SNAPSHOTS OF LIFE IN QUARANTINE

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Forbes INDIA

PUSHING THE PIVOT BUTTON

How Covid-19 compelled **Delhivery**, along with a clutch of other startups, to evolve the business model, without abandoning the core

PLUS

HOW CSR BECAME CORPORATE COVID RESPONSIBILITY

THE COMING DEFAULT DELUGE

MUTUAL FUNDS' NEW PARADIGM

From left:
Sandeep Barasia
Mohit Tandon
Suraj Saharan
Sahil Barua
Ajith Pai
Kapil Bharati

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Welcome to the

Forbes INDIA

Digital Edition

Dribble and Dunk

Look for the word 'pivot' in dictionaries, and you'll find at least a couple of meanings. For instance, Merriam-Webster's first definition is 'a shaft or a pin on which something turns'. Or, as the Cambridge Dictionary puts it: "A fixed point supporting something that turns or balances." Merriam-Webster also defines the action of 'pivoting': "The action in basketball of stepping with one foot while keeping the other foot at its point of contact with the floor." Pivot, as a verb in the Cambridge Dictionary, also means "to change your opinions, statements, decisions, etc so that they are different to what they were before".

These various definitions have their similarities and their nuances. The common factor to all is a 'turn' or a 'change'. The subtle difference is that the former can happen only as long there is fixed point of support, which could be a shaft or, on the basketball court, one foot on the floor. Pivot as a change, however, doesn't pay much attention to the core point of support, going in a direction different from the one before.

Startup pivots have been celebrated in case study books. YouTube, for instance, was never meant to be about video streaming; it actually started out as dating service, allowing users to upload short videos of themselves. The company that Google went on to acquire for $65 billion may have come a long way, but look back and you'd realise that YouTube hasn't veered from its core—which is video.

That's what a clutch of Indian startups is counting on during the disruption triggered by Covid-19. Disruption may be a much overused and abused word, but it may be apt for the transformation many of these business models are undergoing—an evolution that takes the company in a different direction but one that's related to the core. A good, and perhaps unique, example of this is Delhivery, which has over the past decade evolved into a logistics service provider. Now Covid-19 has opened an opportunity that it had begun with back in 2011: Hyperlocal delivery, a pivot related to Delhivery's core of transportation and warehousing. In April, the company says it delivered over 2.5 million orders of medicine and 10,000 tonnes of grain. Sahil Barua, one of Delhivery's seven founders, tells Rajiv Singh who penned this fortnight's cover story that, by June, Delhivery was doing "pre-lockdown volumes".

As Singh writes, pivots usually happen when startups realise there's no market for its product or service. It's rare that businesses have pivoted because of external factors. A pivot during Covid-19 could well start out as survival gambit but end up as a huge opportunity that wouldn't have been a gleam in the founders' eyes pre-pandemic.

Nothing of course—and surely not a pandemic—can save a business that's sucked in huge money, and belatedly realised it's going nowhere. Covid-19 then may be just an excuse to pivot, and not driven by core competence and market dynamics. Also, the business needs to be viable long after the pandemic has passed. For more such nuances, Singh's cover story 'Ready, Set, Pivot' on page 28 is a must-read.

As India's citizens set out to reclaim livelihoods, movement across state and international borders is inevitable. Which also means quarantine is here to stay till we bid adieu to the virus. So what is it like to be locked up for a couple of weeks within four walls? As Naini Thaker and Madhu Kapparath found out after capturing some vivid moments of the quarantined, life can go on and splendid isolation can be a thing. Don't miss the photo feature on page 58.

STORIES TO LOOK OUT FOR

▲ Akash Gupta and Rashi Agarwal of e-bike manufacturing startup Zypp have pivoted to hyperlocal grocery delivery; life under quarantine in photos

