Ashutosh Pande, a postgraduate in Ancient Indian Culture and member of rock band Xenon in Mumbai, observed that there was a shortage of instrument dealers in India. To address this gap, Pande, then 26, founded Bajaao in September 2005 with an initial capital of Rs 4 lakh.

Online transactions were still a novelty in India then. "People were hesitant to put their credit card details online, and we literally had to hand-hold people to make the purchase," says Pande, who is now the board chairman and CTO of Bajaao. But the company slowly started gaining popularity, mostly in small towns that did not have many retailers.

In 2010, Bajaao was acquired by JMD Telefilms for around Rs 5 crore. The venture then diversified into providing consultancy services to studios for audio-video setups. Challenges, Pande admits, began when the likes of Snapdeal and Amazon entered the musical gear retail space in late 2012.

REVENUES FROM THE FOUR VERTICALS



*All figures in Rs crore

Play

Deals with the sale of musical instruments as well as audio-recording systems and DJ gear. It accounts for 80 percent of the company's total revenue

Discover

Enables people who share similar tastes in music to meet

Learn

Helps students locate a 'Bajaao Certified' teacher in their locality

Experience

Involved with the promotion of live music. Bajaao is credited with the success of various music festivals

But help was just around the corner. On a visit to India in 2014, Singh was keen to understand the popularity of music in the country and was introduced to Pande by a mutual friend. "Bajaao, at that point, was facing a lot of challenges (in expanding geographically and scaling up sustainably) similar to what I once faced with Austin Bazaar. The company had to switch to a more sustainable model," says Singh. At his behest, Pande visited Austin that year.

"He [Singh] was already running a company, which was ten times larger, in the US and I was impressed with the way he had streamlined business processes," says Pande. The visit led to a partnership and Singh got involved in Bajaao as an investor, acquiring a majority stake from JMD Telefilms. (Currently, Singh and Pande jointly own three-fourths of the company, while JMD Telefilms owns the rest.)

In January 2015, Singh took over as the CEO after which Bajaao developed a unique strategy to grow its four verticals—Play, Experience, Learn and Discover (see box).

"Our focus has always been on selling high-end instruments," says Pande, "and hence, most of our products are imported." The average size of a transaction is Rs 10,000. But it "jumps to Rs 25,000 when potential buyers consult experts at our call centre before the purchase," says Singh, which explains the 'Mission 50' cards in the company's office.

From their warehouse in Bhiwandi, in Mumbai's central suburbs, the instruments are delivered within five days in most cases. A tie-up with India Post has given the company a pan-India presence.

Logistics and reverse logistics (in case of returns) are the most important aspects of the Play vertical, according to Singh. To fortify this, he is looking to increase staff strength by 50 percent in the next six months.

But are consumers ready to buy musical instruments online? Says

SAMEER PAWAR

Karthik Janakiram, lead guitarist of the Kolhapur-based band Aakar, who bought his first guitar from Bajaao in 2010: "Online sites are useful only for beginners who are not bothered with the intricacies of the instrument like the fret board being maple or rosewood and whether one prefers the brightness of a Fender Stratocaster or the warmth of a Gibson Les Paul [both models of electric guitars]."

These limitations of online retail could be a concern for Bajaao. Along with ecommerce portals for musical instruments like theinventory.in, Bajaao also faces stiff competition from the grey market, retail stores like Furtados and Raj Musical, and marketplaces like Snapdeal and Amazon. But Singh is clear that Bajaao will not foray into retail. "We have already overtaken Furtados in terms of revenues," he claims.

"In electronics, the ticket size is high and people seek discounts. Retail costs and distribution margins make the products expensive. Also, most people know what they want through research and their music teachers. So I am not surprised that Bajaao is selling more than Furtados," says Harminder Sahni, founder and managing director of consulting firm Wazir Advisors.

Singh adds that he doesn't mind buyers doing their research at Bajaao before buying their instruments elsewhere. "We want them to be a part of the experience," he says and that is where the next vertical comes into the picture. "Our aim with the Experience vertical is to promote live music and get more artists," explains Singh. Bajaao is credited with the success of music festivals like the metal festival 'Big SixNine', the jazz-themed 'Naariyal Pani' and the recent dance festival, 'Bailamos'.

They also arrange artists for various gigs, the most notable being the Tuesdays and Thursdays at Hard Rock Cafe in Mumbai, where Bajaao curates and manages the music for a fee. The company has also worked with brands like Walt Disney Studio, Sony Music and Pepsi MTV Indies. It has also signed a deal with the National Institute of Technology, Rourkela, to help the students learn and experience music. "We are expecting a 10x growth in revenues from the Experience vertical," Singh says.

Ashutosh Pande, founder of Bajaao, says being a known musician in college helped him influence potential buyers

For Discover, Singh plans to launch an app which will enable people with similar tastes in music to meet. And as part of the Learn vertical, the company has launched its own line of instruments called 'vault', where the instruments are directly sourced from manufacturers and thus priced much lower. "This is targeted at students," says Singh. Bajaao, for instance, is the official musical equipment supply partner for True School of Music, a Mumbai-based music academy.

Baqar Naqvi, a business director at Wazir Advisors, says, "In an internal study, we found that online sales account for 20 percent of overall sales of electronic musical instruments in India. And Bajaao had one of the largest shares within this space."

For this year, Singh's plan is to grow the Experience and Learn verticals which will, in turn, benefit the Play vertical. It is all inter-linked, he says.

He has identified another untapped opportunity. The company is now tying up with local artisans to manufacture Indian instruments and retail them under a new brand. "We are also tying up with a globally-renowned musician to market the brand," he says without revealing the musician's identity. The company has also joined hands with Bajaj Finserv to help buyers pay in installments.

Shuttling between India and the US to oversee the operations of Bajaao and Austin Bazaar, Singh has a lot on his plate. But he is not complaining. "Each month we see considerable growth," he says with a smile, and continues to tune strategies to make Bajaao's story a successful musical in a volatile market, where one loose string can ruin the deftly orchestrated business. F

Hold on, My Wallet's in My Phone

Powered by technologies that harness big data, fintech companies are positioning themselves as viable lenders and payment solutions providers with mobile wallets and insta-loans. Not surprisingly, this is compelling traditional banks to evolve too

BY HARICHANDAN ARAKALI

Pankaj Garg, 33, founded DailyObjects, a company that designs, manufactures and sells customised smartphone cases and laptop sleeves, in 2012 because he loved seeing people's emotions captured in the graphic designs. Like most entrepreneurs, he too faced working capital needs in the initial stages and approached banks for loans. However, they weren't convinced about the company's business model. Back then, "we were a startup and growing fast but had not broken even," he says. "Banks just didn't understand us then."

It was Bengaluru-based Capital Float that saw the startup's potential. The new-age lender, aided by proprietary algorithms that scrutinise reams of data and measure a potential borrower's creditworthiness, offered a small working capital loan to Garg in 2013. That helped him pay his freelance artists for their designs and also bear the expenses for the just-in-time manufacturing of cases and sleeves.

"They are just as tough as banks in their due diligence," Garg says about Capital Float. The difference is, they are fast, automated and flexible. For the right customers, loans are disbursed in a day, and for durations as short as 60-90 days. Garg, a repeat customer, typically repays his debts within a year to 18 months through equated monthly installments (EMIs).

Gaurav Hinduja, 33, and Sashank Rishyasringa, 32, both MBAs from Stanford, who started Capital Float about three years ago, have by now disbursed loans worth Rs 400 crore to over 1,000 small businesses across 40 cities in India. Venture capital firms SAIF Partners, Sequoia Capital and Aspada recently returned to hand Capital Float another $25 million (around Rs 170 crore) in funding led by Creation Investments Capital Management. The startup had

The combination of fintech companies providing working capital in quick time and India's digital revolution augurs well for customers, who can expect efficient, faster services

GETTY IMAGES


paytm

previously raised $17 million in two rounds from its existing investors.

Capital Float isn't the only player to have grown in this space. Bengaluru-based Loanzen, Ahmedabad-based Lendingkart and Gurgaon-based Indifi Technologies are also in the game. They see opportunities on multiple fronts—lending to new economy ventures, where traditional banks fear to tread; and quicker, cheaper and hassle-free lending. The emphasis is on fast, internet-based processing. Applications are mostly online and some parts of the process can be done on smartphones too. Loanzen, for instance, will eventually go "app-only", its founder Madhu Sudhan tells *Forbes India*. "Our goal is to make it [getting loans] convenient for an entrepreneur so that he or she won't have to run from branch to branch," he says. Like Capital Float, Loanzen is also building a proprietary platform to automate lending.

Unlike Capital Float and Loanzen, which are themselves lenders, Indifi operates as a marketplace, connecting banks and non-banking financial companies (NBFCs) with small and medium enterprises (SMEs). The company caters to businesses as diverse as travel agents and manufacturers, all of whom have the same underlying need—short-term capital.

These modern-day financiers are opening up credit to SMEs at roughly the same interest rates (16-18 percent) as banks. Demand for debt within India's 29.8 million micro, small and medium enterprises (MSMEs) stood at $520 billion (around Rs 35 lakh crore at current exchange rates), the International Finance Corporation estimated in a November 2012 report. Formal sources of lending, however, cater to only $140 billion, of the total MSME debt financing, according to the report. That leaves a $380 billion opportunity—currently including everything from self-financing to loan sharks—for companies such as Capital Float to target.

JOSHUA NAVALKAR

'The Shift to a Digital Economy

Ravi Venkatesan, Bank of Baroda chairman

A common thread running through these companies is the sophisticated technology they are employing, including big-data analytics and machine learning, to make lending practices more competitive, earning them the name 'financial technology', or fintech, companies. The numbers bear out the opportunity: The Indian fintech sector is projected to rise from an estimated $33 billion in 2016, by volume of transactions, to $73 billion in 2020, growing at a five-year CAGR of 22 percent, accounting firm KPMG and technology lobby Nasscom said in a report in June.

Lending apart, another class of fintech firms is employing technology to take over a task traditionally done by banks: Payments. Mobile wallets—digital repositories of money accessible through smartphones—like Paytm,

Will be Like a Tsunami'

Indian fintech companies are boldly going where no bank has dared to tread. Ravi Venkatesan, chairman of state-owned Bank of Baroda (BoB), says traditional banks must urgently find ways to shed their cultural rigidities and adapt to the evolving banking landscape.

On what beleaguers public sector banks:
The issue with most public sector banks, except the State Bank of India (SBI), is that they are focussed on the issue of non-performing assets and cleaning up their balance sheets. The process of recoveries tends to be a very time-consuming activity. This comes at a rather dangerous time, when you have the [digital] disruption happening. There is very little bandwidth or intellectual horsepower being focussed on this, which is seen as slightly long term. That's the big issue. Financial technology doesn't figure in the list of priorities for most state-owned banks. SBI is different because Arundhati Bhattacharya, to her credit, has focussed reasonably on the issue. At BoB, too, [Managing Director and CEO] PS Jayakumar and I are quite focussed on it. I don't think this can wait till the current problems are resolved. This needs to be a vital board-level issue at all the major PSU banks.

The heart of the challenge:
It takes a completely different mindset to build a new-age digital bank. The challenge for all of us is: How do you bring in the kind of talent that is needed? How do you create an environment where such talent can innovate and be agile? In the new space, you have to take a lot of risk. At the end of the day, fundamentally, it is an organisational challenge for all of us.

At BoB, the vast majority of our business is corporate lending. So BoB must be a challenger and a disruptor, and not the disrupted. We have to see this as an opportunity and not a threat.

On the opportunity to leapfrog, just as in mobile:
[Former chairman of the Unique Identification Authority of India] Nandan Nilekani and his team, and networks such as Indian Software Products Industry Round Table (iSPIRT), are catalysing the fintech revolution in India. They are determined to build all the layers of the stack [a combination of four digital layers—biometric authentication, paperless records, cashless transactions and consent for data use—that India is building] and make it available to everyone; unlike in developed markets where commercial interests will build this one component at a time. It's an open stack [anyone can offer services on it] that they call the India Stack.

The conditions for leapfrogging from a cash-based economy to a digital economy are far riper in India as a result. The shift won't happen bit by bit; when it happens, it will be like a tsunami. We will likely see viral adoption like with WhatsApp.

On the new advisory council at BoB:
One of the challenges is how to tap expertise on a global basis, and it is hard for a public sector bank like ours to do so in traditional ways. At the end of the day, the board is nominated by the government and our ability to induct the expertise that we need is quite limited. We're trying to bring advisors to the board in a few critical areas—fintech, risk management, HR and financial inclusion. For instance, we are working with a global leader in risk management in banking, with a seasoned venture capitalist who is making significant investments in fintech. It's not a large number of people—it will be a handful of people, who will meet three or four times a year and make sure that our thinking and speed of execution are appropriate to these kinds of challenges.

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MobiKwik and Freecharge are being used by millions of urban Indians today for a host of services from ordering food to hailing a cab.

"What is evident is that banks are not the only players who are going to operate in this space," says Bipin Singh, co-founder and CEO of MobiKwik. "Technology has a role to play and technology companies, independent of banks, also have a significant role to play."

Mobile wallets have garnered the trust of millions of users, by offering convenience, superior user experience and trustworthiness. Ecommerce marketplace Snapdeal's Freecharge mobile wallet, newer than rivals MobiKwik and Paytm, was processing a million transactions a day within the first six months following its September 2015 launch, says CEO Govind Rajan (see interview on *page 71*).

This high rate of adoption in turn gives fintech firms access to the real gold in their business—data. On that data will be built innovative money models never seen before in this country, envisions MobiKwik's Singh. "The next logical step is, if people have money in their [mobile] wallets, they should be able to invest it. Or, if they're short, they should be able to borrow. So basically, it is going to be a seamless movement

Gaurav Hinduja (right) and Sashank Rishyasringa, co-founders of Bengaluru-based Capital Float

BMAXIMAGE

of money from banks to wallets to lenders or multiple lenders."

The Reserve Bank of India (RBI) has said it is watching peer-to-peer lending, which is not directly regulated in the country, says Singh. Lending to businesses through NBFCs is, on the other hand, well-established.

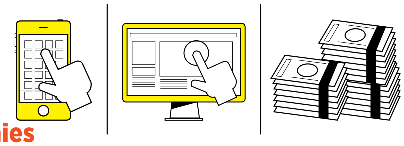
Capital Float has an NBFC permit under the legal entity Zen Lefin Pvt Ltd. Prospective borrowers can apply online, with "one inquiry coming on our website every 10 minutes," founders Hinduja and Rishyasringa say. Within minutes of applying, the quantum of loan they are eligible for is calculated. Loans are disbursed in one hour if there is enough data to support it, but typically it takes a day. "One-day turnaround is the Holy Grail of this business," says Loanzen's Sudhan, and already, the turnaround time at his startup is as low as three days in many cases.

The ability of fintech firms to trawl the internet and accumulate enough data on potential borrowers represents "a real promise of getting a breakthrough in lending to SMEs," says Ravi Venkatesan, chairman of Bank of Baroda (BoB), one of India's largest state-owned banks. On the one hand, SMEs, which have reasonably sound business models, find it tough to get credit; on the other hand, traditional banks find it extremely hard to meet lending targets—a perplexing scenario, he adds. Venkatesan, a former head of Microsoft's India unit, points out that the traditional ways of banking are increasingly becoming rigidities, rather than processes that enable businesses to thrive with timely credit (see interview on *page 68*). The traditional banks have very little time, because the shift towards new-age alternatives is gathering pace. And even as banks grapple with their large pile of bad loans, they must somehow find the wherewithal to urgently prepare for the digital era. "The shift won't happen bit by bit. When it happens, it will be a tsunami," he says.

