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# INDIA Forbes

## Breath of Lifetech

From drug research and agri-biotech to portable medical devices, deep-science entrepreneurs are venturing where few have tread before

(From left)

**VIJAY CHANDRU**  
Strand Life Sciences

**TASLIMARIF SAIYED**  
C-Camp

**ANAND MADANAGOPAL**  
Cardiac Design Labs

**ANAND ANANDKUMAR**  
Bugworks Research



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Tablet Edition

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The US FDA approval for Biocon's biosimilar puts India on the global map, says its chairperson and MD Kiran Mazumdar-Shaw. The Union Budget is keenly awaited as it's the last before the 2019 general elections

# The Life in Tech

Two decades ago, Indian pharma appeared poised for its next big leap. After making a mark on the global stage with generics pharmacy, local drugmakers now seemed ready to pursue a more grandiose dream: of drug discovery. Dr Reddy's led the way, followed by the likes of Ranbaxy, Piramal Enterprises, Torrent and Wockhardt, among several others who fancied their chances at discovering and developing a proprietary new chemical entity. India was expected to develop and take to market a drug at a fraction of what it would take Big Pharma (over \$1 billion then).

By the end of the oughties, reality set in as a string of candidate compounds bit the dust at various stages of development. Strategies have since been rejigged, ambitions scaled down and large-scale discovery efforts are now restricted to a handful.

A few years before this apparent meltdown, the daughter of a brewmaster had begun to 'pivot'—it wasn't quite a buzzword then—from a maker of enzymes to something more ambitious. Kiran Mazumdar-Shaw had decided she wanted to be "one of the top ten biotech companies of the

world" (as chronicled in Seema Singh's *Myth Breaker: Kiran Mazumdar-Shaw and the Story of Indian Biotech*).

Alongside, a bunch of startups and small biotech companies were going out on a limb to succeed where the frontline pharma majors had hit a brick wall: Drug discovery and development. It is a high risk, high return gambit, and those who had written off Mazumdar-Shaw and her tribe a decade ago may have, in end-December 2016, sat up and noticed when Biocon became the first company to have a biosimilar approved in the US, for treating breast and stomach cancers. That still isn't in the realm of new drug discovery but, as our Tech Editor Harichandan Arakali puts it: "It (the biosimilar) brings Biocon a step closer to the next big challenge: To build a truly original bio-drug for markets all over the world." According to Differding Consulting, a Belgian consultancy that specialises in pharma R&D, "the increase in development compounds coming out of India is currently entirely driven by R&D-focussed biotech companies".

To be sure, innovation in healthtech today is taking place in areas beyond drug discovery. Mazumdar-Shaw calls

this space lifetech. In our cover story headlined 'A Breath of Lifetech', Arakali checks out a variety of deep-tech and deep-science initiatives. The ventures—many of them startups—and indeed some ideas still on the drawing board have huge potential. Now only if there were adequate investors willing to see them through.

One investor who isn't shying away from loosening the purse strings in India is Masayoshi Son-founded SoftBank. It's, however, unlikely to bet on hidden gems—in healthtech or elsewhere—preferring to write out big-ticket cheques for stakes in market leaders. Don't miss Sayan Chakraborty's take on why SoftBank is pursuing the 'big is better (and safer)' strategy.

It's that time of the year to dive into what investors—big and small, direct and portfolio—look ahead to with enthusiasm: The Union Budget. A year ahead of the General Elections, will the finance minister be nudged towards populism or prudence? For answers to what to expect, check out our pre-budget special, which includes a sectoral analysis of challenges and expectations and an interview with Commerce Minister Suresh Prabhu. Over to February 1.



Best,

*Brian Carvalho*

**BRIAN CARVALHO**  
Editor, *Forbes India*

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# Forbes<sup>INDIA</sup>

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Deep science innovations, from drug research and biotech to portable medical devices and green solutions, have finally caught the attention of people who matter. It has triggered an influx of novel ideas, auguring well for the broader ecosystem

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Anand Anandkumar;  
(Sitting, from left): Vijay Chandru  
and Anand Madanagopal



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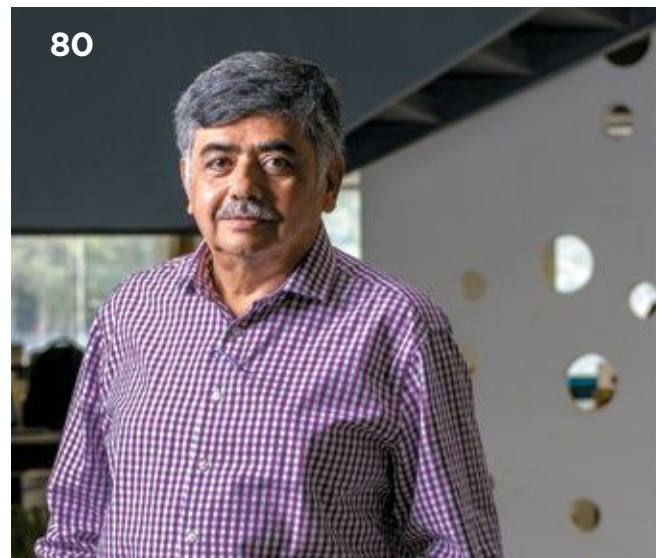
It is imperative for the finance minister to stick to fiscal deficit targets, revive the rural economy and fuel growth with green energy



Former media entrepreneur Arianna Huffington



Kiran Mazumdar-Shaw, CMD of Biocon Limited



Bhaskar Bhat, managing director, Titan



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# Readers Say

## DEGREE TO RECRUITMENT

Refer to 'Lessons To Be Learnt' (Issue dated January 19, 2018). An MBA degree isn't always a passport to a good job. Only a select few from the top MBA institutes manage to get a good deal as far as jobs are concerned. The time has come for the government to formulate a policy to have a common examination for all the recognised MBA colleges of the country. This is the only way to maintain consistency and also a high standard of examination and knowledge. There is one institute for chartered accountants which controls the examinations at an all-India level. No wonder, they score over MBAs when it comes to jobs.

*Mahesh Kapasi, via email*

## STAR QUALITY

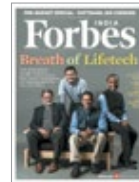
Refer to 'Beyond Boundaries' (Issue dated January 5, 2018). Anushka Sharma's frankness and forthrightness give a glimpse into the easy-going person that she comes across, both on and off screen. It came as a breath of fresh air to know that she gives great importance to her growth as a human being despite being such a successful actor. Her take on dealing with criticism was interesting too. She's steered clear of taking the comfortable path as far as her career choices are concerned. It shows that she is not afraid of failure and is willing to offer something new with every project of hers. That's a nice quality to possess.

*Rohan Paleja, via email*

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**Network 18**



**Winds of Change**

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**READY FOR SALE**

# Flying High with FDI

*Just how attractive is Air India for foreign investors?*



**A DECADE AFTER AN** ill-fated merger threw national carrier Air India into a tailspin, the Narendra Modi government has given it a new lease of life. On January 10, the government decided to allow foreign direct investment (FDI) of 49 percent in the airline. That means a foreign player could end up owning a notch less than half of the flag carrier, by tying up with an Indian company.

Already, the Tata Group and InterGlobe Aviation, which owns IndiGo, have expressed interest in buying the beleaguered airline. Air India has a debt of over ₹50,000 crore, which it picked up after a merger with domestic carrier Indian Airlines to create

the National Aviation Company of India Limited (NACIL) in 2007. At the time, Air India only flew international routes.

"There are many reasons for an investor to buy Air India," Mahantesh Sabarad, head of retail research at Mumbai-based SBICap Securities says. "Apart from the large fleet that it has

[119 aircraft, excluding its subsidiaries], the airline also has a number of bilateral rights and slots at some of the biggest airports in the world. But, debt is a big overhang and unattractive. Therefore, the government needs a mechanism to sweeten the debt for the buyer."

The airline has a 13.6 percent share in India's domestic aviation market. Last year, rating agency ICRA said that Air India also had the largest share in ferrying international passengers.

"India is one of the fastest growing aviation markets in the world and there will be many companies willing to buy Air India," says Mark

Martin, founder of Dubai-based Martin Consulting. "Any buyer will be able to start operations from day one as there is no startup cost or upkeep cost. The airline is a [potential] money-spinner and the buyer will have access to a large number of countries [around 40]."

Domestic air travel in India is expected to grow 9.5 percent annually between 2011 and 2031, according to Airbus.

It is not just India's aviation market that the buyer will have access to. The airline owns some of the most expensive real estate in India and abroad, and also operates ancillary services. For instance, Air India Air Transport Services (AIATSL), its ground handling arm, enjoys a near monopoly. The airline is also a member of the lucrative airline network Star Alliance.

"The sale will attract cash-rich companies such as Etihad and Qatar Airways," says Martin. "[But] you need to invest nearly \$20 billion over the next few years in the company and it would take over 50 years to recover. So, it is a prized asset, but not many investors have the appetite to spend so much cash in one go."

—MANU BALACHANDRAN

**DRIFTING IN A SKY OF RED**

Air India's financial numbers (₹ cr)

YEAR	REVENUE	NET PROFIT
2013-14	19,480.7	-6,279.6
2014-15	20,613.6	-5,859.9
2015-16	20,526.1	-3,836.8
2016-17	22,146	-3,643

**Sources:** Annual report, Parliament questions

# LeaderBoard

17%

Share of electricity that states must purchase from clean energy producers in FY19, as per the centre's Renewable Purchase Obligations (RPOs)



A SECTOR IN FLUX

## Winds of Change

*New auction-based regime for wind projects has led to lower tariffs*



### THE EARLIER SITUATION

Wind power producers were always paid at a pre-determined rate for the power they produced (feed-in tariff). But this allowed producers who could develop a site as a monopoly to pad costs and accrue returns far in excess of what a utility could expect.

Producers argued that setting up a wind site was more complex than setting up a solar site. At the same time, state electricity boards were scrambling to procure power from renewable producers. This allowed producers to get away with quoting higher tariffs.

In late 2016, the government said it intended to move from feed-in tariffs to a reverse auction method.

### WHY THE SECTOR FACES HEADWINDS

Once the government announced its intent to move to reverse auctions, there was a huge slowdown in orders.

"The government's intent to move away from regulated tariffs to reverse auctions was reasonable, except that individual states leapt to abandon current policies based on regulated tariffs even before their sunset date," says Kameswara Rao, leader, energy utilities and mining, PWC India.

States awaited clarity on the reverse auction guidelines and overnight stopped entering into any power purchase agreement. As a result, there were no

auctions in the first half of the year resulting in a large inventory build-up at the manufacturers' end.

Several faced working capital issues while they awaited clarity. When auctions for wind power were done in October, the bid received by the Solar

Energy Corporation of India for 1 GW of projects was just ₹2.64 per unit.

### WHAT NEXT?

There is still concern about the lack of clarity regarding the quantum of auctions. "The pipeline visibility is not there and this has led to a build-up of inventory. This can impact the level of innovation in the wind sector as companies

**"Auctions will weed out inefficient players and lower tariffs will eventually expand the size of the market."**

—Devansh Jain  
Whole time director,  
Inox Wind

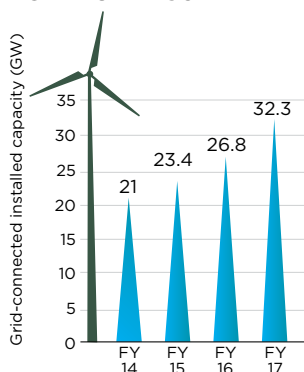
cut back on research," warns Vivek Sharma, senior director, CRISIL Infrastructure Advisory.

However, the market expects it to be business as usual once the auction process settles down. "The reverse auction mechanism has its issues. But these are temporary. As the sector matures further, and more capacity is offered up through auctions, the process should become robust and bids should become more realistic," says Ravi Kailas, chairman, Mytrah Energy (India).

Lower margins also mean that players with lower debt can bid aggressively, leading to consolidation in the sector.

—SAMAR SRIVASTAVA

### GRADUAL ASCENT



Source: Ministry of New and Renewable Energy

# LeaderBoard

**\$90 mln**

The amount raised by Hakuto, a Lunar XPrize finalist from Japan, for its lander and missions. It was to use the same rocket as TeamIndus for its lander



## SPACE STARTUPS

# Celebrating TeamIndus

*India's first private effort to land a rover on the moon seems to have gone awry, but here's why it is no cause for disappointment*

**"FALCON HEAVY GOES vertical,"** billionaire entrepreneur Elon Musk recently tweeted, with a short time-lapse video. The rocket, built by Musk's company SpaceX, will soon go on its first test flight, and, if all goes well, it could be the rocket that takes humans to Mars, one day.

Such dreams are possibly what propel the founders behind the 10 space startups in India—there are more than 1,500 globally—to one day build an Indian SpaceX or Blue Origin that can join the Indian Space Research Organisation (Isro) in taking India's space leadership into the next millennium.

For now, Isro, which launched its 100th satellite on January 12, remains the only game in town. Stellar though its role has been thus far, Isro has a very different approach in comparison to Nasa that has struck deals with many private enterprises.

Therefore, what's a little lost in the disappointment over TeamIndus reportedly pulling out of the Google-backed Lunar XPrize contest is that they did come quite far. Especially for an Indian startup that dreamed of delivering full programmes—building and launching a satellite,



**Reaching for the moon: TeamIndus members (from left) Sridhar Ramasubban, Rahul Narayan, Sheelika Ravishankar and Dhruv Batra**

and not supply piecemeal components to ISRO.

TeamIndus actually made it to the final 10—from among 29 contestants—then remained in the final five, and won one of the milestone prizes, leading up to the actual launch date. The competition required contestants to build, launch and land a rover on the moon, for it to then cover 500 m on its own power and send back pre-designated data.

And the effort had to be privately funded. Indeed, chief among TeamIndus's reasons for pulling out seems to be their inability to raise money to pay ISRO for the PSLV rocket they

would need, according to a report in *The Ken*.

TeamIndus, or Axiom Research Labs, the company behind the project, had estimated it would need about ₹450 crore, but it reportedly managed to raise only half the amount. Axiom Research Labs was started by IIT Delhi alumnus Rahul Narayan, who, in 2010, was

**"The story of TeamIndus is a call for getting things fixed at many levels in India."**

**—Narayan Prasad**  
founder, Satsearch

the last to register for the Lunar XPrize, three years after it was announced.

Narayan (44), through an external PR agency, declined to comment, in response to a *Forbes India* email. He was inspired by the Ansari Prize, in 2004, he had said in an interview to *Forbes India* last June, to give up his software career and take the plunge to start Axiom Research.

"The story of TeamIndus is a call for getting things fixed at many levels in India," wrote Narayan Prasad, co-founder of Dhruva, a private Indian space startup that is trying to build its own satellites, in an email from Berlin. Prasad now has a new company in Berlin called Satsearch, registered in the Netherlands, which has an agreement with ISRO's commercial unit, Antrix Corporation, to sell Indian space hardware overseas.

There needs to be a strategy to scale up space startups in India, with money from venture capital and private equity firms, as well as multinational aerospace companies, Prasad argues. Airbus Ventures funding Japan's InfoStellar, is a good example, he writes. India's space effort could yield a \$10 billion economy by 2025, creating more than 1 lakh jobs, he adds.

Such brave new collaborations augur well for India's space future, but they need more backing. Hopefully, TeamIndus will find it, and keep going.

—HARICHANDAN ARAKALI

NISHANT RATNAKAR





## LIFE AFTER DEBT

# Insolvency in Motion

*Private equity firms, asset reconstruction companies and the promoters themselves are the ones likely to play a leading role in the insolvency resolution process*

**IN EARLY JANUARY**, NEWS of Anil Agarwal-backed Vedanta Resources emerging as a bidder for debt-laden Electrosteel Steels sent the latter's stock soaring. While Vedanta wasn't the only bidder—Edelweiss Asset Reconstruction Company, Tata Steel and Abhishek Dalmia-promoted Renaissance Steel were also in the fray—the process marked the beginning of proceedings under the Insolvency and Bankruptcy Code (IBC).

If the Electrosteel bid goes ahead (the insolvency professional could still reject the bids) it would be the first time an Indian company is sold after ousting the promoters and the lenders taking a significant haircut on the



## THE CASE OF SUNEDISON

In June 2016, SunEdison, which once aimed to be the world's largest clean energy company filed for bankruptcy. The process was slowed down due to a number of lawsuits filed by shareholders who saw their investments in the company written down. Brookfield bought SunEdison's arms TerraForm Power and TerraForm Global for about \$1.7 billion (total asset sales totalled \$2.3 billion) bringing the bankruptcy to an end on December 29, 2017. —SS

₹10,000 crore (₹13,000 crore with interest) loan due. *The Economic Times* reported Vedanta's ₹4,500 crore bid as the highest. While the RBI has released two lists of companies that would go through the insolvency route *Forbes India* looks at three possible scenarios.

First, the promoters after paying off the interest on the outstanding loan emerge as winners of the

bid. This allows them to restructure their dues to suppliers and emerge with a leaner and fitter balance sheet but with a shrunk business. Take for instance SunEdison, which emerged from bankruptcy in January after selling \$2.3 billion in assets mainly to Brookfield Asset Management. The smaller SunEdison extinguished the stock held by common stock holders and is now a

private company. Similarly, equity holders in Indian companies could also see their holdings diluted. Market regulator Sebi is yet to issue specific rules in this regard and it is likely that the rights of small shareholders will be protected.

Second, private equity funds put in bids for assets that are available at a discount. They typically have a team that takes over management, turns the asset around and preps it for an eventual sale. Again, in January, Brookfield Asset Management entered the nuclear power sector with its purchase of the bankrupt Westinghouse Electric Company for \$4.6 billion. The deal was Brookfield's biggest ever. In addition to private equity funds there are also vulture funds that take over companies at a steep discount (at times 80-90 percent) and then strip assets and sell them on a piecemeal basis.

Third, there are asset reconstruction companies (ARCs), which in the Indian context could have a significant role to play. They'd be particularly relevant for companies where the banks are sceptical about attracting quality bids. In such a situation, banks could either sell these loans to an ARC in exchange for 15 percent of the consideration or they could initiate insolvency proceedings at the National Company Law Tribunal.

—SAMAR SRIVASTAVA



**CHANGING INDIA'S DIGITAL LANDSCAPE.**

**TAKING INDIA TO  
A NEW LEVEL.**

India is riding a digital transformation wave that's impacting individuals, societies and businesses. At the heart of this is new-age technology rooted in data. The exponential increase in data presents itself as both an opportunity and as a challenge. This is fueling businesses to come up with innovative ideas to address unique Indian challenges in a uniquely Indian way. Forbes India presents #ideas2act – The Digital Edge Series, in partnership with IBM India, to explore evolving frameworks that can transform ideas into meaningful action.

**Forbes** INDIA  
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THE DIGITAL EDGE SERIES

In Partnership with

**IBM**



# LeaderBoard

**7.3%**

India's projected GDP growth in 2018-19, according to the Global Economics Prospect released by the World Bank



## ROBUST GROWTH

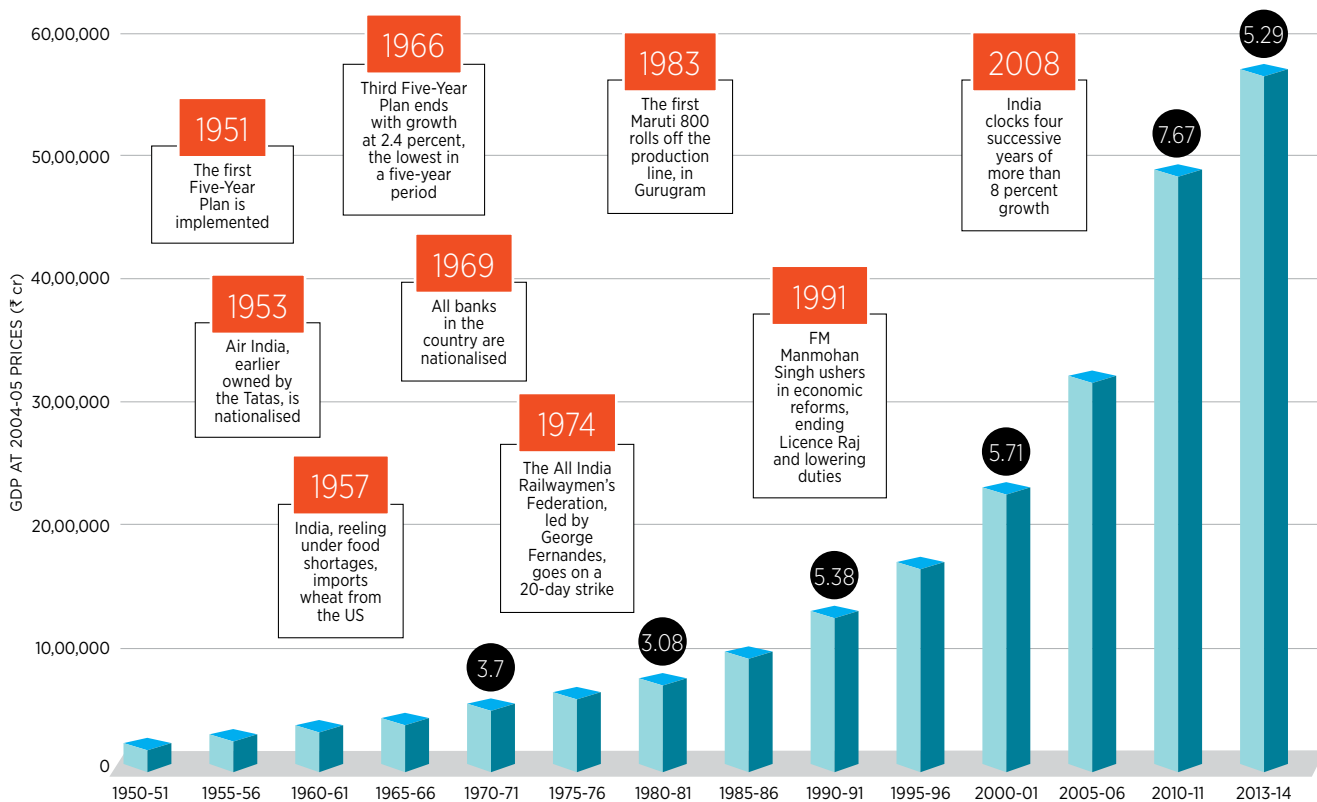
# The Indian GDP Turns 69

### THE CONSTITUTION OF INDIA CAME INTO EFFECT ON

January 26, 1950, giving the country a document to govern itself by. In the six decades since then, the country has experienced defining economic periods, reforms and milestones. This January, as the GDP turns 69, we take a look at its growth, the sectors that have contributed to this growth, and some noteworthy moments.

## INDIA GROWS UP, ALONG WITH ITS GDP

GDP at 2004-05 prices (₹ cr) 10-year CAGR (%)



GDP data has not been considered for 2013-14 onwards as the methodology for calculating GDP changed, thus making the numbers incomparable with previous years

Source: Planning Commission

## GROWTH BOOSTERS: CONTRIBUTION OF DIFFERENT SECTORS TO GDP (%)

1950-51 2013-14



Total adds up to more than 100 as there is overlap between industry and manufacturing

Source: Planning Commission

—COMPILED BY SAMAR SRIVASTAVA

"An absolutely clean pate... surrounded by a furry circle of hair around the sides and front. From which all ends are drawn up to meet in the centre and then swept back and secured by a stiffening spray."  
—Ivanka Trump, on her father's hair-do



## BOOK REVIEW

# Fire and Fury: Inside the Trump White House

**IMAGINE HAVING VERY** rich, slightly distant, relatives you hate (and perhaps are secretly jealous of). Now imagine you are at a big fat wedding, where you meet another relative—also rich, and also despicable in some ways—who begins to dish out the dirt, by the cartload, about those rich relatives. Every scrap of gossip and juicy tidbit that had been whispered about, with varying degrees of credibility and incredulity, suddenly appears to get a fresh coat of vetting, thanks to the proximity and trust that this rich relative seems to enjoy with those very rich relatives. Even if you wonder how much of it is actually true, snarky gossip about those rich relatives feels just so darned good!

Reading Michael Wolff's *Fire and Fury* is like sitting at the big fat wedding, taking in all the dope that we so long believed to be beyond anyone's reach on US President Donald Trump.

Wolff, who claimed in an interview to *Time*, that "Anybody who's spending time around the White House knows a lot of what I know. Or most of what I know. They just aren't writing it" writes as much about Trump himself, as

about the people around him—most notably one-time chief strategist Steve Bannon, daughter Ivanka and son-in-law Jared Kushner—and the continuous stream of crises, chaos and cajoling going on in the Trump White House. A "full monty of Trumpland" is what Wolff called it.

Wolff claims the book is based on conversations, with the president, members of his senior staff and others, over 18 months. These innumerable bits create the picture of a clutch of wholly incompetent and unprepared people who suddenly find themselves thrust with the kind of power they had only dreamt of, but never imagined themselves capable of getting or handling.

Narrating election night developments, Wolff writes, "There was, in the space of little more than an hour, in Steve Bannon's not unamused observation, a befuddled Trump morphing into a disbelieving Trump and then into a quite horrified Trump. But still to come was the final transformation: Suddenly, Donald Trump became a man who believed that he deserved to be and was wholly capable of



**Name:** *Fire and Fury: Inside the Trump White House*

**Author:** Michael Wolff

**Publisher:** Little Brown

**Price:** ₹700 (paperback)

**Pages:** 310

being the president of the United States."

What followed, and what we continue to witness, is one of the most divisive presidencies in the United States, with the potential of far-reaching global consequences.

Although the book is written chronologically, you could turn to any chapter and read it as a standalone. Replete with a fire-hose of anecdotes, it is a highly entertaining read about a vast crew of supporting actors—billionaire donors, media moguls,

Silicon Valley hot shots, senior government aides, petulant counsellors and communications officers—and the thin ice that they walk on while dealing with Trump. However, if you are not clued in to every detail of US administrative protocol or to the names that Wolff constantly drops, your eyes could glaze over once in a while.

That all of this should come from Wolff is what makes it more interesting. Disliked by much of New York's news reporters for his disregard for journalistic ethics and practices, and questioned repeatedly over the veracity of his claims, this is not the first tell-all-style book he has penned: In 2010, he wrote Rupert Murdoch's biography, *The Man Who Owns the News: Inside the Secret World of Rupert Murdoch*, "a book that he deeply detested", says Wolff. And yet, for all his snarky comments and derisive observations about the rich and famous, Wolff himself has been accused by the media of hankering to be part of the swish set.

But none of this seriously comes in the way of enjoying the insider edition of all that goes on within the most famous government office in the world.

—JASODHARA BANERJEE

TOP: VIKAS KHOT

# ‘The Idea that You Have to Sacrifice Your Well-Being to Succeed is Delusional’

*Former media entrepreneur Arianna Huffington is on a mission to upend the global stress and burnout “epidemic” by offering micro-solutions*

BY VARSHA MEGHANI

Arianna Huffington says her Thrive Global is launching an app that turns a smartphone into a dumb phone for specified periods



**SINCE LEAVING THE HUFFINGTON Post**, a news and entertainment website she co-founded in 2005, Arianna Huffington, 67, has turned her attention to her wellness startup Thrive Global. Launched in late 2016 in the US, the company recently marked its India entry in partnership with Times Bridge, part of Bennett, Coleman & Co Limited. In an interview, she speaks to *Forbes*

India about transforming our culture of overwork, the importance of sleep and redefining what it means to be successful. Edited excerpts:

**Q Your career has been marked by multiple reinventions. Starting off as an author to attempting a career as a politician to setting up *The Huffington Post* and now launching Thrive**

**Global... Tell us about your own transformation from a fast-lane addict to a proponent of sleep and digital detoxing.**

For me, it was a painful wake-up call when I collapsed from exhaustion in 2007. I hit my head on my desk, broke my cheek bone and was lying in a pool of blood. I was two years into building *The Huffington Post*, working 18 hours a day, seven days a week. I

was divorced and had two teenage daughters. The incident prompted me to start studying the latest science on the need to recharge in order to be fully effective. I realised that we were living under the big delusion that in order to succeed we have to always be on and working 24x7. The truth is, we are much more effective if we take time to recharge and refuel. Yet, hundreds of millions of people are suffering from burnout. In India, 80 percent of working professionals feel stressed at work, while 60 percent want to quit their jobs because of the stress [according to a 2016 TimesJobs survey]. We claim to be a data-driven society, but we're ignoring the data.

**Q You've said that human behaviour can be changed through a combination of data and stories. How is Thrive Global working towards that?**

Thrive Global helps people implement small behavioural changes that can help them improve the way they work and live, which in turn makes them healthier and more productive. The company has three areas of focus. The first is our work with corporations to help them change their culture so as to encourage well-being. We measure the impact of those changes on productivity, performance, attrition and health care costs.

The second is our media platform that brings together the latest science as well as ancient wisdom on how to live a good life. We also bring together role models to talk about how they sleep, meditate, take breaks, and how they're not hooked to their phones all the time.

The third part is to create a suite of products so that we can digitise our intellectual property. We've set out eight pathways as well as hundreds of micro-steps to help people make positive changes to their lives. For instance, 'well-being' is a pathway that includes sleep, nutrition and exercise; 'wisdom' includes mindfulness and meditation.