Brian Carvalho
Editor, *Forbes India*

brian.carvalho@nw18.com

Best,

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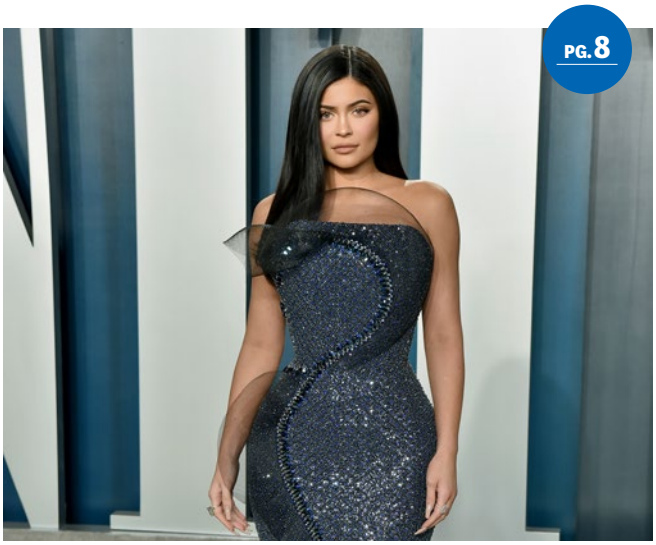

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Editor: Brian Carvalho

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TO OUR READERS
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FACEBOOK | BCG BOSTON CONSULTING GROUP

Turn the Tide

Unlock the new consumer path to purchase

Leverage the accelerated digital influence to unlock the new path to purchase

Turn the Tide with Facebook & BCG report

Learn about changes in consumer behavior and opportunities to unlock the new path to purchase for your business with 'Turn the Tide', an industry first report by Facebook & BCG.

SANDEEP BHUSHAN

Director and Head, GMS, Facebook India

"The 'Turn the Tide' report outlines the opportunities that businesses need to embrace in the context of new consumer journeys and category needs. In response to consumers embracing the digital medium, brands need to focus on solutions that are relevant for the new normal such as hyper-localization, creating virtual experiences, re-looking at the media-mix to build efficiency, or building messaging around new habits such as DIY and the increased focus on health and hygiene."

Download the industry first report by FB and BCG

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REJIGGING OUTLAYS

Low Margins, Lower Demand

Industries with slender margins must move quickly on reducing their cost structures to reflect decreased demand

SANCHIT KHANNA / HINDUSTAN TIMES VIA GETTY IMAGES

Restaurants are taking a hard look at their fixed costs as they prepare to operate at a lower capacity in the post-Covid world

IN EARLY JUNE, TWITTER WAS abuzz with news that at least 10 restaurants in Delhi's tony Khan Market planned to shut shop. The restaurants, which operate at slender margins at the best of times, complained that landlords were unwilling to lower rentals. With lower footfalls and takeaway orders at a fraction of earlier numbers, the business was unviable. Customers who had planned to visit Café Turtle and Khan Chacha's once they reopened were disappointed.

This tug of war points to the delicate reckoning that a number of businesses face. With demand numbers still uncertain, they are taking a hard look at their fixed costs. Most are grappling with the new reality of operating at a far lower capacity on account of lower demand in the post-Covid world. "Airlines are flying at about 30 percent of their capacity at 55 percent load factors," tweeted Sanjiv Kapoor, former chief commercial officer at Vistara. "Do the math. Less than 20 percent of pre-Covid demand is back," he said. Fixed costs for InterGlobe Aviation and SpiceJet were 91 and 92 percent of revenues respectively in the last 12 months.

Airlines, restaurants, malls, cinemas and hotels have already gotten rid of the low hanging fruit—employee costs. Salaries have been cut and some staff laid off. The next stage promises to be messier as they look to reduce a larger component of fixed costs. For a restaurant and stores in malls, it means negotiating with landlords to bring down rentals. Airlines must decide whether to return planes to lessors or negotiate with airport operators to reduce parking fees. "Several businesses are looking to invoke force majeure in re-negotiating their terms. This is likely to attract multiple litigation in various sectors in the next few months," says Zulfiquar Memon, managing partner at MZM Legal.

For now, markets continue to price these companies at levels that are at a discount to their pre-Covid levels but not at prices that would reflect reduced demand for several quarters. This phase of opening up presents the trickiest valuation puzzle for analysts. They must price in a recovery in demand that may or may not happen.

"THIS PHASE OF OPENING UP PRESENTS THE TRICKIEST VALUATION PUZZLE FOR ANALYSTS. THEY MUST PRICE IN A RECOVERY IN DEMAND THAT MAY OR MAY NOT HAPPEN."

In the absence of clear demand numbers,

(Contd on Page 9)

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investors have taken some money off the table. If demand doesn't recover, these companies may prove to be expensive even at the lower prices.