Fintech companies use sophisticated technology to make lending practices more competitive

One bank has taken serious note

POPULAR FINTECH STARTUPS IN THE COUNTRY



Marketplace lending / Analytics companies

SMEcorner	It's an online platform that enables SMEs to avail loans from banks and NBFCs
Faircent	It offers a P2P lending platform that serves as a marketplace for borrowers and lenders
Biz2credit	Biz2credit is a popular online credit resource for startups and small business loans
Vote4cash.in	Vote4cash.in is a P2P online marketplace where borrowers can access cash loans 24x7, without the hassles of document gathering, guarantor, collateral, verification, etc, based on their social status
Nanobi Analytics	This platform lets you build analytic applications with uses in fintech customer experience, product and service positioning and profitability

Payments companies

Paytm	Founded in 2010, Paytm offers both a mobile wallet and an ecommerce platform for online retail, competing with Snapdeal, Flipkart, and Amazon
Simpel	Simpel has a smartphone application that allows paying a merchant from a mobile phone using credit/debit cards or net banking by just typing the merchant's mobile number
ftcash	ftcash is a mobile payments platform which allows offline retailers to accept mobile payments, advertise and engage customers
Citrus Pay	Citrus acts as a payment gateway allowing users to pay for train tickets, utility bills, etc online. Launched Citrus Cash in 2013, a mobile wallet app for P2P money exchange
Kyash	Kyash is a fully automated system for collecting cash payments via a countrywide network of neighbourhood shops and offices

of these trends. In March this year, the State Bank of India (SBI), the nation's biggest lender, placed front-page ads in India's leading dailies tom-tomming the 5 million 'likes' that its Facebook page had garnered at the time. The ads underscore the earnestness with which SBI wants to cater to the digital aspirations of its new-age customers.

'State Bank', as it's called in the industry, has taken steps to tap the same lending opportunity that Capital Float and its peers are pursuing. It has become one of the first public sector banks to tie up with Snapdeal to offer loans to merchants that sell on the ecommerce platform. "With Snapdeal, we have introduced a fully-automated credit assessment and sanction model," says Manju Agarwal, the bank's deputy managing director for corporate strategy and new business. If a merchant selling on Snapdeal requests a loan, Snapdeal will share the data for his or her trading activity in the preceding six months, which is then fed to a fully-automated engine. "Based on the algorithm, we will get to know how much money can be lent. We then ask the customer to submit know-your-customer (KYC) documents… it's as simple as that," explains Agarwal.

The high rate of adoption of digital wallets gives fintech firms access to real gold—data

Govind Rajan, CEO, Freecharge

'The First Mantra is to Build Habit'

Higher smartphone penetration will help India transition from a cash-based to a digital-money ecosystem, predicts Govind Rajan, CEO of mobile wallet provider Freecharge. Going digital in India isn't about the lack of smartphones, but lack of habit. "We are in the Netscape era of payments, therefore, the first mantra is to build habit," says Rajan.

The expectation is that consumers will start transacting digitally with payments. "The revolution will start with retail," with low-value transactions that don't have any other ramifications. The next priority is to build acceptance among an estimated 30-40 million merchants in the country. In the near future, transactions will become "frictionless" with a host of options based on technologies like ultrasound, QR codes, Bluetooth and even biometrics.

Ensuring better convenience, compared to competition, means the Freecharge user interface "should result in the most frictionless and efficient payment system in the country," says Rajan. "That's what is going to move the consumer from cash to digital—99.5 percent of our transactions happen in less than 10 seconds."

— HA

This applies to individual borrowers as well. "Once these customers start using digital transactions, a transaction history is created. If a customer is seen spending say Rs 20,000 a month, I can straight away give him around Rs 1 lakh as a personal loan… where is the risk?" asks Agarwal.

In May, SBI joined a group of banks that rolled out the mVisa smartphone app to merchants and customers in Bengaluru. mVisa is aimed at enlisting millions of small merchants and their customers on the digital payments ecosystem and uses a QR code-based solution developed by payments services provider Visa Inc. Unlike with point-of-sale machines, like the ones used to swipe credit or debit cards, mVisa places no upfront costs on merchants, but charges a commission on transactions. If the bank can bring on board the 30 million merchants in the country and its 280 million customers to mVisa, so that all their transactions are digital, it would be an important milestone, says Agarwal.

For fintech firms, the importance of the digital footprint these transactions generate cannot be overemphasised. One reason why algorithm-based automated lending is possible today—and was not five years ago—is the reliable data available on potential borrowers. India's growing ecommerce and other internet- and smartphone-based services ecosystem is generating a wealth of data on individuals and businesses interacting with many of these digital platforms.

Nandan Nilekani, former chairman of the Unique Identification Authority of India (UIDAI) responsible for the Aadhaar project, likes to call this the "digital exhaust" that people leave behind, much of which is out there on the internet. More sensitive components of this digital exhaust, such as bank transaction details, can also be accessed. This, however, requires the consent of the customer.

AMIT VERMA

This is where the "consent architecture" component of the India Stack comes into play. India Stack refers to the various layers of applications—the foundations of which are now in place in the country—that enable a growing number of transactions to happen online. These could be financial, like money transfer, or government-to-citizen services, like applying for a marriage certificate, say, or government-to-business services such as registering a startup. Eventually, the India Stack will also facilitate and catalyse a host of business-to-consumer and business-to-business transactions as well.

As more and more payments become digital, they create a digital footprint of your [financial] activity and you can give consent to a bank to use your digital footprint to sanction a loan," Nilekani said in February. He was speaking at a workshop organised by the National Payments Corporation of India (NPCI) on the Unified Payments Interface (UPI), a round-the-clock funds transfer service that is set to enable cashless payments through smartphones. "I, as a user, can authorise my digital footprint to go to a lender, who can use it to check my activities and based on that, give me a loan," he said. "It's a layer on

Pankaj Garg's startup DailyObjects got a small working capital loan from Capital Float

top of UPI, which we hope will be developed in the coming months."

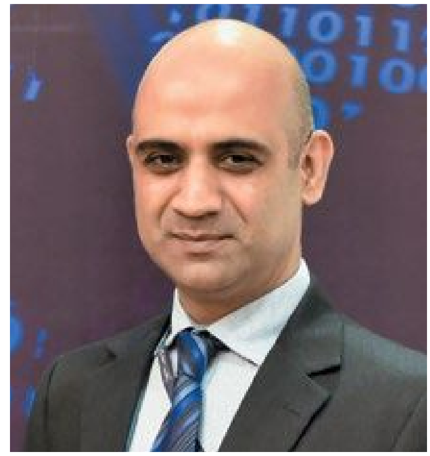
The NPCI has built a massive backbone on which low-ticket, high-volume retail payments transactions can happen quite literally at the click of a button—or the tap of a smartphone. An Uber cab driver in Bengaluru, for instance, can send money to his far-flung village, within minutes of the taxi aggregator paying him his weekly dues. This dis-intermediation of payments—industry-speak for eliminating the middleman (read traditional bank)—is another aspect of the fintech revolution sweeping India.

"SMEs have started to interact with digital payments platforms and have begun generating a lot of formal data, which now makes them easier to under-write than if they just had some traditional financial information," Capital Float's Rishyasringa points out. "The biggest paradigm change in this business has been that we are going from a world where decisions were based on human bias and judgement to one where they are based on data. Literally, our model is, give us your data and we will tell you whether we can give you a loan or not, and within minutes," he adds. "So what we have built internally is a proprietary way of looking at the data footprint of an SME and arriving at an assessment about whether the business will be able to adequately service and pay back our loan."

Capital Float's proprietary software application crunches data on "over 2,000 variables" before throwing up information, based on which a decision on sanctioning a loan is made. As more businesses buy loans from Capital Float, the more data there is to test and make the underwriting model more robust.

The RBI sets strong KYC requirements, which still need some manual processes. Barring those processes, "we are pretty much able to do everything else in an automated fashion," says Rishyasringa. "With the whole India Stack going live, you will have Aadhaar to do KYC, e-sign to sign documents, and UPI for payments, so I think we are already heavily engaging with the India Stack. In the next one year, a

SBI has taken steps to tap the same lending opportunity that many fintech firms are pursuing



Nitin Chugh, country head of digital banking at HDFC Bank

'We are Digitising the Entire Bank'

When it comes to smartphone apps, people expect high levels of user experience. It is no different with banking apps, says Nitin Chugh, head of digital banking at HDFC Bank. "We are digitising the entire bank," he says. For instance, the bank tied up with Chillr to offer mobile payment services like sending money to contacts or splitting a bill.

The bank is also actively studying technologies such as sound wave-based transactions and ways to transact when only one party has a smartphone. "There is a big effort from our side to expand the whole digital payments ecosystem," says Chugh. HDFC Bank, earlier this year, held a digital innovations summit, a first-of-its-kind in the industry. The bank invited fintech companies to discuss their solutions, and shortlisted five startups to partner with, he says. One startup is using the Aadhaar ID to make payments, a second company is working on QR code-based offline payments, a third on Artificial Intelligence. Another startup is working on context-based marketing. Chugh's team too is ideating and coming with solutions, which they plan to hand over to fintech software ventures to develop further.

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lot of this will become paperless."

Almost all the loans are for working capital, he adds. "We were the first ones to lend to merchants who sell on Snapdeal, based on their transactions. We do a lot of invoice lending to the more traditional segments. We interact with Uber as well, via a partnership, to finance car purchases for drivers—again a very interesting segment and very interesting data set," points out Rishyasringa. They have also tied up with Alibaba to allow merchants in India to buy goods on credit from suppliers in China.

Then there is Indifi Technologies, which has collaborated with OfBusiness, a business-to-business ecommerce marketplace offering quick, short-term loans to small-scale manufacturing companies, so that they buy raw materials, for instance. "Indifi combines the low cost of marketplace sourcing with the credit availability of traditional suppliers," co-founder Alok Mittal said in a press release in May. The Gurgaon startup has also tied up with ShopClues, which has around 350,000 retailers selling on the ecommerce site, offering them working capital loans. The company also has similar partnerships with other groups of businesses, including Travel Boutique Online, where travel agencies can tap short-term loans to cover their settlements with airlines as they wait for corporate customers to pay their bills.

All this validates the premise that smaller businesses are responsible and credit-worthy borrowers, even though traditionally they have been viewed as risky. On the other hand, the bad loans at India's biggest banks are largely on account of defaults by mid- to large-size corporates, says Rishyasringa. The microfinance institutions and other NBFCs that have lent money to the SME sector and managed it in a "focussed and disciplined manner, have portfolios with a stellar track record". Ten years ago, there was no credit bureau score, one didn't have much net banking activity and there was no Facebook. Today all of Capital Float's borrowers have very heavy digital footprints across multiple platforms and services, he says.

Hinduja adds to this: In the last 18 months to two years, large private sector banks and NBFCs have been thinking seriously about going more digital; India will start seeing the evolution of this whole digital economy ecosystem, "perhaps spurred by people like us but also as larger players join in and build it out".

Different banks are evolving in different ways and are also at different stages of that evolution, says Nitin Chugh, head of digital banking at HDFC Bank (see interview on *page 73*). However, "specific to digital, the view is very clear: Banks that are not offering new technology will obviously see leakages happening." "It's possible that some banks will go down the tube by not doing anything to improve their customer relationships," Chugh adds. "It is also equally important to change your own internal processes and mindset, and internal structures. This is what we have done with a strong hand and a strong will. Now we are confidently saying that digital is in our DNA."

The private bank has taken a lead in engaging hackathons and short-listing promising startups to work with, specific to banking technologies. Chugh is also studying, in a very time-bound manner, Blockchain technologies and related applications. Blockchain, in an over-simplified manner, is a sort of a ledger in which everyone knows what everyone else is doing. Chugh and his team are close to deciding on its applications at HDFC Bank, he says, although the decision could well be to wait a tad longer before taking the plunge.

BoB's Venkatesan echoes the sentiment on the need for a digital mindset: "The heart of the challenge for all banks, whether it is a private- or a public sector bank, is culture and capabilities. It takes a completely different mindset to really build a new digital bank."

Say Hinduja and Rishyasringa: "Our first aha moment was when we realised firms were giving loans in the US within hours, and we asked 'Why can't we do this in India?'" This was in 2012 and they were inspired by companies like Lending Club, OnDeck and Kabbage. Capital Float was started the following year. Today India already has smartphone users hailing an Uber or booking a movie ticket, so "why should something as important as getting a loan be an antiquated brick-and-mortar experience?"

(Additional reporting by Shruti Venkatesh)

Ritesh Pai, senior president and country head—Digital Banking, Yes Bank

'Traditional Banks Must Learn to be Nimble'

To survive in the new banking ecosystem, alongside fintech startups that have the advantage of the latest technologies, traditional banks will have to learn to be nimble, says Ritesh Pai, head of digital banking at Yes Bank.

The bank started Yes Money, a cash remittance solution, about three years ago. With the award-winning service, the bank has shown how innovation can extract value even when it caters to poor migrant workers, says Pai. Today, Yes Money has built a network of over 42,000 banking correspondents and agents handling more than 1.2 million transactions every month, helping 4 million migrant workers in metros and other cities send money to their families. The transactions take just minutes and the money is credited immediately.

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Skype Meets Cash

The latest salvo in the war for the future of money: Person-to-person currency transfers. Silicon Valley's heavyweights are betting that a $1 billion startup called **TransferWise** can pull off the trick right now

BY SAMANTHA SHARF

TransferWise co-founder Kristo Käärmann is late for dinner. His Uber driver took the long route from his offices to Art Priori, a trendy restaurant in Estonia's capital, Tallinn. The driver had recognised Käärmann and wanted time to pitch an idea he had for a new app. Waiting patiently for him at the restaurant, Taavet Hinrikus, his co-founder and CEO, responds to his tardy partner's explanation with a knowing grin. "Estonia is a small country, so it's natural that people know TransferWise," he says. "There's some downside, like Uber drivers lying in wait." He, too, has been subject to long, pitch-filled rides from local taxi drivers.

So it goes when your tiny Baltic country of 1.3 million people has bet its national future on becoming a tech incubator and you've founded a unicorn startup. Käärmann and Hinrikus may as well be Mark Zuckerberg and Jeff Bezos here, and they have the A-list investors to back up the local hype. Peter Thiel invested early in TransferWise. So did Richard Branson. A $58 million infusion from Andreessen Horowitz last year has allowed Käärmann and Hinrikus to expand the staff to 600 people.

They'll need all that manpower and money: In pushing a peer-to-peer platform for moving money—think Skype for currency—they're taking on pretty much every global bank, along with entrenched giants like Western Union.

"You have this conceptual argument that it shouldn't cost that much to move money," says Käärmann. "That it is really just electrons that you are moving around."

It's a billion-dollar theory, as measured by TransferWise's current valuation. If proven correct, it has the potential to make the two founders, with roughly a 20 percent stake apiece, fabulously wealthy. It could legitimise Estonia's digital gambit. And it could, most powerfully, upend the oligopoly that controls $3 trillion of consumer currency flow around the world.

Kristo Käärmann and Taavet Hinrikus, co-founders of TransferWise: Peer-to-peering into the future of money

Nestled in the elbow separating Latvia and Lithuania from Russia, Estonia owes its status as the Silicon Valley of the Baltics to its former Soviet oppressors. During the Cold War, the Kremlin sought to snuff out a blossoming independence movement by restricting the ability of Estonian universities to teach philosophy and social sciences. Instead, students would focus on computers and information technology. Eventually, Estonian software developers were at the centre of the Soviet space programme and KGB spying efforts.

Then, in 1989, the Berlin Wall came down. Estonia gained its independence two years later. And Netscape's internet browser followed three years after that. Freed of the Soviet bureaucracy, its resourceful natives, who speak a Uralic language close to Finnish,

LEVON BISS FOR FORBES

set out to create an entrepreneurial e-republic leapfrogging the restrictions of conventional infrastructure.

In Estonia, nearly everything is digital and decentralised. Pretty much the entire landscape has access to broadband Wi-Fi—and has for more than a decade. Estonians have been voting online and using their mobile phones as identification since 2007 and paying for parking spaces via text messages since 2000. With programming entrenched in the national curriculum and more startups per capita than any other country in Europe, little Estonia has already brought the world Skype as well as once popular peer-to-peer music service Kazaa.

This environment—and a belief that no system is sacred or unchangeable—nurtured Hinrikus and Käärmann, both 35, and TransferWise's staff; while the company's sales office and headquarters are now in London, two-thirds of its employees, including most developers, live in Tallinn.