**Q Are Indian CEOs receptive to your line of thinking?**

They are totally receptive. I was at a dinner sitting next to Vijay [Shekhar Sharma] of Paytm and he was incredibly wise about how he saw himself as an entrepreneur. He used the metaphor of being like a sustained sun, as opposed to fireworks that brighten the sky and then disappear. I'm finding a lot of wisdom among Indian people and we need to make it a part of conversation. This is what happened in the US only a few years ago—Marc Benioff of Salesforce talking about his regular meditation practice, or Ray Dalio of

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**“We need to set boundaries or we are going to be consumed by technology.”**

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Bridgewater, who is also an investor in Thrive Global, talking about how meditation is essential to his success.

**Q But the belief that burnout is the price we must pay for success is pervasive.**

I think what makes it easier is profiling the people who actually live the principles. And also raising awareness. I'm optimistic that there will be a culture shift. The idea that you have to somehow sacrifice your well-being and happiness to succeed is completely delusional.

**Q You've said that at the heart of our increase in stress and mental health problems is our addiction to digital devices. How can we embrace a healthier relationship with technology?**

Technology is becoming increasingly invasive. So it's a great time to ask the big questions: What is a good life? And how can we protect our humanity in the middle of this onslaught of

technology? This is not to be anti-technology. This is simply to say that we need to set boundaries, otherwise we are going to be completely consumed by technology. So one of our eight pathways is 'Unplug and Recharge'. Within that, the first micro-step is to turn off your phone before you turn off the lights and charge it outside your bedroom. We'll also be launching an app to help us deal with our relationship with technology. It turns your smartphone into a dumb phone for specified periods of time and you can't override it.

**Q You talk about “sleeping your way to the top”. How realistic is it to get 7-9 hours of sleep every night if you have a demanding job, kids and a house to manage?**

If you have a sick child or a deadline, there will be times when you will not get the sleep you need. So the first question is what do you do on a regular basis? And the second is when you have to pull an all-nighter how quickly do you give yourself the time to refuel? Most people watch a lot of TV or spend a lot of time on social media. These are choices.

**Q You emerged as the public face of Uber through its cultural and boardroom crisis. Did you lose sleep over it?**

(Laughs) I didn't. I happened to be the only woman on the board when the crisis erupted, so I felt it was my responsibility to make it clear to employees that there was going to be an end to sexism, and that we were going to change the culture at Uber. I oversaw the internal investigation by former attorney general Eric Holder. The board adopted all 47 of his recommendations. I chaired the committee that looked for a new CEO and we are lucky to have Dara Khosrowshahi. Now with the SoftBank investment, Uber is emerging strong again. **F**





People Standing (L -R): Vinay Agrawal (CEO, Angel Broking), Anand Agarwal (CEO, Sterlite Technologies Limited), Chetan Naik (Head of Enterprise & Mid Market BU, IBM India-South Asia). People Sitting (L-R): Vijay Shah (Executive Director, Piramal Enterprises), R. M. Vishakha (MD & CEO, IndiaFirst Life Insurance Mrugank), M. Paranjpe (MD & CEO, MCX Metal & Energy)

# DECIPHERING DIGITAL TRANSFORMATION

**T**here is a consensus in most circles that digital transformation cuts across business boundaries. Whether it is manufacturing or financial services, digital is omnipresent and immensely relevant. At the same time, a lot of businesses are still trying to grapple with what digital can really do for them and how technologies like Artificial Intelligence (AI) and Internet of Things (IoT) or cloud computing can benefit them and their customers.

To discuss these issues through a candid conversation with industry leaders, Forbes India hosted a panel discussion, Forbes India #ideas2act: The Digital Edge Series, in partnership with IBM. The participants at this discussion included Vinay Agrawal, CEO, Angel Broking; Mrugank M. Paranjpe, MD & CEO, MCX; Vijay Shah, Executive Director, Piramal Enterprises; RM Vishakha, MD & CEO, IndiaFirst Life Insurance; Anand Agarwal, CEO, Sterlite Technologies and Chetan Naik, Vice President, Enterprise and Mid-Market, IBM India and South Asia.

## CHANGING EXPECTATIONS

The dialogue began with RM Vishakha observing that as the priorities of a company keep changing, so do its expectations from digitalisation. "Initially it was all about eliminating manual processes, enhancing efficiency and improving productivity. Now we are moving to the next level; we are looking at how to increase customer satisfaction. As the third stage, I envisage that we will be using AI to do away with training, which really never ensures uniformity of behaviour in the customer service or sales team."

## NEW PLAYER ADVANTAGE

Leaning on his own experience, Shah highlighted another interesting trend, "Piramal Enterprises is big in financial services, but we are among the latest entrants. So, we had the opportunity to tap into the latest in technology while setting up the business." He also pointed out that in the manufacturing sector most people still don't even know what digital is. "We have to start with educating people about what digital means, with the help of consultants, who can walk the organization through this revolution." In his view, the biggest challenge was getting the top management to appreciate and understand what digital is, set a vision and then gradually overcome the hurdles during the transition.

## OBSOLESCENCE AND ADAPTATION

Digitalisation has changed job profiles and their relative importance too. Paranjpe shared two interesting examples of this. "In 1994, the most empowered person in a stock broking firm was the person who went into the trading ring. In about six months this role completely lost its relevance. In 1997, back office functions changed considerably too as everything went paperless. More recently, in the commodities space, electronic warehouse receipts are expected to trigger a similar revolution for commodities as depositories did for equities by digitizing assets."

Agrawal of Angel Broking underlined another aspect of redundancy – resistance to change. "With digitalisation, the work that people do for an organization often gets automated. It becomes a big challenge to encourage these people to reorient their approach to digital technology.



While they find it easy to adapt to using smart phones and digital apps, it is different when it comes to their work. They do not like to feel that their contribution, which seemed important until now, has suddenly lost all its relevance."

Naik opined that at an aggregate level, it was unlikely that the sum total of job changes would remain the same during the transition to digital. "It will be hard on a set of people," he said. "For example, if a mid-career professional in the technology industry today does not upgrade his or her skills and adapt, it could be difficult for them to survive changes."

### ASYMMETRIC OPPORTUNITIES

Digital technologies have their pitfalls as well, which industry leaders are mindful of. Paranjape raised a pertinent issue when he pointed out that some of the questions that the industry was grappling with included: "Does technology create level access for everyone or do people with deep wallets, high computing capacities, high networks, gain unfair access?" He further added that people trusted exchanges because they believe that there is no asymmetry in formation. But the concern is that sometimes asymmetry emerges due to some people being more digitally capable than others.

### ENHANCED CUSTOMER EXPERIENCE

The next relevant issue to be discussed was can digital be used to boost retail participation in the securities market? Digital has taken the securities market to a level where information is real time, transparency is assured and access to information is available on the go, via mobile phones. Agrawal suggested that the focus would now shift to enhancing customer experiences - right from sales and acquisition to fulfilment and after-services. "Earlier we used to have a software lifecycle of months and years, now it has been reduced to weeks. The whole cognitive technology piece is playing a very big role. We are able to profile the customer much better without too many questions being asked," he said. Anand Agarwal of Sterlite Technologies succinctly summed up by saying that all the digital technologies were merely tools and it was up to the users to make them relevant to customers and employees.

### TRANSITION DILEMMAS

While he acknowledged that equity markets were making the most of digital transformation, Chetan Naik observed that companies in sectors like manufacturing and retail distribution often had good intent (vis-à-vis digital adoption) but were struggled with where to begin. "Unfortunately, there are so many aspects that could use digital intervention

– at one end digital marketing and training could be implemented and at the other, sensor-based readings and predictive maintenance. One has to prioritise which of these areas will have the greatest impact or be the best place to start," Shah observed.

Anand Agarwal pointed out that since India is just getting started on creating a data infrastructure, which is the core for digital, the industry cannot offer a preferred experience yet. "We are working with telecom providers and the defence sector to create a data network. We are also working with smart cities, some of which are coming up with rural broadband. There are really neat technologies available," Agarwal said.

### START-UP SUPPORT

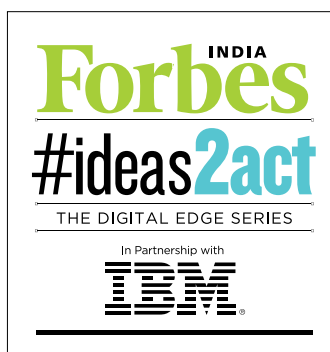
With an army of start-ups mushrooming in the digital space, it has become imperative for larger companies to evaluate how they can partner with younger companies and their innovative ideas. Anand Agarwal shared that his company uses start-ups to scale up a platform that it has created and, at the same time, consciously and continuously funds start-ups to undertake projects that it is not agile enough to conceive and implement. Vinay Agrawal also stated that Angel Broking looks at these start-ups both as partners as well as competition. He explained that due to their brilliant ideas and customer-focused

approach, there is scope for synergistic equations between large corporates and start-ups towards creating quick and effective solutions. Vishakha shared that her company had a separate budget and team for experimenting with start-ups.

### THINKING BEFORE ACTING

New digital technologies shouldn't merely be adopted because it is fashionable to do so. Paranjape cautioned about rushing into adopting new technology as it could result in the adoption of unsuitable solutions. Another challenge was ensuring that what is created complies with prevailing and anticipated regulation, especially while creating something like a marketplace, which is meant for a wider spectrum of users.

Vinay Agrawal offered a slightly different view, arguing that while there may be risks associated with adopting a digital first approach, those risks are lesser compared to the challenges faced in the earlier physical world, where transactions were often manual and paper-based. "For example, during the era of physical shares, clients and brokers faced losses that were far larger than those in these digital times," Agrawal said.



# A Relationship Economy: Are We Prepared?

*It's built on trust between service providers, their consumers and partners.  
With the technological advancements we're seeing, it's a reality of tomorrow*

BY GISELLE HARRISON & SUDHAKAR SAMPATH



## 2011 WAS THE LAST TIME WE RECALL

having witnessed a heated discussion on the merits of a 'products versus services' economy. The topic, at the time, seemed fresh and well researched. However, we soon started to hear about the importance of building personalised experiences to stay relevant in the new 'experience' economy—or like its popular term, the digital economy.

Come 2018, we're bang in the middle of that predicted experience economy; watching businesses, large and small, invest healthy sums into modelling unique experiences for their customers. This pace of change, a move through two different economies, in a span of barely seven years, is shocking. In the near future, we believe, that change may come at an even greater stride. If

organisations want to continue to remain relevant, building personalised experiences alone is not going to help.

Have you noticed how consumers have started to become increasingly focussed on the relationships they share with their service providers? Think: How many times have you gone back to a particular place for the same service? Why do we keep going back? It is possible that we keep returning because of the connections we have built with these service providers. In fact, it is likely that we are on the brink of the next big economic wave: The relationship economy.

A relationship economy is built on 'trust' between a service provider, its consumers and their partners. How is it going to come into existence? We believe that the advancements we have made in certain technologies

are leading to this shift in economy. Recent scientific milestones like artificial general intelligence (AGI), programmable matter and quantum computing are just examples of these advancements. Once these technologies become commercially available, we will notice a paradigm shift from an 'experience' economy to a relationship-fuelled economy.

You're probably wondering how these technological advancements are leading to a shift in economy. We are beginning to see what we once considered science fiction turn to fact.

Google's online game AlphaGo is based on AGI. It is remarkable how a machine can replicate the fullest form of human intellect, so much so that it has become unbeatable. This gaming software can predict all possible moves because of deep learning algorithms in place. When we start to use AGI as virtual assistants, we will no longer need to rely on people for routine tasks. A small example of this could be a self-driven car driving your child to school every day. When this happens, the only missing element will be a basic human connection.

Another technological advancement is the research on programmable matter by Carnegie Mellon University and Intel Labs. This research studies the use of nanotechnology to enable objects to change their original form, based on its user's need. This technology can be used with applications like self-growing and contracting furniture, buildings changing their own shapes, and even, automobiles changing dimensions when required. Imagine building a comfortable rocking chair in your living room without having to visit your nearest furniture store. Once again, we will be able to master our own experiences, but what about our basic need for human interaction?

Imagine being able to inject yourself with a new skill when you require it. If you've seen *Matrix*, this becomes easier to visualise. With the advent of quantum computing, applications involving telecommunications, personalised health care will soon be able to function devoid of human interference. In fact, companies like IBM, Microsoft and D-Wave are already making significant investments in this technology.

When the relationship economy kicks in, the survival of any organisation will depend on whether it is able to foster relationships; not only with its stakeholders, but also among them. Here are a few recommendations to help do this:

### 1) Bringing Customers Together

Mahindra & Mahindra through its initiative 'Trringo' has created a call centre platform that allows farmers to rent out their machinery to fellow farmers whenever not in use. ShareGrid and Boatbound are two other US companies that have started similar

initiatives to bring their customers together.

Similarly, businesses will have to adopt newer technologies to enable clients to interact and be comfortable so that they can complement each other when the need arises. They may even prefer to repeat collaborations in which they experienced 'friendly' gestures in the past.

### 2) Bringing Together Employees

There are a multitude of people joining social networking applications (almost 30 percent each year). Many organisations have, in some form, enabled social communications tools like Slack or Yammer with an intent to facilitate internal collaboration. Yet, only a few of them have used it successfully. Isn't this a resource we need to exploit a little more in our work environments? This will make it easier to share information on platforms employees are already comfortable with, in the new relationship economy.

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## With the new economy, the survival of an organisation will depend on its ability to foster relationships

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Charlene Li, in her article for *Harvard Business Review*, stresses the importance for leaders to promote social communication by actively listening, sharing and engaging with their teams on these platforms.

### 3) Bringing Business Partners Together

In the new relationship economy, success will follow those businesses that allow suppliers and partners to come together and collaborate. We believe consistent quality, optimising supply chains and improving process efficiencies can be achieved if organisations provide their business partners with a non-threatening forum to share best practices between each other.

Frequently highlighting how each vendor is adding value to the larger ecosystem will be a further advantage to the business in the long haul. Technological advancements are inevitable, but are organisations doing enough to leverage them to foster relationships? The suggestions mentioned above can certainly help create a 'win-win' advantage in the new relationship economy. As Edward Whitacre popularly put it "... we are 100 percent in charge of how we respond to challenges that come our way." 

*The writers are behavioural facilitators with Wipro's Centre for Behavioral Excellence, Talent Transformation function, Bengaluru*

Masayoshi Son,  
SoftBank's  
chairman and chief  
executive officer





SOFTBANK

# Cheques & Balances

*By betting big money on big businesses, SoftBank is bringing its India strategy in line with its founder Masayoshi Son's global vision*

BY SAYAN CHAKRABORTY

**A**fter a few initial hiccups, a resurgent SoftBank, armed with a \$100-billion Vision Fund, is wiping clean its chequered past in India by writing big cheques to the biggest startups.

This is not entirely unexpected, given that Masayoshi Son, the maverick and sometimes impetuous founder of SoftBank, has time and again professed his love for doing things big. “I don’t do things small,” Son, 61, had said in an interview in December 2016.

SoftBank has seen a billion dollars invested in online real estate startup Housing and online marketplace Snapdeal sink. But such setbacks haven’t stopped it from bankrolling another online marketplace Flipkart with \$2.5 billion and financial services company Paytm with \$1.4 billion in 2017.

More big ticket investments by SoftBank are likely to follow, but, this time, it likely to go for market leaders.

This is in sharp contrast to its earlier ploy of cherry picking promising startups in emerging sectors (Oyo in hotel aggregation, Housing in real estate, Grofers in hyperlocal delivery) or even businesses that were number two or three in the pecking order (Snapdeal,

for instance, trailed Flipkart when SoftBank first bought into the company in November 2014).

“Earlier, SoftBank’s thought process was to get a foothold in the market and see how quickly they could learn. Now there is a more concerted strategy to dominate the market,” says Vinod Murali, managing partner at Alteria Capital. Murali, in his earlier job at Innoven Capital, had invested in Snapdeal and Oyo. “The number of companies that can absorb the kind of capital that SoftBank will offer is limited, maybe in single digits. But, the next set of such companies is being nurtured and Softbank will have a bigger play then.”

Son not only has the appetite and means to do things big, but also the stomach to digest big losses.

“For them, a couple of hundred million dollars is small change,” adds Murali. An executive at a venture capital (VC) firm that has co-invested with SoftBank, and who did not wish to be named, concurs.

“They seemed to have moved on despite losing more than \$900 million in Snapdeal. This is a very different DNA, which is very hard to replicate. To give you some perspective, they weren’t hurt as much as we were after losing \$25-30 million. That is

the kind of cushion they have.”

SoftBank has burnt its fingers earlier, trying to discover hidden gems in India. It teamed up with News Corp-backed venture fund ePartners and Ispat Industries promoter PK Mittal to float eVentures India Holdings in 1999. After investing in about 13 startups over the next four years, the fund shuttered in 2003. It exited three investments, wrote off six and sold the rest to Nexus Venture Partners in a block sale.

In 2001, it floated the SoftBank Asia Infrastructure Fund, this time in collaboration with Cisco. This too collapsed after its executives chose to form a new fund called SAIF Partners in 2004.

SoftBank jumped on to India’s consumer internet bandwagon late, in the second half of 2014, by when American hedge fund Tiger Global Management had already established a firm grip over Flipkart, India’s most valuable startup.

But once it entered, there was no stopping SoftBank. In fact, led by Nikesh Arora, the former chief business officer at Google who joined SoftBank as vice chairman in July 2014 and was widely viewed as Son’s heir apparent, SoftBank sometimes gave Indian founders

more than they asked for.

Take, for instance, Housing. In late 2014, Rahul Yadav, its 20-something co-founder and CEO, was looking to raise capital to fund his growth plans when he met Arora. By then, Yadav had almost sealed a deal to raise \$40 million from investors including Falcon Edge Capital, in a transaction that would value Housing at roughly \$150 million. Arora made an offer Yadav could not refuse: A \$100-million cheque. Despite the euphoria among investors, a Series C investment that big was hard to find for a two-year-old startup such as Housing.

"SoftBank didn't want other investors. Since they were in advanced talks with Falcon Edge and others, Housing could not have said no to the other investors as well," says a person privy to these discussions.

In December 2014, Housing raised \$90 million, of which \$70 million came from SoftBank and the rest from Falcon Edge Capital and existing investors Nexus Venture Partners and Helion Venture Partners, at a valuation of \$235 million. To sum it up, Housing got about \$50 million more than it had asked for, with an \$85 million mark-up in valuation.

Well, Son is known for writing eye-popping cheques. He has done so in the US and China. But, borrowing a page from his global playbook for India had its downsides. Unlike mature markets such as the US and China, Indian entrepreneurs were still coming to terms with the flush of funds. Exuberance from the likes of SoftBank and Tiger Global Management not only sent valuations soaring, but also prompted them to start spending sprees to gain market share.

Essentially, they didn't save enough for a rainy day, and when a funding downturn in mid-2015 hit, most Indian startups floundered.

"Because of large pools of capital that came to companies unduly, ahead of time, many of them wired their business models wrongly," says an



**"For them [SoftBank], a couple of hundred million dollars is small change."**

**- Vinod Murali**, managing partner, Alteria Capital

executive at another VC firm that had co-invested with SoftBank.

"In a market like India where there is a lot of competition, the companies are loss-making and you don't know how long the battle lasts. We, as investors, were very happy to have SoftBank, even at the expense of dilution. But, yes, SoftBank and Tiger Global were, to some extent, responsible for the way valuations were perceived in India."

A questionnaire to SoftBank seeking comments on its India investments did not elicit a response.

In October 2014, a month before investing in Housing, SoftBank had bankrolled Snapdeal, which was then trailing market leader Flipkart (Amazon, which entered India the year before, was still a fledgling), with a \$627-million cheque, valuing it at \$1.8 billion. The same month, ride-hailing startup Ola entered the unicorn club—startups valued at \$1 billion or more—riding on a \$210-million investment from SoftBank.

"To begin with, they [SoftBank] were basically trying to find a marquee investor base and do a mark-up on their investments with a 30 percent ownership target," says the VC executive cited earlier.

Indeed, Nexus Venture Partners,

which was an early backer of Snapdeal and Housing, played a key role in introducing SoftBank to Indian startups. Nexus executives Sandeep Singhal and Anup Gupta had earlier worked at eVentures India Holdings.

In the next one year, SoftBank, under Arora, invested further in Ola and Snapdeal. This apart, SoftBank led a \$100-million Series B investment in Oyo in April 2015 and a \$120-million Series C round in

Grofers in November, which were, again, investments disproportionate to the scale and stage of the companies.

The halcyon days didn't last long. In mid-2015, Housing imploded following a spat between Yadav and his investors. The next June, Arora abruptly resigned. Meanwhile, Snapdeal was losing ground to Amazon and Flipkart, while Grofers struggled to scale up, as its gap with market leader BigBasket grew. Ola, which has since bounced back, was battling Uber's aggressive advances while Oyo was burning cash to get hotels and customers onboard.

It seemed at one point that Son had bet on the wrong horses.

**A**fter the 2015 blitzkrieg, SoftBank spent a quiet 2016, cleaning up its act in India. It refrained from expanding its portfolio and only provided follow-on capital to Oyo (\$62 million in August) and Housing (\$20 million in two tranches in January and December).

In 2017, SoftBank returned much stronger with the Vision Fund, the largest of its kind in the world, backed by the likes of Saudi Arabia's sovereign wealth fund and conglomerates such as Apple, Foxconn and Sharp.

Armed with a mammoth corpus, of which about \$10 billion is expected to

be channeled to India, where SoftBank today finds itself in a unique position. Tiger Global, one of the most prolific backers of homegrown startups, with close to 40 investments, is looking for an exit. Some of the large funds, such as DST Global, Steadview Capital and Falcon Edge Capital, have also retreated from India. SoftBank is possibly the only investor who can cut multiple cheques of \$100 million or more without batting an eyelid.

The company made the most of this opportunity in 2017. Apart from investing in Flipkart and Paytm, valued at \$11 billion and \$7 billion respectively, SoftBank led a \$250-million funding round in Oyo and participated in Ola's billion-dollar fundraise. All these firms are market leaders in their respective categories.

It is also in talks to invest in food delivery startup Swiggy and freight startup Rivigo.

**N**ot only has SoftBank emerged as the go-to investor for big startups, it is possibly one of the few firms that can give VC funds in India a much-needed exit, given that public offerings are nowhere on the horizon. It has made some progress on that front already: SoftBank is slated to buy a part of Accel Partners, IDG Ventures and Tiger Global's stake in Flipkart, increasing its holding to about 20 percent, second only to Tiger Global's about 23 percent. It also handed handsome returns to SAIF Partners, which sold a part of its stake in Paytm to SoftBank for about \$300-400 million.

Meanwhile, it tried to salvage some of its investments, with moderate success. After a futile move to merge Housing with Snapdeal, the former was bought by its NewsCorp-backed

## A SLICE OF THE BEST PIES

COMPANY	INVESTMENT	SHAREHOLDING
PAYTM	₹6,463 CR	14.4%
GROFERS	₹600 CR (APPROX)	20-30%
SNAPDEAL	₹5,500 CR (APPROX)	33%
OLA	₹6,487 CR	26.4%
OYO	₹2,640 CR	47.2%
FLIPKART	₹16,200 CR (APPROX)	APPROX 20%
HOUSING	₹600 CR (APPROX)	40-45%

**Source:** Tracxn and Forbes India

rival Proptiger in January 2017. SoftBank also tried to orchestrate Snapdeal's sale to Flipkart, but failed.

"Softbank takes a proactive approach to working with portfolio companies. In Housing, they deployed resources to help the company. From cash flow management to executive hiring, Softbank's operational staff was involved in all aspects," says Ritesh Banglani, a former Helion Venture Partners executive who co-founded Stellaris Venture Partners.

Sometimes, though, this approach rattles investors and entrepreneurs. Following its maneuvers in Snapdeal and Housing, which saw some of



**"SoftBank takes a proactive approach to working with portfolio companies."**

- Ritesh Banglani, co-founder, Stellaris Venture Partners

its early investors take massive haircuts on their investments, Ola has curbed SoftBank's rights, possibly to avert boardroom hostilities. It has restricted SoftBank from buying more shares without the approval of founders Bhavish Aggarwal and Ankit Bhati, and the board. Also, SoftBank, which has one board seat, cannot get another if it acquires more than 50 percent preference shares in Ola's ongoing funding round (having closed a \$1-billion round, it is in talks to raise another \$1 billion).

"People are slightly wary of Softbank becoming the largest shareholder, but they don't have much choice as SoftBank has the largest corpus. Most companies will find it hard to deny them an entry," says a senior executive at another VC firm.

The message is loud and clear: Despite early setbacks, SoftBank will not balk at investing in India. In fact, its India investments are now not just whimsical bets. Instead, companies like Flipkart, Ola and Paytm could be key pieces to its global machinations.

For instance, Chinese ecommerce behemoth Alibaba, which has kept Amazon at bay on its home turf, owns close to 40 percent in Paytm. Alibaba is arguably Son's biggest success as an investor. He had invested about \$20 million in Alibaba at the dawn of the millennium. Its 25-percent stake in Alibaba is valued at about \$140 billion. Consequently, SoftBank's investments in Flipkart and Paytm can be construed as a move to strengthen the anti-Amazon alliance in India. In the years to come, a merger between Flipkart and Paytm to stave off Amazon cannot be ruled out.

Similarly, SoftBank has bought into all major ride-hailing startups across the globe—Uber, Ola, Didi Chuxing in China and Grab in Southeast Asia. A merger between Ola and Uber, which currently bleed each other in India, cannot be ruled out as well.

The play is bigger. But only time will tell if Softbank will reap a rich harvest in India. **T**



FROM DRUG RESEARCH AND BIOTECH TO PORTABLE MEDICAL DEVICES AND ENVIRONMENTALLY-SUSTAINABLE SOLUTIONS, INNOVATION IS COMING TO THE FORE IN MULTIPLE AREAS OF DEEP SCIENCE. WHAT THESE VENTURES NEED NOW ARE FUNDERS TO BACK THEM ALL THE WAY

By **HARICHANDAN ARAKALI**



# New Lease





**A**t a recent competition organised by India's C-CAMP (Centre for Cellular and Molecular Platforms), more than 1,500 entries vied for a shot at the top few spots. C-CAMP, started in 2010, is a government-backed agency tasked with promoting deep-science-based startups in India.

A four-month gruelling process threw up nine finalists at the competition, called the National Bio Entrepreneurship Competition, pitching before a grand jury. Their ventures represented what can be best described as India's emerging 'lifetech' industry—spanning biotech, drug discovery, agriculture, medical devices and even environmentally-sustainable alternatives to toilet soap.

At stake was a little bit of cash, including ₹1 million sponsored by Ankur Seeds, ₹300,000 from Pfizer, and \$15,000 in Amazon Web Services credits. There was also the investment opportunity of up to \$100,000 from the Tata Trusts' Foundation for Innovation and Social Entrepreneurship.

The competition, as well as the large number and quality of the entrants, was reflected in the innovative ideas—a nanofibre membrane to carry bio-fertilisers, a water-less cleanser for the soldiers of the Indian armed forces, an automated neonatal early-warning system.

# of Lifetech

(From left) **Taslimarif Saiyed**, CEO & director, C-CAMP; **Vijay Chandru**, co-founder & chairman, Strand Life Sciences; **Anand Anandkumar**, founder, Bugworks Research; **Anand Madanagopal**, founder, Cardiac Design Labs

Such initiatives may have attracted little attention in India—where startups have come to become synonymous with ecommerce—but the good news is that these entrepreneurs have caught the attention of the people who matter. “They have such innovative ideas,” Kiran Mazumdar-Shaw, founder of Biocon Ltd, who was one of the judges, tells *Forbes India* in an interview.

Kavitha S, founder of FIB-SOL Life Technologies, won the Ankur Seeds Prize as well as the investment opportunity from the Tata-backed foundation. FIB-SOL Life Technologies offers ultra-light weight, biodegradable and water-soluble nanofibre carriers for bio-fertilisers.

The fertiliser-carrying membrane (FCM) is intended to be used in organic farming. The bacteria are more stable in this membrane and 5 gm of the membrane is sufficient to fertilise an acre, C-CAMP said in a note about the winners, in December. Kavitha started her venture in 2013, which is a spin-off from IIT Madras’s incubation centre, and she has been a recipient of various government grants. She is now ready to step up commercialisation.

These are exciting signs of a nascent, but promising, rise in Indian life sciences research and innovation. They augur well for the growth of a broader ecosystem that can tap the Indian market for solutions that can have applications in advanced economies too. Mazumdar-Shaw calls it “lifetech”.

From established pharma companies such as Biocon, which recently won the first approval in the US for a biosimilar drug to treat certain types of breast cancer, to brand new startups with little more than a proof of concept or early working prototypes, the change is happening at many levels and on multiple fronts.