Take airlines for instance. InterGlobe Aviation is down by 47 percent from its February peak, but passenger loads are barely 20 percent of pre-Covid times. So even if prices have fallen, its multiple has expanded as both revenues and profitability are expected to decline significantly this fiscal. SpiceJet is down by 43 percent. Phoenix Mills, which is locked in rental negotiations with tenants, is cheaper by 31 percent. Indian Hotels is down by 38 percent. It would take several months for more accurate forecasts to emerge.

• SAMAR SRIVASTAVA

DEBT FINANCING

Luring With Loans

EMI-linked products are getting popular and several companies are making attractive offers during the lockdown, but can people repay?

IN MAY, WHEN THE RESERVE Bank of India (RBI) cut the repo rate further to 4 percent this year, it paved the way for private and public sector banks to lower their lending rates, and in turn their EMIs.

Banks, through an RBI directive, have offered an extension of the moratorium on loan repayments, but that does not mean it is a waiver. In times as uncertain as these—when individuals have seen salary cuts or lost jobs and small businesses have seen a complete drop in revenues from customers—payment of EMIs on loans has become a challenge.

Bajaj Finance, which has a range of products to induce people to take loans or spend more on their cards and pay through EMIs, has seen a drop in profit, assets under management and number of customers too. This only makes the market more challenging. As a result, lenders have come out with innovative schemes to lure customers.

Hyundai Motors has an "EMI Assurance Programme" wherein it will pay for three car loan EMIs for customers working in a private firm who have lost their jobs due to poor financial health of the firm or its acquisition or merger. The cover is underwritten by Shriram General Insurance and applicable on loans for select cars that were purchased in June. The allowed EMI amount is minimum ₹2,000 and up to ₹50,000.

The Bajaj Finserv Health EMI Network card, on the other hand, allows individuals to pay for medical expenses incurred, in EMIs. This applies to treatments such as dental care, eye care and hair transplantation among others, with offers from September this year to March 2021.

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Lizzie Chapman, chief executive and co-founder of digital lending startup ZestMoney, says: "There is a massive boom in demand for EMI products. We are seeing that even those who do not necessarily need finance are more likely to take one because the future is uncertain." ZestMoney, along with Digit Insurance, had in 2019 created a product—which continues to be operative—covering customers for a portion of their debt burden of EMIs in case they cannot pay due to hospitalisation, permanent disability or death. Several finance firms have since introduced similar 'credit protect plus insurance' products.

Chapman says they have doubled the number of edtech partners, forecasting the demand for loans in this sector in coming months.

Due to the lockdown and standstill in business, bank credit to individuals and small businesses has fallen. Credit from banks towards housing has fallen by 0.61 percent, vehicles by 1.65 percent, unsecured personal loans by 3.69 percent and MSMEs by 4.22 percent, according to RBI data for April compared to March.

Chapman says with India's household debt-to-GDP ratio at 12 percent (as of January), much lower than China's (55 percent as of December 2019) and the US (75 percent in January), its outstanding credit lines are low and can rise in the coming years. The critical element for individuals and small businesses in India will, however, be the ability to repay loans, come September 1, when the moratorium on loans is lifted.

• SALIL PANCHAL

1.5 lakh

The number of Covid-19 samples being tested every day in India in June, up from 10,000 in late March

SHUTTERSTOCK

COVID-19

Why India Needs To Test Even More People

Despite increase in daily number of tests, higher positivity rates in certain cities point to the need for more inclusive approach

SAKIB ALI / HINDUSTAN TIMES VIA GETTY IMAGES

A medical professional collects a swab sample from a woman to test for Covid-19 infection at the Joint District Hospital of Sanjay Nagar in Ghaziabad

IN LATE MARCH, INDIA TESTED under 10,000 Covid-19 samples a day. People with influenza-like symptoms, and without a history of foreign travel, couldn't get tested as the country struggled with making test kits available. By the end of April, the numbers had moved up to 30,000 tests a day. In June, an average of 150,000 samples were being tested a day, according to the Indian Council for Medical Research.

While testing capacity is no longer a constraint, even now it turns out that getting tested is a challenge. As the number of tests has gone up, there have been wide variations in positivity rates (the number of tests confirmed to have the Covid-19 virus as a percentage of total tests conducted). This number is important, as it shows that infections in certain cities have become clustered. The national positivity rate stands at 5.7 percent, with some states like Himachal Pradesh (0.5 percent) and Jharkhand (1.06 percent) recording lower rates.