As a local computer science student, Käärmann gained notice building a Baltic and Scandinavian version of Yahoo Finance. That eventually led to a consulting gig focussed on banking and finance for Deloitte in London. There he met his countryman Hinrikus, a fellow programmer who had spent so much time building websites as an undergraduate that he stopped attending classes, started working with Skype's founders and got kicked out of school. Hinrikus was the first employee hired at Skype.

Their epiphany came in 2007 as

expats in London, when Hinrikus, by then Skype's director of strategy and technically based back in Estonia—and thus paid in euros—needed pounds to fund his life, while Käärmann, who was paid in pounds, needed euros for student loans and the mortgage on his flat back in Tallinn.

Since banks charge transaction fees and bake in markups to exchange rates, the duo's frequent currency transfers were costing them a small fortune. One year Käärmann thought HSBC had lost some of his Christmas bonus because 500 euros less than expected arrived in his account.

"The bank will take 10 percent or even 12 percent of the money transferred. Seeing that first-hand is what made me start to think: Is there a better way?" Hinrikus recalls. "We realised there is actually no need to move the money. No need to make an international transfer because the money already exists where it needs to."

The Estonian software engineers devised a simple solution: Hinrikus would transfer euros from his Estonian bank account into Käärmann's Estonian account, while Käärmann would transfer pounds from his British HSBC account to Hinrikus's at Lloyds. This would save them on international transfer fees, as well as on currency drag since they used the real exchange rate, known as the midmarket rate. Soon they had a Skype chat going with other Estonians who wanted to exchange money this way. Eventually this Skype-linked money exchange forum morphed into TransferWise. In 2011, the pair quit their jobs and self-funded for a year before landing a seed funding round amounting to $1.3 million. A year later, Thiel led another round for $6 million, and in 2014, billionaire Branson invested in a $26 million funding. To date, TransferWise has raised $91 million in VC money.

"As we saw more and more adoption, there was a gradual growth in confidence that we are solving a real problem," says Käärmann, who reasoned that sending money digitally should be as easy as sending an email. "That problem is huge, and it doesn't get solved if we don't solve it."

So how does TransferWise work? Prior to visiting Estonia, I set out to convert money using the startup's app, sending almost $300 via TransferWise to convert it to euros. TransferWise uses a system not unlike the ones big financial institutions use to "cross-trade" securities, without incurring costs or commissions, by internally matching buyers and sellers. In this case, the official midmarket price offers clarity—neither side is speculating—so it's simply a balancing process, as TransferWise's computers simultaneously verify that both sides have the money ready to swap. Indeed, its matching system means funds rarely cross international borders. (The startup has these clear "peer-to-peer currency routes" operational for 30 country combinations.) And voilà, 90 minutes later, 250 euros showed up in a European account. There was no spread, just a $3 fee. (The fee goes up, depending on the amount transferred; $100,000 would cost $710.)

Peter Thiel and Richard Branson have invested in TransferWise while Andreessen Horowitz pumped in $58 million

My $300 or so was a tiny sliver of the $750 million that TransferWise is now moving each month, with one million people already sending or receiving money in some 60 countries, leading to about 500 different possible transactions. (Polish zloty to Bangladeshi taka, anyone?) Those small fees slowly add up: The company is now producing roughly $5 million in revenue a month versus about $1 million per month a year ago.

TransferWise's glass, concrete and steel space in Tallinn goes overboard with the startup-fun clichés. There is a Gymboree-vibe, including bright colour-coded floors with lots of comfy seating areas, Razor Scooters for zipping around the office, a ping-pong table, a sauna and the Amazeballs room on the sixth floor—a ball pit with hundreds of clear plastic spheres reminiscent of bubbles. There's also a unicorn room, decorated with stuffed My Little Pony unicorns, complete with a giant rainbow sculpted on the wall.

Such tongue-in-cheekiness aside, the levity underscores a key point: TransferWise may play in the sandbox of the big banks, but the ultimate customer is the individual consumer. A bank wire might be ten times more expensive than TransferWise, but it's still a rounding error on big transactions, and it's a proven method that's generally safe. For now, most banks, which use the troubled SWIFT network to move money, are ignoring TransferWise. Of the $150 trillion in currency-transfer volume annually, the consumer portion amounts to an estimated $3 trillion.

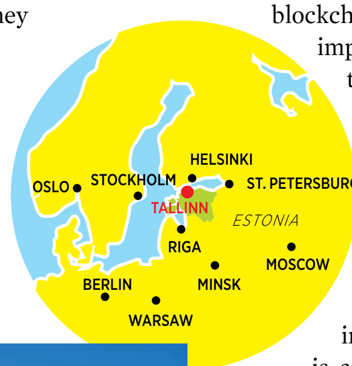
Still, that's a decent-size market, with the revenue generated from it exceeding $45 billion. And with the global workforce increasingly employed across borders, it's growing (230 million people worldwide now live in a different country from the one where they were born). TransferWise's customers predominantly use the service to move money between their own bank accounts to cover obligations back home—a mortgage, a cellphone bill, a charitable gift. Others do what the TransferWise team calls "use a friend as an ATM".

The real competitors in the short term are Western Union and MoneyGram. Western Union is already doing $300 million in revenue from transfers through its website and app, and it's bolstered mightily by its

600,000 physical stores and kiosks worldwide. To compete successfully, TransferWise must prevail on interface (and, indeed, I found it easier to send money via the startup than via Western Union's app) and on price.

Hinrikus and Käärmann are fanatical about the latter. Signs on the office walls declare "Charge as little as possible" or "Customer > team > ego." In an effort to scale, product teams look to charge 80 percent less than local banks. A new partnership in India, for example, lowered TransferWise's costs on US-to-India transfers—and Hinrikus used most of that savings to reduce fees on that route from 1.5 percent to 0.9 percent. "At the bank we would have high-fived for more profit," says TransferWise operating chief Wade Stokes, a former executive with Swedbank.

Longer term, TransferWise faces a more existential threat. Its core peer-to-peer technology dates to the 1990s. Blockchain, the type of technology that powers bitcoin, is far more sophisticated. Wedbush Securities analyst Gil Luria expects that, within a decade, 20 percent of international person-to-person money transfers will happen via blockchain, which employs a series of public ledgers. Blockchain would eliminate third-party intermediaries and should result in nearly instantaneous money transfers. To Luria, TransferWise's application is "an intermediate step".



Ben Horowitz of Andreessen Horowitz, TransferWise's big backer, counters that its relatively small niche will keep it safe. "Human-to-human payments in the first world are not a big enough problem at this point to implement bitcoin to solve it. We find blockchain to be a really, really important new technology that will have a gigantic set of applications, but I think the ones that are going to happen first are the ones you literally can't do today."

Adds Hinrikus: "For moving money internationally, blockchain is, at this point, a theoretical discussion. I can point you to a very practical version of it, at a very practical firm called TransferWise, which is doing this every day."

True enough. But if it starts making real money, then the big banks will stop ignoring it and a host of other startups, including WorldRemit and Xoom (owned by PayPal).

That means the Estonians need to step up fast. Hinrikus and Käärmann are striving for a future in which their technology can result in instant payment. They can complete a transfer between the UK and the euro zone in 17 seconds. Moving money from the US takes longer because the Dodd-Frank Act requires that customers be given 30 minutes to cancel.

Still, the founders don't seem concerned. The earlier Estonian darling Skype carved out a healthy 30 percent of the international voice-call market without posing an existential threat to big telecoms like Verizon and AT&T. Says Hinrikus, "What we are doing is not the most exciting thing, moving money from A to B. But we have been able to do this in a way that brings our customers joy in a place they are not expecting it." F

SEAN PAVONE / GETTY IMAGES

CUTTING THE POUND OF FLESH

Don't be fooled by low advertised fees. Money transfer providers profit in two ways: Fees and a spread built into the exchange rate. So how much does it really cost to send 1,000 euros to a country like Estonia?

	NET COST	TURNAROUND TIME
BANK OF AMERICA	$100.14	2 DAYS
MONEYGRAM	51.43	SAME OR NEXT DAY
TRANSFERWISE	11.18	1-4 DAYS
WESTERN UNION	44.12	UP TO 5 DAYS
WORLDREMIT[1]	18.81	1-3 DAYS
XOOM	55.61	2 DAYS

Exchange rates as of 19/05/16. [1]Cost of transfer to neighbouring Latvia; WorldRemit does not support Estonia

The Backpackers

From a Bengaluru garage 23 years ago, outdoor gearmaker Wildcraft now logs sales worth Rs 300 crore. And the journey has only begun

BY ANSHUL DHAMIJA

Dinesh KS loves the wilderness. And, as an avid mountaineer (he is a certified instructor in climbing and mountaineering), he always found it easy to be close to it. But, in 1990, he suffered an ankle injury which hindered his treks. Dinesh was forced to find another way to stay in touch with his passion. By 1993, he had figured out how: The then 32-year-old Bengaluru resident started to design tents and backpacks, which were manufactured in the city's industrial hub of Peenya. "I would shop for buckles, zippers and other accessories, fill up my bags with the raw materials, and then ride to Peenya [on my motorbike]. I would spend the whole day there, teaching tailors how to stitch [these products]," recalls Dinesh.

This was at a time when access to such products in the country was limited and, therefore, expensive. In fact, the better quality ones were available across the border in Thamel, the commercial neighbourhood in Kathmandu, the capital of Nepal.

Dinesh started small—it would take at least five years before this little venture would become Wildcraft India Pvt Ltd—in 1993 and produced only five to 10 products a day. He would sell them from a friend's garage in Bengaluru's southern residential suburb of Jayanagar. Dinesh estimates that he sold between 2,000 to 3,000 units per annum. And he made next to nothing, he says. "It [the money] was like change, so let's not go there. But I did get a kick out of doing it," says the 55-year-old. He then adds, laughing, "Kicks were coming from other places also. My parents were always ready with those because all my classmates were in the US and doing well."

Things were to change, though, especially after 2003, when the company would get its focus right, and move to products from services (more on that later). "Till then, we didn't even think of it as a business. It was a hobby," says Gaurav Dublish, co-founder of the reinvented Wildcraft, who joined full-time with his college friend Siddharth Sood, both 40, in 2007.

It certainly isn't a hobby anymore. The outdoor products brand reported retail sales of Rs 300 crore in FY16, having clocked a CAGR of over 60 percent since 2007. (The company did not disclose profitability numbers.) It sold over 2 million products in the year including backpacks, rucksacks, sleeping bags and tents, cheaters and jackets, and footwear. From the garage it started selling from in 1993, Wildcraft products are today available in 120-plus exclusive stores and over 2,500 multi-brand stores across 400-plus Indian cities.

From a garage in 1993, Wildcraft products are now available in over 2,500 multi-brand stores across 400+ cities

What has helped in achieving scale is an investment of about Rs 70 crore for an undisclosed minority stake by Silicon Valley-based venture capital fund Sequoia Capital in 2013. There has been no follow-up equity investment since. "The company has grown 3x plus since the investment and has strongly positioned itself as a full-blown outdoor brand across gear and apparel with footwear being added as well," says GV Ravishankar, managing director, Sequoia Capital India Advisors.

It has been quite the journey, then, for Dinesh. Born and brought up in a middle-class family in Ranchi, he had moved to Bengaluru in 1978 for his Pre-University Course (PUC). After that, he obtained a degree in electronics engineering from RV College in the city. The wilderness was never supposed to have been part of the plans, but here he is, fuelling others' wild dreams.

FRIENDS IN DEED

"When Gaurav and I joined, the revenue of Wildcraft was lesser than the salaries that the two of us earned," recalls Sood, who had quit his job at GE in Singapore in 2007, and Dublish his at Standard Chartered in Dubai. However, their association with Dinesh and Wildcraft began earlier, in 2000. Back then, besides making outdoor gear,

PHOTOGRAPHS: BMAXIMAGE

Dinesh KS turned his passion for the outdoors into a business that is growing at a galloping pace

(Left to right): Wildcraft co-founders Gaurav Dublish, Siddharth Sood and Dinesh KS feel their best years are still ahead of them

Wildcraft India had a robust services business. This included organising river rafting expeditions at Dandeli, located in the Western Ghats in Karnataka, and conducting outdoor learning programmes for children and corporates, as well as some consultancy services. This constituted 75 percent of the company's overall revenues at the time.

Sood and Dublish had taken a trip to Dandeli in 2000 and, having enjoyed it, started helping Wildcraft run its services business in their spare time. Between 2000 and 2003, both Sood and Dublish moved from the periphery to getting invested—financially and operationally—in the company's product business. "We didn't have any office. All the fights and arguments used to happen at one of our places," remembers Dublish, now seated in the third floor of the three-storey Wildcraft India headquarters in Bengaluru's southern suburb of JP Nagar.

In 2003, even as Dublish and Sood were both embarking on international assignments in their respective jobs, they convinced Dinesh to give up his job at the National Outdoor Leadership School (NOLS) in Wyoming, US, and devote all his time to Wildcraft. (For at least six months in a year, Dinesh worked as a climbing instructor at NOLS. In his absence, an accountant-cum-inventory manager oversaw operations.)

Around this time, it was also decided that Wildcraft would let go of its services business and focus on products. "The three of us were convinced that we need to take the product route. So the guys who were associated [and invested in Wildcraft earlier] moved out and took the services business with them," says Sood. The company took up a 700-odd square feet office space opposite its earlier garage setup, and hired tailors. It opened four retail stores across the city in the key suburbs of Jayanagar, Cambridge Layout, Malleswaram and Rajajinagar.

"We had tied up with vendors who would tap into Korean and Taiwanese suppliers. In 2006, we started sourcing directly," says Dublish. The business required significant working capital. For a turnover of Rs 50 to Rs 60 lakh, Dublish says, "we used to pour in Rs 30-40 lakh of capital to sustain it because the demand was not outstripping [supply]. And that capital was coming from the three of us." Annual sales for Wildcraft averaged around 10,000 units then.

Those were also the years of "armchair entrepreneurship" for Dublish and Sood. And even though Dinesh ran the show, for about three to four weeks in a year he would take off to the mountains. This setup needed to change.

THE CONFIDENCE GAME

In 2007, Dublish and Sood decided to come back to India and spearhead operations. It was around the time that Dinesh, who oversees design and product development, was looking for more personal time to explore mountain ranges in India and abroad. Also, "there were question marks on the survival of a design product-led company. At that time, entrepreneurship was still not as fashionable as it is today," recollects Dublish. But nothing deterred their entrepreneurial spirit or their belief in Wildcraft.

The trio put forth a clear vision for the company: To build the largest outdoor brand in India. While Dublish and Sood settled into their roles of leading marketing and sales, and finance, respectively, Wildcraft began hiring its first set of designers. "Consumption of backpacks as a category wasn't there. But we believed that the category had a future in this country, and we clearly saw an opportunity," says Sood. And they were right: The backpack has come to be the company's largest selling product, considered to have a multi-utility appeal in urban landscapes such as workplaces and schools. An internal assessment by Wildcraft shows that 80 percent of consumers use the backpack for daily commute, while 20 percent carry it for the outdoors.

Also, the overall Indian outdoor gear market is estimated to be over $2 billion in size, and their confidence in being able to tap into that has held the company in good stead. As Ravishankar of Sequoia Capital India Advisors says, "In the beginning, we were not convinced on whether the Indian market had evolved enough to accept the outdoor positioning the company was building on. But every time we met them, we got more and more convinced that this was a special team, who, with their unique insights about the Indian/Asian consumer, had a strong, long-term focus on building a leading outdoor brand out of India."

Arvind Singhal, chairman of Technopak, a leading retail, textile and apparel consulting firm, has a different perspective. He puts Wildcraft in the category of "being a niche player which has become successful, another example being Fabindia". Adds Singhal, "Over the years, Wildcraft has built up very strong capabilities in product development, manufacturing and sourcing. That has been their strength." But he is not convinced that such niche players have the ability to grow and become ten times the size and scale they currently are at.