“Whether it’s drug discovery or biosimilars or novel biologics or devices, I’ve never seen a larger trend (in India) than the one that is starting up now, in terms of novel ideas coming up,” says Anand Anandkumar,



### **ANAND ANANDKUMAR, 53**

**Designation:** founder, Bugworks Research

**Founded:** 2014

**Venture:** Development of next-generation antibiotics to combat drug-resistant ‘superbug’ bacteria

**Funding:** DBT-BIRAC (\$0.5 mln), Baxter Ventures (\$1.5 mln), Angel investors (\$1.0 mln), CARB-X award (\$2.6 mln)

co-founder of Bugworks Research. Bugworks is a spin-off from Cellworks, a therapeutic design company using proprietary simulation technology, and he serves as an external director and chairman of the board of directors of the India operations of Cellworks.

Anandkumar, a prolific engineer, in an earlier avatar helped build the India operations of Magma Design Automation, a ‘fabless’ chip design company, in Bengaluru. With backing from C-CAMP—comprising grants and the use of its state-of-the-art labs in Bengaluru—he is now chasing the next generation of antibiotics to combat bugs that have become resistant to medicines currently in use for treating common infections such as pneumonia and diarrhoea.

“If you look at our lab, you’ll see different entrepreneurs just working side by side, without any kinds of barriers,” Taslimarif Saiyed, C-CAMP’s CEO and director, said in an interview at the centre in Bengaluru recently. “Our aim is not to become the end-innovator by ourselves, but to catalyse many such efforts.” Indeed, while the government is often derided for red tape in India, C-CAMP is shaping up to be an unsung success story.

It has thus far succeeded in nurturing the beginnings of a culture of informal, unfettered back and forth of ideas among multiple parties—scientists, entrepreneurs, investors and so on that one tends to associate

only with universities and industry in California.

“You don’t even have to have a startup,” Saiyed says of the grant. The selection process, of course, is stringent, and involves a panel of experts that C-CAMP has carefully put together. It first started funding these ideas in 2013-14, and the most important objective is to ferret out and encourage deep-science based ventures, to get high-calibre academic scientists to take an equal interest in “translational research”—which literally means translating their work in the research lab into a commercially viable product and/or service that could benefit millions.

**“That we are innovating from India to solve a global problem of significance is of great pride to the team.”**

C-CAMP has a centre in Bengaluru, co-located with the National Centre for Biological Sciences. However, it works more like a network across the country, and has funded 100 ideas—some are startups, but others are work-in-progress missions.

Saiyed calls them “non-obvious” ideas, which C-CAMP is willing to take a bet on, to help the scientist-engineer-entrepreneur figure out if the brainwave has potential. One such non-obvious field: Geriatrics, a growing concern in India.

This kind of support is crucial, says Anandkumar. “We don’t have a rich VC [venture capital] environment in this space, so clearly somebody had to fuel it.” The ideas are beginning to come, and the risk-taking ability has improved over the last few years because generations are changing and India’s department of biotechnology (DBT) has played such an important role, he says.

That role includes BIRAC, or the Biotechnology Industry Research Assistance Council, which has created grant schemes such as the Biotechnology Ignition Grant.

DBT’s involvement helped with another important necessity for biotech to flourish. One needs “heavy-duty incubation” infrastructure comprising modern labs, which has also happened “beautifully” in the last five years, Anandkumar says. This has happened with biotech parks coming up, such as C-CAMP, which in Bengaluru is situated within the campus of National Centre for Biological Sciences, the Helix Park in Electronics City and similar hubs in cities such as Hyderabad.

“That means people like us can focus on innovation and not have to put in plant and machinery,” adds Anandkumar.

Biotech research isn’t the only field in which various elements of the ecosystem are coming together. At Cardiac Design Labs, some 30 km away from



## **TASLIMARIF SAIYED, 37** **The Catalyst**

**Designation:** CEO and director, C-CAMP

**Founded:** 2010

**Venture:** Government of India-funded agency to promote deep-science-based entrepreneurship

**Funding:** Department of biotechnology, government of India

C-CAMP, on the other side of the city, Anand Madanagopal and his co-founders are developing the next generation of cardiac monitors and software algorithms that tap the power of machine learning.

“We are trying to build ‘intelligent remote holters’,” Madanagopal told *Forbes* in a recent interview. The use of holters—externally wearable heart monitoring devices—along with ECGs isn’t new, but existing methods have limitations, including one important one—they aren’t real-time. Madanagopal is tackling another problem as well: “These are tests today done by large hospitals, but we are trying to get it to even faraway places so that patients don’t have to travel to a big city for just a first-level test, meet cardiologists and so on,” he says.

Cardiac Design Labs, which won the grand jury prize at Google’s Launchpad competition in 2016, has built the IP (intellectual property) to enable such devices. “All the clinical algorithms required and the IP are owned by us and it is all in place. We have also done multiple rounds of tests and deployment,” says the co-founder.

The venture raised some early-stage funding from Cyient in Hyderabad, and is now looking to close another round of funding—to raise an undisclosed amount to go from the 70 or so devices deployed in the market today to several thousands. Madanagopal also expects a version

2.0 very soon, which will become the real “commercial model that the world will see”, he said in an interview.

He and his team of about 20 engineers have now elevated their product MIRCaM (mobile intelligent remote cardiac monitor) from the holter they started out with, to a complete solution comprising cloud software that manages the entire mobile-device-management workflow, the actual devices, and software apps used to show real-time reports and notifications to doctors and so on.

Cardiac Design went commercial in January 2017, after four years of developing its product. It has consciously

**“Think of us as a mid-fielder in soccer, attempting to create enough opportunities for the forwards to score goals, agnostic to academia and industry.”**



built its products for emerging economies, with India being the first test bed—perfecting a pay-per-use model fine-tuned for Indian realities. “The Indian market is very tough, and if it works here, it will work anywhere,” explains Madanagopal.

Cross-border efforts are coming up too, again tapping the potential India offers because of its demographics. The large population throws up large numbers of people with various conditions—from heart disease to diabetes to cancer. At UE LifeSciences, for instance, entrepreneur Mihir Shah has built a US-India startup, manufacturing a portable battery-powered breast scan device in India. The non-invasive, radiation-free scan is user-friendly enough to be operated in primary health centres. A scan could cost as little as one dollar.

Shah and his co-founders took research developed in the US and turned it into a device that can take timely breast scans to corners of India where such diagnostics would never have reached otherwise. Shah’s venture may also turn out to be a commercial success, helping him scale up; General Electric Corp has entered into an agreement with UE to market the devices over 25 countries. That raises the chances of large hospital chains and diagnostics labs adopting the devices.

Started in 2012, UE Lifesciences is backed by Unitus Seed Fund, an impact venture capital firm in India, and from Mazumdar-Shaw and Ranjan Pai, managing director of the Manipal Group, in their personal capacities. High net-worth individuals (HNIs) from India’s first round of startups that have now become established companies—such as Mazumdar-Shaw, Senapathy Gopalakrishnan, co-founder of Infosys, and Pai—are starting a new wave of venture investments in India. Unlike ecommerce-based startups, these are typically long-gestation deep-tech ventures.

Cardiac Design Labs and UE LifeSciences are making their products at a time when companies like Medwell Ventures and Portea Medical are bringing home health to urban India.



### **ANAND MADANAGOPAL, 44**

**Designation:** Founder, Cardiac Design Labs

**Founded:** 2011

**Venture:** Mobile, intelligent remote cardiac monitoring

**Funding:** Seed funding from Cyient; Series A funding

Local manufacturers are also in the fray, such as BPL Medical Technologies, which is testing portable devices for a variety of uses that can be hooked up to the cloud using smartphones.

The talent piece of the puzzle is also beginning to fall into place because there are PhDs and post-docs returning to India from the US and the UK, Anandkumar points out. “It’s not easy for them to find jobs, which means that they have to invent their way out. There’s only one Biocon or Syngene or Novozymes, unlike the software industry which sucks in a lot of people,” he says.

The availability of talent, the existence of grants and infrastructure, and backing of HNIs at the early-stage funding level are happening when India is facing a mounting health care problem. India spends a little over 1 percent of its GDP on health care, whereas in advanced economies, it’s four to five times that.

There are also pricing controls in India, which means companies from overseas balk at bringing their intellectual property here. This also means that “our only way is to (locally) innovate our way out of the problem”, Anandkumar says.

Bugworks’ effort thus far has earned the venture recognition from the prestigious CARB-X accelerator.

CARB-X is short for Combating Antibiotic Resistant Bacteria Biopharmaceutical Accelerator. Launched in 2016, it is a partnership between Britain’s Wellcome Trust charity and the US government’s department of health and human services and the National Institutes of Health.

CARB-X expects to spend as much as \$455 million till 2021 to back innovations that lead to effective ways to fight drug-resistant superbugs. The accelerator said it was making an initial investment of up to \$2.6 million in Bugworks, with potential for option payments of another \$3.6 million, in a press release in July 2017. Such validation has given Anandkumar and his team, who number less than 20, a chance to aspire for something big; to be a billion-dollar

**“We are the first company taking arrhythmia management to the masses. We are democratising it.”**



## “Biotech, with AI and quantum computing, will redefine human society in the 21st century.”

company one day doesn't feel all that far-fetched.

If one of Bugworks' promising candidates actually reaches the level of an approved broad-spectrum antibiotic that can kill superbugs causing many of today's common infections, it will be the first such one in nearly half a century.

While not nearly in the billion-dollar league, one Indian biotech venture that did successfully reach the stage where it was ready for a public listing is Strand Life Sciences, called Strand Genomics in its earlier days. It was started in 2000 by scientists from the Indian Institute of Science. One of them, Professor Vijay Chandru, remains chairman and managing director, while another, Ramesh Hariharan, is CEO.

The company started out with bioinformatics, a meeting point of biology and data analytics, and became a specialist in human gene sequencing technologies. Today, Strand Life Sciences provides genetic testing-based diagnostics in cancer detection and treatment. The company has over 200 scientists and works with more than 300 large hospitals and hospital chains in India.

“Biotech, with AI [Artificial Intelligence] and quantum computing, will redefine human society in the 21st century,” Chandru said while moderating a discussion on biotech as part of a conference organised by Carnegie Endowment in December.

Strand Life Sciences came close to listing itself on the Nasdaq stock market in 2016, but called it off. On January 4, it announced that it had struck an agreement to acquire the Triesta unit of Healthcare Global Enterprises, better known as HCG, which operates cancer hospitals. The transaction gave HCG a 48.5 percent stake in the combined Strand-Triesta entity.

“Together we are well on the path to building Asia's leading integrated analytics-driven diagnostic and genomics research company... we will work together to be at the forefront of precision medicine,” Hariharan, CEO of Strand Life Sciences, who co-founded the company

with Chandru, said in a press release on January 4.


Hariharan, Chandru and two other co-founders, V Vinay and Swamy Manohar—who moved on to build other ventures of their own—are also a rare breed of role models in India that Saiyed at C-CAMP would like to see more of. This is because the participation of high-calibre academic research scientists in entrepreneurship in India is abysmally low, he points out, unlike in the US.

Funding beyond the early stage is another big hurdle. Anandkumar at Bugworks adds: “Government funding can only take you so far in the early stage. Then you fall into this huge valley and you need to (find the money to) get out of that valley.” The big VCs are just beginning to take an interest and it might still be a year or two before one sees a blockbuster funding deal in the biotech field in India, he says. That deal will most likely involve a multinational VC and “I still think the Indian VCs are at least five years away,” he says. “This is a high-risk area, you need subject matter expertise.”

Kiran Mazumdar-Shaw agrees: “The biggest challenge they all have is money. They don't have enough funding to even scale up their ideas. With proof-of-concept, you'll get small amounts with angel funding, but they need to scale, for which they don't have money.”

Not funding these promising ideas adequately has a big downside, Mazumdar-Shaw points out: “Where is their money coming from? From the US-based VCs, right? Because they can't get money here, they have to go and incorporate abroad. Every company is incorporating abroad just to get VC funding. So, you're

driving away innovation. Even though the innovation is happening here, the entity is registered there.”

Out of today's lifetech startups will emerge some of India's most exciting global businesses 10 years from now. What is needed is a way to anticipate that and enable them to get there. 



**VIJAY CHANDRU, 64**

**Designation:** Co-founder and chairman, Strand Life Sciences

**Founded:** 2000

**Venture:** Gene sequencing-based predictive and clinical diagnostics for cancer

**Funding:** \$17 mln (The funding and details are for Strand Life Sciences alone; this excludes an ongoing transaction with Healthcare Global)

KIRAN MAZUMDAR-SHAW

# ‘US FDA Approval Puts India on the Global Map of Biosimilars’

*Biocon has embarked on developing a pipeline of interesting novel biologics which it will look at as a global opportunity, says CMD Kiran Mazumdar-Shaw*

BY HARICHANDAN ARAKALI

**B**illionaire Kiran Mazumdar-Shaw's Biocon Ltd recently became the first company to have a biosimilar approved in the US for Roche's drug Trastuzumab, which is marketed as Herceptin and used in treating certain breast and stomach cancers.

The biosimilar, to be sold under the brand name Ogivri, brings Biocon a step closer to building a truly original bio-drug, or 'novel biologic' as it's called, for various markets. Biocon already has two novel biologics—Nimotuzumab for treating head and neck cancer and Itolizumab for treating psoriasis—that it markets in India, says Mazumdar-Shaw, 64, the company's chairperson and managing director.

From an earnings perspective, the bigger prize is to build biologics for America and Europe, and Biocon is working on a pipeline.

It has also strengthened its partnership with Mylan NV, which will market Ogivri in the US starting 2019, when Roche's patent on the original drug expires.

Biocon will eventually rely on cutting-edge R&D to produce high-risk, high-reward original molecules for multiple markets, Mazumdar-Shaw tells *Forbes India* in an interview. Excerpts:

**Q Give us some context of India's pharmaceuticals industry, leading to the development of biosimilars...**

India's pharma sector has played a pretty important global leadership role when it comes to generic drugs. This category is based on our huge skill base in chemistry and synthetic chemistry. And we've leveraged that to take us to where we are today.

To put things in context, if you want to develop a generic drug, it takes about two years and about \$5 million. Basically, to show equivalence to the drugs through Beba (bioequivalence and bioavailability) studies. This is the model that has been successfully pursued by Indian pharma companies over the years.

Then came the opportunity to develop biosimilars, which are near-identical copies of biologics—large, complex molecules which are impossible to identically copy. But a biosimilar can do the same job as the biologic drug. Therefore, the efficacy, safety and immunogenicity of such drugs are important factors. They require extensive clinical trials and studies over hundreds of volunteer patients, which is expensive.

Typically, a biosimilar drug can take upwards of \$150 million to develop and about 80 percent of

that cost is the clinical development price. The rest of it is the pre-clinical development of the drug. The risk is pretty high because you are spending all this money and hoping that the data that comes out matches that from the tests conducted with the original drug.

This is an opportunity for us to be a differentiated pharmaceutical company because as an entrepreneur, I've always believed that you should try and find a niche for yourself.

**Q What's the significance of Biocon winning the US Food and Drug Administration's (FDA) approval for Trastuzumab's biosimilar?**

It's taken us almost a decade. We started work on the biologic [Roche's Herceptin] in 2008 and got the approval in 2017. We got the Indian approval in 2014, so that was a six-year effort too.

This was the first biosimilar for Herceptin approved by the US FDA. It was a proud milestone for us because there are competitors, including Pfizer, Merck and Amgen, with deeper pockets and more experience in developing and selling biologics, which says a lot about what our scientists have done.

It's recognition that India has the skills to develop such complex





Kiran Mazumdar-Shaw  
says India has not  
encouraged clinical  
research and  
only focussed on  
clinical practice



## Interview

molecules. It puts India on the global map of biosimilars. And Biocon has a pipeline of other biosimilars that are nearing the finishing line. We are kind of a lone ranger in India in this space.

Trastuzumab is a \$6 billion global opportunity; the US and Europe between them are a \$4 billion opportunity. The World Health Organization has now put this in its essential medicines lists.

We also believe that we have a development and manufacturing advantage by developing the drug in India. The entry of generics leads to a discounting in the price, which on the other hand expands the market. Therefore, we are looking at a large market opportunity.

We have [the biologics] pegfilgrastim, glargine and bevacizumab in our pipeline. I don't think there's a chance of huge competition in the first four to five years as there will be only a handful of players with the risk appetite and deep pockets to develop these kind of products.

### **Q Are you now better equipped to push into original biologics?**

The fact that we started our biologics business with novel biologics gave us the confidence that we could address the biosimilars opportunity. We had the capabilities and understanding of large molecules which made it easier to make biosimilars. That said, Biocon's business strategy has always been about balancing biosimilars with novel biologics.

We already had two novel biologics in the Indian market, but didn't have the deep pockets to take them overseas. Therefore, we almost confined ourselves to the Indian market... but that's helped us to become big in biosimilars.

Now we have embarked on developing a pipeline of interesting novel biologics, which we will look at as a global opportunity. One is in the area of cancer again. These are called 'fusion antibodies', which

combine two antibodies to make one, and the method of action involves first attacking the tumour and then getting to the T-cells to further attack and kill the tumour.

So far, all the work has been done in a pre-clinical environment and the data looks promising. We're going to start human clinical trials next year.

### **Q How's Biocon changing and how do your products reflect that?**

Biocon started with niche enzymes. However, it was with the entry into biopharmaceuticals that we saw our revenues jump exponentially. In biopharmaceuticals, in the near-term, the big opportunity is going to be biosimilars. The biologics will take some time to enter global markets. If we're going to start clinical trials for a biologic next year, it will take us three years to complete those clinical trials.

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## **"In India, there's a dearth of expert skills in evaluating new drugs."**

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### **Q How do you see the interplay of biotechnology with machine learning and quantum computing?**

There is a lot of overlap. Today, drug research relies a lot more on information technology to accelerate. Product characterisation, for instance, is a long, cumbersome process and needs highly skilled people. If one can tap AI and quantum computing, this can probably be done much faster.

Therefore, you are going to use the new technologies to shorten timelines. Even today, clinical trials are done in a certain way, but there might come a day when one might have virtual models, and a lot of data points and findings can be acquired much faster. For instance, we can


get early signals that tell us if a drug is behaving the way it is supposed to. If predictive technologies can say 'yes the immunogenicity profile of this drug is fine', that shortens development time frames.

### **Q In India, where are we in general in your industry, including regulation?**

How many companies in India have developed novel small-molecule drugs? None. So, unless Indian companies start innovating novel drugs in the small molecules space, you aren't going to see a huge augmentation of regulatory skills. That said, it is improving, at least in the biopharma area; there are decent skills but in small numbers.

What is happening in India is also because we haven't encouraged clinical research and only focussed on clinical practice, there's a dearth of expert skills in evaluating new drugs—that's the issue, it's the whole clinical research ecosystem. It's all interconnected. Now if you start having companies developing new drugs, you will also start getting people.

Biocon is developing oral insulin, for instance, which is insulin administered as a tablet. It will be the world's first, if it works. We have a large number of diabetologists in India and diabetes is an area that is well understood.

On the other hand, with cancer, where we don't have adequate expertise to do some of the evaluations, we are likely to rely on external advisors from the US and Europe. Oncologists in India haven't really been involved in enough critical clinical research. We want Indian oncologists to become active in this. For instance, in the novel biologics that Biocon developed, the doctors involved continue to be research oriented and take an interest in the progress of the drug development. It's an evolving ecosystem, which needs to grow. 



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# Budget 2018: Prudence or Populism?

Finance Minister Arun Jaitley will be walking a tightrope as the government is expected to offer relief to the middle class and rural economies, while managing fiscal deficit and boosting investments

BY AVEEK DATTA, SALIL PANCHAL & ANSHUL DHAMIJA

**P**olitics and economics are the two focus areas that any government continuously juggles with, especially since veering towards one often means sidelining the other. Ensuring a fine balance between the two isn't the easiest job, even in the best of times. And these definitely aren't the best of times.

Recent political and economic developments—including the election results in Gujarat, and conflicting macroeconomic indicators, such as Gross Domestic Product and manufacturing indices—highlight the Herculean task ahead for Minister of Finance Arun Jaitley, as he gears up to present the Union Budget for 2018-19 on February 1.

The Gujarat election results ensured that the Bharatiya Janata Party (BJP) would form the government for the sixth consecutive term in the state. The victory, which followed a pitched battle with a somewhat resurgent Opposition led by the Congress, however, threw up crucial trends that could shape the contours of Budget 2018. The BJP won the election by a narrower margin than in 2012, and it became clear

that a sizeable chunk of the rural and agrarian population voted against the incumbent government. The reason, as analysts later dissected, was attributed to distress in the farm economy.

With elections in key BJP-ruled states such as Rajasthan and Madhya Pradesh due in 2018, followed by the next general elections in 2019, the rural economy is widely expected to be in focus in the Budget. It is almost certain that Budget 2018, which could well be the last full budget from the NDA-led government before the next general elections, will be a populist one. But the extent to which Jaitley can “balance populism with prudence” will decide its success, says Harsh Goenka, chairman, RPG Enterprises.

Suvodeep Rakshit, senior economist at Kotak Institutional Equities, expects the Budget to

be more nuanced in its populism when compared to the pre-election budgets of the Congress-led United Progressive Alliance government. “UPA’s pre-election budgets were characterised by measures such as hiking the minimum support price (MSP) for farmers’ produce, and other subsidies,” he says. “But the present government is likely to be more subtle in the manner in which it transfers wealth and creates jobs in rural areas. This may be through increased allocation under the MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act) for jobs involving the creation of rural infrastructure, and budgetary support for irrigation facilities, rural roads, bridges and housing.” The overall allocation for rural development could be 20-25 percent higher than



Arun Jaitley arrives to present Budget 2017. While last year's budget came just months after demonetisation, this year's is the first in the post-GST era

last year, adds Rakshit; in Budget 2017, this figure was ₹1.87 lakh crore.

Harsh Mariwala, chairman of consumer goods maker Marico, is also hopeful that the government will not use doles to stimulate the rural economy and create jobs. "They should boost the rural economy through investments in improving productivity, supply chain linkages, and irrigation; not by hiking MSP," he says.

"The Budget will also focus on rural housing as this segment has a multiplier effect. It spurs demand for housing material and construction, and also boosts consumption," says Ajit Ranade, president and chief economist at Aditya Birla Group. "I expect the government to announce

schemes through which there will be more income in the hands of the farmers." He didn't rule out the possibility of the government increasing MSP to help small farmers.

"I believe the Budget should focus on attracting investments, greater productivity and job creation," says Kiran Mazumdar-Shaw, chairperson and managing director of Biocon. "Measures for the agricultural sector need to be balanced with incentives for corporate India."

Industry leaders and analysts agree that direct financial assistance (such as increased MSP) to the farm sector, while politically enticing, may not be the best option, given India's fiscal deficit. Although the government's efforts to maintain fiscal prudence

and stick to its articulated fiscal deficit target has been commendable, economists agree that there may still be a marginal slippage.

Jaitley has previously articulated the government's commitment to reduce fiscal deficit to 3.24 percent of GDP by the end of FY18, and to 3 percent by the end of FY19. Ranade and Rakshit expect the fiscal deficit for FY18 to be around 3.5 percent, given that the government's revenue (both tax and non-tax) has been below expectations, owing to falling tax collection under heads like GST, as well as lower-than-expected dividends from the Reserve Bank of India (RBI). All of this means the government has very little elbow room to dole out largesse to its

The rural economy is widely expected to be in focus in Budget 2018 as lower farm incomes weigh on GDP growth



electoral constituents, mainly the farm sector and India's middle class.

There are other factors to consider as well. The full impact of demonetisation, implemented in November 2016, was felt in 2017. As liquidity dried up in the system, it led to obvious challenges for individual citizens, while trade channels found it difficult to continue normal operations. However, as the BJP's victory in the March 2017 Uttar Pradesh elections demonstrated, demonetisation had its supporters.

Then there was the Goods and Services Tax (GST), implemented from July 1, which seeks to create a seamless market in the country by making the flow of goods and services easier and more transparent. But the implementation of GST wasn't without hurdles. It took enterprises, especially small and medium ones, a while to understand and transition to the new tax system.

Demonetisation and GST, along with lower farm income, have

led to estimates that India's GDP will grow at its slowest pace in the last four years, with the Central Statistics Office estimating GDP growth in 2017-18 to be 6.5 percent, down from 7.1 percent in 2016-17.

One of the key economic statistics that the government will take heart from is the Nikkei India Manufacturing Purchasing Managers' Index (PMI), which reached its highest level in five years in December 2017, indicating a revival in manufacturing activity through new domestic and export orders. But Goenka says the industry will plan new capital expenditure projects (that will lead to new

jobs) only when existing capacity utilisation inches above 75 percent (it is around 71 percent at present). This is one of the reasons that new capex announced by Indian companies in December 2017, worth ₹77,000 crore was at its lowest level in 13 years.

Capacity utilisation will rise with increased demand and consumption. The expectation is that to bring some relief to the middle class (which bore the brunt of demonetisation) and to raise their disposable income (to boost consumption), the government could increase tax exemption limits for salaried individuals. To compensate for the consequent revenue loss, the government is widely anticipated

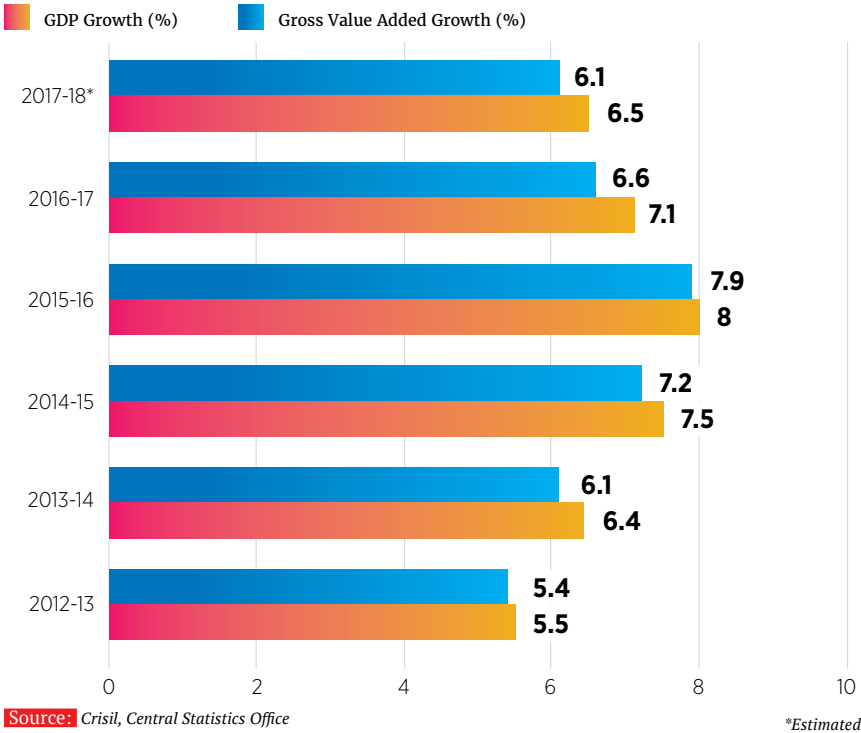
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**“All budgets are political, in India there is always an election coming... hopefully the government will stay with its belief that a 10-year plan is not the same as 10 one-year plans.”** —Manish Sabharwal

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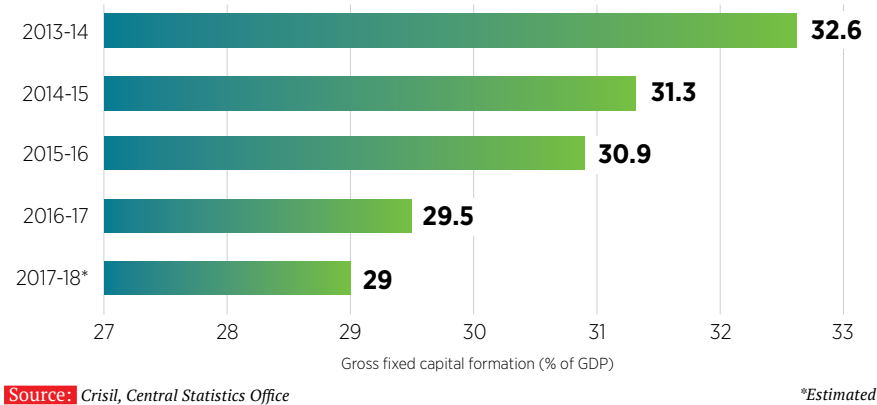


## INDIA'S GDP GROWTH AT A GLANCE



## CAPITAL INVESTMENTS TREND

Capital expenditure has been on a decline as capacity utilisation is sub-optimal and bank funding has been difficult to come by



to either re-introduce long term capital gains tax on listed securities or tweak the holding period that qualifies as long-term. At present, investors who buy and hold listed shares for over a year are exempt from paying long-term capital gains tax on the investment.

Aashish Sommaiya, MD and CEO of Motilal Oswal Asset Management, says he “won’t be surprised” if long-

term capital gains tax is brought back in the Budget and this could lead to a 10-12 percent equity correction.


But the markets have been buoyant right through 2017 and a contrarian theory is that, since equities are so attractive, a long-term capital gains tax may not impact investor sentiment. There are other reforms with respect to direct taxes that the industry is expecting. Ranade

reasons that if the government introduces long-term capital gains tax on shares in the Budget, it should do so across other asset classes such as bonds, real estate and private equity to ensure parity. “This will generate income for the government by widening the tax net,” he says.