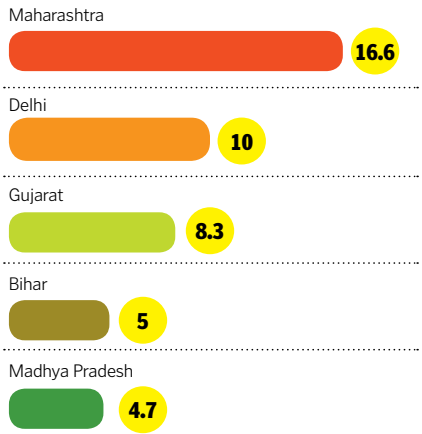
Delhi and Mumbai have been particularly hard hit, with positivity rates of 27 and 32 (between June 7 and 11) percent respectively. Both cities have capped the number of tests being conducted at 4,500 to 5,000 a day, and have declined to test asymptomatic cases. (Note: These numbers do vary. On some days, Delhi has tested only 3,700 samples.) As a result, there has been a decline in positive cases in these cities, even as the positivity rate has risen. This points to a false sense of calm as it is clear that a number of people are slipping through the net. Though potentially asymptomatic, they could infect others.

The lack of testing in cities where cases are clustered has surprised infectious disease experts, as testing capacity is no longer an issue. "When we have such high positivity rates, it has to be taken as an indirect indicator of a wide prevalence in the community and hence the possibility of community transmission has to be taken seriously," says Dr Anup Warrier, senior consultant, Aster Medicity, Kochi. According to him, there is little point in denying community transmissions, as testing rates in high positivity areas are not being ramped up.

On June 11, a change in testing protocol in Delhi, where all asymptomatic cases were tested, pushed the number of positive cases to 1,877—the single highest daily count. While data on the number of tests carried out is awaited, it is clear that in areas with high positivity rates, more tests will result in more cases being recorded. As more states loosen testing protocols, expect infections and positivity rates to rise.

• SAMAR SRIVASTAVA

Higher Positives



Data is average for two weeks starting May 25; numbers in percentage—for instance in Maharashtra, 16.6 percent of all tests came positive

SOURCE covid19india.org

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Dr. Abhay Valsangkar – Life Coach

In a world where a 'Jack of all trades' is considered to be the master of none, Dr. Abhay Valsangkar's life tells a very different story. Dr. Valsangkar's life has spoken of unusual choices right from the beginning.

Currently the Chief Consultant, AAYAAM, Dr. Abhay Valsangkar's story starts from his diverse choice of educational degrees. The list is as strong as is lengthy. Beginning with a bachelor's degree in Economics, Dr. Valsangkar went on to pursue two master's degrees - one in General Law and another in Personnel Management and Industrial Relations. Not one to become complacent, Dr. Valsangkar topped his qualifications with a Doctorate in 'Diversity and Inclusion Practices in Relation to the U.N. Directions'.

For the next 30 years Dr. Valsangkar donned the hats of strategy enabler, organisation builder, culture creator, HR head and Country head across various industries - like chemicals, pharmaceuticals, food, financial services and IT. When all of that was not enough to satiate his hunger for getting more out of life, he ventured into the field of entrepreneurship. His journey as an entrepreneur has been no less exciting.

Running a business with a vision is common, but helping individuals and organisations in envisioning a bright future is out of the ordinary. As a strategy consultant, Dr. Valsangkar personally mentors C-level executives globally. To ensure that the mentorship leads to greater gains, it is supported by well-thought of strategy and execution mechanisms. When asked what he enjoys the most in his role as a strategy consultant, he fervently credits it to, 'Autonomy and a variety of experience.'

Being an alumnus of Bombay University and Tata Institute of Social Sciences (TISS), Dr. Valsangkar realised the role that quality education plays in life. Wanting to catch students while still young, he modulated his role as a strategy consultant to help school going students as well. His quest to help young minds broaden their horizons led to him to develop a 'Versatility Quotient' for students. The Versatility Quotient was brought to life to create experiential settings for students to be able to learn what schools don't teach. The initiative was the result of one question that stayed in his mind continuously - 'Our education system will produce doctors and engineers, but what about socially responsible, culturally aware and creatively inclined pupils'? The Versatility Quotient involves a variety of subjects, ranging from arts to development of global awareness.