Dinesh had hoped to do a business that would give him space to pursue activities. That's how his story is playing out

Ravishankar, though, is confident that Wildcraft's business can be scaled to Rs 1,000 crore "over the next few years". "We aspire for Wildcraft to be a truly global brand out of India. And they have taken baby steps in that direction," he says. In fact, the company has begun to distribute its products to international markets such as the UAE, Saudi Arabia, Oman, Qatar, Singapore, Malaysia, Indonesia and Taiwan.

CLIMB EVERY MOUNTAIN

Competition for Wildcraft comes from all quarters: Sportswear brands, international sporting goods retailers such as Decathlon, traditional luggage makers such as Samsonite and American Tourister which now offer backpacks, lifestyle brands such as Fastrack from Titan, as well as other outdoor players like Woodland and Timberland. "Their biggest external challenge comes from brands with deeper pockets that can push ahead with market penetration more aggressively, including the sportswear giants, as well as retailers identifying the category as one where they can undercut brand margins through private labels," says Devangshu Dutta, founder and chief executive of Third Eyesight, a retail consultancy firm.

But Dinesh isn't fretting over potential rivalries. The best outcome he had hoped for was "doing business which would give me time and money to pursue activities." And that is exactly how his story is playing out.

On the one hand, he has the bandwidth to follow his passion: In 2008 and then again in 2011 he climbed some of the Himalayan mountains in Ladakh that stood at 6,600 metres. Mount Everest, which is at 8,848 metres, has never excited Dinesh. "For some people, height matters, but not for me. The challenge is in the kind of routes that you climb," he says. His next target is to explore the mountain ranges on the eastern side of the Karakoram.

When he is not in the mountains, he helps the 20-odd member Wildcraft design team in product development. This is of no lesser joy to Dinesh. As he points out, "When we started, the garage was our manufacturing unit, head office and retail outlet. And now we're looking to be counted among the best in the business globally. I'm confident that our best years are ahead of us, and outdoor-lovers are at the heart of this confidence."

Either way, Dinesh seems to have it all—wild dreams are made of this. F

The New Liquid Asset

Three years ago, **HYT** introduced innovative hydromechanical watches that were prized by collectors and disrupted the industry. Then a $23 million investment came flooding in

BY ROBERTA NAAS

Water is a watch's mortal enemy, but five years ago, Swiss entrepreneur Patrick Berdoz saw an astonishing concept he thought was visionary: Using liquid to indicate time. There have, of course, been water clocks for thousands of years, but no one had figured out how to create one that was wrist-size. So, along with three partners—including nuclear engineer Lucien Vouillamoz, who developed the innovative fluid system—Berdoz launched HYT, a watch brand whose raison d'être is producing hydromechanical timepieces.

The principle behind HYT's groundbreaking watches is two

LAURA STEVENS FOR FORBES

Water works: HYT co-founder Vincent Perriard (with an H2 watch in the background) is expanding the business to include lower-priced timepieces with increased production

immiscible liquids that flow from bellows, through a capillary powered by a mechanical movement to indicate the time on the watch dial. The complex, revolutionary system would not have been possible without the help of sister brand Preciflex, which makes liquid indication devices for the medical, design and automotive fields. Both companies were chaired by Berdoz—who has bought and sold a number of medical and real estate businesses—and HYT watches began production in 2012.

Starting with $30 million (including funds from Berdoz and private evergreen investor SVC, or Swiss Venture Club) to develop technology that did not exist in the industry before, Berdoz brought in watch veteran Vincent Perriard, who had successfully headed up TechnoMarine and Concord, to serve as CEO of HYT.

What the three men devised for HYT are watches that are complex not only in their technology but also in their design. The futuristic fluid system is set in cases that are atypical for the watch world. And collectors—particularly in Asian markets—can't get enough of these timepieces, which sell for upwards of $50,000. In 2013, the first full year of sales and production, HYT made about 150 watches. Last year, it turned out 400. Revenue has grown accordingly: Berdoz claims sales of $4.6 million in 2013 with growth of about 40 percent in 2014 and another 20 percent in 2015.

Berdoz says he expects 20 percent growth in 2016 as well. And he is being conservative. Just after Baselworld 2016 in March—the world's largest watch exhibition—orders for HYT watches were up by 30 percent over the same period in 2015.

According to Berdoz, this year's growth is coming not from volume (production will remain at around 400 pieces) but rather from the introduction of more expensive timepieces. Currently, HYT's base model, the H1 watch, retails for $50,000 to $70,000 (depending on material), and the average price of all models was $65,000 in 2015. The average this year is projected to be $80,000, thanks to collections with higher price points (the H2, H4 Alinghi and Skull collections, for instance, range from $90,000 to $180,000) and also to one particular ultra-high-end model, the H3, that goes for $285,000.

Bold face: HYT's $120,000 Skull Maori indicates hours, but not minutes

But it's the new investment money that came pouring in that has HYT set to take its growth to a whole new level. In February, the brand received another $23 million in capital—including funds from Nestlé Chairman Peter Brabeck-Letmathe—for expansion into new markets and new fields.

"This liquid technology is so promising that there is so much room for growth," Berdoz says. "That is why we raised the $23 million—to address the needs of the market, to be able to animate the brand in new ways moving forward."

The new capital will also allow HYT to reduce the prices of a soon-to-be-released line of watches with an all-new movement. Referred to in-house as X Series, the new movement is smaller and a lot more affordable. With it, HYT can unveil watches that are slimmer and have a more approachable price range of $25,000 to $35,000. Additionally, Berdoz expects the new line (slated to be unveiled in 2018) will be produced in "thousands of pieces per year".

"HYT has a DNA as a luxury brand, so we will never be priced lower than the mid-20s, and we will always be hydro and mechanical," Vincent Perriard explains. "But with this new movement, we can accelerate growth by offering this smaller, thinner size, and by adding functions and complications. It opens a new frontier for us."

The new investment has also led to another development for the two companies. This one, code-named Aqua Quantum, is a line of liquid-display watches and jewellery in the fashion realm, with an entry price of $300. There will also be a collection of smartwatches because the liquid can be used to display different functions. In addition, Preciflex is exploring new fluid-driven medical devices, and HYT is poised to open a US subsidiary that offers an after-sale programme with fluid specialists to service customers' watches.

"These new products will not be made under the HYT brand name, and because of the price and design concept, they will not compete with our business. It is a hybrid," adds Perriard. With prototypes already in hand, Preciflex is exploring production options that involve either establishing a separate company to produce and market the fashion line or working with a watch brand that is capable of mass production.

In other words, the floodgates are open.

Chairman Tulsi Tanti has put Suzlon on the path of redemption with his resolve and focus

Riding the Wind

A gradual process of recovery is unfolding at **Suzlon**, or so improved growth, profitability and debt numbers—and Tulsi Tanti's confidence—seem to indicate

BY AVEEK DATTA

A year ago, Tulsi Tanti, the 58-year-old chairman of the Pune-based wind turbine maker Suzlon, decided to set his ego aside—at the right time—to bring his company back to financial health. This included divesting the crown jewel of his business, Senvion, a German wind turbine manufacturing company acquired in 2007, and parting with a significant portion of his shareholding in the company he founded in 1995. He also took the help of lenders and friendly investors to fix his company's liquidity challenges, which had forced operations to come to a near standstill. The intention was to grow the core business and lead Suzlon to profitability once again.

Today, it is fair to say that Tanti seems to have put Suzlon Energy on the path to redemption. You can see it in the pride on his face; you can, more importantly, see it in the numbers.

The wind in Suzlon Energy's sail appears to be back as it reported its first annual net profit in seven years. With robust growth across operating revenues and profits for the financial year ended March 31, 2016, a gradual process of recovery is unfolding at Suzlon, just as Tanti said it would when he spoke to *Forbes India* last July.

Suzlon recorded a turnover of Rs 8,259 crore in FY16, up by 69 percent year-on-year. The company's Ebitda (earnings before interest, tax, depreciation and amortisation) is at Rs 1,295 crore versus a loss of Rs 166 crore in FY15, with a healthy Ebitda margin of 15.7 percent. Suzlon reported a net profit of Rs 539 crore, against a loss of Rs 9,355 crore in FY15. The net profit was largely the result of a one-time gain of Rs 1,039 crore on account of the sale of Senvion in 2015. But even without this, Suzlon reported a net loss of Rs 24 crore, a considerable improvement over the loss of Rs 2,376 crore—excluding one-off items—in FY15. (In fact, Suzlon's acquisition of Senvion—executed in phases between 2007 and 2011—was one of the reasons it landed in the debt trap that hampered its growth.)

"Reporting a profit for fiscal 2016 is an extremely important and valuable milestone for the company," Tanti tells *Forbes India*. "It has helped in significantly enhancing the company's credibility among stakeholders and boosted investor confidence." It has also proved to be a source of motivation for employees, adds Tanti. "When we were struggling over the last three years, the team was preoccupied with crisis management rather than focusing on the actual project execution," he says. "But the team is now motivated to grow the business as there is visibility on where we want to go from here."

DOWN WITH DEBT

A combination of factors—the financial crisis in Europe, a slowdown in the wind power sector in India, and aggressive international expansion leading to a highly leveraged balance sheet—had pushed Suzlon into a corner in 2012-13. It had become the largest defaulter on repayment of foreign currency convertible bonds (FCCBs) in India, a considerable slip in perception from being one of the world's largest wind turbine makers.

Things have altered for the better there. Suzlon's consolidated long-term, rupee-denominated debt stood at Rs 3,033 crore in FY16, compared to Rs 10,100 crore as on March 31, 2015. As far as the dollar-denominated debt is concerned, the outstanding FCCBs on the company's books have come down to $249 million from $328 million in FY15. The credit-enhanced debt taken by the company (backed by a standby letter of credit from the State Bank of India) remains at the same level as last year at $647 million, but significant repayment on this isn't due before FY23. Kirti Vagadia, Suzlon's chief financial officer, tells *Forbes India* that the company had reached an agreement with lenders to extend the maturity of this debt till 2022-23 (from 2020-21 earlier). Consequently, a bullet payment of $657 million, which the company was supposed to make in FY18, is due only in FY23 now, Vagadia says. He also adds that the company is in talks with lenders to assess if it can repay this debt in larger installments ahead of the due date, instead of

VIKAS KHOT

coughing up $657 million at one go.

Getting help from lenders to restructure outstanding debt, as well as bringing in Dilip Shanghvi, chairman of Sun Pharmaceutical Industries, as a white knight investor (in February 2015, Shanghvi invested Rs 1,800 crore for a 23 percent stake in Suzlon and also agreed to extend additional working capital to the company) has worked as Suzlon has been able to focus on growing volumes again in FY16.

The company delivered wind energy equipment to support 1,131 MW of power generation in FY16, two-and-a-half times over the previous fiscal; it has commissioned wind power projects, on behalf of clients, worth 900 MW in India, double of what it did last year. With the level of wind power generation capacity that Suzlon helped commission in India in 2015-16, its market share in India has risen to 26 percent from 19 percent in FY15. Simultaneously, the company took fresh orders for 1,251 MW in FY16, a little over three times its 2015 number.

With the Indian wind energy market expected to grow at a compounded annual growth rate of 30 percent over the next five years, Tanti is confident that Suzlon will grow faster than the industry and is targeting a 40 percent share of the market by the end of FY17.

OPERATIONS FOCUS

But fiscal 2016 hasn't only been about kick-starting volume growth after addressing liquidity challenges; the company has also utilised the crisis to bring in better operating practices, prudent working capital management strategies and strengthening the management team to ensure future growth, according to Vagadia. "The entire organisation has been trained to regain credibility across stakeholders. Giving a commitment to a customer and not honouring it is not acceptable any longer," Vagadia says. With most of the liquidity challenges behind it, Suzlon is focussed on executing orders in a timely and profitable manner, he adds. "We no longer accept orders that do not match our threshold of profitability, or which are cash flow negative."

Tanti also points out that even during its troubled phase, Suzlon didn't stop investing in upgrading technology to improve productivity of a new range of products—turbines and rotor blades. Suzlon's new line of equipment helps increase the plant load factor of wind power installations to around 40 percent from 30 percent earlier, and allows production of wind energy at sites that were earlier unviable. "All of this will help us grow the business in India and remain competitive, even as the cost of renewable energy keeps coming down," Tanti says.

Suzlon reported its first annual net profit in seven years in fiscal 2016. It is a valuable milestone, says Tulsi Tanti

"The company argues that its new products, which offer around 15-20 percent better yields should be able to offset the impact, if any, from the phase out of accelerated depreciation and generation-based incentive schemes," says an HSBC research report dated June 1, 2016.

Suzlon is also mindful of the government's target of generating 100 GW (1 GW is equal to 1,000 MW) of solar power by 2022—and knows it cannot afford to miss out on the opportunity. The company has already won a bid to develop a 210 MW solar power project in Telangana and will be bidding for more such assets. While it will capitalise on its project management skills to develop and maintain these assets, it doesn't intend to retain their ownership for long. Consequently, on June 20, Suzlon signed an agreement to sell a 49 percent stake in a 100 MW solar energy project (part of the 210 MW won from the Telangana government) to CLP India, the Indian arm of the Hong Kong-based power company. CLP India has the option to acquire the remaining stake post commissioning in May 2017. This is a strategy for diversification that Suzlon will continue with, says Tanti.

RECOUPING NET WORTH

But even after the encouraging financial performance, years of strain have led to a negative net worth of Rs 7,077 crore as on March 31, 2016. The company aims to recoup this over the next three to five years on the back of greater estimated operating profits, further conversion of FCCBs into equity shares, and some amount of long-term capital to be raised at the level of some group companies at a cheaper cost of borrowing.

Suzlon has also strengthened its management bandwidth over the last one year, making two key hires. It appointed JP Chalasani, former CEO of Punj Lloyd and Reliance Power, as group CEO; it has also brought in Rakesh Sarin, a former senior executive at Finnish power company Wärtsilä Corp as the CEO of its international business and global service division.

If the momentum of the earnings for the January-March 2016 quarter continues, the next year looks even better for Suzlon. The company reported a consolidated turnover of Rs 3,240 crore during the quarter, up by 423 percent year-on-year, with an Ebitda of Rs 450 crore versus a loss of Rs 220 crore earlier. "We remain confident on Suzlon Energy regaining market share leadership in FY17," another HSBC research report dated May 31, 2016, notes.

Whether Suzlon's FY16 financial performance is an indicator of a full recovery remains to be seen. But Tanti is confident that in FY17, Suzlon will be able to report a net profit purely on the back of its operational performance—without any exceptional gains. F

War of Words

Liz Elting founded one of America's leading translation companies with her boyfriend from business school. But nearly 20 years after calling off their engagement, the ex-lovers are waging an ugly battle for control that's landed them in corporate divorce court and may cost them what could be a billion-dollar baby

BY KATIA SAVCHUK

For someone who has made a fortune trading in words, Liz Elting can be remarkably tight-lipped. But the 50-year-old co-founder of TransPerfect, one of the world's largest translation firms, is acting under lawyers' orders. Her attorneys don't want her saying much about the messy corporate divorce she's been embroiled in with her co-CEO and one-time fiancé, Phil Shawe. Nor do they want reporters at TransPerfect's Park Avenue headquarters, where she shares a floor with Shawe, the day before she's due to face him in a Delaware court over the future of their company.

That's why, on a Tuesday morning in late April, Elting is perched on a leather chair in her all-white living room on Manhattan's Upper East Side. A trim brunette in a navy-blue skirt suit, she has the energy of a slight, skittish bird.

"TransPerfect is my brainchild, my baby," she says. "I'd like to own this company and be part of its future."

Elting and Shawe built the company from a dorm-room startup to a global leader with $505 million in sales. But tensions between them flared up five years ago, spilling into legal battles in two states with mortifying episodes of infighting. There was Shawe charging the petite Elting with battery by high heel, his breaking into her office and stealing her confidential emails


HAN KOZOWYK FOR FORBES
HAIR AND MAKEUP: SUZANA HALLILI FOR TART COSMETICS

with attorneys, and F-bombs galore. Despite an astonishingly acrimonious relationship, the ex-lovers have thrived as business partners, and out of their dysfunction has grown a company that has, ironically, solved one of the world's biggest problems—how to communicate better.