Goenka agrees that the Budget should address the direct tax issue by rationalising rates and widening the base of taxpayers. One of the direct taxes that the industry hopes will be rationalised is corporate tax. India taxes the income of domestic companies at a rate of 30 percent (the effective tax rate comes to 33-35 percent). Soon after the current government came to power, Jaitley had stated that he expected the corporate tax rate to eventually fall to 25 percent, but that hasn’t happened.

“We need to simplify corporate tax and other direct taxes so that businesses don’t spend time micromanaging tax issues and run around for exemptions,” says Mariwala. Whether the finance minister can cut corporate taxes in an environment where there may be a fiscal slippage is debatable. But Mazumdar-Shaw points out that other economies, such as the US, are offering tax breaks to corporations in a bid to bolster the economy.

Agriculture versus industry, rural voters versus middle class voters, long-term sustainability versus short-term fixes, and economic prudence versus the compulsions of electoral politics—Jaitley will have to make many choices, and none of them are going to be easy.

In the end, Manish Sabharwal, chairman of TeamLease Services and a director on RBI’s central board sums it up when he says: “I think all budgets are political, because in India there is always an election coming. There is a difficult balancing of the short- and long-term, and hopefully the government will stay with its belief that a 10-year plan is not the same as 10 one-year plans.” 

# ‘We Cannot Rely on Old Industries Alone’

Commerce Minister **Suresh Prabhu** is zeroing in on a host of new sectors to boost manufacturing over the next decade

BY MANU BALACHANDRAN

**F**or a little over four months, Suresh Prabhu has been working round the clock, meeting India’s corporate doyen, to chart out a path for the sinking manufacturing sector. The commerce and industry minister, who took charge last September, has had an eventful few months: India’s exports grew by a record 30 percent in November, he flew to Buenos Aires and stood firm by India’s demands at the inter-ministerial talks of the World Trade Organization. His ministry is now in the process of identifying between six and seven new sectors to boost manufacturing over the next decade.

PM Narendra Modi had set out an ambitious manufacturing programme in 2015, looking to improve the share of manufacturing in India’s GDP to 25 percent by 2025 from the current 17 percent. In an interview to *Forbes India*, Prabhu spoke about what 2018 looks like for India and his attempt at reviving the manufacturing and export sectors. Edited excerpts:

**Q It’s been four months at the helm. How do you see the Indian economy performing?**

To begin with, you have to look at the Indian economy from two perspectives. One is the fundamentals of the economy. Then there is the psychological factor that influences the economy. The economy is driven by people and people are driven by psychology. So psychology is as important as



Suresh Prabhu says the fundamentals of Indian economy are getting stronger every day

the fundamentals and psychology can change the fundamentals.

So, if you take both, the fundamentals of Indian economy are stronger and getting stronger every day. Savings rate is improving and the investment rate is growing too. We are also seeing improved exports and beginning of good activity in manufacturing. Services, too, are growing well. This is one part. Then there is the external sector, which is also looking better.

The second part is the psychological part. If you go by business confidence, it has, for the first time, improved in a significant way. If you go by the PMI (Purchasing Managers' Index) for manufacturing and services, it has improved too. And psychology, as I said, influences decision-making on real economy. So, we should look at better days.

**Q 2018 is a critical budget, just ahead of the elections in 2019. What are your expectations?**

We will have to see on February 1 what's there in the budget. It is the prerogative of the finance minister. The wish list of every minister is large, and the finance minister has to balance the budget. But, we are expecting a good budget, which will take India forward and consolidate the position we are in today.

**Q The PM has laid a lot of stress on Make In India. How is it progressing?**

The Make In India programme is an important component of not just make in India, but also the making of India. That's because the GDP can't be sustainable if manufacturing doesn't grow in good numbers.

We had a big manufacturing summit in Mumbai recently in which we asked the companies and industrialists who have been manufacturing for decades to make a plan that would make us a \$5-trillion economy by 2026-27; and \$1 trillion must come from manufacturing.

We are now identifying sector by sector, for instance, how much must come from steel, pharmaceuticals, cement, chemicals and others. This is about modernising existing industries, scaling them up to a level where they can contribute to 20 percent of the GDP.

The second part is new industries. We cannot rely on these old industries alone. So Make In India must focus on industries that are not born today. We are trying to find out those industries and work on them. If you look at it, the company that will reach the \$1-trillion market cap is a company that wasn't listed 20 years ago. There are companies that are listed for 100-plus years and they will never reach that mark.

**Q But manufacturing across the world has been affected by Artificial Intelligence and**

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**“The Make In India programme is an important component of not just make in India, but also the making of India.”**

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**automation. In that regard, how do you see the future of manufacturing in India?**

There is no conflict in that. Manufacturing has changed over the last hundreds of years. What is important is that the manufacturing we will do tomorrow is relevant to the times. If you scale up the level of manufacturing, its capacity and propensity to create that many jobs in the old manufacturing sectors may not be as high as the new ones, but doesn't mean jobs won't be created. We will go into new industries and the modernisation of industries, which will create jobs. It is a misconception that automation doesn't create jobs.

**Q Your ministry is looking at a new industrial policy. Can you**

**tell us what that will look to do?**

This policy will look into deregulation, new manufacturing facilities, industrial corridors, and specific products where manufacturing can happen on a large scale.

**Q The Foreign Trade Policy (2015-20) had set an ambitious target of \$900 billion in exports by 2020. Are you on target?**


We have not kept any targets. We will aim at the highest possible rates. My mid-term export policy was clear, that we will work on strategies. The outcome of strategy will be exports. We are aiming at a good number, but I will not like to give any number.

**Q How do you think 2018 is likely to shape up for India?**

The Indian economy is doing far better than many other world economies. All Indians feel that we

should do better. That shows that Indians have far more expectations from themselves; this will propel the economy. Business confidence and fundamentals are improving, and structural reforms are taking place to change the trajectory of growth.

**Q Lastly, even as you talk about structural reforms, domestic spending and the issue of twin-balance sheet continue to plague the economy. Will that change?**

That is what is improving. Based on PMI for manufacturing, things have improved and future spending is set to increase. There is also the deleveraging of the Indian corporate balance sheet, which will go a long way in creating investments. We see that happening already. 



# Staying the Distance

It is imperative for the finance minister to stick to fiscal deficit targets, revive the rural economy and fuel fast-paced growth with green energy sources



BY SUMANT SINHA

**S**ince assuming office in 2014, the Narendra Modi-led government has been working hard to bring the economy on an even keel. Fiscal deficit and inflation have been tamed, and the country's foreign exchange reserves have swelled. Further, the rollout of the Goods and Services Tax (GST) promises to pave the way for an economy with fewer barriers for business.

The world has taken notice of the efforts—India has climbed 30 places to rank 100 in the World Bank's Ease of Doing Business Index for 2018, FDI inflows have touched a record \$118 billion in the period from 2015-17 and Moody's has upgraded India's investment rating.

## FISCAL DISCIPLINE

To continue in this growth lane, more has to be done. We hope that in the upcoming Budget, the government will maintain the current fiscal discipline and check borrowings. The recently-announced additional borrowing of ₹50,000 crore suggests that fiscal deficit targets are likely to be missed. Caution needs to be maintained to ensure that growth momentum is not lost and inflation remains under control.

The GST regime has been in place for around six months and its contours should be finalised. The GST refund backlog has touched an unhealthy ₹60,000-70,000 crore, according to CII.

Additionally, privatisation of the banking sector could pave the way

for long-term economic growth and improve investments. Solving the issue of stressed assets will revive bank lending, while facilitating job creation.

## REVIVING PRIVATE INVESTMENT

Industry expects the government to bring down corporate taxes to make India an even more attractive destination for investment. Recently, the US Congress approved an overhaul of the US tax code, slashing the corporate tax rate to 21 percent from 35 percent. This is expected to make investments in the US more attractive, and have an impact on emerging market economies like India.

The finance minister should consider reducing the corporate tax to encourage investments by both domestic and international companies in India. In his 2015-16 Budget, the FM had promised to reduce the corporate tax rate to 25 percent in four years. The rate must come down for India to stay competitive in the global market.

There is an urgent need to push infrastructure development by boosting public expenditure and encouraging private investment. To get capital flowing into an ailing manufacturing sector, the government must look at incentivising private investors, especially in the Micro,



The renewable energy sector will hope for an impetus to achieve the ambitious target of generating 175 GW by 2022



Small & Medium Enterprises (MSME) space—a major driver of employment.

MSMEs, being labour- and not capital-intensive, cannot benefit from the large tax write-offs that large manufacturing companies claim on depreciation. If they are allowed deemed depreciation on the basis of employment generated in a financial year, the additional cash flow back would lead to more employment.

Another aspect of the country's MSME sector is that less than 3 percent of MSMEs are corporates registered under the Companies Act, with the vast majority being proprietorship and partnership firms. One major reason for this trend is the absence of tax slabs at lower rates for low-income companies. Levying corporate tax for enterprises based on income slabs similar to individuals' personal income tax would possibly bring more entities under a structured tax regime.

#### THE RURAL ECONOMY

The government needs to evaluate its options in two core sectors—

agriculture and affordable housing. It is important to continue to grow the rural economy. The Budget should focus on increasing agricultural yield, promote cash crops and incentivise the use of new technologies in agriculture.

It is now time to focus on income and livelihood security for all. A few steps that could help are: Classifying loans to agricultural infrastructure, including food processing units, as priority sector lending and introducing integrated marketing through public private partnerships for fresh produce handling.

As with agriculture, another sector that calls for substantial investment is affordable housing, which will boost urban development. The Modi government has set itself a steep target to achieve housing for all by 2022. The intent is indeed commendable as it has triggered intense state involvement in urban housing, planning and infrastructure. However, there are issues of scarcity of land, high capital expenditure and lack of proper property records.

#### FUEL FOR GROWTH

The fast-paced growth envisaged for the country also means that energy demands will spiral. Recently, the International Energy Agency said India would be the fastest growing energy consumer, and market, till 2040. The PM has also announced the 'Saubhagya Yojana' to achieve the goal of lighting every household by December 31 and also reiterated the importance of green energy. With Budget 2018, the renewable energy sector is hopeful for some major announcements that can provide the impetus to achieve the ambitious target of generating 175 GW of renewable power by 2022.

Renewable power developers should be encouraged to continue reducing tariffs, for which the government must ensure that no additional duties are imposed. At the same time, sops should be provided to encourage the manufacture of equipment like solar panels in India, and reduce dependence on imports.


The operational costs of setting up



## There should be substantial investment in agriculture and affordable housing to propel both the urban and the rural economy

Under the Pradhan Mantri Awas Yojana (Urban), the government has come out with several measures, including giving the sector infrastructure status and extending interest subsidy benefits. However, more needs to be done if we want to reach the target of 22 million homes by 2022. Digitisation of property records, providing access to cheaper capital to attract more private investments and exploring rental models backed by an institutional structure can help achieve this objective.

renewable energy plants should be exempted from GST and a common rate should be applied to various components of a solar installation. Currently, while tax on solar power generating systems is 5 percent, other components such as inverters, transformers and cables are taxed at various rates under GST.

Budget 2018 will perhaps be the last full budget of this government. We hope that the fiscal prudence shown thus far will be sustained in that. 

*(The author is chairman and CEO, ReNew Power)*

# Govt Must Focus on Reforms in Direct Tax, Job Creation

The Budget must take steps to make the Indian corporate sector competitive and send across a message that the country is a haven for investors



BY SHOBANA KAMINENI

**T**he Union Budget 2018 will be presented at a time when the economy is on the cusp of a recovery. The focus will be on how that can be strengthened so as to have an impact on the lives of people. Finance Minister Arun Jaitley will likely pay attention to issues such as rejuvenation of the rural economy, acceleration in building infrastructure and generation of quality jobs in manufacturing. This is also the first budget to be presented in the Goods and Services Tax (GST) era, thus ruling out any changes in excise and service tax rates. Reforms in direct tax laws, however, are on the cards and those would give further impetus to the economy.

The Indian corporate sector needs to be globally competitive for which tax rates need to be on a par with other countries. With the minimum alternate tax (MAT) and dividend distribution tax (DDT), the tax burden on the Indian corporate sector is one of the highest in the world. The US has announced a reduction of corporate tax rate to 20 percent with effect from 2019. The UK plans to reduce the current rate of 20 percent to 17 percent from April 2020. Singapore applies a tax rate of 17 percent. Emerging economies too have lower tax incidence.

The Confederation of Indian Industry (CII) has recommended a reduction in the corporate tax rate to 18 percent with withdrawal of

tax incentives and exemptions, and dropping of surcharges and cesses. Further, MAT should be abolished or brought down to 10 percent. The DDT rate too should be brought down to 10 percent. This will send a powerful message to the Indian industry and global investors that India is an attractive investment destination.

In infrastructure, public spending needs to be stepped up in sectors such as roads, rail, waterways. A critical push is also required in public housing projects in industrial clusters and agri-infrastructure areas such as

the recommendations of the Kelkar Committee on revisiting and revitalising the PPP model of infrastructure development. Further, the government should award projects to the private sector only after securing key sovereign clearances with proper interventions to ease norms in land, labour and environment, especially for big infrastructure projects.

Given the constraints on land availability, the CII has suggested that a 'Land Bank Corporation' be set up to make available surplus

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## With MAT and dividend distribution tax (DDT), the tax burden on the Indian corporate sector is one of the highest in the world

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irrigation, cold storage, warehousing, rural roads, to raise farmers' income. In order to raise funds, we have suggested that the government speed up the formulation of its asset recycling policy and identify public utilities and infra projects either for outright sale or for giving out operation and maintenance contracts to specialised private sector firms.

There is an urgent need to renew the focus on revitalising public private partnerships (PPPs). An effective dispute resolution mechanism needs to be put in place by implementing

land owned by the government. Multiple public entities like the railways, army and airport authority, hold vast parcels of public land in prime urban spaces which are often underutilised. There should be a publicly accessible inventory of such land, which the industry can access if it wishes to invest.

The power sector is seeing a lot of stress. While a lot of capacity has been created in generating power, some of these are stranded assets as distribution companies are not buying power from them. In this context, the

**Public spending needs to be stepped up in sectors such as roads, rail and waterways**



CII suggests the creation of a 'National Power Distribution Company' which will buy power from the generating companies when the state utilities are not able to do so. This will create a unified market for power in much the same way that GST has created a single market for goods and services.

The rural sector needs to be rejuvenated by injecting more dynamism in both agricultural and non-agricultural activity. A target has been set for doubling farmers' incomes. To achieve this, it is important to set up post-harvest infrastructure, including warehousing and cold storages at the district level, and lease to the private sector, including food processors and large buyers. Current contract farming laws need to be amended to allow leasing of farm land on contracts to corporates and large growers without transfer of titles to reap the benefits of large-scale scientific farming. The CII has suggested the creation of an empowered group of state agriculture ministers to implement reforms in

agriculture, much like the empowered committee of state finance ministers, which made GST possible.

India needs to invest in human development to best leverage its demographic dividend. Public spending on education is currently 3.2 percent of GDP and needs to be gradually raised to 6 percent. In health care, the current spending is just 1.5 percent of GDP; it should go up to the stated target of 2.5 percent by 2022. In education, we need to boost technology usage in schools and a fund could be allocated for teacher training. Merit scholarships for secondary education would lower dropout rates.

In health care, the private sector should be encouraged to partner for universal health care and states must be allowed to go for PPP in district hospitals. Infrastructure status may be given to private hospitals. A special fund can be created for remote and digital health care facilities in rural areas. Special attention must be given to the development of 100 backward districts. A target should

be set for improving India's rank in the human development index to within 50 from the current 131.

Creating quality jobs must be a near-term objective. The Budget could offer incentives for employment generation and a pilot scheme for universal basic income for poor households may be undertaken. Employment generation would also flourish if coastal economic zones are created with incentives to create jobs.

Although GST is no longer a budget issue, the CII hopes that the finance minister will highlight the need to move to a simpler structure with three rates and inclusion of more items to ensure free flow of credit through the supply chain. Once there is stability in the tax rates and more items are included, there should be an increase in the tax-GDP ratio. Higher revenues should be used judiciously on productivity-enhancing measures rather than subsidies and giveaways. The industry looks forward to another path-breaking budget.

*The writer is president, CII*

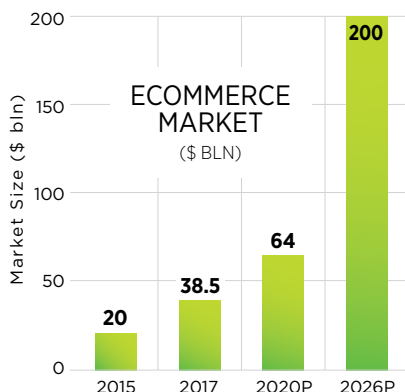


# High on Hope

From banking to aerospace, every sector is buoyant with expectations from the upcoming Budget. As February 1 looms, hope springs eternal

## 1. ECOMMERCE

The size of the Indian ecommerce market is estimated to touch \$40 billion in 2018. Good policy and fiscal support, especially around GST, can catalyse growth in the sector.



Source: IBEF, Deloitte

### Challenges

- Large number of consumers, especially in rural areas, cannot access digital transactions.
- Logistics account for 2-10 percent of the cost of ecommerce.
- FDI policy for sector is still evolving.
- There are grey areas around characterisation of ecommerce transactions for tax treatment, especially for foreign players.
- GST has resulted in additional compliance requirements.
- Working capital has been choked due to additional GST on stock transfers.
- The Composition Scheme—wherein taxpayers can get rid of tedious formalities and pay GST at a fixed rate of turnover—is not available for

ecommerce transactions.

- There is lack of clarity on tax treatment of cash-back schemes, gift coupons and vouchers.
- While the law mandates passing on benefits that businesses accrue from GST to end-consumers (anti-profiteering), there is no clarity on the methodology to be followed.

### Expectations from Budget 2018

- Incentivise cashless transactions.
- Reduce logistical costs by slashing GST on tyres.
- Incentivise technology and sourcing agreements between kirana stores and foreign ecommerce players.
- Bring clarity on how ecommerce transactions should be treated under GST.



## 2. RETAIL

The Indian market provides a good opportunity for the retail sector to flourish, with robust demand, increasing investments and innovation in financing. Adoption of digital technology and ecommerce is the way forward for the sector.

### Challenges

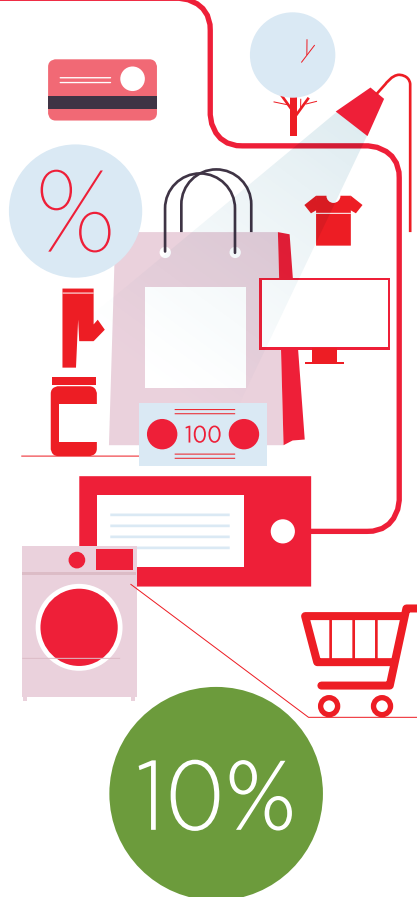
- Lack of proper infrastructure and an under-developed supply chain have resulted in inefficiencies and higher costs. Coupled with rising real estate rates, this has hit profitability.
- Demonetisation has impacted sales and footfalls.
- Though GST has been positive, ambiguity remains on transitional credit for existing stock and anti-profiteering rules.
- Multiple changes in GST rates have made transitions difficult and, in some cases, resulted in higher prices.
- There is a dearth of skilled workers at the management and operational levels.
- Despite several relaxations in FDI policy, multiple regulatory bodies are slowing decisions.
- Kirana store owners perceive foreign players as a threat to their livelihood. Deep discounting by e-tailers has bred insecurity among them.

### Expectations from Budget 2018

- Focus on developing infrastructure

and the rural sector.

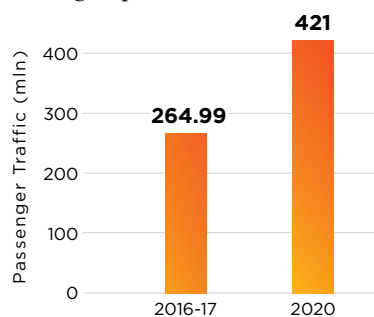
- Reduction of GST rates for consumer goods and clarifications on transitional credit and anti-profiteering can help reduce prices.
- Budget 2018 should relax conditions for income-tax incentives related to employment generation in the sector.
- Government could sponsor training programmes or incentivise training initiatives of private players to take on the challenge of inadequate skilled manpower.
- Clarifications on open issues and measures for ease of doing business, including those related to return-filing timelines, their revisions and relaxation of non-compliance penalties would be welcome.
- Technology and sourcing collaboration agreements between small players and foreign investors must be created to promote trust and avoid oligarchy.
- Simplification of compliance procedures under GST and scaling up of IT infrastructure to ease compliance.



**EXPECTED CAGR OF THE RETAIL SECTOR. IN 2017, CONSUMER APPLIANCES TOPPED THE ITEMS TRADED ON THE RETAIL PLATFORM. THIS WAS DESPITE THE IMPLEMENTATION OF DEMONETISATION AND GST.**

## 3. AVIATION

Domestic airline passengers in India stood at around 104 million in FY17, up by 22 percent from the previous fiscal. This fast growth in passenger traffic is increasing the pressure on existing airports.



Source: IBEF

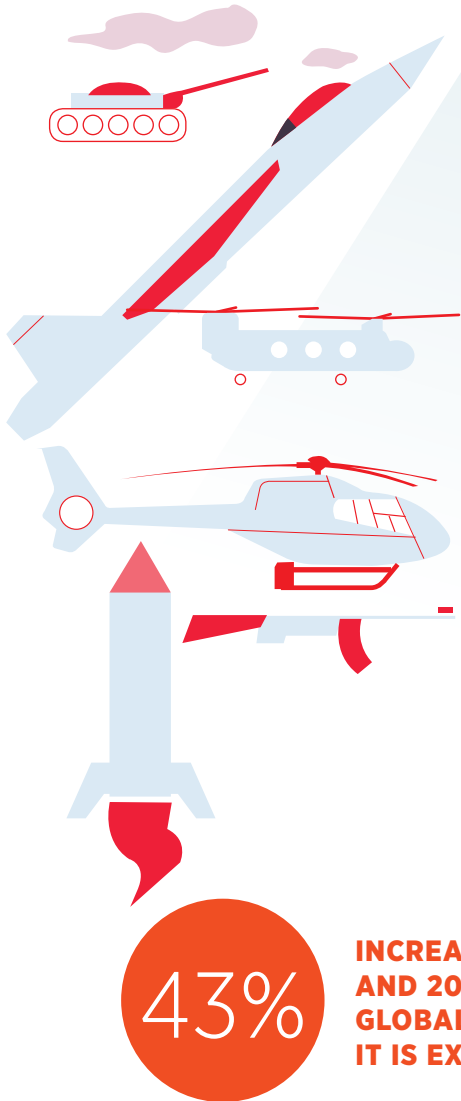
### Challenges

- Most of India's 40 largest airports are likely to exceed their capacity within a decade; Mumbai and Chennai are fast approaching saturation.
- There is no roadmap for safety enhancement, airport capacity expansion or improving the quality of services at airports run by the Airports Authority of India.

### Expectations from Budget 2018

- Consider tripling airport capacity within 15 years at a cost of ₹3 lakh crore.
- Reduce VAT on aviation turbine fuel to 1 percent.

- Enable private sector to operate and maintain airports in tier-II and tier-III cities and develop underserved airstrips and airports.
- Set up skill development centres for technical and service staff so that they can play their roles to perfection.
- Set up centres to develop skilled personnel for aerospace manufacturing.
- Promote energy-efficient airports.
- Expand e-visa initiatives to more countries.
- Bring airport operations and maintenance under public private participation (PPP).
- Finalise guidelines for use of drones for civil purposes.



## 4. AEROSPACE & DEFENCE

At around \$55.9 billion in 2016, India's military spending is the fifth largest in the world and the country is also the world's biggest arms importer.

### Challenges

- Only 15 percent of India's military equipment is state-of-the-art; 50 percent is obsolete.
- Procurement procedures of the defence ministry are time consuming.
- Lack of cutting-edge manufacturing facilities is responsible for India's large defence imports.
- Offset credit can be claimed by foreign defence companies only for equity investments in joint ventures and not for portfolio investments.

### Expectations from Budget 2018

- Consider 100 percent FDI under the automatic route to encourage global participation from original equipment manufacturers and to expedite technology transfers.
- Bring tax exemption for private players that enter into transfer of

technology agreements with foreign companies.

- There should be development of relevant skillsets and tax rationalisation to retain maintenance, repair and operations activities.
- Weighted tax deduction for R&D spends, which will be phased out after March 31, 2020, should be extended by five years.
- The 15 percent tax deduction for investment in new plant or machinery, which was available for all sectors until March 31, 2017, should be extended for aerospace and defence.
- Procurement costs should be slashed through exemptions or by lowering GST.
- Government can accord 'infrastructure' status to the defence sector for claiming various benefits, such as tax holidays.

43%

**INCREASE IN VALUE OF INDIA'S ARMS IMPORTS BETWEEN 2007-11 AND 2012-16. INDIA'S DEFENCE BUDGET BECAME THE FIFTH LARGEST GLOBALLY IN 2016, MOVING UP FROM THE SEVENTH POSITION IN 2015; IT IS EXPECTED TO BE THE THIRD LARGEST IN 2018.**

## 5. HEALTH CARE

India can achieve its health care goals by tapping digital and other modern technologies, through targeted budget allocations, that will make surveillance, monitoring and various health care programmes feasible.

### Challenges

- In 2017-18, government spending on health care was a dismal 1 percent of GDP, compared with 7-12 percent in many developing countries.
- Malnutrition, air pollution, contaminated water and lack of sanitation remain some of the leading risk factors.
- The National Nutrition Mission needs more funds.
- Health care has to be made more affordable and equitable with price controls on medical devices.

- Penetration of health insurance schemes remains low.

### Expectations from Budget 2018

- Health care services should continue to be exempt from taxes under GST.
- High taxes (12-18 percent) levied on inputs such as consumables and medical equipment must be reduced.
- The government must enhance the limit of non-taxable medical reimbursement to at least ₹50,000.
- For taxation, pro-rata deduction of single premium paid in a year should

be allowed over the term of a medical insurance policy.

- Deductions on health insurance under section 80D may be enhanced to ₹40,000 for individuals and ₹50,000 for senior citizens.
- Tax exemption on preventive health checkup under section 80D should be raised to ₹20,000 from the current ₹5,000.
- Weighted deduction available under section 35AD to a taxpayer engaged in building and operating a hospital must be restored to 150 percent (currently 100 percent) to reduce cost burden on patients.
- Liberalise provisions of section 35AD to include new hospitals with less than 100 beds.



## 6. LIFE SCIENCES

The government's proactive policies have helped domestic private pharma companies build scale, with Indian generic firms recognised the world over as critical partners for providing safe and low-cost medications.

### Challenges

- Local innovation is discouraged.
- There must be more government focus on chronic diseases such as diabetes and cardiovascular ailments, including tax incentives for patients.
- Promote cutting edge R&D to help Indian players transition from pure-play generic companies to branded pharma firms.
- Financial and non-financial incentives are needed to increase Indian companies' presence in the

manufacture of active pharmaceutical ingredients.

### Expectations from Budget 2018

- Concessional tax rates for patent royalties received from overseas.
- Concessional tax rate on royalty must be extended to include know-how, copyrights and trademarks.
- Tax deductions for expenditures incurred on marketing and protection of patents.
- Concessional tax for successors of

mergers and demergers or inheritors of inventions.

- Expenses in connection with payment to doctors should be available for tax deduction.

Indian pharmaceuticals market is expected to grow at **18%** up to **FY21**, driven by both domestic and export growth

By **2021**, the domestic market will cross **₹1.8 lakh crore**, growing at over **21%**. The export market will grow at a slower pace of **15%** to reach **₹2.2 lakh crore**

## 7. PUBLIC FINANCE

It is hoped that Budget 2018 will focus on fiscal consolidation, while releasing adequate resources for accelerating growth.

### Challenges

- The government has to reduce its fiscal deficit to 3 percent of GDP and revenue deficit to 1.6 percent of GDP from the prevailing 3.2 percent and 1.9 percent, respectively.

### Expectations from Budget 2018

- A fiscal council to monitor progress of rule-based fiscal policy should be established.
- The Budget should mandate

tax authorities to progress with the recommendations of the Tax Administration Reforms Commission, which suggests changes in structure, improvement in taxpayers' service, enhanced use of information and communication technology, exchange of information with other agencies, revenue forecasting, predictive analysis and research for tax governance.