Dr. Abhay Valsangkar's journey has been shaped by his varying interests in life. Living by the theme of versatility, his hobbies are as different as chalk and cheese. He enjoys reading fiction as much as he enjoys reading non-fiction. Travelling, cooking, Hindustani classical music and creative writing elicit equal passion from his side.

Dr. Valsangkar feels that in a world of specialism and super-specialism, singing a tune of versatility is like swimming against the tide, and he says he 'chose that path consciously'. He believes that the entrepreneurs of today and the future need to acquire a holistic awareness of the world around them which goes beyond the realms of the restricted world of business. He clearly envisions entrepreneurs to be society leaders who are not merely accountable for building successful businesses but are equally responsible for bringing in societal changes through business initiatives.

He has no illusions that the path is going to be simple, but has a touching faith in the work being done by many young entrepreneurs who are tirelessly working to leverage technologies for the betterment of the society**. 'And only the versatile will succeed', signs off Dr. Valsangkar.**

15-20%
Fall in price of residential apartments before the Covid-19 pandemic


SHUTTERSTOCK

REAL ESTATE

Can Realtors Really Slash Prices?

High cost of land, labour and raw materials, along with steep loan rates post-Covid-19, will put developers in a spot


SHUTTERSTOCK

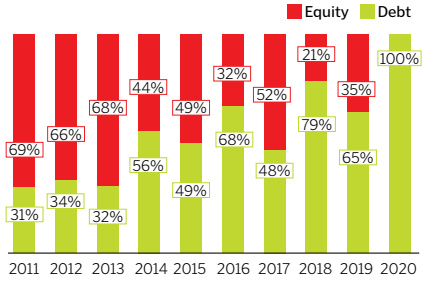
OF LATE, PROMINENT VOICES like Union Minister Piyush Goyal and banking doyens Uday Kotak and Deepak Parekh are speaking out on how real estate developers need to cut prices. Kotak said developers need to let go of the fact that they bought land at higher costs, and now make sales feasible. But is this easier said than done?

According to a note by Knight Frank Research on June 10, between January and May 2020, only one private equity deal in the residential space was closed at $40 million as compared to 11 deals worth $469 million in the same period last year. Due to low investor appetite, the share of residential in the overall investment pie has shrunk from 60 percent in 2011 to 11 percent in 2019.

Yet, realtors have long argued against reducing prices because of land costs. Also, if a developer cuts the price of a project, existing customers will ask for discounts, leading to a market price crash in the area.

While some developers own land bought at lower rates, most Mumbai developers, especially in southern and central parts of the city, bought land at exorbitant rates over the last decade, amounting to 50 to 75 percent of the project cost. Yet, over the last four or five years, prices have stagnated and even fallen due to oversupply and overpricing. Even pre-Covid-19 prices of residential apartments had fallen by 15 to 20 percent. Analysts indicate the trend will continue for two years.

Residential Real Estate: Shift in Investor Preference from Equity to Debt



Note: YTD 2020 represent investments till 31st May 2020

SOURCE Knight Frank Research, Venture Intelligence

So if developers are forced to take a haircut in these high-ticket projects, does that provide a window for others across the country to do the same?

According to a research note by Adhidev Chattopadhyay of ICICI Securities Ltd, "Residential property prices in the markets of South India, Pune and NCR range between ₹5,000-6,000 per sq ft against construction costs plus land costs of at least ₹4,300-4,900 per sq ft for developers. This translates to pre-Covid-19 project level Ebitda margins of around 15 to 20 percent for developers..." and hence he believes these markets, including outer Mumbai Metropolitan Region areas like Kalyan, Dombivli, Navi Mumbai, Thane, and the extended Western suburbs would see a 5 to 10 percent correction in prices more in the form of indirect discounts rather than a cut in the quoted prices.

Why is it tough for developers to cut prices? Before Rera, realtors held on to prices by selling fewer units rather than offer discounts. But now, they have to pay to get permissions and other approvals before launching a project, thereby increasing the initial cost. Coupled with lower sales, rise in labour costs with workers returning to their hometowns, and rise in the cost of construction material, it is only going to get tougher for builders. Chattopadhyay says, excluding land cost, construction costs vary between ₹3,796 per sq ft for a 20-storey building to ₹5,623 per sq ft for a 40-storey one.