Elting, who owns half of TransPerfect, has an estimated net worth of $390 million, landing her on *Forbes*'s list of America's Richest Self-Made Women for the second time. But TransPerfect's unbroken two-decade growth streak could all come undone if the two are forced to sell the company in a saga that has careened from bedroom to boardroom to courtroom.

The idea of TransPerfect was born 24 years ago, after Elting received an MBA at the Stern School of Business at New York University. She had always been a linguaphile. By high school she'd lived in three countries and had studied French, Portuguese, Spanish and Latin. Her parents, a teacher and an advertising executive, urged her to work from age 10. She babysat, delivered newspapers and manned a dry-cleaning shop. At Trinity College, where she majored in modern languages and literature, Elting cleared dining hall trays and worked overnight security.

After graduating in 1987 and jetting to Caracas for a finance internship, Elting joined Euramerica (which later became part of Berlitz), then the best-known translation firm in an industry of mom-and-pop shops. With the personal computing revolution and economic globalisation taking off, demand was booming. "It looked to me like they were going to change the world," Elting says.

After three years she thought she could be the one to do that. Clients wanted things done faster, more professionally and in more formats. She envisioned a company with offices around the world and the service level of a top-tier bank or law firm. "I can be a pioneer in this industry," she thought.

Elting enrolled in business school to hone her entrepreneurial skills. In her second year she started dating Shawe, a round-faced 22-year-old with a mop of black hair. He was a year behind her at Stern, and she moved into his dorm room after graduating.

Believing she needed more business experience, Elting joined the proprietary trading division of a French bank, where she was one of the few women. She quit after six weeks. "I was putting numbers in a spreadsheet, and whenever the phone rang, everyone would yell across the office, 'Liz, phone!' My heart wasn't in it," she says.

Unemployed at 26, Elting decided she had nothing to lose. In 1992 she took out $5,000 she had saved, got a $5,000 credit card advance and asked Shawe to start a company with her. (Shawe says he ran up $80,000 in credit card debt to fund the business,

SPLITTING HEADACHE A heartfelt guide to corporate marriages—and divorces

Tory and Chris Burch

FOUNDED: Tory Burch (2004)

SPLIT: After the pair raised six children together, the fashion designer filed for divorce in 2006.

HAPPILY EVER AFTER? In 2011, Chris opened C Wonder, which his ex-wife deemed a Tory Burch copycat, igniting a series of lawsuits the presiding judge called a "drunken WASP fest". Both ended up winners: After he sold his 28 percent stake in Tory Burch for an estimated $550 million in 2013, each emerged briefly as a billionaire.

Roxanne Quimby and Burt Shavitz

FOUNDED: Burt's Bees (1984)

SPLIT: They met when he picked her up hitchhiking and divorced a decade later, after she discovered his affair with a younger employee.

HAPPILY EVER AFTER? Quimby got the company in exchange for buying Shavitz a home in Maine, where he lived without electricity until he died in 2015. She paid him another $4 million when she sold her stake to a private equity firm in 2003 for $141 million.

Sandy Lerner and Leonard Bosack

FOUNDED: Cisco Systems (1984)

SPLIT: The pair were reportedly separated by the time they were pushed out in 1990 from the company they launched in their living room.

HAPPILY EVER AFTER? The couple stayed close and launched a charitable foundation together to support animal welfare and science education. Lerner also helped found Urban Decay Cosmetics in 1996 and sold it to LVMH four years later.

PMC / SIPA / NEWSCOM; ROBERT F. BUKATY / AP; SILICON VALLEY HISTORICAL ASSOCIATION which Elting disputes.) "I thought it would be nice to do it with a partner. And he was my boyfriend, so that was a factor," she says.

The sweethearts agreed to split the business 50-50 (although Shawe later transferred 1 percent to his mother, Shirley). They didn't set an exit strategy.

With a fax machine, a phone and a rented computer, the couple made and wrote hundreds of calls and letters daily, offering anything businesses needed in a foreign language faster and better than competitors. Their first job was translating a legal document from English to Slovak. From the beginning, Elting and Shawe outsourced the language work to highly-specialised freelancers, while putting in 100-hour weeks running the company from Shawe's dorm room.

Their personalities were complementary—he was the risk-taker, she the analytical one. But, as couples do, they also bickered. "Day in and day out, there were all kinds of things we disagreed on," Elting says. "There are times when it's been better than others."

After seven months in business, the pair moved to an office suite. A year later they hired their first employee and reeled in their first million-dollar client, JC Penney. By 1996 they had opened TransPerfect's current New York headquarters, along with offices in San Francisco, Atlanta and Washington, DC.

They also got engaged, but Elting broke it off a year later. Shawe didn't take the split well. At one point, in anger, he even hid under her bed, Elting later told a Delaware court. Elting also testified that he did the same thing several years later when he surprised her in her hotel room in Argentina on a business trip. Elting also claimed Shawe came uninvited (with his mother) to her 1999 wedding in Jamaica to Michael Burlant, a lawyer turned real estate broker whom she had first dated after college (and with whom she now has two teenage children). Shawe didn't deny the actions in court, according to an August 2015 opinion from Delaware Chancery Court Chancellor Andre Bouchard. (Through a spokesman, Shawe told *Forbes* that he has never crawled under a bed, was not in Argentina at the same time as Elting and was invited to her wedding.)

Despite their breakup, Elting and Shawe kept working together. "The company was like a child," she says. "Neither of us wanted to walk away."

TransPerfect grew up fast. In 1998, the firm hit $10 million in sales and started opening offices abroad. The following year the company launched Translations.com with several million dollars in outside investment to meet demand for software and website translations. Shawe oversaw the digital business while Elting ran TransPerfect until 2004, when they bought out investors and merged the companies. By then, revenues were $50 million.

The company went on to open a handful of offices a year and aggressively added services, including litigation support, remote interpreting and general staffing. The firm invested early in digital translation tools that improved efficiency and in high-growth specialties, such as law, finance and life sciences. They created an enticing compensation model for salespeople, with commissions that never sunset.

Recently, a key factor driving growth has been TransPerfect's GlobalLink technology, a platform that plugs into the back end of clients' content systems and works with any language-services provider.

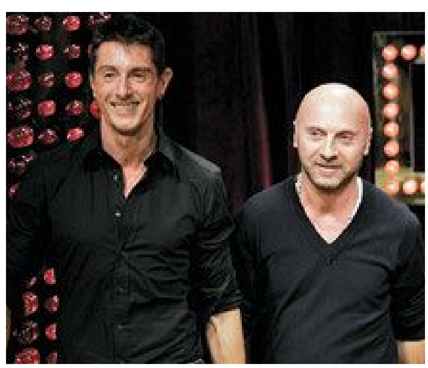
Ninety percent of growth was organic, but TransPerfect also acquired more than 20 companies, mostly for talent or technology. Eventually it added capabilities in 170 languages through a network of 15,000 freelancers, many of whom are translators. Today it has about 4,000 full-time employees in more than 90 cities.

Christel and Jon DeHaan

FOUNDED: Resort Condominiums International (1974)

SPLIT: She had run the company for eight years by their 1987 divorce, which awarded her half of the timeshare pioneer.

HAPPILY EVER AFTER? After buying out her ex for nearly $68 million, she increased revenues at the company to nearly $480 million before selling it to a division of HFS for $825 million in 1996.



Domenico Dolce and Stefano Gabbana

FOUNDED: Dolce & Gabbana (1985)

SPLIT: The fashion designers parted ways romantically in 2005 after 23 years.

HAPPILY EVER AFTER? The exes continue working together at their luxury fashion house. "The truth is, everything is exactly the same," Gabbana has told reporters. "But no sex!"

DOLCE AND GABBANA: LUCA BRUNO/AP

LIZ Elting and Phil Shawe never drew up a buy-sell agreement or cemented their roles on paper, and their duties have shifted over the years. Recently she has led the divisions that oversee document translation and interpreting, while he handles website and software localisation. Staff in accounting, operations, HR and other "shared services" report to both.

The co-CEOs agreed they didn't want to go public or entertain the calls of private equity firms. "We liked the freedom, being able to focus on the long-term vision and the lack of other decision makers," Elting says.

By 2011, the firm had $300 million in revenues and 2,000 employees around the world. But at the top, the relationship was turning ugly. Early in the year, Elting got upset with Shawe for what she considered "self-indulgent" expenses, including using corporate frequent-flier miles for a plane ticket for his fiancée, according to the Delaware opinion. "Your priorities are all wrong now, and we're not meant to be business partners," she wrote in an email. "[Let me know] how much you want to buy me out for—I'd like to make this amicable."

Instead, what ensued was a series of events that Bouchard, the Delaware court chancellor, called "temper tantrums" over hires, new offices and management strategies. In early 2012, Elting poured a bottle of water on Shawe when he wouldn't leave her office, according to an affidavit from CFO Steve Tondera in a separate dispute. (Elting says the account "is not accurate".) When Elting questioned whether a new office in France made sense, Shawe responded via email: "Relent… or I will dismantle this place starting today."

By late 2012, Elting and Shawe were fighting almost daily. Bouchard's opinion details a litany of bad behaviour: Each started holding up approvals for matters such as raises, profit distributions and acquisitions unless their own proposals got a green light. Shawe especially bristled at "dual approvals", which he claimed was a new policy Elting instated in December 2012, requiring both to sign off on routine decisions. "I will simply create constant pain until we go back to the old way of doing things," he wrote in an email to a senior executive. After Shawe held a meeting of top managers on a date Elting couldn't make, she announced a blanket freeze on acquisitions.

Things got even nastier after Shawe learned that Elting had lawyered up. He started intercepting her mail and tracking her phone calls. On New Year's Eve 2013 he broke into Elting's locked office and mirrored her hard drive, then accessed her computer remotely at least 20 times. This allowed him to capture 19,000 of Elting's personal emails, including 12,000 privileged communications with her attorneys. In 2014, Shawe co-opted the firm's outside counsel to represent him personally, unilaterally hired at least ten employees for shared divisions by falsifying records and put through raises without Elting's approval, the court opinion said.

Shawe's ploys reached new heights when Elting boarded a red-eye to Paris and discovered he was sitting across the aisle

By early 2014, Shawe had had enough. He offered Elting $150 million for her stake in the company, she testified, $100 million of which would be in cash; Elting responded with a $300 million all-cash offer, with a letter from Goldman Sachs saying it was "highly interested" in financing the deal. Neither bit.

In May 2014, the drama finally reached the courtroom. Elting sued Shawe in New York State Supreme Court, seeking to remove him as director, and in Chancery Court in Delaware, where TransPerfect's parent company is incorporated, asking to have the company dissolved and a custodian appointed. Shawe sued Elting in Delaware for waste, breach of fiduciary duty, unjust enrichment and other claims.

But the personal drama continued. In June of that year, Shawe came to Elting's office to confront her about a tax distribution he said was unauthorised. He refused to leave and blocked the door with his shoe, so she "tried to move it with [my] foot," Elting wrote to colleagues the next day. Shawe filed a police report about a "domestic" assault, but her lawyers intervened to prevent her arrest; no charges were filed, and the case was later closed. He then filed a civil suit, accusing her of assault and battery by shoving him and kicking him twice on the leg with "dress shoes that were pointed at the toe".

"It's heartbreaking and surreal. [Shawe's] retaliating big time because I had to pursue legal action and I want out," Elting wrote to a friend. (In court she claimed that she wanted only to break off the relationship with Shawe, not get out of the company.) Elting called his accusations "a work of pure fiction" in a July 2014 affidavit, and she has countersued for defamation and assault. (The case remains open.)

In August 2014 a New York State Supreme Court judge ruled against Elting, declining to remove Shawe as director because he didn't see material harm. "It is not clear who drew first blood," the judge wrote. The following month Shawe issued a company press release without Elting's approval, dubbing her a "minority shareholder", calling the ruling a "major victory" and falsely quoting her as "extremely pleased". (Bouchard eventually issued a temporary restraining order preventing Shawe from speaking for TransPerfect without Elting's consent.)

In December 2014, Shawe's ploys reached new heights. Elting boarded a red-eye to Paris—and discovered Shawe sitting across the aisle. He claimed to be surprised but in court admitted it was no accident after it emerged that he had texted colleagues: "Was next to Liz on the plane to Paris and she switched seats ;)." In his opinion, Bouchard noted that "the smiley-face emoticon at the end of his text message suggests he was amused by yet another opportunity to harass Elting."

In March 2015, the court appointed corporate attorney Robert Pincus to mediate. Shawe made new offers of up to $280 million for Elting's stake, and a group led by four senior managers bid $170 million for half of the company, but talks failed. Five months later, citing "irretrievable deadlocks" and "complete and utter dysfunction", Bouchard made a decision that was unusual for a growing enterprise: He ordered Pincus to oversee a sale that would keep the company intact and maximise value for shareholders. He deemed it unfair to leave Elting with no choice but to sell her stake since Shawe's actions made it less likely that an outsider would pay a fair price: "What rational person would want to step into Elting's shoes to partner with someone willing to 'cause constant pain' and 'go the distance' to get his way?" Bouchard wrote in his decision, which also dismissed Shawe's claims against Elting.

Shawe disagrees with the Delaware court's conclusion that their disputes were irreparable. "We're just passionate people, and this is the way we make decisions all the time. Nothing changed at the company—the deadlock and dysfunction are manufactured," he says. "It's basically a government takeover." Former New York mayor Rudy Giuliani, an ex-US Attorney, seemed to agree when he recently weighed in on the TransPerfect saga, telling a local paper that the decision was "a very intrusive ruling in terms of the free market".

In late April the courtroom scene in Wilmington, Delaware felt like a grim version of the wedding Elting and Shawe never had. Each side filled the rows with more than a dozen lawyers, with Shawe's mother, a polished blonde who looks like Faye Dunaway, in the front. Shawe wore a gray pinstripe suit and baby-blue tie; Elting wore black. Her lawyers spent the first half of the day arguing that Shawe should pay all her attorney fees because of his behaviour during trial, including deleting files from his computer after a discovery order, having his phone thrown out after a curious incident involving a Coke and a rat, and lying in "every known form of testimony". ("Liz's lawyers often take things out of context and twist them for their own purposes," Shawe's attorney Martin Russo said of the perjury allegation.) At the hearing, Shawe's lawyers claimed he'd deleted files to protect personal information and backed them up, and that no relevant evidence was lost.

"What rational person would want to step into Elting's shoes to partner with someone willing to 'cause constant pain'?"

After lunch, Jennifer Voss, the attorney for mediator Robert Pincus, laid out his plan for selling the company: A modified auction allowing bids from both the owners and third parties. To avoid conflicts of interest, Pincus offered to take charge of the sale side. He wanted broad discretion to determine who could bid, which advisors to retain and, most controversially, whether to impose non-compete agreements. Pincus, who has a square jaw and perennial smirk, sat behind Elting.

John Hardiman, one of Shawe's attorneys, repeated claims that Shawe had made elsewhere: "Ms. Elting, it appears, would prefer to sell ... [for] a headline price." He went on: "Mr. Shawe has been more active in managing this business and keeping this employment team together than Ms. Elting has." She rolled her eyes.

Bouchard closed with a reflection. "Most of these cases settle because at some point most businesspeople get rational," he said. "I'd hope that you have one more productive exercise at trying to reach an acceptable resolution. I realise there's less than a 0.01 percent chance that'll happen."

Yet Shawe says he took those comments to heart. A week after the hearing, he offered Elting $300 million for her stake in the company. "I never wanted to be a buyer or seller of this business—I just wanted to keep running it and running it well," he says. "Settlement is always better than a government-imposed solution."

Elting says she's not interested: "I've let the custodian know that I would pay more."

She insists she's not looking to cash in and get out, despite asking to be bought out in the past. She says she will bid for Shawe's stake, likely with backing from a private equity firm, and notes that she has outbid him in the past. "I've always wanted to stay and own this company, but I wouldn't be a rational person if I didn't look at being both a buyer and a seller," she says. "I'd love to own this company and take it to the next level."