- The Budget should focus on generating resources and improving

governance through strategic disinvestments, starting with Air India.



**INCREASE IN INDIA'S RANK (TO 100) IN WORLD BANK'S EASE OF DOING BUSINESS RANKINGS IN JUNE 2017**

## 8. CONSUMER AND INDUSTRIAL PRODUCTS

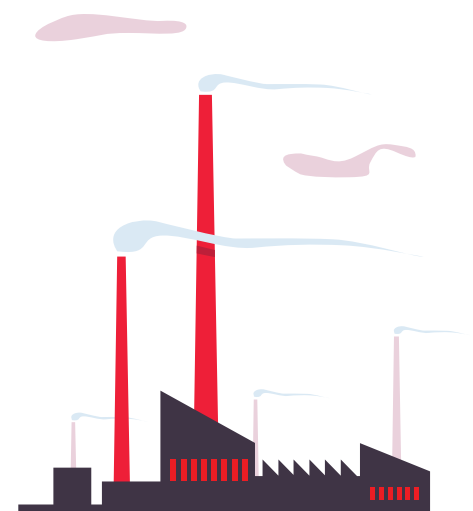
A tax-payer friendly, transparent GST regime and incentives to promote infrastructure and the rural sector will provide an impetus to the overall growth.

### Challenges

- Consumer products companies have been impacted by GST with supplies remaining muted in recent months.
- Consumer demand has not been picking up at the desired pace.
- Consumer Price Index-based inflation rose to a 15-month high in November 2017.
- Manufacturing companies have been hit by a slowdown in capital goods demand.

### Expectations from Budget 2018

- Measures to pass on benefits of GST to consumers will boost demand.
- Strengthen agricultural supply chain to manage price fluctuations.
- Law curbing anti-profiteering.
- Articulate a better PPP framework to increase investment flow to infrastructure projects.
- Improve efficacy of GST implementation to reduce supply chain costs.





## 9. TRANSPORT SECTOR

The transport sector is an important contributor to India's growth. It is important to focus on regional airline connectivity, promote electric vehicles, enhance last mile connectivity and address skill gaps in the sector.

### Challenges

- The central government plans to build 83,677 kilometres of roads over five years by spending ₹7 lakh crore, the bulk of which will have to be borne by the government.
- Most Indian cities are not equipped to provide sustainable transportation options leading to growth of motor vehicles and the inability to popularise electric vehicles.

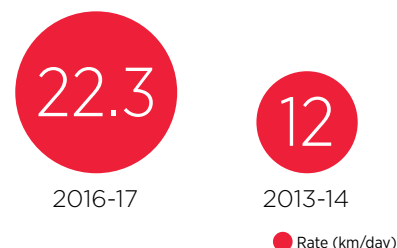
### Expectations from Budget 2018

- Infrastructure companies would like revenue to be taxed during the operation and maintenance period and

- not during the construction period.
- Scale-up high-speed train network.
- A large commitment by Indian Railways for development of stations.
- Public listing of Ircon, IRFC and IRCTC to unlock value for Indian Railways.
- Measures to develop a seamless payment infrastructure in ports and integrate payment infrastructure at tolls and fuel retail outlets.
- Eliminate differential tax treatment for shipping industry.
- In urban transport, promote sustainable financing via dedicated funds.

- National Urban Transport Fund must be created at the national level and state governments should be encouraged to generate additional funding.
- Take adequate measures to meet target of 100 percent vehicle electrification by 2030.

### RATE OF ROAD CONSTRUCTION



Source: IBEF, Press Information Bureau, Government of India

## 10. ENERGY & RESOURCES

India is the world's third largest consumer of crude oil and petroleum products and the second largest refiner in Asia. The fortunes of this sector are strongly linked to the development of infrastructure.

### Challenges

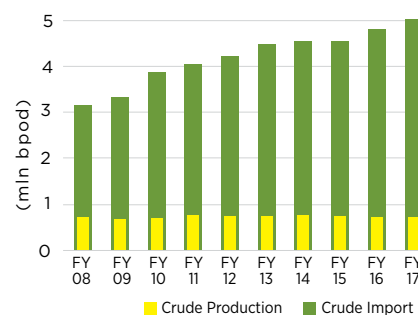
- Mining sector carries the risk of non-productive mines where companies invest huge capital.
- Slow economic growth and reduced demand have affected the sector.
- Given the PM's vision of reducing import dependence for energy needs, there must be more private players in oil and gas exploration.

### Expectations from Budget 2018

- The promised reduction of corporate tax rate from 30 percent to 25 percent announced in Budget 2015 is yet to be applied to all sectors.
- Abolish Minimum Alternative Tax (MAT): While the I-T Act has moved from profit-linked incentives to investment-linked incentives, its benefits can be enjoyed only if MAT

provisions are done away with.

- Consolidation of tax returns for infrastructure and energy companies.



Source: PPAC & DGH

## 11. OIL & GAS

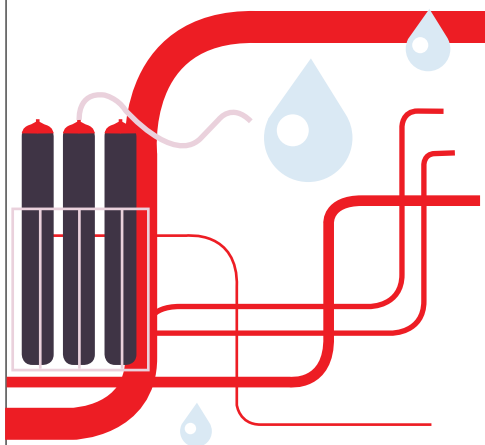
According to BP Energy Outlook 2016, India's energy consumption is projected to grow at 4.2 percent per annum up to 2035, faster than all major economies in the world. With the continued dependence on fuel imports, ensuring energy security is crucial to sustain the country's growth momentum.

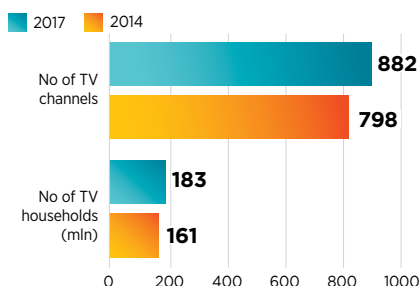
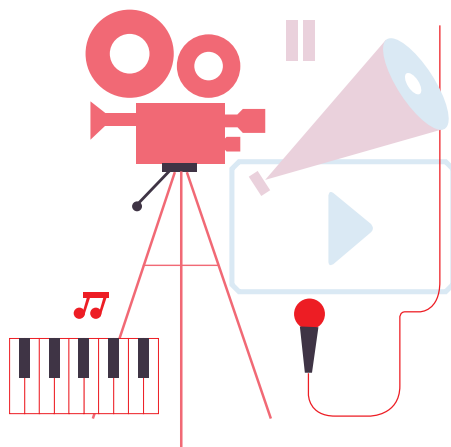
### Challenges

- The government has embarked on a mission of '24x7 power for all' by March 2019.
- The MAT rate of 20 percent of book profit for exploration and production (E&P) is a significant deterrent for overall investment.

### Expectations from Budget 2018

- The government should consider reducing MAT rate for E&P operations.
- Petroleum products should be brought under GST to enable free flow of credit and avoid cascading of taxes.





Source: FICCI, MIB

## 12. MEDIA AND ENTERTAINMENT

The media and entertainment market in India was estimated at \$20.5 billion in 2016. The country is the second largest television market globally and its film industry churns out the largest number of movies in the world annually.

### Challenges

- Benefits of carrying forward tax losses during consolidation is not available to the broadcasting sector.
- The sector cannot claim benefits of the safe harbour provisions, which internet companies, for instance, use to protect themselves from copyright infringement cases.
- Broadcasting is capital intensive and requires financing at a lower cost and the segment has not been granted infrastructure status.
- India has a screen density of 6 per million people which is significantly lower than the US (126 per million) and China (30 per million).
- The requirements to obtain a cinema

licence were drafted in 1952 and have not been updated. About 15-20 approvals are needed.

### Expectations from Budget 2018

- The government should consider treating broadcasting as an industrial undertaking.
- A single-window clearance mechanism should be introduced for setting up screens.
- Tax holidays for new multiplexes or for conversion of single screen to multiplexes.
- Even with GST, local authorities levy tax on movie tickets. This should be discontinued or a corresponding reduction in GST should be provided.

## 13. BANKING & INSURANCE

The financial services sector needs structural incentives to provide solutions for raising capital and refinancing credit.

### Challenges

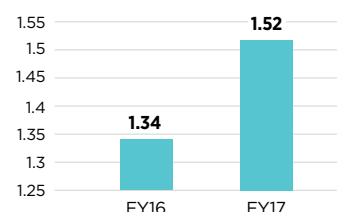
- Income of banks from most sources is subject to TDS. This creates a huge volume of TDS certificates.
- Units located in International Financial Service Centres (IFSC) are provided with a MAT rate of 9 percent; this is not globally competitive (Dubai 0 percent, Malaysia 3 percent).

- Costs of private health care have risen but section 80D allows a maximum deduction of just ₹25,000 for qualified medical insurance expenses.

### Expectation from Budget 2018

- NBFCs must be treated at a par with banks for tax provisions.

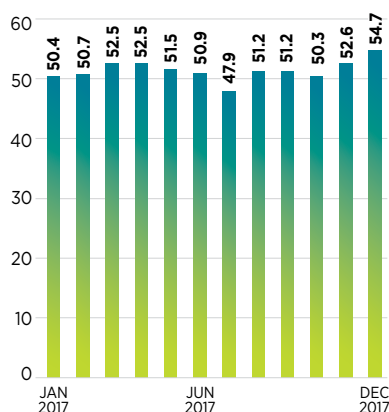
### PUBLIC SECTOR BANK ASSETS (\$ BLN)



Source: IBEF

- Provide blanket TDS exemption for payments to banks.
- Abolish MAT for units in IFSCs and increase tax holidays.

### NIKKEI INDIA MANUFACTURING PMI



## 14. MANUFACTURING

The manufacturing sector is estimated to touch \$1 trillion by 2025 accounting for about 25-30 percent of the GDP, providing 90 million jobs. With its geographic advantage and huge labour pool, India can be a global manufacturing hub.

### Challenges

- Stronger consumerism in the domestic market and sustained availability of high-skilled, low-cost manpower is needed.
- Disputes relating to indirect tax incentives promised to MNCs in India by state governments have not been resolved.

### Expectations from Budget 2018

- Relaxation in tax compliance and fast track settlement of long-pending tax cases.
- Matters decided by courts or tribunals in favour of taxpayers should be implemented by lower authorities without delay.
- Reducing MAT rate



No 1: Angela Merkel

# The WORLD'S 100 Most POWERFUL WOMEN

**WHO'S IN CHARGE? FOURTEEN YEARS AGO, WE DEFINED WHAT IT MEANS TO BE A POWER woman:** Economic might, a wide sphere of influence and high-octane impact. This year's lineup includes the icons you know on a first-name basis: Angela, Melinda, Oprah, Beyonce. But we're introducing a brand-new generation of heads of state, CEOs, founders, visionaries and leaders. A full quarter are newcomers to the global stage—women who are building billion-dollar brands, moving markets and criss-crossing the globe on humanitarian missions. Together they govern or directly influence more than 3 billion people and \$51 trillion in GDP and revenue, and have a personal net worth of over \$97 billion

EDITED BY DOROTHY POMERANTZ & SAMANTHA SHADDOCK WITH CAROLINE HOWARD

**1**  
**ANGELA MERKEL**  
Chancellor • Germany

**2**  
**THERESA MAY ★**  
Prime minister • UK

**3**  
**MELINDA GATES**  
Co-chair • Bill & Melinda Gates Foundation • US

**4**  
**SHERYL SANDBERG**  
COO • Facebook • US

**5**  
**MARY BARRA**  
CEO • General Motors • US

**6**  
**SUSAN WOJCICKI**  
CEO • YouTube • US

**7**  
**ABIGAIL JOHNSON**  
CEO • Fidelity Investments • US

**8**  
**CHRISTINE LAGARDE**  
Managing director • International Monetary Fund • France

**9**  
**ANA PATRICIA BOTÍN**  
Chair • Banco Santander • Spain

**10**  
**GINNI ROMETTY**  
CEO • IBM • US

**11**  
**INDRA NOOYI**  
CEO • PepsiCo • US

**12**  
**MEG WHITMAN**  
CEO • HP • US



No 15: Tsai Ing-Wen

**13**  
**ANGELA AHRENDTS**  
Senior VP, retail • Apple • US

**14**  
**LAURENE POWELL JOBS**  
Founder • Emerson Collective • US

**15**  
**TSAI ING-WEN**  
President • Taiwan

**16**  
**MICHELLE BACHELET**  
President • Chile

★ NEW TO THE LIST

ANGELA MERKEL: MICHELE TANTUSSI / GETTY IMAGES; TSAI ING-WEN: ULET IFANSASTI / GETTY IMAGES



17

**FEDERICA MOGHERINI**

High representative of the EU  
for foreign affairs and security  
policy • Italy

18

**SAFRA CATZ**

Co-CEO • Oracle • US

19

**IVANKA TRUMP ★**

Advisor to the president  
• White House • US

20

**ADENA FRIEDMAN**

CEO • Nasdaq • US

21

**OPRAH WINFREY**

Media mogul • US

22

**MARILLYN HEWSON**

CEO • Lockheed Martin • US

23

**ISABELLE KOCHER ★**

CEO • Engie • France

24

**RUTH BADER GINSBURG,  
ELENA KAGAN,  
SONIA SOTOMAYOR**

Supreme Court justices • US

25

**RUTH PORAT**

CFO • Alphabet • US

26

**QUEEN ELIZABETH II**

Monarch • UK

27

**ANNA WINTOUR**

Artistic director • Condé Nast  
• US

28

**HO CHING**

CEO • Temasek • Singapore

No 11: Indra Nooyi



No 21: Oprah Winfrey



29

**EMMA WALMSLEY ★**

CEO • GlaxoSmithKline • UK

30

**SHEIKH HASINA WAJED**

Prime minister • Bangladesh

31

**BEATA MARIA SZYDLO ★**

Prime minister • Poland

32

**CHANDA KOCHHAR**

CEO • ICICI Bank • India

33

**AUNG SAN SUU KYI**

State counsellor • Myanmar

34

**LUCY PENG**

Executive chair • Ant Financial  
Services • China

35

**POLLYANNA CHU**

CEO • Kingston Financial Group  
• Hong Kong

36

**SHEIKHA LUBNA AL QASIMI**

Minister of state for tolerance  
• UAE

37

**AMY HOOD**

CFO • Microsoft • US

38

**JACINDA ARDERN ★**

Prime minister • New Zealand

39

**KOLINDA GRABAR-KITAROVIĆ**

President • Croatia



No 32: Chanda Kochhar



★ NEW TO THE LIST

OPRAH WINFREY: GETTY IMAGES; INDRA NOOYI: MONICA SCHIPPER / GETTY IMAGES; CHANDA KOCHHAR: VIKAS KHOT

No 4: Sheryl Sandberg



No 57: Roshni Nadar Malhotra

**40**  
**JEAN LIU ★**

President • Didi Chuxing • China

**41**  
**BONNIE HAMMER**

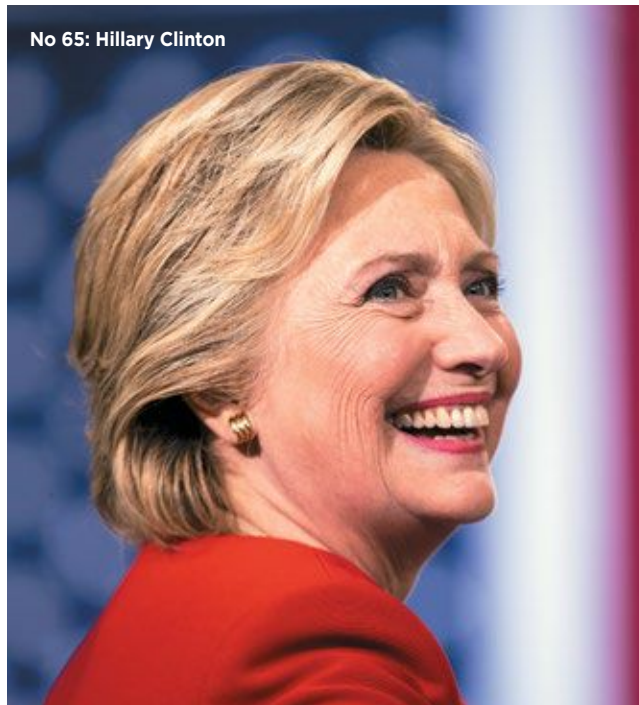
Chair • NBCUniversal Cable Entertainment • US

**42**  
**NICOLA STURGEON**

First minister, Scotland • UK

★ NEW TO THE LIST

No 65: Hillary Clinton



**43**

**NIKKI HALEY ★**

UN ambassador • US

**44**

**ROSALIND BREWER**

COO • Starbucks • US

**45**

**GINA RINEHART**

Executive chair • Hancock Prospecting • Australia

**46**

**ERNA SOLBERG ★**

Prime minister • Norway

**47**

**STACEY SNIDER ★**

CEO • 20th Century Fox Film • US

**48**

**PHEBE NOVAKOVIC**

CEO • General Dynamics • US

**49**

**ELVIRA NABIULLINA**

Governor • Bank of Russia • Russia

**50**

**BEYONCE KNOWLES**

Musician • US

**51**

**PENG LIYUAN**

First lady • China

**52**

**MARGARITA SIMONYAN ★**

Editor-in-chief • RT • Russia

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**MARY CALLAHAN ERDOES**

CEO, asset management • JPMorgan • US

**54**

**ZHOU QUNFEI**

Founder • Lens Technology • Hong Kong

**55**

**NGUYEN THI PHUONG THAO**

Co-founder • Sovico Holdings • Vietnam

**56**

**LISA DAVIS ★**

CEO • Siemens USA • US

**57**

**ROSHNI NADAR MALHOTRA ★**

CEO • HCL Technologies • India

**58**

**GÜLER SABANCI**

Chair • Sabanci Holding • Turkey

**59**

**LUBNA OLAYAN**

CEO • Olayan Financing • Saudi Arabia

**60**

**DANA WALDEN**

CEO • Fox Television Group • US

**61**

**KATHARINE VINER**

Editor-in-chief • Guardian • UK



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**WANG FENG YING**CEO • Great Wall Motor Co  
• China

63

**DONNA LANGLEY**

Chair • Universal Pictures • UK

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**MARIANNE LAKE ★**

CFO • JPMorgan Chase • UK

65

**HILLARY CLINTON**Former presidential candidate  
• US

66

**MINGZHU DONG**Chair • Gree Electric Appliances  
• China

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**MELANIE KREIS ★**

CFO • Deutsche Post • Germany

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**DALIA GRYBAUSKAITE**

President • Lithuania

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**PRISCILLA CHAN ★**Co-founder • Chan Zuckerberg  
Initiative • US

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**GWYNNE SHOTWELL**

COO • SpaceX • US

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**KIRAN MAZUMDAR-SHAW**

Founder • Biocon • India

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**ZANNY MINTON BEDDOES**Editor-in-chief • The Economist  
• UK

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**MIUCCIA PRADA**

Co-CEO • Prada • Italy

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**ISABEL DOS SANTOS ★**

Business tycoon • Angola

75

**SOLINA CHAU**Co-founder • Horizons Ventures  
• Hong Kong

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**LAM WAI YING ★**Chair • Biel Crystal Manufactory  
• Hong Kong

77

**KATHLEEN KENNEDY ★**

President • Lucasfilm • US

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**KERSTI KALJULAI ★**

President • Estonia

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**ARIANNA HUFFINGTON**

Founder • Huffington Post • US

80

**JUDY FAULKNER**

Founder • Epic Systems • US

81

**FABIOLA GIANOTTI**

Director-general • CERN • Italy

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**LYNN GOOD**

CEO • Duke Energy • US

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**GEISHA WILLIAMS ★**

CEO • PG&amp;E • US

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**MARY MEEKER**General partner • Kleiner Perkins  
Caufield & Byers • US

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**TAYLOR SWIFT**

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**PATRICIA HARRIS**CEO • Bloomberg Philanthropies  
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**DREW GILPIN FAUST**President • Harvard University  
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**RAJA EASA AL GURG**Managing director • Easa Saleh  
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**DEBRA CAFARO**

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**JENNY LEE**Managing partner • GGV Capital  
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**KIRSTEN GREEN ★**Founder • Forerunner Ventures  
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**ANNE FINUCANE ★**Vice chair • Bank of America  
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**BETH BROOKE-MARCINIAK**

Global vice chair • EY • US

No 92: Shobhana Bhartia



No 71: Kiran Mazumdar-Shaw



No 97: Priyanka Chopra



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MOOVIT

# Big Data for Big Cities

*Moovit has created the Waze of public transit. Is this the app that can beat urban congestion?*

BY ALAN OHNSMAN

**L**ike most suburbanites, Janice Monkowski, a piano teacher who lives in Danville, California, some 30 miles east of San Francisco, gets around mainly by car. For much of her life, public transit was not even an afterthought.

That changed recently when Monkowski, a self-described technophobe, discovered Moovit. When she goes to San Francisco to meet friends or catch the symphony with her husband, the smartphone app lets her plan bus and train trips down to the minute. “Moovit tells me where to walk and how long it might take to catch a bus to get to the train station,” Monkowski says. “It had probably been 10 or 15 years since I’d ridden a transit bus.”

In exchange for the free service, Monkowski lets Moovit track her trips. Much like the navigation app Waze, which follows its users on the road to determine optimal driving routes, Moovit aggregates Monkowski’s location data with that of other nearby users to predict the most efficient public-transit trip between two locations. “Transit users have an even bigger problem than drivers,” says Nir Erez, a 52-year-old Israeli serial entrepreneur who co-founded Moovit in 2012. Most commuters don’t know when a bus might arrive—let alone how it might connect with another transit service—or when walking or bicycling might be faster, Erez says, speaking from his home in Tel Aviv: “Information is usually bad.”

So bad that Moovit has become

the world’s most downloaded transit app. In just five years, it has racked up 100 million users—roughly the same number as Waze, which Google bought for \$1.1 billion in 2013.

Moovit is available in 44 languages and 78 countries, and commuters in 1,500 cities, from Lexington, Kentucky, to London, Moscow and Hanoi, rely on it to get to and from work. In Los Angeles, 40 percent of its users access it in Spanish. In 2016, Moovit became the official transit app for the Summer Olympics in Rio de Janeiro, beating out Apple and Google, according to the company. When public transit doesn’t get a user all the way to her destination, Moovit may connect her to bike-share programmes or services like Uber.

Moovit’s popularity has helped it attract a string of marquee investors. The company, which launched with \$500,000 from Erez, has raised nearly \$84 million from the likes of Sequoia Capital, Ashton Kutcher’s Sound Ventures and BMW i Ventures. Its valuation reached \$450 million, according to PitchBook. The investors have been lured by the potential to monetise Moovit’s real-time transit information, which

includes more than 500 million data points generated daily.

Now Moovit must prove it can convert that data into cash. The company says it is just now turning to monetisation and won’t disclose revenue, which remains negligible, according to *Forbes* estimates. But Erez and his investors say it won’t be hard to ramp up sales, and they believe the company is in the right place at the right time. Cities everywhere are battling congestion and pollution. This has fuelled a frenzy around the concept of “smart cities”, a somewhat amorphous idea that data from all forms of sensors, along with Artificial Intelligence and cloud-connected technologies, will help manage increasingly complex urban systems. Moovit’s plan is to feed cities’ appetite for transit data. “Urban mobility is a global concern,” says Sequoia partner Gili Raanan, adding that Moovit’s transit data could “dramatically improve the quality of life of our cities.”

Buenos Aires and Madrid have signed up to be early customers of Moovit’s Smart Transit Suite, a data portal with precise, real-time information on bus and train locations and usage, passenger wait times, optimal routes and more. “They have very granular data as to how people move around cities,” says Andreas Mai, an executive vice president for Keolis, a French transportation-management company that works with transit services around the world. Keolis has invested

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**Moovit is the world’s most downloaded transit app; it has 100 million users**

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Nir Erez (left) and Roy Bick founded Moovit to help bus and train commuters, encourage residents to ditch their cars and make cities more liveable

in Moovit and will incorporate its data in pilot programmes in certain cities that Mai wouldn't identify.

Moovit began taking shape in 2011, when Erez had just left a startup he'd co-founded and was training for a marathon. He had planned on a leisurely semi-retirement of investing a bit in early-stage startups and competing in triathlons. But on long training runs around Tel Aviv, his friend Yaron Evron kept talking about a website he'd made for the local transit authority with a young computer scientist named Roy Bick.

An avowed transit nerd, Bick had taken it upon himself to help local commuters. Tel Aviv had recently reconfigured its bus system to accommodate a new rail line, changing routes and stops to feed more riders onto trains. Public information about new locations was poor. So Bick walked the city to log

stops into a database he had built. He also tapped into transit-bus GPS information to turn his database into a real-time route-planning website.

Bick's work clearly had the potential to be useful well beyond Tel Aviv. And Erez, who had considered investing in Waze—also founded in Israel—understood that crowdsourced location data flowing from users' smartphones could provide the basis for creating comprehensive transit-trip planners everywhere. Erez, Bick and Evron founded Moovit the following year, with Erez becoming CEO and Bick overseeing operations. Evron never took a formal role. "I had a nice seven-month retirement, and then it was back to work in another startup," Erez says.

As Moovit has grown to 100 employees, with headquarters near Tel Aviv and offices in cities such

as San Francisco, Athens and Rio, Erez and Bick are convinced they can help cities be more efficient in myriad ways. If demand surges on a specific route, for example, Moovit could suggest deploying more buses to serve it. "We look at the demand and the actual movement information, then look at the system infrastructure, all the routes and the timetables to understand whether it's optimised or not," says Bick, 37. Cities spend millions of dollars to survey residents about their use of public transit, and Moovit can provide better, more up-to-date information at a lower cost, he adds. Best of all: It's all built one data point at a time by people like Monkowski. "When I go to San Francisco, I don't want to drive," she says, noting the city's "terrible" parking and traffic. Moovit has given her another option: "It's very simple." **F**

ERMENEGILDO ZEGNA

# 'I See a Different Confidence In Luxury'

*Zegna CEO Ermenegildo Zegna on the Indian market, personalisation in the age of casualisation, and balancing luxury and digital*

BY MONICA BATHIJA

**L**uxury brand Ermenegildo Zegna, which began as a small woolen mill in Trivero, Italy, in 1910, is today probably the biggest luxury menswear brand with 500-odd stores across the world. After a year of falling sales in 2016, the company has been getting back to growth. In 1991, it became the first luxury goods company to expand into China and, 10 years ago, it entered the Indian market, long before other luxury brands. CEO Ermenegildo Zegna, 62—grandson of the original Ermenegildo—who was in the country recently, spoke to *Forbes India* about how the brand has been transforming itself in the age of digital and of millennials, how the lessons he learnt when he worked in retail at Bloomingdale's in New York in the '70s still hold true and how they are in for the long haul in India. Edited excerpts from the conversation:

**Q How did Zegna succeed in arresting 2016's trend of falling sales? What are the recent changes at the company?**

I think we were known as a clothing company; today we are called a lifestyle brand where, with a change of lifestyle, men's fashion is becoming more casual, more accessories driven, more digital. All these important features have to be met by any brand, including ours. So I've been working in the last

couple of years to make it happen, and to turn back to growth.

We recently changed our artistic director (and brought in Alessandro Sartori). I think with him I brought a kind of rejuvenation, which goes exactly in this direction of casualisation, which can be intriguing, also for a millennial. There is a lot of talk about millennials, there are some luxury brands that have declared that 50 percent of business will be [accounted for by] millennials, which is huge, not necessarily in our case, but we cannot disregard this phenomenon.

One of our biggest markets is China and I think the Chinese and millennials, and digital, are three important ingredients that have to be taken seriously and our new brand strategy looks in that direction as well. And you have to cater to your loyal customer, because a few percentage points of clients make a big chunk of our turnover, so you have to keep those loyal customers happy.

Travel today is becoming an extremely important part of the equation so you have to create a travel wardrobe—items that are good for travel at the same time keeping the high quality associated with our brand. On the other side, you also need to do more fashion items. Sartori has created this collection, part of our couture collection, which is millennial, celebrity-driven, which is more than casual wear... very, very stylish. So





the challenge is how to manage all these things together and still keep the DNA of the brand the same, which is made of 107 years of history.

**Q What, according to you, is the DNA of the brand?**

The DNA is, surely, high-quality products with strong ingredients of innovation in what it represents in terms of performance, in terms of style, and a capacity to put the pieces together. You can tell a Zegna

wardrobe by the look, and that is what Italian style is about. And we go from sheep to shop and shop to screen, in which we control the entire process from industry to product to store management and to the online future that we've brought around the world.