As for her contributions to TransPerfect, at trial Elting pointed out that divisions she oversaw grew by $55 million in 2014, while Shawe's grew by $14 million, and that hers were more profitable. Russo counters that Shawe oversaw some major projects in Elting's division that year.

If Elting gains sole control of

TransPerfect, she could face steep challenges. Several senior managers told *Forbes* they adamantly oppose her taking over the company. According to the Delaware opinion, Elting wants to terminate four top executives because they followed only Shawe's orders. More than 100 employees, many of whom reported to Shawe, also signed affidavits supporting him in Elting's New York suit (CTO Mark Hagerty called him TransPerfect's "Steve Jobs"). Numerous employees testified on Shawe's behalf in the Delaware suit, and 610 signed a letter to Bouchard opposing a forced sale and management change. Several managers have said they thought the conflict was already hurting morale and causing employees to jump ship, according to court records.

"The clear leader for me is Phil," says Martha Geller, vice president of strategic accounts at TransPerfect's digital business, who reports to Shawe and was Elting's supervisor at Euramerica. "It's sort of who deserves to be more of a parent: The one that nurtured you and bandaged your knee, or the biological one? I don't see her participation as much."

Kyle Osborne, who was vice president of sales at TransPerfect's legal division from 2004 to 2012 and reported to both co-founders, disagrees. "Liz was definitely as big a part of the company as he was, and she had to give her blessing for everything," he says.

Elting claims that employees haven't sung her praises publicly because she's tried to keep them out of the conflict. "The company will be in a great place if I own it, and I'm not worried about any valuable employees leaving." Shawe denies lobbying employees to align with him. (Bouchard wrote in his opinion that at least two senior managers "expressed seemingly genuine concern" that Shawe would impose monetary fines on them if they brought up the fact that the conflict posed a problem for the business.) Some employees believe Shawe may be more familiar to the staff because he has a more outgoing management style and spends much more time travelling to various offices.

Even though it's not unusual in any company sale, multiple high-level departures could put off outside bidders. "That would definitely be a deal-breaker for us," says Andrew Brode, executive chairman of UK-based RWS Group, one of TransPerfect's main competitors. He says RWS Group would "look closely" at bidding for TransPerfect if the standout profits it reports—Ebitda near $80 million in 2015—hold up when audited financials appear later this year.

Even if Elting gains control of TransPerfect, she faces challenges as many senior managers oppose her taking over

If it went to auction, TransPerfect could bring between $800 million and $1.2 billion, based on court testimony from financial experts. Martin Russo, Shawe's lawyer, calls that range "rosy and high", but Don DePalma, who tracks the translation industry for Common Sense Advisory, believes it's realistic. "We could end up with a barbarians-at-the-gate scenario, with things being bet up enormously," he says.

DePalma says private equity firms and other investors have increasingly salivated over the translation industry, which he estimates is worth $38 billion and will grow to $50 billion by 2019. TransPerfect is an attractive buy—no debt, plenty of cash and 11,000 clients, including Google, Merck and Wal-Mart. It has increased revenues at an average of 22 percent annually in the past decade despite recession, litigation and no acquisitions since 2013. (By comparison, Lionbridge, the only language-services provider bigger than TransPerfect, grew an average of 11 percent a year over that same period.) If the trend continues, TransPerfect will cross the $1 billion revenue mark by 2019 and eventually become the industry's biggest player.

"I have a level of disbelief," DePalma says of TransPerfect's recent performance. "The market has given them a pass."

Not completely. Major clients, including Bank of America, Procter & Gamble and Shell Oil, have expressed concerns, and Lionbridge solicited TransPerfect's clients, according to the Delaware opinion. Elting has claimed Johnson & Johnson declined to increase its business with TransPerfect because of the feud. (Russo disputes this.)

Many clients seem unfazed by the turmoil. As Rocio Haskell, a multicultural marketing manager for Dentegra, a dental insurance company that has worked with TransPerfect for three years, notes, "What happens at the senior level didn't affect the service I received or my day-to-day working relationship with my account manager."

Meanwhile, business goes on. Weeks before the April hearing, Elting and Shawe shared a stage in Barcelona handing out awards to top TransPerfect employees. They attend many of the same meetings with managers. Lately, with Pincus acting as a third director, things have actually been fairly civil. "We're not out there bowling," Shawe says.

If Bouchard finalises his forced-sale ruling or imposes substantial sanctions against Shawe in June, he says he will likely appeal, a process that could extend through the end of the year. If an auction proceeds, Shawe says he'll make an offer.

Whatever the outcome, Elting prefers it to the uncivil war. "It's time for a change," she says, sounding like a weary parent. "Our child has grown up." F

Forbes India Life

RECLINER
Taking the India-bound Mustang GT for a spin between LA and Bonneville
P/96

RECLINER
Sudha Murty: More than just a billionaire tycoon's wife
P/100

RECLINER *How the Mustang came to stand for everything Amercian*

The Making of an Icon

With the Ford Mustang finally coming to India later this year, a look back at the evolution of this car and its cult status

BY SIDDHRAJ SINGH

A 1969 Boss 302 being put through its paces on a race track

"This is the car dreams are made of," says the narrator. On the television screen, a teenager with eyes wide open, stares at a red convertible car spinning on a turntable. This was the first television advertisement for the Ford Mustang in 1964.

Little did they know that 50 years later, those words would still ring true. Just hearing the name of the car brings images of a brooding beast rumbling away to your mind. Songs have been written in its name; it has shared screen space with some of the biggest Hollywood stars, including Steve McQueen, Sean Connery and Farrah Fawcett; and even the popular comic character and archetypical all-American teenager, Archie Andrews, drove one.

The Mustang became deeply entrenched in Americana. That is perhaps the reason for its global fame—it encapsulated the spirit of the American baby-boomer generation, and signified free living and hard driving. It was the perfect antagonist to the lithe, fragile and expensive European sports cars of the time such as the Austin-Healey or the MG.

The pony is born

The Mustang nameplate may now be synonymous with Ford's legendary pony car, but it started out as anything but that. Back in 1962, Ford was toying with the idea of producing a small, mid-engined sports car powered by a Ford Germany-sourced four-cylinder engine. It was to go up against the Chevrolet Corvair. Designed under the watchful eyes of Lee Iacocca, the almost mythical Ford executive and later president, the Mustang I concept had just two seats, minimal windscreen and a roll bar adorning its light aluminium body.

Named after the P-51 Mustang fighter planes from World War II, it featured the now-famous running horse motif, set against stripes in the colours of the American flag. The car was shown at various events around the United States, and despite its popularity and calls for production, the two-seater's limited appeal doomed it. The car remained just a concept.

Almost simultaneously, Ford engineers had been tasked with building a small, affordable, front-engined car with four seats, floor shifter, multiple engine options and 'European' looks. In a record 18 months, they created a new car, based on existing mechanicals from the Ford Falcon and Fairlane range to keep costs down. It had unibody construction, with the 'torque box' structure, essentially making the car extremely stiff, with structural strength coming from the passenger cell rather than a chassis frame.

Styling was based on designs submitted by the Lincoln-Mercury design division of Ford Motor Company. The now-familiar design featured a classic long hood, short deck profile, a wide grill flanked by round headlights, and three-bar detailing, which mimicked the now-signature three-bar tail lamp. The interior featured a double hump dash, and all the cars came with front bucket seats as standard. A number of names were suggested, including Cougar and Torino—both later used on other Fords. But the name and logo from the Mustang I concept were adopted, including the right-to-left running stance, depicting a wild, untamed horse (as against the left-to-right stance that would depict a race horse).

There was enough enthusiasm from within the company during the development for Ford to know it had success on its hands. Nevertheless it wanted to ease in the jump of the Mustang changing from a mid-engined, two-seater to a front-engine, four-seater. So it built the Mustang II concept in 1963. Using a pre-production car and some styling elements borrowed from the Mustang I, the II provided an adequate link between the original concept and the new production car.

Running success

On April 17, 1964, the Ford Mustang was launched at the World's Fair in New York. Despite the positive press reports about it, Ford had its entire marketing machinery behind the Mustang, even getting a pre-production model screen time in the James Bond movie *Goldfinger* (1964). Launching five months before other 1965 models were due, the early Mustangs, available only as coupe and convertibles, were known as the 64½. Powered by an inline six or optional 4.3-litre 260 V8, the Mustang came with manual or automatic transmissions. It was an instant hit with almost all demographics, including women who, in the 1960s United States, were fast becoming a major market for automobiles. The car broke all records. Within 18 months of its launch, Ford had sold a million cars.

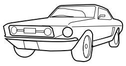
The Pontiac GTO has widely been accepted as the first muscle car, but the Mustang created a new niche: The pony car—a smaller, lighter, less powerful, yet sporty car.

The golden generation

Well into the '65 production year, Ford introduced a third body style, the sports roof or 'fastback' as it is known in Ford nomenclature. The fastback would come to define the car, and sits firmly on top of the body style hierarchy.

Ford also changed the engine lineup in '65, introducing the popular 289 cubic-inch (4.7 litre) V8. A great selling point of the Mustang was customisability. Ford offered all sorts of options, both mechanical and cosmetic, allowing customers to have a different car from their neighbours. Even today, classic Mustangs are often put on sale as one-of-one cars; its defining character is as silly as being the only blue car with a red stripe and deleted clock.

In 1967, Ford introduced the first major restyle of the car. Now facing competition from Chevrolet's own pony car, the Camaro, the Mustang was muscled up, its size increasing slightly, with its signature grill getting bigger. More engine options were added, including the 390 cubic-inch (6.4 litre) big block V8, which would power Steve McQueen's Mustang in the cult movie *Bullitt* (1968). The ultra realistic chase scene from the movie helped cement the Mustang's status as an iconic car.



The iconic chase from *Bullitt* (above) saw the Mustang battle with rival Dodge's Charger; the wild horse logo and the triple-slat tail lamps (overleaf) are a Mustang signature that stay alive even today; Ford gave us the body style and term, Fastback. It's still a Mustang speciality

By 1969, the Mustang was already seeing quite a bit of track time, and the 428 Cobra Jet engine was powering 'Stangs' up and down drag strips all across the United States.

It was the year of the second major restyle of the car. Now even bigger, with the classic Coke-bottle shape, the Mustang was entered into the highly competitive Trans-Am racing series, and the Boss 302 was introduced as a homologation special. But Ford did not stop there. The Nascar racing series required manufacturers to sell a certain number of race engines to the public to pass homologation, but didn't specify which car they need to be in. Ford chose the Mustang, and the mighty 429 Nascar engine was shoehorned into the '69, creating the Boss 429.

The following model saw a minor styling change, with the '69's quad headlamps giving way to twin lamps, but it was 1971 that saw the final major restyle of the first generation cars. Going with a squarer design, the Mustang no longer resembled the 1964½ styling, but nevertheless was a well proportioned car, and its distinctive look was quite popular.

With changing emission mandates, fewer engine options were offered, but the popular 'Mach 1' option was carried forward from the previous years. 1973 would be the last year for the first generation cars, ending what would be the classic generation of Mustangs.

Shelby factor

One of the key reasons for the Mustang's popularity was the halo effect created by the Carroll Shelby-modified cars. Shelby, a former racing driver, already had close ties with Ford as he was putting its engines into AC bodies to create the Shelby Cobra. Iacocca was worried that the Mustang's lower performance, and the image of a soft car, would cause a drop in sales. He got Shelby to work his magic on the '65 Mustang Fastback.

Shelby lowered the weight and upgraded the engine, suspension and brakes. The end result: The GT350. The functional scoops, fat tyres and throaty exhaust note were captivating, and in the horsepower race that was brewing in Detroit, the lighter Mustang won. Shelby even created a batch for Hertz, the

car rental company, which allowed customers to rent them. There are countless stories of race abuse and part thefts on these rental cars.

One of the key elements of the Shelby cars was the difference in appearance. Employing fibreglass body panels, that also made the car lighter, Shelby opted for an aggressive look. In 1967, he used long Ford Thunderbird tail lights to replace the now-familiar three-bar units. And in 1968, the Shelby cars featured aggressive snake-like styling to go with its Cobra nickname. Going a step further, in the following years, the '69/'70 models looked nothing like their regular versions.

All these cars were built in limited numbers, and many were used by amateur and professional racers alike. It was the ultimate expression of the 'Race on Sunday, sell on Monday' mantra used by car marketers. By 1970, Shelby had a fallout with Ford and the two parted ways only to reunite in 2005 for the company's 100th anniversary and the launch of the fifth generation Mustang.

Mustang II and the 1970s auto crisis

With the oil crisis of the 1970s, new emission norms and the onslaught of imported cars in the United States that were smaller, cheaper, better engineered and, more importantly, frugal, Ford decided to make the second generation Mustang smaller too, basing it on the Ford Pinto platform.

The much smaller car had muted styling, and was geared more towards sports-luxury, than muscle—a word that was becoming taboo during the period. Engine options included an inline four and a V6, both with relatively low outputs, bogged down by emission control equipment. The Mustang II, as it was christened, is widely considered a low point in the history of the car. However, it did allow the Mustang name to be carried forward. And such was the weight of the name that Ford managed to sell 386,000 cars in 1974.

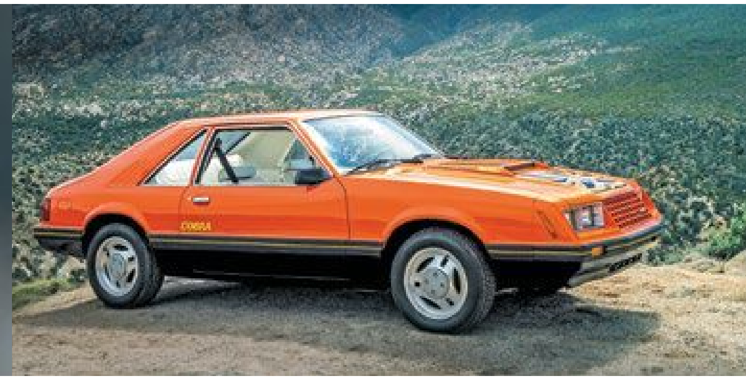
For the '75 model year, a V8 was reintroduced, but emission norms-mandated equipment made it heavy and low on power. In 1977, Ford introduced the Cobra II moniker, but it was just an appearance package. It, however, did make a limited number of a relatively higher performance Mustang, called the 'King Cobra', for the final year of production.

For all its sales, the Mustang II could never replicate the cult factor of its predecessor, yet it did leave behind a legacy of sorts, via its front suspension setup. The independent system, that didn't require a strut tower and used rack-and-pinion steering, has become one of the most widely used front-suspension units in the custom car community, used for modernising old cars and building hot-rods.

Return to form

The replacement for the Mustang II came in 1978 and was based on Ford's widely employed Fox platform. The platform became famous with the Mustang, and the third generation cars were affectionately called the 'Foxbody'. Slightly bigger than the Mustang II, the Foxbody had a more hatchback profile and an angled grill was used for the first time. Body styles included a notchback coupe, the fastback—which was more of a hatchback—and a convertible.

Engines were carried forward from the IIs, including the 302 Windsor V8, which in metric was now called a 5-litre. The Foxbody



At the concept stage, the Mustang was a mid-engine, rear wheel drive sports car (bottom left). The second generation Mustang (above left) also got a Cobra II variant (above right) which added some cosmetic upgrades to the regular car. In its third generation, the Mustang got a hatchback style profile and was called the ‘Foxbody’. In the ’90s, the Mustang underwent a complete redesign that people weren’t fans of (overleaf). The arrival of the fifth generation Mustang saw the return of the retro design and the Shelby badge (bottom right)

did not carry the iconic running horse logo on its exterior, but the V8 had a big ‘5.0’ insignia on its flanks, and was nicknamed ‘five-point-Oh’. Ford also gave the Foxbody a 2.3-litre inline-4 turbo engine, with similar output as the V8. In later years, an improved, high output version of this engine would become the most powerful in the lineup, gaining the SVO designation.

While not muscle cars in the ’60s sense, the Foxbodys were still popular. Their affordability, handling and a large aftermarket parts support helped keep their sales up, and retain a strong fan following, especially with those who grew up in the ’80s.