**Q Fabric has been at the heart of Zegna. What's the latest innovation from the house of Zegna?**

Today I'm wearing a suit that is

called Wash and Go. It is something you can put in the washing machine and pull it out and walk. And for somebody who travels, it's washable, it could be worn with ties, as a blazer, it's practical, good to travel, good to handle, lightweight for the climate, it doesn't wrinkle... so it has all these peculiarities. We've been working on this product a while and I think we can bring something new to the party of dressing and of being comfortable in what you wear

Ermenegildo Zegna, CEO, Ermenegildo Zegna Group, is constantly trying to bring something new to the party of dressing





and feel at ease and yet luxurious.

**Q You've completed ten years in India. How has the journey been?**

In India, we have three stores; hopefully we will add a couple in the next two years and in this new project that Reliance Industries is putting together at the Bandra-Kurla Complex (in Mumbai) we will have a strong presence with a global store. We were limited, in a way, in distribution and by the fact that it's hard to figure where to open a store in India. The hotels have a limited traffic and malls are few, street level is almost impossible, so I think it's a great project that they are putting together.

India is smaller as compared to other markets, but I see a different confidence in luxury. And as the distribution is developing, we have a much better chance to do well here.

**Q What is the percentage of the market of India vis-à-vis the rest of the world?**

The number is so small that it's not even worth mentioning. But we see a long-term equation. We don't have to be impatient for India. We believe we will be here for many years, so we are patient. But in made to measure in percentage terms, India would be among the top Zegna markets. The made to measure business has been very significant in India and over the years, we have steadily built a loyal customer base.

**Q What are the specific initiatives for the Indian consumer?**

We did some fabrics in silks for India, some accessories, the well-known Guru jacket with a special shape, for evening wear... these are some of the peculiar products we did. And more will come as we get to know the customer better. India loves colours, and embroidery from their artisanal capabilities, so as we get more spread out, we will surely do more exclusive products for this country.



**Q You said there are three things you are looking at: China, digital and the millennials...**

If you are not serving China, you are in trouble. That's true of any brand, whether you are talking about automotive, design, food. It's just a huge market, they love newness, they love travel. And they change flow. One day they are here, the other day they are there, so you have to be truly smart to understand those flows and to anticipate. And they are becoming more and more service-oriented, so you have to be equipped. In several stores, we have Chinese-speaking staff that knows what he or she wants. We created this Techmerino project, which is the elder brother of Wash and Go. Techmerino is active performance wool, a product that is very casual, so we are bringing in this casualisation to a formal product and they (the Chinese) clearly jumped at that; it's become one of the biggest things out there.

The other thing is personalisation. We do very well with made to measure, which incidentally makes up a big part of the Indian market too. We've created this unique service of bespoke tailoring in Milan and bespoke shoes in London. We created an atelier on the top of our Milan shop and this is with a private entrance, very exclusive service, and he (the tailor) travels the world to do this special suiting. And every suit is three trials with a very vast array of fabrics and very specialised in terms of the detail you want to add.

**Q How do you balance luxury and your in-store experience and bespoke services with digital?**

I think they go hand in hand, because the way we see digital is slightly different than many others. Many have started by creating a virtual catalogue, which is going to be another means to increase sales. Or they want their virtual store to be

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**"If you are not serving China, you are in trouble. It's just a huge market, they love newness, they love travel."**

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**Overleaf: Ermenegildo Zegna plans to have an important presence in Mumbai; the Zegna store at Palladium, Mumbai, offers bespoke services. Above: The atelier at the top of the Milan store is an exclusive, personalised service**

the biggest store of the chain. We've started differently. We said we'd like to have digital and have the service level we provide in the store. So, through digital, you can book an appointment in your store, have your garment transferred from one store to another, or buy in the store and have it delivered to wherever you are, or check stock availability. It gives the customer more choices.

Deciding what's online and offline is difficult, but I think one helps the other. And digital is also much more informative. Digital forces you to put interesting information in writing, in an emotional way... we've tried to really revolutionise our site by telling stories, by adding some humour, taking away some of the rigidity that digital can offer you, and create a new communication with the client.

This dialogue on digital is like a store window, it's becoming *the new window of the brand*, I think this is the best way to put it.

Content is becoming an asset to be used in digital, storytelling is the new way to go. By telling the new brand story. And I think the millennial is more interested than anybody else in these things. I'm sure there are lots of 20/30-year-olds that have plenty of money, so

the issue is not the economics, the issue is making them interested and making your brand relevant to them.

**Q You worked at Bloomingdale's in America in the '70s and then you have been with Zegna for 35 years. What are the lessons you picked up in the early days that are still relevant?**

I started at Zegna in 1982. I was in Seattle exactly five days ago, to visit one of my original customers and we were commenting on the things that are still relevant. He said much of what you learnt from here still applies today. Many of the relevant aspects of merchandising I learnt in my early days are still true today, but it has to be communicated in a different way.

The customer experience, the relationship with the customer, it's important even today but supported by new gadgets or means or tools. I think the people content is important and digital supports the people. And the customer still appreciates very much the personal relationship with the brand and you just have to give the option. It's like a self-driving car: I don't believe there would be either/or, yes, there would be self-driving cars, but if you wanted to drive

your Alfa to the mountains with a manual gear, you can do so... give the customer the option of a self-driving car and doing your own manual crazy driving. So it's creating the option.


**Q Which are the other exciting—and challenging—markets, apart from China?**

I find Italy very exciting because we're looking for a new business paradigm, we are trying to entertain our customers in a different way. Italy is the country where we were born, in which we have a very solid image, so the challenge is to make people understand how Zegna has changed. It's easier to do it with the Chinese than Italians (laughs) because if you ask a taxi driver in Italy you know Zegna, he says of course I do. What does Zegna do, and he will say fabric, which is good but we have to make him understand that Zegna also does, say, beautiful shoes. It's not easy to do so.

America is another challenge, a market I am excited about... it's another market in which we are turning the perception of Zegna as a clothing brand into Zegna as a lifestyle brand. Russia, Japan, every country I have been to recently has been fun because it represents challenges.

The challenge in every market is to fine-tune the situation, and timing is important. Many times we made mistakes, we went in too quickly or we went in boom—five stores, ten stores. Do it more gradually, test it and then go more step by step and if something doesn't work, just pull back and try a different way.

**Q How have the recent policy changes in India affected the brand?**

These are small bumps on the road. It's important to have both an investment appetite and a risk appetite in this business, which means you don't measure the market in small phases. We call them bumps along the way. 



AIR DECCAN

# Back in the Skies

*With smaller aircraft and strategic tie-ups, Air Deccan's Captain GR Gopinath is having another go at commercial aviation. Will he be second time lucky?*

BY ANSHUL DHAMIJA





**O**n December 23, 2017, Captain Gorur R Iyengar Gopinath re-entered India's commercial aviation market, a decade after he had exited from it. With the launch of three flights from Mumbai—to Nashik, Pune and Jalgaon—Gopinath, fondly known as Captain or Gopi, and his airline entity Air Deccan, which made budget air travel in India a reality back in 2003, were back in the game.

Budget airlines or low-cost carriers (LCCs), which charge for traditional services such as food and seat allocation and offer low fares, function on a different revenue model as compared to traditional airlines. In 2003, when Gopinath had launched Air Deccan, there were only four airlines—Jet Airways, Air Sahara (which was bought by the former), Air India and Indian Airlines (the latter two have merged since then)—and all were, and continue to be, traditional full-service airlines. Today, LCCs command a 65 percent share of India's domestic air passenger traffic.

Amber Dubey, partner and India head of aerospace and defence at KPMG, points out that Captain Gopinath “is the pioneer of the LCC concept in India”. “He provided regional connectivity when the term was not a buzzword,” says Dubey.

It's a different story though how another budget carrier IndiGo, which launched operations three years after Air Deccan, has become India's largest and most profitable airline with a 40 percent share of the domestic air passenger traffic while Air Deccan bowed out in 2007. This despite having scaled and achieved over 20 percent market share in four years. The airline was making huge losses and early investors of Air Deccan were pressuring Gopinath for an exit. “Air Deccan succeeded, it did not fail. It sold to [Vijay Mallya's] Kingfisher [Airlines] because of investor pressure,” says Gopinath, adding, “And everybody who invested made huge returns.”

Gopinath, however, managed to retain the name Air Deccan by registering for it soon after Mallya rebranded it as Kingfisher Red. Even though he had no intention of relaunching the airline at the time considering he had signed a six-year non-compete agreement with Mallya, he wanted the brand back. "It [Air Deccan] was a brand he [Mallya] had abandoned and which he did not renew. He had no interest in it," says Gopinath. "He felt Kingfisher was a brand that was powerful [given its dominance in the beer market]. So by changing Air Deccan to Kingfisher he imagined he could get a better price per seat. That was his notion without realising that Air Deccan stood for something else. When he abandoned it, I registered for it [with Office of the Registrar of Trade Marks] some time back."

The Deccan brand, meanwhile, continued to exist through Deccan Charters, Gopinath's air-charter and aircraft maintenance company, which he started in 1997 and which Air Deccan is now part of. In 2009, he started a cargo airline Deccan 360, which wound up in two years. A graduate from the National Defence Academy at Pune and from the Indian Military Academy in Dehradun, Gopinath also unsuccessfully contested the 2009 general election as an independent candidate from the South Bengaluru constituency. Until regional air connectivity to India's tier 2 and 3 cities driven by the Union government's Regional Connectivity Scheme (RCS) once again brought him back into the country's commercial aviation arena.

Through RCS, more commonly known as Udan (Ude Desh ka Aam Naagrik), the government is seeking to make flying affordable for the masses. Under the scheme, the government has capped airfares (that are indexed to inflation) at ₹2,500 for a one-hour flight or for a distance of 500 to 600 kilometres, provided huge tax benefits on fuel and given airlines

concessions on electricity, water and other utilities at regional airports.

Designated RCS routes are offered to airlines through a formal bidding process, whereby the airline that shows the lowest cost of operating a flight on a particular route wins the bid. The airline gets exclusivity on the route for three years and is given a government subsidy as well. The first round of bidding for 128 RCS routes took place in March last year, and Air Deccan won 34 of the routes.

"I as an entrepreneur am an optimist. Optimism is the essence of entrepreneurship," Gopinath tells *Forbes India* in a telephonic interview of his re-entry into commercial aviation. At 66, Gopinath says he is making one final attempt to make it big in India's aviation market, which has been growing between 15 and 20 percent in terms of passenger traffic over the last three years.

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## Air Deccan has won the bids for 34 routes under the Regional Connectivity Scheme

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"Gopinath's return to regional operations should be welcomed as he comes with the experience of having run an airline," says Jitender Bhargava, former executive director, Air India. "His [Gopinath's] earlier stint is bound to have taught him what not to do, and also to not be over-ambitious," he adds. Gopinath clearly knows his mistakes as he says, "I scaled up very fast and that had its own kind of pressures like cash burn." This time, he adds, "We will grow in a steady manner."

### A NEW STRATEGY

Air Deccan's first commercial flight, in August 2003, was from Bengaluru to Hubballi, a tier 2 city in Karnataka, with a 48-seater ATR,

a twin-engine fixed-wing turboprop aircraft. By 2007, the airline was flying to 70 destinations in India and operated a dual fleet of over 45 aircraft consisting of the 180-seater jetliner Airbus 320 and the smaller ATR, which flew on regional routes. Says Gopinath, "Between 2003 and 2007, almost all the routes that have now come under Udan were flown by Air Deccan. For example, we had flights to Bellary, Mysore, Vijaywada, Belgaum, Kolhapur, Gwalior, Kanpur, Rajahmundry, and Kullu, among other destinations."

Gopinath's model back then was that Air Deccan's ATRs would act as feeders—bringing people from tier 2 cities to the metros—to its larger A320s which flew on the major trunk routes. And, of course, the LCC concept of low airfares. His aim was to fill every seat in an aircraft.

"When I started Air Deccan, the average occupancy of airlines was only 55 percent," says Gopinath. Reason: Prohibitively high ticket prices. Gopinath recalls that in 2002, a Bengaluru to Delhi one-way ticket sold for ₹12,500. "If the seat was empty, the airline would let it be empty because there was a class barrier there." That class barrier is what Air Deccan broke.

Today, the landscape has changed with several other LCCs like SpiceJet and IndiGo. And now, the cheapest one-way Bengaluru-Delhi air ticket costs between ₹4,300 and ₹5,800.

In its second outing, Air Deccan continues to be an LCC and Gopinath's penchant for offering ₹1 fares to entice travellers, also continues. However, considering the airline is only serving RCS routes—flights to tier 2 and 3 cities where airport infrastructure is not great—and not trunk routes like a Mumbai-Delhi or Delhi-Bengaluru, he's operating with a twin-engine fixed-wing turboprop Beechcraft 1900, a 19-seater aircraft that is widely used for regional air connectivity in America and Africa.

"It can land at airports where



the runway length is not sufficient [for even an ATR to land],” says Gopinath. He adds that at airports like Mysuru and Ballari, ATRs cannot land if they are carrying a full load of 72 passengers. A short runway length means there are restrictions on the landing and take-off weight of an aircraft. Similarly, as the Shimla airport is at an altitude of over 7,000 feet above sea level, the ATR cannot land with a full load. “Keeping all this in mind, we went with a 19-seater aircraft,” he says. However, the Beechcraft 1900 is an old generation of aircraft that was in production between 1982 and 2002. Over 600 such aircraft were produced

separate entities. Air Odisha has won 50 RCS routes, so that gives the airlines a combined network of 84 RCS routes. Air Odisha is still awaiting its flying permit from the Directorate General of Civil Aviation.


Gopinath thinks the collaboration will ensure economies of scale, especially in key areas such as flight operations and training of personnel. Bhargava, though, is of the opinion that established airlines like IndiGo, SpiceJet and Alliance Air will “undoubtedly enjoy an edge” over standalone operators like Gopinath. “Due to their elaborate network, they will appeal more to passengers, resulting in higher

there were zero concessions on fuel. Now, there are zero taxes on fuel, there is a three-year exclusivity of routes and a 50 percent government subsidy. These combinations would make it viable,” he asserts.

### IS RCS VIABLE?

The airline business works on high volumes and low margins. Hence, an RCS airline operator needs to have a robust scale-up plan in place before the government’s three-year financial subsidy period under Udan runs out. But considering regional airlines like Air Costa and Air Pegasus ceased operations since July 2016 due to financial troubles, the question arises about whether there is a viable regional air connectivity model that can be tapped into.

So, besides the question of whether Gopinath can achieve success, the question is also whether Udan itself makes great business sense. KPMG’s Dubey believes it does. “Else a leading player like IndiGo would not disrupt its single-aircraft fleet strategy [of A320s] and go for turboprops [ATR]. And SpiceJet would not order another 50 turboprops [Bombardier Q-400s] and talk of 100 seaplanes on top of that,” says Dubey. According to him, Delhi and Mumbai have less than 5 percent of India’s population, but nearly 40 percent of India’s air traffic. “There are dozens of places of significant importance in the interiors of India from a population, tourism and industry perspective, but they lack air connectivity since there was no fiscal or monetary support.”

Earlier, from a politician’s point of view, supporting the aviation sector was risky as it was a rich man’s mode of transport. That seems to have changed. Udan’s success, according to Dubey, now depends on factors such as the robustness of an airline’s strategy, business plan, operations and human resources. Says CAPA’s Kaul, “Making it work will be very challenging but I sincerely hope that Captain makes it big.” 



Air Deccan used a 48-seater ATR for its first commercial flight in August 2003

and continue to be in service.

At present, Air Deccan has two Beechcraft 1900 with plans to add close to 12 aircraft over the next six months which would allow the airline to connect to 62 regional airports. The expansion will also be aided by Air Deccan’s recent partnership with another regional airline Air Odisha, based out of Bhubaneswar. According to Gopinath, it is a ‘strategic tie-up’ whereby Air Deccan will manage a host of functions for Air Odisha such as aircraft procurement, leases, and maintenance, IT systems, pilot and engineer training, flight operations, and inventory management, while both airlines will operate as two

load factors and thereby enhanced revenues,” says Bhargava.

Kapil Kaul, CEO, CAPA South Asia, an independent aviation consulting, research and knowledge practice firm, is also sceptical of whether standalone regional operators can succeed. “I don’t see regional operators making it work with sub-scale operations, significant under capitalisation and operating a very old fleet [of aircraft]. This, coupled with slot challenges at metros [airports] and a resultant dispersed network, will make it very difficult [for them] to achieve viability.”

But Gopinath is optimistic that his second innings will be successful. “When I first started Air Deccan,



BlackRock's  
secret weapon:  
Chief operating  
officer Robert  
Goldstein

JAMEL TOPPIN FOR FORBES

BLACKROCK

# BlackRock's Edge

*How do you stay on top when your core business is a commodity and you measure profits in hundredths of a percentage point? You build the best risk-management software on Wall Street*

BY ANTOINE GARAW

**O**n a large flat-screen monitor perched in front of a framed orange-and-blue Warhol print of

Teddy Roosevelt as a Rough Rider, BlackRock's chief operating officer, Rob Goldstein, is looking over the entirety of the financial firm's \$6 trillion in global assets—135 teams with positions in hundreds of markets in 30 countries. He is using software that he's been perfecting for the 23 years he has spent at the company. A simple grey column on the left reveals BlackRock's activity on this quiet pre-Thanksgiving day: There are some 25,000 trade orders in the market, 77,000 trades and thousands of collateral calls. A wider view colourfully identifies the specific portfolio managers and traders initiating the moves.

The program is called Aladdin, shortened from the wonky Asset Liability and Debt and Derivative Investment Network, and it can expand and contract like an accordion, from a holistic view of firm-wide risk down to a single trade in a split second. It is the reason Goldstein, 45, is a favourite to run BlackRock one day, despite the fact that he has never placed a trade or made a market call during his tenure. His ascendance at the financial giant speaks volumes about the state of asset management today—a business dominated by the explosive growth of passive index funds all racing to the bottom on fees.

"The ability to have a dashboard for running a firm like BlackRock that's as simple as the dashboard in a car is a remarkable feat," Goldstein confidently states. "One system, one database, one set of models. I know the vast majority of people don't have this."

But what's on the screen in Goldstein's office is only a glimpse of what Aladdin can do. Rick Rieder, CIO of BlackRock's \$1.7 trillion fixed-income business, uses it to track and analyse the risks embedded in his thousands of complex holdings.

He loads his \$31 billion Strategic Income Opportunities Fund to show how the portfolio will react to different market environments. A scenario called “Eurozone Breakup” will cost Strategic Income 79 basis points of performance relative to Rieder’s targets, Aladdin calculates, displaying asset-by-asset and risk-by-risk where the impact is acute. “China Credit Crunch” would be twice as painful. Strategic Income’s biggest potential risk? “Spring 2013”, a repeat of the taper tantrum, when the Federal Reserve signalled it would unwind its stimulus efforts, causing bond yields to surge.

“If I buy an asset, I know exactly what it’s going to do to the rest of the portfolio,” Rieder says. When North Korea fired missiles over Japan last fall, he used Aladdin to check whether he was overexposed to the market and saw he would need to buy about \$400 million of Treasuries to manage the risk.

“Aladdin is like oxygen. Without it, we wouldn’t be able to function,” says Anthony Malloy, CEO of \$238 billion (assets) New York Life Investors, one of hundreds of firms outside of BlackRock paying fees to use Aladdin. Daniel Pinto, CEO of JPMorgan’s investment bank, adds, “It allows our clients to trade across asset classes, conduct sophisticated risk analytics and oversee their portfolios in a very integrated data environment.”

It’s no accident that a piece of software may be the single most important differentiator for BlackRock. From the firm’s modest beginnings as a bond manager in 1988, CEO and co-founder Larry Fink put data analysis and risk technology at the forefront, instead of treating it as second fiddle to portfolio managers and traders.

“The roots of the organisation were founded on the concept of risk management and technology,” says Fink. In an era of disruption, BlackRock is reporting record operating margins, and its stock is

the best performer on Wall Street, returning on average of 23 percent per year since its IPO in 1999.

Raised in the Canarsie neighbourhood of Brooklyn, Goldstein graduated from high school at 16, opting for less expensive SUNY Binghamton over offers from private colleges because his father had promised him a new car. A nerdy Grateful Deadhead, he joined relatively small BlackRock in 1994 at the age of 20. His small team valued mortgages, producing computer-crunched internal risk reports, called “green packages” for the paper they were printed on. He hoped his back-office job would be a springboard to a more glamorous and lucrative post as a bond salesman.

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## BlackRock’s Aladdin counts 200 financial firms as clients and has 25,000 users

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Instead he became more entrenched in the unit as BlackRock turned its risk technology outward, using it to help General Electric liquidate the mortgage portfolio of Kidder Peabody. Then in 1998, a 25-year-old Goldstein led BlackRock’s effort to licence its analytic firepower to Freddie Mac, which used it to value over \$500 billion in mortgages. By 2000, demand was so great a business unit was formed around the software called BlackRock Solutions. Goldstein was a key leader.


Every time BlackRock gobbled up new assets, Aladdin was refined. Monitoring stocks and European markets were added when the firm bought Merrill Lynch Investment Managers in 2006. Later it gained expertise in ETFs with BlackRock’s opportunistic purchase of Barclays Global Investors in 2009 for \$13.5

billion. Another break came during the financial crisis, when understanding exposures to failing firms and assessing potential losses became paramount. In 2008, Aladdin was used by the Fed when it took on the assets of Bear Stearns, and then by the Treasury to rescue the financial system. During the European debt crisis, Aladdin was hired by the central banks of Ireland, Greece and the ECB.


Today Aladdin counts some 200 financial firms as clients, with 25,000 users, monitoring some \$18 trillion in assets on the platform. It carries out a quarter-million trades daily and billions of forecasts weekly. Roughly a quarter of BlackRock’s 13,000 staff are devoted to technology, with close to half focussed on Aladdin. BlackRock Solutions is on track to generate \$700 million of the firm’s \$12 billion in revenues this year, up by 15 percent.

Aladdin is pushing into retail, where BlackRock believes rigorous quantification of risk and scenario forecasts can help financial advisors (FAs) and individuals build better financial plans. BlackRock has already made numerous bolt-on investments: FutureAdvisor, Scalable Capital, iRetire and iCapital. Five wealth-management firms, including UBS, are now using Aladdin. If the FAs like the technology, they may also buy BlackRock products.

Besides being career changing, Goldstein’s software is a big reason why analysts and hedge funds like Dan Loeb’s Third Point gush over BlackRock.

“We see BlackRock as far more than an asset manager dependent on market movements,” says a Third Point investor letter. Some, like Macrae Sykes, an analyst with Gabelli & Co, are even comparing the behemoth asset manager to Amazon. “Am-Rock reminds me of the qualities of Amazon,” Sykes says, “driving efficiencies for clients, generating strong growth and pursuing a relentless approach to competitive positioning.” 





Cross Border

CHRIS CLINE

# The Last Coal Tycoon

*Dark days ahead for coal? Don't tell that to billionaire Chris Cline, who's convinced the dirtiest fuel still has a bright future and is building what he believes will be the last mine standing*

BY CHRISTOPHER HELMAN

**T**he masseuse felt the broken bones and the scars and asked Chris Cline what he did for a living. Cline said he was in the energy business. What kind of energy?, she wondered. Maybe solar panels or windmills? No, not that, he said. You're not a fracker, are you? No, not that either. Then what? "I own coal mines," said Cline. Without a word she stopped working on him and left the room. He waited a while, but she didn't return. Cline won't name the resort ("I might want to go back there"). And the scars? From his years underground in Appalachian mines, where the coal seams have been worked so thin it's like "crawling under a table all day". Cuts on his back from a mine's ceiling "felt like insect bites".

Cline, 59, is one of the most archaic and unpopular specimens of capitalist: The coal tycoon. He doesn't mind people not liking him. He knows that coal fuels 40 percent of the world's power needs. "People deserve the cheapest energy



Major miner:  
Chris Cline stands  
outside his newly  
opened Donkin mine  
on Cape Breton Island  
in Nova Scotia





**Underground roots:** Cline's father in Appalachia

they can get," he says. "Tell the poor in India and China that they don't deserve to have reliable, affordable electricity."

Coal is far from dead. Global demand has dipped because of America's shale-gas boom and tighter regulations in China, yet it remains 50 percent above its level in 2000, at 7.2 billion tonnes per year, according to the International Energy Agency. Even factoring in a carbon tax of \$30 per tonne, coal can compete on price with natural gas and renewables. And Chris Cline, relying on operating efficiencies that he has honed over nearly 40 years of running his own mines, intends to be the last man standing in the industry, supplying low-cost coal from Canada to energy-hungry consumers around the world.

Cline thinks the carbon crusade is folly: "I'm all for getting sulphur and mercury and nitrogen oxide out of the air—that's common sense", but ultimately, he posits, "global cooling" will be a bigger threat. (It's easy to forget that, as recently as the 1970s, fear of a coming ice age was part of the mainstream climate conversation.) Which is why he has no qualms about having built his \$2 billion fortune with a series of all-in bets that have taken him from Appalachia to Illinois and now to Canada. He created one of America's biggest publicly traded coal miners, Foresight Energy, and two years ago, sold most of his interest for nearly \$1.4 billion. He's since sunk \$150 million into a new mine in Nova Scotia that may produce 500 million tonnes of high-dollar metallurgical coal by mid-century. And he has permits to develop 1.7 billion tonnes more at the Vista mine in western Canada.

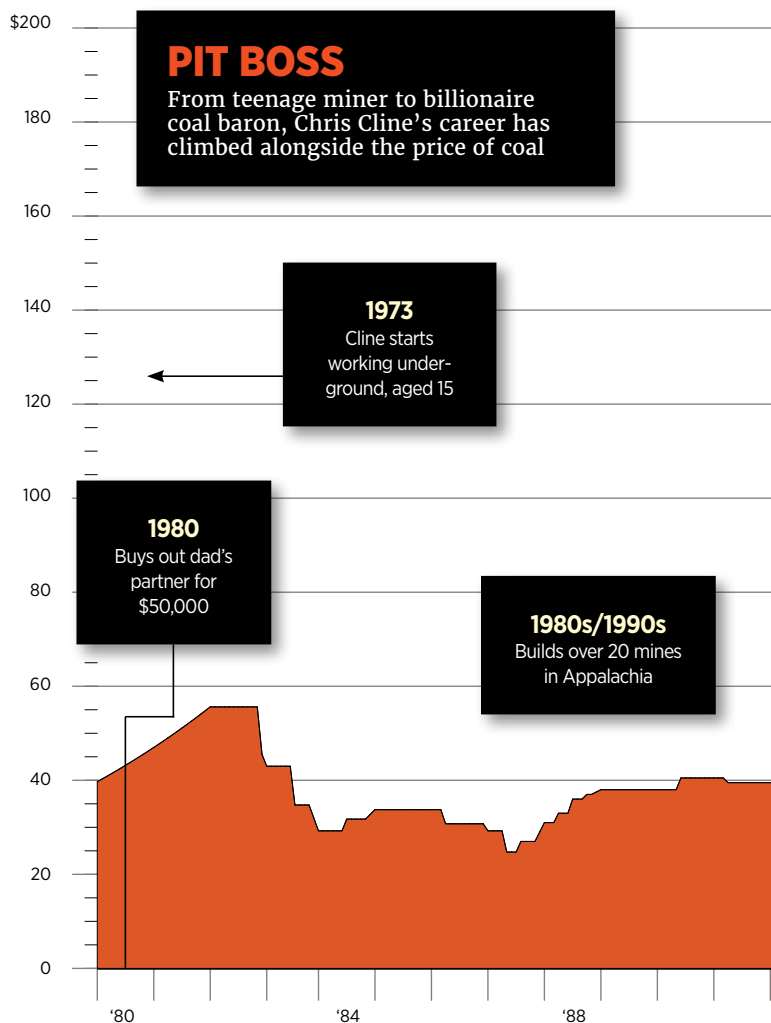
"If you had any idea where I started," Cline says wistfully. Trim, powerfully built, 5-foot-11, he speaks in a quiet growl from the back of his throat. Cline's father, Paul, was a contract miner in Beckley, West Virginia; he operated rich men's mines in exchange for a cut of what his team pulled up. When Cline was six, his dad paid him a penny for each little bag he filled with dirt, which would be used to pack explosives into coal seams. When their front porch collapsed, it became clear young Chris had been excavating dirt from under the house. "It

taught me the importance of engineering roof supports," he says. He first went to work underground at the age of 15; the miners would hide him when inspectors came.

Cline's first, battered hard hat sits above the fireplace in his mansion in Beckley. He created a lake here by damming up the hollow; it's big enough for waterskiing and features a 400-foot waterslide. There's also a go-kart track and a pasture, where 150-pound Italian sheepdogs keep tabs on livestock—including Fabio, a white stallion. Cline has four kids, now grown. His first wife died of cancer; he's divorced from his second. For four years, he dated Tiger Woods' ex-wife, Elin Nordegren.

Cline's gun vault holds more than 50 firearms, including a Magnum .44 and a Gatling gun.

Today he's armed with a sheaf of papers. There are architectural renderings for his island in the Bahamas and photocopies of old pics. A black-and-white shot shows a young Cline outside the little house where for fun he'd flatten bottle caps under the rails of the coal trains that ran a stone's throw from the front door. "I'd hitch a ride on a





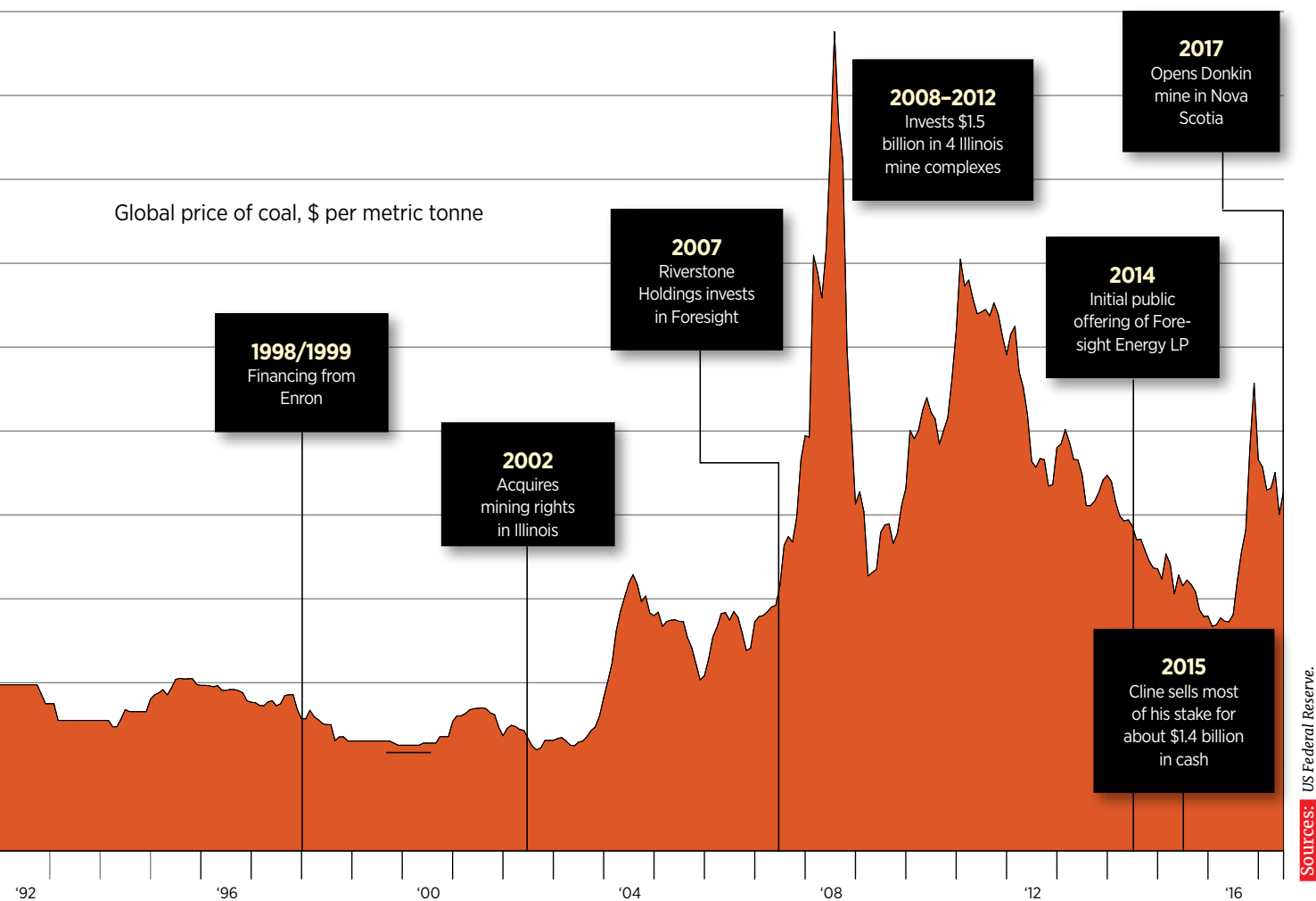
train, hang on for a few miles, then grab one coming back.”

Cline has since upgraded his transportation. He spends 400 hours a year in the air—most of it on his \$50 million Embraer Lineage 1000—shuttling between his homes, making due-diligence tours of mines in Australia and Colombia, or hauling a *Forbes* camera crew to Nova Scotia, where he has been operating the Donkin mine since April. He applies the same philosophy to his planes as he does to his capital equipment: “We buy the best and run it hard.”

Underground, 1,000-horsepower mining machines rip the coal face with rotating claws; roof bolters hammer steel rods into the ceiling to hold the rock in place. Cline saw early on how much more coal he could produce with reliable equipment. If a vital machine breaks down and needs parts, Cline thinks nothing of sending one of his jets to fetch spares from anywhere on the continent. The math is easy: Every minute his crews are not ripping coal out of the earth equates to hundreds of dollars in lost revenue. And, yes, it’s dangerous. “It used to be brutal,” he says. “We’re trying to get all the hard work out of it.”

In 1980, when Cline was 22, his father had a bypass surgery, and his partner offered \$50,000 to buy him out. “My dad was going to do it.” But Cline had no doubt he could work harder and smarter than anyone else. “I said, ‘Why don’t we buy him out?’” And so they did, borrowing every penny. The first two weeks he worked 16-hour days and never saw sunlight—whatever it took to make his payments. With every success he doubled down. His first big success came with Pioneer Fuel, a mine he acquired for \$1 million and flipped for \$17 million.

He bought a Lamborghini and a 200-foot yacht called Mine Games, but most of the money went back into the Appalachian ground. He implemented worker-friendly innovations like air-conditioned cockpits for mining machines. And he began handing out daily bonuses in the form of dollar coins, based on how many feet of coal a team had mined that day. At year’s end, he’d hand out cheques to cover taxes due. “Those guys would run through a wall for him,” says Andy Fox, an independent mining engineer who first met Cline when Cline pulled up to his





**Empty lockers:** Cline hoped to create 200 mining jobs for distressed Nova Scotia. After layoffs, there are now only 81 at the Donkin mine

office in a red Porsche 928 on the way to the beach and unloaded five bags of coal he needed Fox to analyse.

Still, it's not enough to be innovative. "You need a little luck," Cline says. In the late 1990s, he had acquired enough reserves to build six new mines. Enron was big in natural gas and wanted to diversify into coal, especially coal trading. Cline got \$85 million in loans and equity from Enron to build three mines. After Enron's 2001 collapse, he bought back the interests for \$13 million, then turned around and sold a similar stake to ArcLight Capital Partners for \$151 million. By 2003, he was out of Appalachian coal altogether.

The coal industry had watched intently as the EPA cracked down on emissions of acid-rain ingredients like sulphur dioxide in the early 2000s. The quickest way for many power companies to comply was to stop buying high-sulphur coal (example, from Illinois) in favour of low-sulphur varieties (like those from Wyoming). Panicked holders of high-sulphur reserves just let their leases lapse and walked away.

Through a new company, Foresight Energy, Cline started accumulating 3 billion tonnes of high-sulphur reserves in Illinois for less than 30 cents a tonne, some of it from the likes of Exxon Mobil. What did Cline know that they didn't? He believed in technology and was encouraged by power-plant innovations like scrubber systems that capture toxins before they go up the smokestack, enabling them to keep right on burning high-sulphur coal. Plus, he was used to making money on mines with seams just 3 feet thick. Those Illinois seams were 6 feet or thicker.

"I didn't see it as a huge risk," Cline says. He took on private-equity capital on one condition: No second-guessing. "He didn't want to be tinkered with," says Bartow Jones, a partner at Riverstone Holdings, which invested \$600 million between 2007 and 2008. Not

only did they acquiesce, Jones says, "we insisted on it". Cline put \$2 billion into four mine complexes, which soon became the most productive underground operations in the nation, averaging 13 tonnes per man-hour at costs of \$23 per tonne with output of 20 million tonnes per year.

Cline had created a market for high-sulphur Illinois coal. "Coal is not a commodity," Jones says. "You can't just shove it into a pipeline like natural gas." Cline swayed power plants to his coal by paying

for their sulphur-catching upgrades out of his own pocket. He acquired docks on the Mississippi and built rail spurs to load coal from 100-car trains directly onto ships bound for India and Europe. Cline needed an exit for his investors. In early 2014, Foresight held an IPO and hit a market cap of \$2.5 billion. By early 2015, Riverstone had exited, having nearly doubled its money at a time when many coal giants like Peabody Energy and Alpha Natural Resources were headed toward bankruptcy. Foresight's relative soundness made it an attractive target for Robert Murray, a 77-year-old coal magnate whose privately held Murray Energy paid Cline a little less than \$1.4 billion cash in 2015 for most of Cline's Foresight stake. The two coal barons had been at odds for years in Illinois, blocking each other via strategic land purchases. Cline stepped down from the Foresight board of directors last March, though he still owns 2 billion tonnes of Illinois reserves, a slug of Foresight bonds and around 29 percent of Foresight shares—which have traded down 75 percent since the Murray deal.

**I**n 2010, as Foresight was hitting its stride, Cline was hungry for something new. He formed a company called Gogebic Taconite that tried to get permits for a Wisconsin iron ore mine on the shores of Lake Superior. But in 2013 the plan ran afoul of the Bad River Band of the Lake Superior Tribe of Chippewa Indians, who farm wild rice in the area. Cline cancelled the plans, he says, because of low iron prices. "It will be mined someday."

Canada was more hospitable. On the day of Foresight's IPO in 2014, Cline rang the bell on the floor of the New York Stock Exchange, then hopped on his plane and three hours later landed in Nova Scotia to go down into a mothballed mine shaft on the eastern tip of Cape Breton, in a town called Donkin. He was drawn to the huge 12-foot-thick seam and the coal's high energy content,

which at 14,000 British thermal units per tonne can be readily turned into high-value coke for steelmaking.

The Donkin Project was a Hail Mary by the Canadian government to prop up a dying industry; it spent \$50 million in the 1980s to bore twin tunnels 2 miles out under the Atlantic Ocean to tap a massive 500 million tonne coal bed. By the time the shafts were cut in the late 1980s, benchmark coal prices had dropped. When 26 miners died in a 1992 explosion at Nova Scotia's Westray mine, it seemed like the end of the industry. But time—and higher commodity prices—heals all wounds. And Donkin was the perfect size for Cline, who bought 75 percent of it in late 2014 for an estimated \$20 million (he'd snap up the remaining 25 percent the following year).

Since then, ten of Cline's old Foresight lieutenants have jumped to Donkin, where they've overseen \$150 million of investments. Legendary coal trader Ernie Thrasher is Cline's partner on the logistics side. He says Donkin's location, nearly halfway across the Atlantic, makes shipping costs to Rotterdam at least 30 percent (\$5 per tonne) less than they would be from central Appalachia. The best coking coal fetches more than \$200 a tonne today. The simplest way to sum up Cline, according to Thrasher: "He sees value in assets others overlook."

Environmental opposition in economically depressed Nova Scotia is restrained. "Even those protesting the trucks know the coal is a good thing for the community," says Paul Carrigan of the Port of Sydney Development Corp. European settlers mined the first coal here 300 years ago. Through the 1970s mining and steelmaking thrived, employing 20,000 before competition from the likes of China wiped it all out. There's talk of using some of Donkin's output to fuel Nova Scotia's remaining coal plants. With plentiful wind and hydropower, Nova Scotia is well within Canada's emissions standards.

Even First Nations peoples, like the Mi'kmaq, have been placated with jobs and a royalty on every tonne. The mining jobs, paying \$100,000 a year, are "an economic lifeline," says Geoff MacLellan, a rep in the Nova Scotia legislature. But how many jobs will there be? At first, Cline had said 200. But in early November, the mine laid off 49 of 130 workers. Just a bump at the start of a long road, Cline says. He has no equity partners or outside financing on Donkin. Once the mine is rocking and rolling, within ten years it could be generating \$500 million in annual revenues and putting \$100 million in cash into Cline's pocket.

Is there anything that keeps Chris Cline up at night? "Sago," he says, the name of a West Virginia mine then owned by International Coal Group where in 2006 a methane explosion killed a dozen miners. Then in 2010 came the disaster at Massey Energy's Upper Big Branch Mine, also in West Virginia, where 29 died. Cline had nothing to do with either incident, though over the years four workers have died in his mines, including his best

friend. There are other risks. The Illinois attorney general sued and settled with Foresight for just \$300,000 (plus \$6.9 million in mine "retirement obligations") over the pollution of groundwater with toxic coal slurry. Lisa Salinas, a critic of Cline who owns a farm 100 yards from an unlined slurry pond in Carlinville, thinks the settlement is a joke because it "calls for little to no valid mitigation of the existing pollution and, in fact, only encourages more damage". A Foresight mine near Hillsboro, Illinois, has been shut since 2015 because of a dwindling coal fire.

Cline is amused by the popular misconception that coal is on its deathbed. Yes, coal-fired power plants do continue to close, and US coal output, currently 700 million tonnes a year, is down by 30 percent from its peak. And yet, the US still relies on coal for 30 percent of its electric power, compared with just 7 percent for wind and solar combined. Worldwide demand for coal continues to grow. Policy and technology are the wild cards; Paul McConnell at energy consultancy Wood Mackenzie figures that advances in solar and battery technology plus worldwide carbon taxes have the potential to erode coal demand by 8 percent a year.

But the death of coal—if it comes at all—will be long and slow. Cline aims for his next project, in Alberta, to be

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## **"Even those protesting know that coal is a good thing for the community."**

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a survivor. He acquired the Vista project via his takeover of the Toronto-listed company Coalspur in 2015 for an estimated \$75 million. The seam is 70 feet thick on the surface, so Cline will build Vista as a pit mine, then go underground to tap 1.7 billion tonnes. By 2022, it could be doing 10 million tonnes per year. Cline's Illinois mines took business away from Appalachia. His Canadian projects will take business away from Illinois. "I think [Vista] could be the last mine operating after they've shut down all the rest of the coal in the world," he says.

Cline plans to enjoy the rising sea levels in splendour. He recently acquired Big Grand Cay, a 280-acre archipelago in the Bahamas that used to be owned by Bob Abplanalp, inventor of the aerosol spray can. On his iPad, Cline scrolls through plans for a serene resort amid azure waters and non-judgemental massage therapists. It's too expensive even for this billionaire to haul in enough diesel to keep the generators running, so he's installing solar panels and researching Tesla batteries, and has three wind turbines on order. "Where it makes sense," Cline says, "I'm absolutely for it." **F**



Bhaskar Bhat, managing director, Titan, says the processes followed at the company have yielded fruitful results





Corporate Account >

TITAN

# Titan's Wedding Party

*Riding on Tanishq, Titan is today the third most valuable jewel in the Tata crown. Can it get better from here?*

BY SAMAR SRIVASTAVA

A little before *Forbes India's* interview with Bhaskar Bhat, I make the mistake of mentioning that Avenue Supermarts, which runs the supermarket chain DMart, is India's most profitable retail company. Only to be swiftly corrected. "People tend to forget that Titan is also a retail company," he explains with absolutely no hint of annoyance. "More profitable and more valuable!"

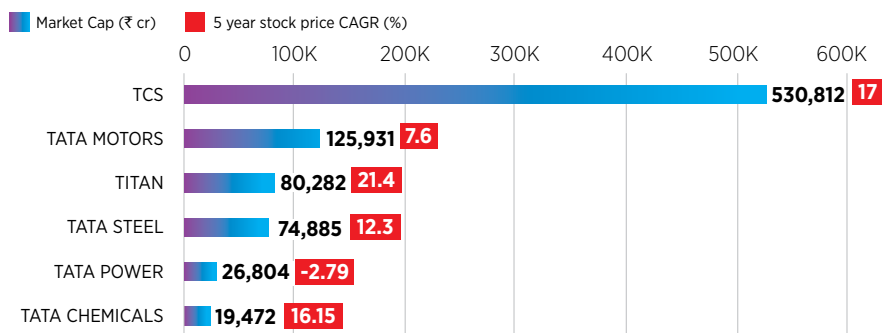
Bhat's rejoinder sets the tone for the quiet self-assurance with which he fields questions. And why not?

The 63-year-old's 15-year helm at Titan has been his most fruitful. In November, powered by a 92 percent rise in its stock price in the last year, the company wrested the third slot for the most valuable Tata company from Tata Steel—Tata Consultancy Services or TCS and Tata Motors are first and second, respectively (See "Tata's Best Performing Companies"). It also has the best return on equity in the group after TCS.

Titan's burgeoning market value also marks an important psychological victory for Bhat, who has come a long way from seeing the company board almost shut down Tanishq in 2002. Through his tenure, Bhat has never let the focus on bottom line slip despite the anaemic margins of its mainstay, Tanishq. At a price to earnings multiple of 90, its stock trades at the highest multiple of all group companies. That's partly because Titan is a consumer business but, more importantly, the market is discounting a long period of consistent growth—the building blocks of which have been painstakingly put in place by Bhat and his team.

Soon after he took over as managing director in 2002, Bhat recalls taking classes with managers where, "I would explain to them what Ebitda was and why it was so important as a driver of market cap. They'd all wonder why this (former) marketing guy was explaining this," he says. Gone are the days when the

## TATA'S BEST PERFORMING COMPANIES

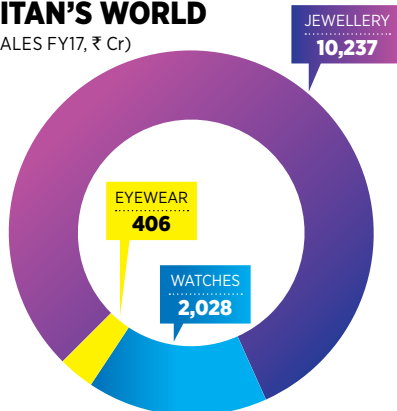


Source: BSE

Data as on January 12, 2018

## TITAN'S WORLD

(SALES FY17, ₹ Cr)



Source: Company's annual reports

board, comprising representatives of Tata Sons and Tidco, were wary of infusing additional capital.

Bhat acknowledges that present cash flows give him all the leeway he needs and some more. Old company hands would like him to be a little more ambitious with that headroom. They point to the fact that the company doesn't seem to be in the mood to incubate the Tanishqs of the future. "They've built a wonderful garden, now all they are doing is tending to it," says a former employee.

Bhat disagrees. He sees huge growth coming from their present

categories even as Titan looks for the next big idea. For now, having shrugged off the demonetisation hit, Bhat has committed to take Tanishq to \$2.5 billion (₹16,250 crore) in sales from the present ₹10,237 crore. Bhat also plans to position the company to compound at 14 percent and clock \$5 billion in top line in 2025. With those numbers, Titan could have a fighting chance at becoming the No 2 Tata company in market cap.

## SEGMENTING TANISHQ

Titan's biggest achievement in the last decade was the turnaround at Tanishq and it achieving scale from 2010 onwards. With customers latching on to its promise of purity, the business began contributing to a larger share of growth. Still, it couldn't get away from the fact that gold is a commodity and making charges or designs would only allow the company to charge a small premium. Profit before tax margins at Tanishq are 10 percent. CK Venkataraman, chief executive of the jewellery business, charted a multi-pronged plan to increase margins.

Initially, the plan involved increasing its focus on diamond jewellery, which brings in twice the margins of gold. Diamonds now make up 30 percent of sales and Tanishq plans to keep it at this level. "We've also been able to push the envelope on gold-making charges so the pressure to do more on the diamond front is less now," says Venkataraman.

While diamond sales increased, Venkataraman took a bolder bet

**Bhat has committed to take Tanishq to \$2.5 billion (₹16,250 crore) in sales**



with the size of stores. Titan had so far been “the masters of 2,000 sq ft retail”, as one analyst explains. “There is no better company than Titan when it comes to understanding where to place its stores, how much rental to agree to, how to staff its stores and so on.”

In April 2011, Titan got superstar Amitabh Bachchan to launch a massive 25,000 sq ft Tanishq store in the western suburb of Andheri in Mumbai. Such stores were meant to showcase the brand and get consumers to up their spends. Titan declined to reveal the increase per bill values in these stores, but Venkataraman believes that they had a positive impact on showcasing the brand. Customers spent more although on a per sq ft revenue basis, the stores were not as efficient as their smaller counterparts. Titan has since launched large stores across all large metropolitan cities that it is present in. (While launching larger stores, it has also rebranded GoldPlus, a label it had launched for small towns in South India.)

With margins up and a strong brand recall, Tanishq is now working on targeting the wedding market. The inherent advantage here is that bill sizes are much larger, at ₹1.5 lakh as against ₹30,000, which is the average spend at Tanishq. “Titan realised that with smaller bill sizes, it was competing with a host of other discretionary purchases like holidays and iPhones,” says an industry watcher. On the other hand, wedding jewellery also accounts for half of the ₹250,000 crore jewellery market in India.

At ₹1,842 crore or 18 percent of Titan’s jewellery business, weddings constitute a small portion of overall revenue but equity analysts at Ambit Capital estimate wedding jewellery sales grew at 43 percent in the fiscal year ended March 2017. Getting it right in this category could have a disproportionate impact on the bottom line. Tanishq has now launched a

## TITAN LAGS IN TOPLINE

REVENUE (₹ cr)	FY15	FY16	FY17
TCS	94648	108646	117966
TATA MOTORS	264058	278546	275247
TITAN	11974	11383	13170
TATA STEEL	139503	106339	117419

## ...AND IN PROFITS

PAT	FY15	FY16	FY17
TCS	25424	28790	30324
TATA MOTORS	13986	11678	7557
TITAN	823	674	697
TATA STEEL	-3955	-4168	-497

## BUT IS No 2 IN ROE

RETURN ON EQUITY (%)	FY15	FY16	FY17
TCS	50	44	35
TATA MOTORS	25	14	13
TITAN	27	19	16
TATA STEEL	NA	NA	NA

Source: Company’s annual report

sub-brand Rivaah to cater to the wedding market. Ambit estimates that the focus on the wedding market would allow Titan to clock an earnings growth of 33 percent till 2020.

## AN EYE ON TIME

While Tanishq has pulled in the numbers for Titan over the past four years, the company has continued to grow its other two divisions—watches and eyewear. Both present separate sets of challenges. While watches are a better margin business than gold, the company is up against a declining category—watches for both utility and gifting have seen diminishing sales. Titan is working on repositioning part of that business as a wearable device business.

In November, it invested ₹3.2 crore in a CoveIoT, a Singapore-based wearable technology startup. It recently launched the Fastrack Reflex band and sold 200,000 units in 45 days. According to Ravi Kant, chief executive officer of the

watch business, Titan plans to have several products in the smart watch category in the next 18 months. International Data Corporation projects that India will account for 0.6 percent of the 200 million units of smartwatch sales by 2020.

As it pivots the watch business, Titan hasn’t dropped the ball on its bread and butter sales across a network of 8,000 dealers pan-India. In fiscal year 2017, this brought in ₹2,028 crore in revenue with its own brands as well as licenced brands like FCUK, Tommy Hilfiger and Police. The business grew by 9 percent in the second quarter, which is the best performance in the last few quarters. In addition to watches, the Fastrack accessories business has been a bright spot for Titan. The portfolio has been rationalised—helmets are out and women’s bags are in—and stores have been spruced up. The brand has found traction online with a chunk of orders coming from smaller cities. According to Kant, it is the fastest growing brand at Titan with a growth rate of 23 percent in the first quarter of 2017-18.

Titan’s eyewear business is its most promising. It is the highest margin business and has a long growth runway. The company has spent the last decade getting the model right and now has 472 stores across the country. In a sign that the management has confidence that it has figured out the model, nearly a fifth or 95 stores of the 472 were added in the last year.

At the core of Titan’s proposition in this category is the promise to provide error-free prescription glasses in a fragmented market. It is a business that it has experimented with. “For us, it is a question of time and some courage on our part,” says Bhat. Ronnie Talati, chief executive of the eyewear business, sees a significant expansion into small towns as well as a push towards sunglasses, which would increase the addressable opportunity for Titan. Add to that lens manufacturing (lenses regularly sell for upwards of ₹10,000) and

## Corporate Account

it's not hard to see why eyewear is a high gross margin category.

### THE ROAD AHEAD

Titan is poised to benefit disproportionately from the Goods and Services Tax, which will bring about a level-playing field between the company and competitors—smaller jewellers, watches brought in through the grey market as well as opticians operating outside the tax net. Titan is also fortunate that except in watches, it plays in categories where ecommerce hasn't dented sales.

That doesn't mean Titan is turning a blind eye to online. In July 2016, it bought a majority stake in online jeweller Caratlane for just under ₹360 crore. "They've helped us understand how to work with a limited set of SKUs and push inventory faster while we've helped drive store footfalls for them that result in higher value sales," says Caratlane CEO Mithun Sacheti.

A level-playing field with the informal economy also opens the doors to newer retail businesses that the company can explore. Titan has worked to put in place a Titan Innovation Engine (TIE) that works on solutions that may be incremental—how to staff stores on weekends versus weekdays—as well as transformational—it has worked with IIT Madras to see how drowsiness sets in (the pulse rate drops) and may work on a preventive product for drivers.

Through the same innovation programme last February, Titan took a small step by entering the saree business through the Taneira brand. At ₹25,000 crore, the saree pie is five times the watch market. Here too, Titan would have to go through a learning curve and understand what styles work as well as the layout of retail stores. Bhat says he is happy with the performance of two pilot stores in Bengaluru and plans to open stores in Delhi.

Titan's earlier franchise was more on a lower ticket size and adornment jewellery, which it is now changing



Titan entered the saree business through the Taneira brand and has two pilot stores in Bengaluru




Tanishq has seen a remarkable turnaround; Titan even took a bold bet with the size of its stores

to wedding jewellery. A successful climb up the value chain would mean that Titan has every chance to double its per sq ft sales to ₹200,000. With more throughput and similar capex levels, return on equity can rise substantially in the next five years. This is what happened in Maruti's case where it moved up the value chain from an entry-level car player to also selling replacement cars.

For now, Bhat has laid out a steady path for the next five years. He's completed 30 years at Titan and his stewardship has earned him a place on the Tata Sons' board. Who succeeds him in two years is an open question.

He declined to answer saying, "the board will take a decision". Industry watchers say they would prefer continuity and that makes Venkataraman the obvious choice.

Titan has shrugged off the profitless growth ghost of the past and put systems and processes in place that make it bottom line focussed. "It was my job to focus on the bottom line while the company focuses on creating elevated experiences. The \$10 billion (market cap) wasn't a goal we had," Bhat says. "It was an outcome of the process we followed." Focusing on execution should keep the juggernaut rolling. 



# Recliner

**RECLINER 2**  
Luxury brands  
are finally  
getting comfy  
online **P/90**

**RECLINER 3**  
Two cricketers  
and a chef bring  
Colombo crabs  
to India **P/94**

**RECLINER 1** *Discovering how Mallorca's food differs from its mainland cousins*



Olives soaking  
in different  
marinades at a  
street market in  
Mallorca; they are  
an integral part  
of the Spanish  
region's cuisine





# Second Helpings

Eating our way through Mallorca's hearty island cuisine

↑ The gambas al ajillo, a Mallorcan speciality, is a dish of prawns done with a generous dose of garlic and olive oil

BY VAISHALI DINAKARAN





**T**he proprietor of the establishment in which we were dining that evening spoke no English. I had jabbed my finger at a couple of dishes on the illustrated menu, and he'd violently shaken his head, his lower lip sticking out firmly, as if to say, "No, that will not be served at my restaurant today!" But when my finger settled on the image of a dish of shiny green peppers, slick with oil, adorned

with little flakes of white sea-salt, he nodded his head vigorously. Suddenly his face broke out into a merry grin, he rolled his eyes heavenwards, kissed his fingertips and then waved his hand in the air. Clearly, he approved of my choice of pimientos de padron, Mallorca's most popular vegetarian tapa. With the restaurant otherwise empty (I had been forewarned that showing up to dinner as "early" as 8 pm in Spain was unusual) it seemed, for the time being, that dinner was going to be a cosy affair comprising me, my travel companion, and the rather animated proprietor of Casa Rufino Tapas and Paellas.

Before I had the opportunity to let my mind wander further, however, he had hustled back from the kitchen, bearing a large tray. In addition to the padron peppers was a sizzling earthenware dish with prawns in olive oil and garlic (gambas al ajillo) and a dish of choricitos—mini versions of the Spanish chorizo sausages. This then, was the moment of reckoning. I gingerly picked one of the peppers from the plate, holding it by the stalk, and, after giving it a moment to cool, I bit into it, hoping for the best.

At that precise moment, I found myself suddenly transported back to a rainy day at home in Bengaluru, with the smell, and subsequently the taste, of fried chilli pakoras. Of course, these particular peppers lacked a coating of deep-fried gram flour on them, but it mattered little. The mild taste of the peppers combined with the kick of the olive oil, and the sharpness of the sea salt came together to do a magical little jig on my tongue. Soon I found myself reaching for another pepper. And another after that, until the plate was empty. And after I had bestowed appropriate amounts of attention on those heavenly garlicky prawns, and then the bite-sized choricitos, I could see quite clearly that Mallorca and I were going to get along just fine.