The fourth generation

The ’90s brought the widespread adoption of the front-wheel drive. The Mustang had avoided this thus far, which was good for packaging and economics, but not for sportscar dynamics.

Ford made a proposal to make the fourth generation a Mazda MX-6-based front-wheel drive car. But objections from enthusiasts made Ford rethink the decision.

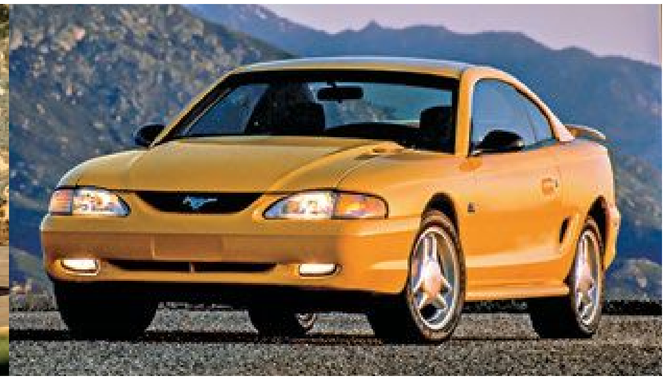
In the end, that car became the Ford Probe, and the new Mustang, codenamed SN-95, still rear-wheel drive, was launched in 1994, on a modified Fox platform. The styling of the new car was previewed by the Mach III concept, with the Mustang featuring soft curves, and wraparound headlights that were popular in the period.

There would be just two body styles—the ever popular convertible and a coupe. There would be no fastback for this entire generation. Power came from a base V6, and a range topping 4.6-litre V8 from Ford’s modular family. The long-running Windsor 302 V8 was finally dropped.

In 1999, for its mid-cycle facelift, the Mustang received some much-needed design updates, under Ford’s ‘New Edge’ styling programme. Gone were the soft curves, replaced with larger, squarer scoops and sharp cuts to the lights. But demand for the car was dropping and Ford began using various marketing tricks to keep customer attention.

Special variants were built, including those commemorating the movie *Bullitt*, and also the Mach I cars of the ’60s, featuring a working ‘shaker’ hood-scoop. The name came from a direct induction air-scoop mounted directly on the engine, poking out of a hole in the hood. Revving the engine would cause the scoop to shake quite dramatically.

The ultimate SN-95 Mustang would come in the shape of the SVT Cobra R. Built by Ford’s Special Vehicle Team, it would be the first Mustang to feature independent rear suspension. And the 2000 model year car featured a 5.4-litre V8 rated at 385 hp. It’s quite rare: Only 300 were made.



The retro years

Launched in line with the Mustang's 40th anniversary, the fifth generation car had a tremendous task in hand: To revive Mustang sale numbers. Born in a period when retro design was popular, the S197 Mustang carried a number of styling cues from the first generation cars, most notably the 1969 model.

With a quad round headlight setup for the GT, the Mustang was instantly recognisable as a modern take on the classic. Body styles were limited to the convertible and a notched fastback, reminiscent of the original '65 fastback cars. The base engine would be a V6, and the GT would again get the V8.

Surprisingly, Ford decided to continue with a live-rear axle, not the most sophisticated system, and critics did not hold back. Despite this, the Mustang sold in good numbers for the first few years, with more modest sales coming in after Chevrolet relaunched the Camaro, and Dodge, their challenger, as retro-styled muscle cars. Ironically, both companies did this after seeing the success of the retro Mustang, a repeat of what had happened in the '60s.

With so much history, Ford would launch a slew of special and limited edition models based on the fifth generation. It revived the Shelby, launching a 500 hp GT500, and an even more powerful 800 hp GT500 Super Snake. A rental version for Hertz was again produced, the Shelby GT-H, and popular names such as the California Special, the Cobra Jet, the Bullitt, and the Boss 302 were all revived. In the final years of production, a new 5-litre V8 was introduced. Nicknamed the Coyote, it brought back the famous 'five-point-Oh' moniker of the '80s.

50th anniversary and the sixth generation

With the car turning 50 in 2014, Ford went into overdrive to ensure the new sixth generation version would live up to the name and exceed enthusiast expectations. The biggest news to come from Dearborn, Michigan, home of Ford Motor, was that the new car would be part of the company's 'One Ford' plan. Under the plan, each new model would be designed to be sold in markets around the world. As a direct result of this, the sixth generation would become the first Mustang to be made right-hand drive from the factory. Internally codenamed S550, it includes the GT that will become the first Mustang to be officially sold in India later this year.

Launched as a 2014½, to commemorate 50 years, the new Mustang is a stylistic departure from the previous retro cars. It features Ford's new corporate design cues, including the trapezoidal grill, but its proportions are still very much Mustang, with humps and curves in all the right places adding to the drama. It comes with a proper fastback body, and for the first time in a series production Mustang, independent rear suspension.

Engines include a base V6, the Coyote 5.0, and a Ecoboost 2.3-litre turbo petrol inline-4, getting enthusiasts excited as the displacement matches that of the '80s SVO cars. But what really got everyone excited was the introduction of the Shelby GT350. Featuring a flat-plane crank shaft, the 'Voodoo' 5.2-litre V8 with its banshee-like wail can turn anyone into a Mustang-holic.

The essence of the Mustang does not lie in its ability to put out quick lap times or run the quarter mile in the low-teens; it lies in its ability to bring a smile to its owner's face

Legacy continues

But the essence of the Mustang does not lie in its ability to put out quick lap times or run the quarter mile in the low-teens; it lies in its ability to bring a smile to its owner's face. Move him in style, provide a fantastic soundtrack and make the neighbours jealous, all without breaking the bank. It may be argued that Hollywood has made it famous, but there is no denying that it fits all the parts it was cast for. It is one of those cars that can get away with not carrying its manufacturer's name.

As the sixth generation cements its position as the top selling pony car, and the Mustang remains a success, Ford will continue producing one of its most beloved models, and we will keep celebrating it. F

Field for

BY BERTRAND D'SOUZA

You can forget about following the speed limits on this route. At least I did. I confess I wasn't a model tourist on this road trip, but with this much epicness all around, I did get a bit overawed and over the limit.

Forgive me my transgressions, but I did make sure I wasn't a nuisance nor was I endangering other road users. And to those who might want to follow in my footsteps, be careful and be warned. Drive responsibly!

Now that I'm done preaching, don't forget to exercise your feet from time to time if you intend to follow my tread marks. The roads in the western parts of the US are long.

They extend for hundreds of kilometres in a straight line and, often, you will find yourself alone. So move your toes unless you want them to go numb. And specifically press your feet down, especially the right foot. It helps the blood rush from your toes to the brain. There's more exercise to be had in that driver's seat than if you walked the entire way.

As you push your right foot down, expand your lungs or the weight of the G forces this car generates will crush your thoracic cavity. I like the Mustang GT, it keeps you fit. And California, Nevada and Utah offer plenty of room to exercise in.

My story, however, begins in Los Angeles. Getting straight out of my flight, I picked up the Mustang GT 500 from WallyPark, a premium multi-storey car park just a few kilometres away from the airport. There were more Porsches and Lamborghinis parked in that lot than in any sportscar showroom anywhere in the world. It's a little intimidating to see everyone drive in or out of WallyPark in exotic cars. But then the valet rolled up in a metallic ruby red Mustang GT, a low thrum from the pipes screaming for attention. The Mustang, let me tell you, never felt out of place in that environment. The delicious exhaust burble, almost as if a thick broth were on a simmer, pop... pop... bubble... pop, got most heads in that parking lot turning towards it. I got a thumbs-up even before I could leave the parking lot.

The Mustang GT is the V8 powered pony, and is where serious firepower for the V8 range starts. Above the GT reside the Shelby GT350 and R versions and below it a V6 and

From left: Goldfield on the route between Wendover and the Death Valley National Park isn't a ghost town even though it appears to be one; Badwater Basin, the lowest place in the US, is 282 feet below sea level; and a replica of the Statue of Liberty stands at the New York-New York Hotel and Casino in Las Vegas. Facing page: The Mustang GT strikes a pose in front of the sand dunes in the Death Valley National Park

Speed!

A Mustang GT on a round trip from Los Angeles to Bonneville. This isn't your average steeplechase

2.3-litre EcoBoost-powered variant. The GT, which will be coming to India sometime later this year, displaces 5.0-litres and makes a satisfying 447 PS of power with an earth stopping 542 Nm of max torque. It may be a bit too much on Indian roads, but in the US, it's just perfect.

India is expected to get the automatic, but to my good fortune, I had the 6-speed Getrag manual. I dove into the cabin with my heart beating faster than the 6,500 rpm redline.

From Los Angeles, I hit I-15, which is the direct and easiest route to get to Las Vegas. It's also the quickest. Having left Los Angeles late in the day, I only managed to hit Vegas well after sundown. It's a five-hour drive, but extends when you have to keep stopping to refuel the Mustang GT. The V8 is thirsty and yet at a steady 110 kmph, you can get around 10.5 kmpl. Stretch your right foot further south when it's on the gas pedal and you can easily see it drop to under 5 kmpl.

Las Vegas miraculously emerges out of the desert like an oasis, all bright, shiny and glittering. The strip is undoubtedly where all the action takes place, but there is a lot more to Las Vegas than just the gambling. Massive parties, loads of entertainment and good food bring in millions of visitors every year.

I spent the night at the Luxor, a megalithic casino resort (it's the 20th largest hotel in the world) that's at the southern end of the strip. With over 4,400 rooms and thousands of guests, check-in was arduous, but I eventually got my room and crashed into a sleep so deep that I missed all the main attractions I was planning on hitting. Five hours later I woke up in the middle of the night, and headed out in search of a meal. The city was still gyrating and pulsating with energy, even as the sun threatened to poke its head back up above the horizon. The vastness and scale of everything in Las Vegas can make you feel lost, but it's also one of those cities where inhibitions run thin and you're

COURTESY: OVERDRIVE

never truly far from having a good time. That very morning, however, I was in the lobby waiting for my Mustang. Next stop, Wendover.

What makes Wendover special is its proximity to the Bonneville Salt Flats; it's the closest town to the International Speedway and a 15-minute drive gets you straight to the salt's edge. However, getting to Wendover is altogether a different story: 37 km from Las Vegas, you turn left off I-15 to hit the Great Basin Highway or US Route 93. This particular highway stretches for over 600 km before you turn right and eventually head further up north towards Wendover. The scale of this highway makes the Mustang feel insignificant. There's a quicker route—Highway 93. But if you aren't the faint hearted road tripper, continue straight on the 'Extraterrestrial (ET) Highway'. This highway, numbered SR 375, has had reports of strange sightings, and its proximity to Area 51 have led to it being called the ET Highway. I went down that road, but saw nothing.

SR 375 is an open highway with very little relief along it. But it's also a fantastic route to exercise the Mustang. There's enough and more space for it to stretch its legs and run. And let it run I did: Gently, at first, letting the low warble of the engine build up to its crescendo. The sweetest thing about the Mustang is that you don't really need to drop a gear on these roads. Simply step on the gas, and seconds later, you're already watching the horizon to spot anything that looks like a cop car waiting to reel you in as the needle in the speedo heads north and then east with remarkable pace. Of course, you could always drop a gear or two, causing the V8 to scream its heart out and make the Mars Rover stop in its tracks and look back towards earth.

The Mustang GT has the new generation of Ford's modular engine, dubbed the 'Coyote', which was built to take on the 6.2-litre V8 in the Camaro and the 6.4-litre Hemi V8 in the Challenger, Charger and the Jeep Grand Cherokee. Ford's V8 is spectacular: Brilliantly linear and effortless in any gear. The massive surge of torque peaks at 4,250 rpm but that also means you have about half of that, which is still a respectable 250 Nm or so available at around 2,000 rpm.

Drivability is incredible in this car, even in sixth gear. The Mustang is fast but not quick; it hasn't got a supercar-like energy to it—it's just too heavy for that. And yet, it's dramatic when you floor the pedal. You will build pace rapidly, and in doing so, you will have a sense of everything that's coming together in this car to build that pace. There's an inherent character that's highly addictive and grin-inducing, and you just want it to keep engulfing you all the time.

I drove into Wendover well past dark. Stopping for photographs along the way, and fuel and coffee halts can eat into your time, so you could plan on breaking this part of the route into two days. There are small affordable motels that are good to bunk in at night, but don't rely on getting gourmet meals. In fact, this route has limited facilities, so it's best to stock up on anything you might need along the way, including water and something to snack on.

Since Wendover is up north, the temperature dips quite low. I wasn't surprised to see a thin layer of frost on the windscreen when I got into the Mustang the next morning. Quick clean-up, and it was time to head to the Bonneville Salt Flats, home of the International Speed Week, the hallowed ground for speed record buffs.

An interesting side note here: Decades ago, some speed fanatics were looking for a large and flat piece of land to break a speed record on. The three places they zeroed in on were Bonneville, some place in Africa and India's Rann of Kutch. Two of these were British colonies but the third was New England. It was also phenomenally expensive at the time for the British to bring their attempt to India, and Africa was just too tough to get into. That's how these early speed freaks went to Bonneville. And as the story goes that is how the Bonneville Salt Flats began their trip to epicdom.

Now the Mustang is no stranger to Bonneville. Over the years it has been part of numerous record runs. The road leading up to the salt flats once you turn off the interstate is long.

From extreme left, overleaf: On the Extraterrestrial Highway, the rest stops are few and far between; ranches and B&Bs like A Cowboy's Dream are ideal halts to spend the night; a huge fibreglass cow alongside a windmill welcomes travellers to the Longstreet Inn and Casino near Death Valley; 7,800 square kilometres of Death Valley are punctuated with plenty of gorgeous landscapes

Smooth and straight, it's good enough to do a top speed run for a stock car at least. But I'm not attempting that.

And yet I can't resist the lure of the Mustang's line lock feature. It's an amazing feature that allows the car to lock up the front brakes just before you shoot off on a drag run, for instance. It allows you to burn out the rear wheels and will continue to do so until you switch it off. What speeds did I do? Suffice it to say I wouldn't risk hitting the Mustang GT's top whack of 263 kmph, settling for just under 250 kmph to slake my thirst.

Resisting the urge to do more burnouts, I headed towards the end of that strip of tarmac where a bullet-ridden board announces to the world that this is the Bonneville Salt Flats. I gingerly took the Mustang off the tarmac and onto the salt flats. Unfortunately for me this wasn't the season to be venturing out too far onto the flats. It was wet, and the surface slippery. There was a good chance my rear-wheel drive Mustang would get stuck. If you do get stuck, it's going to cost you upwards of $700 to get out, depending on how far you are from the main road.

Still I took a chance, at least to get that one photograph. This is the world's temple of speed and the Mustang looked perfectly at home on those flats. I spent an hour-and-a-half on that desolate strip of Bonneville, with nobody around for miles. It's a stark, blazing white expanse of salt, and the Mustang was the only bit of colour for miles.

In August, this place is transformed, as thousands assemble to watch some of the fastest cars make an attempt at setting their own personal records at the Speed Week.

Having worshipped the gods of speed at the temple of Bonneville, I set off for my next destination, Death Valley. This desert valley, bordering the state of Nevada and California, got its name from prospectors in 1849 during the gold rush, after 13 pioneers perished in an expedition into this region. Death Valley is one of the hottest places on earth, with temperatures reaching a recorded 58 degree Celsius in summer. It's also the lowest point in the US: Badwater Basin, a depression in the eastern part of Death Valley, is 282 feet below sea level. Death Valley has all sorts of geological formations within its 3,000 square mile boundaries, making it one of the most-travelled-to destinations in North America.

The drive into Death Valley is equally spectacular if you get in from Beatty, a small town north of Death Valley, instead of from the Amargosa Valley. From Beatty the road descends into Death Valley and it has a superb flow to it, twisting and turning through the Grapevine Mountains. It gave me an opportunity to sample the dynamics of the Mustang GT, which has given even the Europeans something to be excited about.