It was my quest for traditional food of the island that led me to the Celler Sa Premsa in Palma, an establishment housed in an old wine cellar, complete

with a high ceiling, old paintings tacked up here and there, and massive wine barrels nestling in the walls. I'd been assured that I'd find sobrassada, a typical Mallorcan sausage that was also the island's most famous export, right here. It was with an air of expectation, then, that I sat there tucking into bread, aioli (a dipping sauce made of garlic and olive oil) and olives that seem to be a pre-meal staple on every Spanish table. I'd been repeatedly told that one would be hard-pressed to find food more authentically Mallorcan than sobrassada. Which is why when the amicable waiter set the plate down before me, I found myself a little underwhelmed. It contained precisely four slices of fried sausage, swimming in a bed of orange oil. Surely, this couldn't be the famed sobrassada that I'd heard so much about? Somewhat reluctantly I began to pull away the casing around one of the slices, after which I cut away a piece and popped it, with some trepidation, into my mouth. And I was in for a pleasant surprise. The sobrassada wasn't as tangy as a chorizo, and the fact that it had been fried had given the surface a slightly firm texture, but inside, it was soft and almost pâté-like. Even the oil, which I was told was such a fiery shade of orange due to the generous amounts of paprika that go into the making of these sausages, was surprisingly enjoyable. And I found myself finishing rather a lot of bread, topped with the slices of sausage, and dunking some of it in the oil too.

It was a good thing, then, that the other dish I'd ordered was somewhat lighter on the palette and the stomach. Tombet, also spelled tumbet, is Mallorca's answer to ratatouille. The dish, which is often served as a side (although in my opinion it makes a pretty good main), consists of fried slices of potato, aubergines, red bell peppers, and zucchini, all layered in an earthenware dish, slathered with tomato sauce and baked. That tumbet, I was told later, relies heavily on the local produce of the island,

which is why the tomatoes that are traditionally used for the dish are Mallorcan ramallet tomatoes.

Indeed it was the ramallets that caught my eye every single time I found myself in a supermarket in Mallorca. It seemed like they were everywhere. Mountains and mountains of them piled high in baskets, or strung together and hanging from hooks on the walls. After all, it wasn't just the tumbet that relied on these island tomatoes. It was the pamboli too. I was told that while the Catalans ate their bread with olive oil, and some tomato on top of that, the Mallorcans do the opposite. Generous amounts of tomato on slices of llonguet (the local bread), served with olive oil, to drizzle on top. Sometimes, these slices of bread and tomato even come topped with jamon Iberico (Iberian ham), olives and capers that transform the humble bread and tomato dish into various kinds of tapas. In fact, it was over some pamboli at brunch that a friend who lives on the island recommended that I visit Mercat de Olivar, an old-fashioned market hall in the centre of Palma. There, she said, I'd get a true taste of Mallorca's local cuisine.

The beauty of the Mercat de Olivar (mercat is Spanish for market), as I discovered, is the fact that it serves as a one-stop shop for Mallorca's local produce. I walked into the market not quite knowing what to expect. And soon I found myself spoilt for choice. Hanging before me were whole legs of cured ham, sausages covered in garlic powder, onion powder, herbs, chilli, massive sobrassada sausages hanging from the ceiling of tiny stalls, mountains of botifarron (a Mallorcan blood sausage), and slabs and slabs of local Mallorca cheese. There was also a room dedicated entirely to fresh catch from the Balearic Sea—prawns, shrimp, lobster, squid, sardines, anchovies, and fresh grouper that is the star of mero a la mallorquina, a dish where the fish is covered with vegetables and baked. Other stalls in the mercat were dedicated to



**Celler Sa Premsa in Palma, an establishment housed in an old wine cellar serves the most authentic sobrassada, a typical Mallorcan sausage**

vegetables, fruits, spices, fresh meat and even traditional Spanish crockery.

But what fascinated me more than the local produce was the fact that the Mercat de Olivar turned out to be the perfect place to sample local food. It was there that I ate my first ensaimada, a type of Mallorcan pastry coil made with flour, water, sugar, eggs, yeast, and the most important, if somewhat unhealthy, ingredient—lard. The lady at the counter was kind enough to point me in the direction of the ensaimada llisa (a plain ensaimada that comes dusted with powdered sugar) that looked rather doughy and heavy. But when I bit into it, I found it was soft, light and somewhat flaky. And, thanks to the generous amounts of lard, was also very moist. Telling myself that I ought to save room in my stomach for other Balearic delicacies as well, I reluctantly left the ensaimada stall, resisting the temptation of the vast variety they had on hand—topped with apricots, custard, pumpkin, chocolate and even, believe it or not, jam and sobrassada. Yes, sobrassada really was everywhere!

Having consumed some bocadillo (sandwiches with assorted fillings, some of which contained more of that sausage so ubiquitous on the island), I turned my attention to the sopas mallorquina, another one of Mallorca's vegetable dishes that I'd heard a lot about. What I didn't realise, until I caught sight of a dish of the "soup" was that it was more like stewed vegetables. Plenty of shredded cabbage, chopped cauliflower, red peppers, onions, and some ramallet tomatoes are put into an earthen pot and cooked. Eventually the top of the dish is covered with crusty bread that helps soak up the broth, leaving behind the cooked vegetables. It makes for a filling meal. One that can be described, quite accurately, as hearty. And once again, it is a dish that relies on the island's rich crop of vegetables. Since I no longer had any room in me for more food, I skipped the highly tempting dish of lomo con col (another Mallorcan favourite—pork loin cooked in cabbage leaves with slices of sobrassada and botifarron sausages). Instead I opted for a long





**Clockwise from top left: Local Mallorca cheese; varieties of sobrassada sausage; pimientos de padron; tombet, the Mallorcan version of ratatouille**


walk through the city of Palma, which in the day, looked lovely.

However, as I was to discover a few days later, Palma truly came alive at night. The old town, with its tiny cobblestone lanes, quaint cafes, and little boutiques at every corner, looks particularly lovely under the cover of the yellow glow of streetlamps. And it was on a slightly chilly evening that I discovered that Palma's biggest gift to its inhabitants and tourists alike is Tapas Tuesday. Once a week in the centre of the old town, an assorted collection of little bars end up hosting an evening dedicated entirely to tapas, and the drinks they are served with. It takes a little while to locate these bars though, and I found myself hurrying from one tiny little street to the next through the winding labyrinth that is old town Palma. Eventually, I chanced upon the series of little tapas bars, and, since I was so hungry, I stopped at the first one. Here, I was introduced to the tiny fried sardines that nearly every Spanish menu offers, and albondigas (Spanish meatballs in tomato sauce). Once suitably fortified, I continued to wander through the

streets, watching youngsters eating, drinking and generally making merry. Tapas Tuesday, it seemed, was more than just about grabbing a tapa and a drink at a bar at a nominal price. It was, instead, about people. People having a good time on an island that, it seems, is all about celebration.

Susana Bonet, a Mallorcan food enthusiast whom I met on my last day in Palma, can trace her family tree on the island all the way back to the 13th century. According to her, a number of Mallorca's traditional dishes stem from the concept of eating as a community—a tradition that has been kept alive on the island till today. She spoke to me of how the island relies, in addition to olive oil, seafood and local vegetables, heavily on pork. And that when it's time to slaughter an animal, there's plenty of work to be done. Not only are there pork shoulders and legs of ham to be cured, but there are a host of other activities carried out as a community. And that she herself is involved in the family tradition of preparing sobrassada. She spoke of how the meat is mixed with fat and paprika,

before being stuffed into sausage casing and sewn up, either with a red thread to indicate the sausage is spicy, or a white thread to indicate that it is mild. The lard is saved for the making of ensaimada, empanandas and various other savoury dishes. And that it was only during this season of slaughter or matanza that frito mallorquin (also called frito matanza) is prepared. It is a form of tapa typical to the island, and something of an acquired taste. It consists of a dish of offal (usually lungs, liver and kidneys) cooked together with an assortment of vegetables (artichokes, cauliflower, broad beans, fennel) and served with fries. Susana assured me that if made right, frito mallorquin is delicious. After urging me to try it, she gave me a little parting gift, of some homemade Mallorcan hot pepper jam, before hurrying back to her office.

After Susana left, I continued to sit at the corner table at the cafe for a while, looking out at the sea. And I realised that despite the many wonderful meals that I enjoyed in Mallorca over the course of a month, it was the people that truly made the island special, and the food taste better. Whether it was the gentleman I introduced you to at the beginning of the story, or the waiters at the Bar Andaluz who, after having plied us with lovely stuffed mussels, would not let us leave the bar without some Herbs de Majorca (a Mallorcan herb liqueur) and coca de cuerto (Mallorcan sponge cake often flavoured with orange). Or the waiter who insisted on piling my plate with far more paella than my stomach could hold, or the chef who bustled out of his kitchen to tell me that he could add some chicken to the arroz brut (a soupy rice dish cooked with game meat, rabbit, pork or seafood) that I'd ordered, to give it a little extra flavour. But most of all, I will remember a lady passionate enough about Mallorcan food to take time out from a busy day of work to talk to me. I certainly will have to go back to sample more of it. Yes, even the frito mallorquin. 

A Hermès store in Delhi. In-store ambience has been a defining feature of luxury retail



# DOTCOM: *Luxury's New Address*

*Long having shunned online sales, luxury brands are now finding their way around digitally engaging tech-savvy, ethics-conscious customers*

BY NAMITA JAIN





**T**raditionally, luxury goods came with pedigree, an exclusive in-store ambience accompanied by personalised service, and a very high price tag at a physical store located in a tony part of the city. However, if that address is post-scripted with a dotcom, the luxury brand would be sharing part of its address with all retailers, luxury or mass—for example with Walmart.com—stripping it of all exclusivity, and denying customers a unique shopping experience that justifies the price tag.

And yet, as global events lead to slowing sales growth, the changing order of things is dictating that luxury gets an online address. While US economic growth over the last few years did sustain luxury sales, security threats in Europe led to lower passenger traffic and correspondingly, lower sales at regional airports and retail stores. Further, saturation of stores in China and declining Chinese spending on luxury goods, due to the government's anti-corruption drive, added to the slowdown. So there was jubilation when, after an entire year of stagnating sales in 2016, the global personal luxury goods market—high-end handbags, shoes and jewellery—showed growth of about 6 percent in 2017.

Adding to the general uncertainty are changing consumer lifestyles and expectations of existing consumers, dictated by a digital way of life. The wealthier customers have started shopping online, enjoying the luxury of ordering at their convenience, from a vast selection of merchandise and having it delivered to their doorstep in a day or two. Chinese consumers who fuelled a large part of the luxury industry's growth in the past also sobered up in their tastes by shunning big logos and ostentation, and felt comfortable mixing luxury with fast fashion.

Finally, the newcomers to luxury, i.e. the millennials, now account for a larger share of premium goods sales. They are fickle, jump from





**British vlogger Zoella has 10 million subscribers for her video blog. Brands can partner social media influencers like her to lower their advertising and marketing costs**

brand to brand, and think nothing of participating in the shared economy by renting a designer outfit for a day from [renttherunway.com](http://renttherunway.com).

And if this wasn't enough to muddy the waters, all of these categories of consumers seem to want a brand that is relevant to their lifestyles. They want a contemporary brand that aligns with their values, and they are equally happy to shop from their mobile phones as from a physical store.

So, many of the paradigms that define luxe retail—the service, the seasons, the physical runway, the in-store ambience—suddenly seem less engaging, as digital immersion happens. In addition, customers look for a complete experience, where a luxury label can clearly show its commitment to the environment, human rights and wellness and perhaps justify its high pricing, with technology as the centrepiece. While only a fraction of luxury sales happens online today, more than half of all buying decisions are influenced by online engagement.

It has, however, taken luxe brands quite a while to start thinking strategically about how to mingle with the masses while retaining their premium persona. In 2015,

at Georgetown University's Global Luxury Summit, Gildo Zegna, CEO of Italian luxury fashion house Ermenegildo Zegna, spoke of the need to better develop an omni-channel presence to serve the half-million Zegna customers across 100 countries better, and faster. And while product and industry was important, data was key, which in turn required technology that the luxury industry was not adept at harnessing, as yet.

And this is where Zegna is a big corporate success: Its global sales amount to \$1.3 billion per annum across 500 stores, and it is vertically integrated from sheep farms in Australia to retail outlets and, with its websites, computer screens too!

The magnitude of the changes technology has wrought on luxury retail, and how to deal with it, was the subject at Wharton School's Baker Retailing Center, which held

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***Customers today expect luxury labels to show commitment to human rights and the environment***

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a conference in 2015 on online luxury retailing for academics and retail executives. Not surprisingly, it pointed out that the sensory experience and 'social distance'—'I'm better than you'—that are core features of luxury products can be difficult to deliver online. Using technology to connect with this new genre of digitally connected, shared-economy consumers is at the core of the dilemma luxury brands face today.

Speaking at the Georgetown event, John Idol, the CEO of Michael Kors, mentioned the American luxury company had 700 stores worldwide and 4,000 points of distribution and needed to understand how to harness big data to communicate with customers. Despite all the talk, it was only when the personal luxury goods market flat-lined in 2016—with sales at €249 billion, compared with €251 billion in 2015—that it forced a rethink among luxury brands.

In 2017, as a result of price rationalisation between Europe and a traditionally more expensive Asia, as well as merchandising streetwear for younger customers, the personal luxury goods market reached €262 billion, according to Bain & Co and is estimated to grow to €295 billion by 2020. This bouncing back of growth illustrates the potential that changing the formula holds for the industry, even as it forecasts online sales to reach 25 percent of all sales by 2025, up from 9 percent at present.

Ironically, the internet has lowered advertising and marketing barriers, not just between luxury and mass brands, but between competing luxury brands as well. Newcomers to the luxe business, such as high-end jewellery and exotic skin handbag brand Kara Ross, in the absence of large budgets, are building the brand online and working with influencers or social media leaders who carry enough authenticity to guide and validate purchase behaviour among their online followers.

Social media influencers can include the likes of Traackr, a



**Amanda Steele, who has 2.8 million followers for her vlog, was flown down to Cannes in 2017, dressed and made up by Christian Dior**

management platform that could just as well have luxury clients as an Amazon.com, or Zoella, a British beauty vlogger who reportedly has 10 million subscribers for her video blog, earns up to £50,000 per month, and has launched her own range of beauty products. Or, there is the example of Amanda Steele, a 17-year-old beauty vlogger, who shared pictures of herself with Hollywood celebrities at Cannes this year with her 2.8 million followers, with the caption, ‘Thank you sooooo much @diormakeup for treating me like a princess!’. Steele was flown down to the event, dressed and made up by Christian Dior.

These examples underline the fact that having an online presence demands authenticity from luxury brands. Antoine Arnault, CEO of LVMH-owned Berluti, says the industry’s competitive edge is now won by “transparency in communicating”. The generation of customers that demand this transparency is important, since more than 85 percent of the luxury growth in 2017 was fuelled by millennials and Generation Z (generally those born in 1995 or later).

In the past, luxury was a way of life for the royals of India and Europe. Today, wealthy older customers are cutting down on conspicuous consumption as they work towards

leaving a sustainable planet for the next generation. At the same time, millennials are seeking to make a personal statement through luxury casual wear items like T-shirts, denims, jackets and sneakers.


Both categories of consumers are consuming luxury in keeping with the shared values of sustainability, and expect brands to align with their interests.

Some key first movers that understood this are Burberry, which has, over the years, collaborated with Snapchat and Google, and various musicians, all of which have helped rejuvenate the brand. Chanel has been creating great video content on YouTube with Karl Lagerfeld, which has helped the brand stay relevant. Hermès has an amazing site that has quirky features with ties, scarves and jewellery playing at puppet theatre and wordplay; for instance, they create words like ‘meandmyselfomania’, which is defined as a noun describing self-love to the point of idolising one’s double. All of this seeks to engage with consumers and carry them along the journey of discovering their brands online.

Engagement can take other forms too. For example, robots taking away jobs from people is perceived to be a threat. Luxury

brands can help their clients relate better to them by talking of how they still employ local craftspeople for manufacturing. In Trivero, near Milan, 150 artisans work at a Zegna factory. If Zegna were to talk about this story and have an online contest where winners were taken to this factory, what a terrific way it would be of aligning the brand values with those of today’s consumers.

When the Hermès website describes the process of stitching or sewing, illustrating or imagining the Hermès silk that goes into the scarves, it is a revival of traditional skills. When a Stella McCartney uses her sustainable luxury line of clothing—animal leather-free—to partner with mass merchandiser, Target, she’s addressing consumer concerns of affordable luxury that also does not use animal skins. That means, apart from developing online strategies that help them retain their luxury image, brands have started fashioning their marketing strategy with the expectations of new customers.

Meanwhile, Prada rolled out its first online store in China in December-end and LVMH, in June last year, launched a new website 24sevres.com—named after the well-known address of its department store at 24 rue de Sèvres in Paris. 

*Namita Jain is a strategy consultant*

FRANÇOIS DURAND / GETTY IMAGES





(From left) Chef Dharshan Munidasa, former Sri Lankan cricket captain Mahela Jayawardene, Ramit Mittal (CEO) and Deepinder Batth (COO) of Gourmet Investments

## Recliner 3 | RESTAURANT

# ‘Like in Cricket, You Need the Right Partnership in Business too’

*Ex-cricketer Mahela Jayawardene and chef Dharshan Munidasa, two-thirds of Colombo’s Ministry Of Crab, discuss their first foreign outpost in Mumbai*

BY KATHAKALI CHANDA

MEXY XAVIER

**F**ourishing partnerships aren’t new to Kumar Sangakkara and Mahela Jayawardene. With close to 54,000 international runs between them, the duo has arguably been Sri Lanka’s most pre-eminent cricketers in the last decade and a half. Remember their partnership

of a colossal 624 runs in a 2006 Test against South Africa in Colombo? No surprises then that they have carried their mojo off the cricket field as well. In December 2011, Sangakkara and Jayawardene, with chef Dharshan Munidasa, launched a restaurant, Ministry of Crab, which, in six years, has featured thrice on the list of Asia’s

Top 50 Restaurants. Now, they are walking the franchise route to take Ministry of Crab beyond Sri Lanka. Jayawardene and Munidasa were recently in Mumbai to announce their first outpost in the city in association with Gourmet Investments, which represents UK-chain Pizza Express in India. While the location and the



date of the launch are still under wraps—"It will be between April and June; we are targeting the IPL season," is all that Gourmet Investments will say—Jayawardene and Munidasa spoke to *Forbes India* about what makes their restaurant tick.

**Q How do two cricketers and a chef come together for a restaurant?**

**DHARSHAN MUNIDASA:** I hadn't watched a single cricket match before I got to know Kumar and Mahela, so you could say ours was a food-centric friendship. They were regulars at my first restaurant Nihonbashi [in Colombo, which serves Japanese cuisine]. The idea of a crab restaurant came after my TV show *Culinary Journeys with Dharshan*. An American friend was involved, but he eventually stepped away. Then I shared the idea with Kumar and Mahela, who joined in.

**MAHELA JAYAWARDENE:** Both Kumar and I are foodies. Whenever we travel, we seek out good eateries. When we started Ministry of Crab, the idea was that Sri Lankan lagoon crabs, mostly exported, should get their identity in the country. We initially thought it wouldn't get local diners as the price was a bit high, but everyone loved it.

**Q Since 2013, the Indian media has reported about your interests in bringing the restaurant to the country. What took you so long?**

**DM:** Half of those stories are not true. I came and did some pop-ups and some people who were interested started talking. But we couldn't have done it in a huff. It was like handing over our baby. We needed to find the right partners.

**MJ:** During many of our interviews, Kumar and I were asked if we would bring our restaurant to India and we would say, hopefully yes. It was interpreted as we were coming that particular year itself. So, 'we want to come to India' got translated into

'we are coming to India'. But we were in no hurry; we aren't a fast-food chain. We wanted to ensure we get the right product and the right partners to expand with.

**Q You [Jayawardene] and Sangakkara were big brands on the cricket field. What does it take to build up a similar equity off it?**

**MJ:** Cricket, for both Kumar and me, was fantastic, but that chapter has ended. Now, it's time to pursue other passions; the restaurant is one among them. Having Dharshan in that venture is a great thing. He takes care of the main thing, the kitchen, and we don't tell him what to do there. But Kumar and I also want to make sure that Ministry of Crab creates value as a brand. That's why we have been careful about how we want to proceed. We are pretty hands-on in the business. We get our daily updates and numbers on WhatsApp, we even have our board meetings on WhatsApp. The approach is casual, but we are very much involved.

**Q In India, cricketers haven't had it good with restaurants. Even Sachin Tendulkar and Sourav Ganguly have had to shut theirs. How have you and Sangakkara cracked it?**

**MJ:** Two things: Right partner, who knows what he is doing. Dharshan

is a workaholic, he's there from 10 am to midnight to ensure everything is in order. The other thing is, as I said, we are hands-on. We haven't given it to someone else and let them run it. We are careful that we give the right atmosphere to the product. Sometimes, if Dharshan is travelling and if we are in town, Sanga and I drop in, sit at the bar and keep a watch on how things are going; sometimes we go and say hello to the customers. In whatever you do, you need to have control and give your 100 percent.


**Q You [Jayawardene] have played cricket with Sangakkara as skipper and vice versa. Who's the boss at the restaurant? Or is it Dharshan?**

**DM:** We tossed a coin to decide who the chairman would be. Mahela won it, so he's the boss [laughs].

**Q What changes are you going to make to cater to Indian diners?**

**DM:** The price point will depend on what the ingredients will cost here. There wouldn't be any changes to the menu, only some additions to accommodate the local palate. But we don't want to tweak much. We are here to serve crab, and making too many changes, like ramping up the vegetarian menu, will be counterproductive to our DNA.

**Q A number of movements, like farm-to-fork, are sweeping the culinary landscape. Do you subscribe to any of them?**

**DM:** Farm-to-fork was always there; how else, for instance, did you get your chicken? Now it's just a fancy word to indicate a product isn't frozen. I don't subscribe to any of these fancy trends. Our crabs aren't farmed, they are caught in the wild. Right now, we are trying to encourage sustainability studies among crab farmers. Besides, Ministry of Crab is a no-refrigerator restaurant, all our produce is fresh. That reduces our carbon footprint. We don't serve water in plastic glasses. We don't serve synthetic colas; our drinks are all preservative-free, natural. 

**'IT'S GOING TO BE A CASUAL DINING PLACE'**

**Ramit Mittal & Deepinder Batth**, CEO and COO, Gourmet Investments

Following consumption patterns, it was natural to bring a coastal cuisine to Mumbai. That's not to say you don't have seafood lovers in Delhi; there are, and it gives us an opportunity to take the restaurant there (Ministry of Crab will be opening in the capital too.) We will stay as true as possible to the mothership, be it in pricing or sourcing. It's going to be a casual dining place, very approachable and very inclusive. Where we might face a hurdle is in finding a property similar in grandeur to the Colombo restaurant's 400-year-old Dutch Hospital precincts.

# The Second Act

Superstar Rajinikanth is one in a long line of actors to join the electoral fray. We glean some patterns

BY KATHAKALI CHANDA

## 1 SOUTH SIDE STORY

Some of Tamil Nadu's tallest political leaders have also been matinee idols. About four decades ago, MG Ramachandran (MGR) and Sivaji Ganesan took their on-screen rivalry off the screen as well. The former was a runaway hit, with a decade-long reign as the CM, while Ganesan floundered. MGR's legacy was furthered by mentee and late CM J Jayalalithaa, herself a veteran of over 125 movies. Rajinikanth's foray in politics, preceded by Kamal Haasan a few months ago, has evoked memories of the MGR-Ganesan saga and, with both looking to fill in the political vacuum created by Jaya's death, a battle of charisma is on our hands.

## 2 THE BOLLYWOOD CAST

Unlike their Southern counterparts, Bollywood stars in politics have mostly been confined to supporting roles. Sure, there have been surprises, like Rajesh Khanna nearly spoiling the party for LK Advani in 1991 or Govinda's victory over then petroleum minister Ram Naik in 2004, but their performances haven't been anything to write home about. Among the current MPs are Kirron Kher and Paresh

Rawal, who've only managed to score a few headlines with controversial statements. Their senior colleagues, like Vinod Khanna and Shatrughan Sinha, fared better: Both served as cabinet ministers. But the late Sunil Dutt, a five-time MP and a minister, was perhaps the most respected.

## 3 THE SHOLAY SCRIPT (NOT)

The lead cast of *Sholay* failed to make much impact in politics as it did with the iconic film. The inseparable Jai and Veeru, portrayed by Amitabh Bachchan and Dharmendra, had divergent allegiances, contrary to the promise they made in the melodious 'Yeh Dosti'. Bachchan, a childhood friend of Rajiv Gandhi, won an election for the Congress on the late PM's request, but distanced himself post-Bofors

and grew close to then Samajwadi Party's (SP) Amar Singh. His wife Jaya, the reticent Radha, earned an SP ticket to the Rajya Sabha, which she retained even after the party and the Bachchans fell out with Singh. Dharmendra became a BJP MP in 2004 while wife Hema Malini, the babbling Basanti, is a current MP.

## 4 CALIFORNIA CALLING

America's Golden State is home to some of its most prominent cinestar-turned-politicos, the most famous being its 40th president Ronald Reagan. He appeared in over 50 films before being elected the California governor in 1966, and then a two-term president. In 2003, Arnold Schwarzenegger took over Reagan's gubernatorial seat, beating the likes of porn star Mary Carey and media entrepreneur Arianna Huffington. Elsewhere in California, Oscar-winning director and *Dirty Harry* star Clint Eastwood won the mayor's office in his hometown of Carmel in 1986 following a spat with the local planning board. So did Sonny Bono, the 'I Got You Babe' singer and Cher's husband, who became the mayor of Palm Springs to get around local red tape. **P**



Dharmendra and Amitabh Bachchan, *Sholay*'s Veeru and Jai, had varying political allegiances



Clint Eastwood (right) in *The Bridges of Madison County*

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▲  
**HOME**

## Seat of Rest

The expanded range of Gora-V armchair from Vector Projects is made of a sturdy metal base and wooden legs, and a highlighted stacked-up seat and anti-slip rubber feet. Suitable for both indoors and outdoors, Gora-V is a fully customisable chair. The patchwork fabric is available in various patterns.

*[vectorprojectsindia.com](http://vectorprojectsindia.com)*



## HOME

### Raise the Bar

The collection of bar accessories from Argentor Silver is stylish and contemporary, and perfect for celebrations. It consists of a fine range of sterling silver bar essentials such as champagne bucket, ice bucket, whiskey decanter, ice tongs, wine glasses and nut bowls.

[argentorsilver.com](http://argentorsilver.com)

## TECH

### Earbuds of Babel

Forget merely following you around the web or restocking your fridge: Google now wants to put its leading-edge Artificial Intelligence (AI) right into your ear canal. Its new, oddly unhyped Pixel Buds wireless headphones let you chat directly with its virtual butler, Google Assistant, to get directions, play music or place a call. So far, so meh—but its AI, Google says, can do things others can't, such as real-time translation of some 40 languages—as long as your buds are paired with Google's Pixel phones, at any rate.

[store.google.com](http://store.google.com)



## STYLE

### Colours of the Land

Vacheron Constantin's Overseas timepieces are dedicated to India and the Middle East, and mirror the most striking shades that characterise the regions—brown and gold. The women's watch has an 18-carat, pink gold bracelet and its bezel is set with 84 round-cut diamonds. The Overseas Chronograph comes equipped with Calibre 5200, the new self-winding chronograph movement developed and manufactured by Vacheron Constantin.

[vacheron-constantin.com](http://vacheron-constantin.com)



## ON BUDGET

A budget tells us what we can't afford, but it doesn't keep us from buying it.

—WILLIAM FEATHER



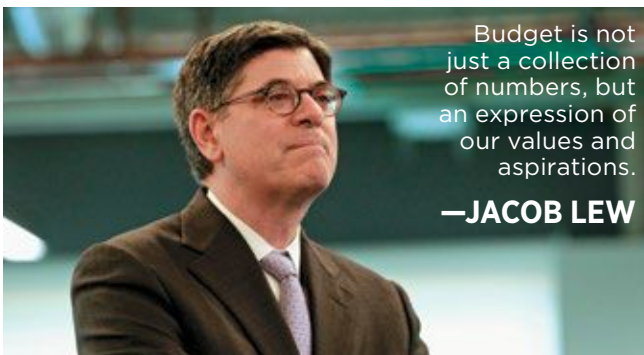
If we can't find cuts in the defence budget, we're not looking carefully enough.

—JON HUNTSMAN JR



It's clearly a budget. It's got a lot of numbers in it.

—GEORGE W BUSH



Budget is not just a collection of numbers, but an expression of our values and aspirations.

—JACOB LEW



We might come closer to balancing the budget if all of us lived closer to the Commandments and the Golden Rule.

—RONALD REAGAN

The budget should be balanced, the treasury should be refilled, the public debt should be reduced and the arrogance of public officials should be controlled.

—ROSS PEROT



The budget evolved from a management tool into an obstacle to management.

—FRANK CARLUCCI

Don't tell me what you value, show me your budget, and I'll tell you what you value.

—JOE BIDEN



If you want creativity, take a zero off your budget. If you want sustainability, take off two zeros.

—JAIME LERNER



This budget reflects a choice—not an easy choice, but the right choice. And when you think about it, the only choice. The choice to take the responsible, prudent path to fiscal stability, economic growth and opportunity.

—GEORGE PATAKI



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