The 2016 Mustang, in fact, moved away from its more traditional chassis setup to a more contemporary type. It works wonderfully; except, don't expect M3- or RS5-type dynamics. For a grand tourer with 1,680 kilos of kerb weight, a hood that extends into tomorrow and the aerodynamics of a good-looking brick, the Mustang GT has tremendous poise and confidence. You don't go pushing this car hard into corners of course, but ease back a bit on the gas and let it deliciously flow from one bend into another. It's got grace and with a reasonably well weighted and direct steering, it is fun.

If you're feeling really, really brave, switch off the traction control and let those 400-odd horses do their thing at the rear wheel. It's easy to get this car sideways, very easy, and thanks to some great stopping power courtesy those huge 4-piston 14-inch vented rotors at the front and single piston 13-inch rotors at the rear, there's a safety net to rein in the hooliganism. The Mustang GT also has selectable drive modes, from comfort to sport, and it lets you mix up combinations.

Death Valley was just too large to explore in the time I had. There is still much more to see. And while this time I could not get accommodation at the famous Furnace Creek ranch, having to settle for a B&B outside Death Valley, the next time I'm going to be better organised.

That only means I'm going to come back again. Back to ride the Mustang GT. To play my chips. Worship at the temple of speed, and then descend into the depths of Death Valley. F

'I Would Rather be Remembered as an Author, Social Worker'

In the first of a series of excerpts from Gunjan Jain's book ***She Walks, She Leads***, the author speaks to Sudha Murty, chairperson of the Infosys Foundation

Mrs Murty is many things... She is a great seeker, incurable dreamer, tireless doer, passionate teacher, eternal student, storyteller, story lover, selfless giver, childlike life enthusiast, engineer, homemaker... and so very human. But above all, she is an inventor... a leader... because she is inventing the future of those at the fringes of survival in India, slowly changing their what-is to what-could-be.

—Vishal Sikka

Sudha Murty married NR Narayana Murthy in February 1978

On a warm April afternoon in 1974, at the Indian Institute of Science, Bangalore, a student chanced upon an advertisement by Telco (Tata Engineering and Locomotive Company; today Tata Motors) for a junior engineer. Her attention, however, was drawn to the disclaimer: Lady candidates need not apply.

Sudha Kulkarni felt the advertisement seemed to mock her achievements as an engineering graduate and gold medallist from Hubli and her history of being the only woman student on two all-male campuses. That it came from as reputed a company as the Tatas fuelled her ire and she shot off a postcard to JRD Tata, lecturing him on gender equality. A few days later she received an interview call from Telco.

✦✦✦

As I negotiate the Bangalore traffic en route to Infosys Foundation, I ponder over the rare quality that distinguishes this pioneer—her intentions are as peerless as her actions. Sudha is a visionary who has taken tough decisions and set both benchmarks and an example throughout her life: Not only does she do, but she thinks very carefully about why, and then articulates that philosophy to the world.

Walking into Sudha's third-floor office a spark of that spunky young woman still glows in the warm smile of the charming lady, in a pretty cotton sari, who greets me. Sudha's office is functional but welcoming, stationery stacked neatly on the desk. Tata Group Founder Jamsetji Nusserwanji Tata looks out from a frame beside one of JRD. Sudha's only accessories are a small bindi and simple mangalsutra; her grey hair is tied back neatly, adorned with a solitary fresh flower. She looks exactly as she does in every photograph and reminds me of what fashion designer Coco Chanel said—'Simplicity is the keynote of all true elegance'.

Early into our meeting, I realise that Sudha is curious and astute, albeit polite. Aware of her reputation of being thorough with her research, I am not surprised when she asks me everything about my book before she begins the interview. After my answers to her frank questions satisfy her, she settles back and speaks with the skill of a practised raconteur. Just as after a good book one feels like the author is an old friend, listening to Sudha narrate her life makes me fight the urge to give her a hug.

The Student Life

Sudha, the second of four siblings, was born in Shiggaon, Karnataka, to Dr RH

Kulkarni, a professor of gynaecology, and Vimla, a homemaker. Hers is a family that respects education and erudition. “My father didn’t buy a refrigerator for years, but our library was vast. For us, academics were not only a priority but a way of life.”

Sudha studied engineering in the late-’60s, when it was an unheard-of vocation for women. Apart from being stared at constantly, she had to walk a mile just to find a washroom she could use. With characteristic cheerfulness and scrappiness, she crossed those hurdles and now chooses to remember that time as idyllic. It was hard work, however. Driven by her desire to prove her mettle and silence the patriarchal voices that dogged her, Sudha graduated top of her class.

Buoyed by that success, she decided to pursue a postgraduate degree in computer science. Again, at the Indian Institute of Science, she was the only girl in class; Sudha eventually graduated as a topper, the recipient of a gold medal from the Institute of Engineers and a silver medal from the Karnataka government.

At Telco, the panel that interviewed her told her that while her academic record was impressive, she may be better suited to a research job, rather than one on a factory floor. “I replied that they had to start somewhere, else no woman would ever work in their factories,” she tells me. Sudha got the job and moved from Bangalore to Pune.

The Unconventional Bride

The job that Sudha had never coveted led her to the man she eventually married. When I ask Sudha about Murthy, she blushes at the memory of how they met. They had a common friend who worked in Telco, from whom Sudha often borrowed books; several of these bore the signature of NR Narayana Murthy. “In my mind’s eye I pictured Murthy as someone bold and confident, but when we eventually met he turned out to be a shy, soft-spoken introvert. We started meeting regularly as part of a group and much later alone.”

The proposal when it came was as unusual and original as the couple. One day, when the two were in a rickshaw rattling through the streets of Pune, Murthy turned to Sudha and solemnly declared, “I am 5 feet 4 inches tall. I come from a lower middle-class family. I can never be rich. You are beautiful and intelligent. You can get anyone you want. But will you marry me?”

Sudha accepted and they married on February 10, 1978.

Sudha and Murthy have dissimilar personalities, with a common passion for books. Sudha is an extrovert who loves travelling and Indian classical music; Murthy prefers being home and enjoys Western classical music. So is it a classic case of opposites attracted to one another, I ask Sudha, who replies with a smile, “We are opposites that complement each other. He is an introvert, but is romantic and sensitive, too. The inscriptions in the books that he presents me with, always say From Me to You or To the person I most admire.”

The Seed Investor

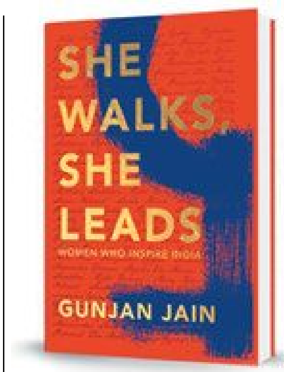
The idea of Infosys was birthed on a cold day in January in 1981 by Murthy and six of his software engineer colleagues in the Murthys’ house in Pune. Six months later, it was registered as a private limited company, with startup capital provided by Sudha.

While she is modest, Rohan underscores his mother’s immense contribution: “Without my mother’s support I am quite confident that my father would not be very successful. I have seen in transaction after transaction, in event after event, that my mother is the backbone for my father, Infosys, our family. The lesson that I have learnt is that without such support it is impossible for anybody to build anything.”

Given her own brilliance, I ask how Sudha feels about being known as Narayana Murthy’s wife; her cheerful reply is—“I would rather be remembered as an author and social worker than the wife of a billionaire business tycoon.” In fact, she spells the family name differently because she was told that the ‘h’ is unnecessary.

Over the years, Sudha has been very clear that she is her own person—a woman who plays various roles but who refuses to be told who she ought to be.

I set out to meet Sudha Murty because I wanted to understand what compels her to lead the extraordinary life she does. I get my answer when she says to me—“It was destiny that Murthy and I were chosen to be successful and wealthy. We are trustees of this wealth and it is meant to be used in a fruitful manner.” Sudha’s personal and professional lives—as also that of her family—are guided by a spiritual compass, and reflect the thoughts of Lao Tzu, the Chinese philosopher-poet who said, “I have just three things to teach: Simplicity, patience, compassion. These three are your greatest treasures.” F



She Walks, She Leads
Women Who Inspire India

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COURTESY: SHE WALKS, SHE LEADS

San Francisco's New Masterpiece

Thanks to a handshake deal between billionaire **Charles Schwab** and Gap founder **Donald Fisher**, SFMOMA is the envy of the art world

BY JONATHON KEATS

Size mattered: After a three-year, $610 million expansion, SFMOMA opened in May with a dramatic new building designed by the Norwegian architectural firm Snøhetta

In 2007, Donald Fisher, founder of Gap, offered his enormous contemporary art collection to San Francisco, proposing to build a 100,000-square-foot museum in the historic Presidio. Featuring more than a thousand paintings and sculptures by blue-chip artists, including Andy Warhol, Ellsworth Kelly and Richard Serra, the collection was admired by art experts who had visited Gap's San Francisco headquarters. But local preservationists were loath to see a boxy modern museum amid the Presidio's 19th-century army barracks and waged war with Fisher for two years.

The philanthropist surrendered. He withdrew his offer, provoking rumours that his art might go to Oakland, or even St Paul, Minnesota. But billionaire investor Charles Schwab had other ideas. A close friend and business associate of Fisher's, Schwab was also chairman of the San Francisco Museum of Modern Art (SFMOMA). "I started having many conversations with Don to convince him to bring his collection to SFMOMA," Schwab recalls. The conversations took on greater urgency as Fisher was coping with terminal cancer. A handshake deal was made just days before his death in September 2009.

Nearly seven years later, as a vastly expanded and reimagined SFMOMA—now the largest modern art museum in the US—reopens its doors, Schwab's intervention is viewed as a masterstroke. "Don trusted Chuck," says Neal Benezra, SFMOMA director. "I'm quite certain that Don's knowing that Chuck was committed to the Fisher collection and the growth of the museum allowed him to have confidence at the end of his life that his collection would be in great hands at SFMOMA."

Schwab's commitment to SFMOMA dates back to the 1960s, when he was just getting started in business and the fledgling museum occupied rented space in the War Memorial Veterans Building. "I started visiting with my children," he says. "Growing up where

Talk to Chuck: Charles Schwab (with wife Helen at the SFMOMA ball) landed Gap founder Don Fisher's art collection for the museum for a century. Right: Richard Serra's 'Sequence'

I did [in Santa Barbara], I hadn't had much access." Following his $55 million sale of Charles Schwab & Co to Bank of America in 1983, Schwab had the financial resources to support the museum more directly, and his commitment only became stronger after he orchestrated a management buyback and IPO of his eponymous corporation in 1987. He soon went to work raising funds for a new SFMOMA building, teaming up with Don Fisher (who was already a museum trustee).

Designed by the Swiss architect Mario Botta and located in the South of Market district, the 225,000-square-foot museum opened in 1995. Almost immediately, Schwab and Fisher set out to find great art to fill it. They had a natural rapport, which they had bolstered by serving on each other's corporate boards. "Our shared quest for contemporary art was an important part of the relationship," Schwab says. Adventures together included a jaunt to Japan. "We went to buy art from a Japanese bank that had a vault full of art that had been securing debt," he recalls. "A lot of the art we collected on that trip would go to the museum."

Of course, landing the entire Fisher collection for SFMOMA was a deal of a different order. By agreement with the Fisher family, the museum will hold the collection in trust for at least the next century and must fulfil a number of requirements, such as a dedicated exhibition every decade. As Schwab explains, "Don had two very clear things he wanted to accomplish with his collection: To show the art regularly and to keep the collection together."

And 225,000 square feet weren't going to suffice—the scale of Fisher's collection alone warranted more space. Together with Benezra, Schwab started interviewing architects about expanding SFMOMA.

They talked to nearly 40 firms—including Diller Scofidio + Renfro and Foster + Partners—before settling on the relatively obscure Norwegian firm Snøhetta (then best known for designing the Oslo Opera House). "We became convinced that they weren't about a signature look but would listen and try to establish a building that would accomplish our goals—to be more open, more accessible," Schwab explains.

The architects came up with a design that featured multiple entrances, free public exhibition spaces and visibility of art from the street, enfolding the post-modern Botta building within a sleek new ten-storey edifice. With a model packed in Benezra's trunk, Schwab and he, along with Robert Fisher (one of Don's sons and museum president), began making house calls to philanthropists and business leaders, seeking to raise $610 million. Schwab was tireless—and highly persuasive. "People have so much respect for Chuck that it's really hard to say no to him," Benezra notes.

The deep wells of support were spectacularly on view in early May at the SFMOMA Modern Ball celebrating the museum's reopening. Among the attendees were tech royalty such as Twitter co-founder Evan Williams, Instagram co-founder Mike Krieger, Zynga co-founder Mark Pincus and Yahoo CEO Marissa Mayer. They cavorted through galleries filled with newly unveiled paintings by Jackson Pollock, Francis Bacon, Jasper Johns and Brice Marden, and contributed an additional $2.5 million to the museum's education programme.

For Schwab, the strong tech world support for the new SFMOMA seems only natural, given that contemporary art is so much about innovation. In fact, the interest of Silicon Valley's titans mirrors his own passion for contemporary art. "It is similar to how I think about business," he says. "They're both the art of the possible." F

SCHWAB: DREW ALTIZER

THOUGHTS
ON SEARCH

The way to find a needle in a haystack is to sit down.

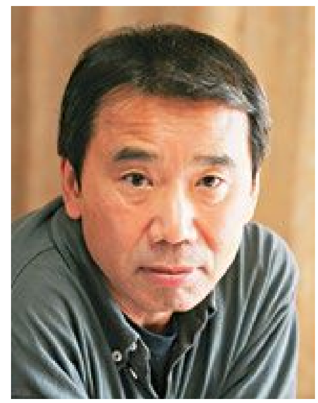
—BERYL MARKHAM

Google can bring you back 100,000 answers. A librarian can bring you back the right one.

—NEIL GAIMAN

The search for the truth is the most important work in the whole world, and the most dangerous.

—JAMES CLAVELL



What we seek is some kind of compensation for what we put up with.

—HARUKI MURAKAMI

A man travels the world over in search of what he needs and returns home to find it.

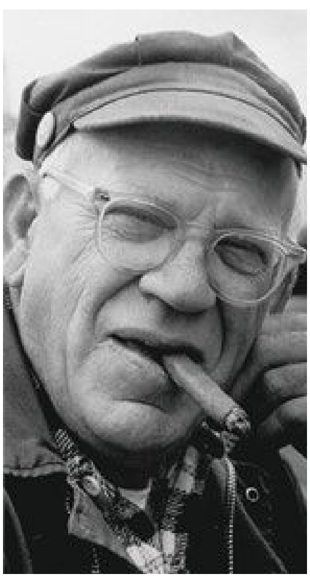
—GEORGE A MOORE

If we become increasingly humble about how little we know, we may be more eager to search.

—JOHN TEMPLETON

When you go in search of honey you must expect to be stung by bees.

—JOSEPH JOUBERT



The search for happiness is one of the chief sources of unhappiness.

—ERIC HOFFER

If you do not expect the unexpected you will not find it, for it is not to be reached by search or trail.

—HERACLITUS

The ultimate search engine would basically understand everything in the world, and it would always give you the right thing. And we're a long, long way from that.

—LARRY PAGE

When trying to locate something, search your mind first.

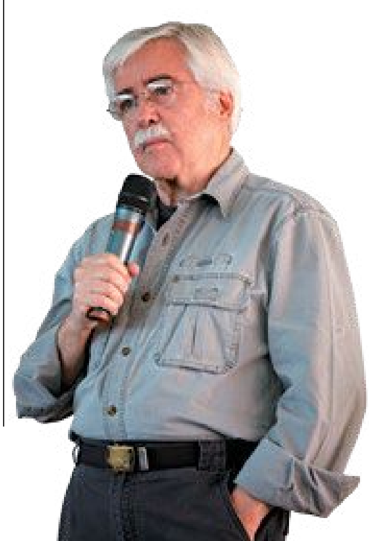
—CRAIG BRUCE

He who would search for pearls must dive below.

—JOHN DRYDEN

Be careful going in search of adventure—it's ridiculously easy to find.

—WILLIAM LEAST HEAT-MOON



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