The other hanging sword is the financing cost. While most non-banking financial companies that offered loans to realtors have been trying hard to sell their exposures to each other, they are charging developers between 12.8 and 20 percent. With costs escalating, it will be a tough ask for developers to survive this mess.

• POOJA SARKAR

"Vegetables offer a better economic choice for smallholder farmers"

East-West Seed India, a Dutch-based tropical vegetable seeds market with 35 years of experience in breeding, producing, and delivering high-quality vegetable seeds, sets a new direction

It has been a busy two years for Dilip Rajan, the Managing Director of East-West Seed India, who, in this short span, has propelled the company with market-leading growth in India. East-West Seed India aims to grow faster than the market to become one of the top three vegetable seed companies in India by 2023. Edited excerpts:

Q I understand you made a career shift from pharma to farming. How has the journey been so far with East-West Seed India?

While I hail from a farming family, I spent more than two and a half decades in healthcare and much of it outside India and was looking to return back to my roots. My journey took a very inspiring turn when I joined East-West Seed India as Managing Director in 2018.

Being new to this industry, I spent most of my initial time traveling across India to meet with farmers, colleagues, and partners to listen and learn. I was fortunate to have a fantastic team that not only took me in but also taught me so much to enable my transition from pharma to farming.

The opportunity to lead a purpose-driven organization is a source of great joy for me. Mobilizing people around a common purpose has always inspired me. In leading East-West Seed India, I have tried to reinforce our core belief that farmers deserve access to high-quality vegetable seeds. Our efforts over the last 2 years have put us on a robust growth path and positioned us to better serve the millions of smallholder farmers in India.

Q Tell us about East-West Seed? What makes it stand out among its peers from your standpoint?

East-West Seed is a global leader in the tropical vegetable seeds market. Founded by Dr. Simon Groot, winner of the World Food Prize 2019, East-West Seed's focus is on developing improved vegetable varieties to help smallholder farmers increase their production and incomes. East-West Seed is #1 in the 2019 Global Access to Seed Index, which recognizes the commitment and performance in providing smallholder farmers across the World, access to quality seeds.

Vegetable farming is not just a business model for East-West Seed, and we have a unique social development approach towards farmer training. Through our Knowledge Transfer, we have helped more than 10,000 smallholder vegetable farmers by providing knowledge on better farming practices with high-quality vegetable seeds.

As a pure-play tropical vegetable seed company, our approach to breeding is unique in that we look at highly specific local factors and breed particular varietals with those factors in mind. We do not believe in a "one-size-fits-all" approach—we look at our work as an investment in the success of farmers in these regions, and breeding seeds that will thrive in those areas is critical to that work.

Consequently, we are working closely with the Indian Institute of Horticultural Research, Bangalore, Indian Institute of Vegetable Research in Varanasi, and collaborating actively with Tamil Nadu Agricultural University, Coimbatore, and Punjab Agricultural University in Ludhiana, besides Asian Vegetable Research and Development Center (AVRDC), Taiwan.

Q Can you tell us more about the 'personal-sized vegetables' that East-West Seed India has introduced? What is the rationale behind this?

The personal-sized vegetables were in response to the emergence of the 'nuclear family' in urban India, where smaller households required nutritious vegetables but did not want to buy/store the currently available large sized vegetables. For example, a typical snake gourd is 50-60 cm long, and that would be a challenge to store and consume for a small family. We introduced Covai, a short (24-28 cm) but high-yielding snake gourd variety with a 200-300g weight that met the needs of a small family and those of the smallholder farmer. Similarly, we have personal size cucumbers, bitter gourds, watermelons, and pumpkins that are perfect for a family of four and one-time cooking.

Q Tell us about your Knowledge Transfer initiative?

Smallholder farmers have an intimate knowledge of the land they work, often passed down over multiple generations. The goal of our Knowledge Transfer work is to honor those traditions while showing farmers how hybrid seeds and improved methods can provide even more value. Once they see the improved harvests, and the higher prices that diverse vegetable varieties can yield, they know they can trust the seeds that EWS sells. Seeds that are more resilient, protect against the unpredictability of farming—weather, pests, disease—and that means peace of mind for farmers.

East-West Seeds' focus is on developing improved vegetable varieties to help smallholder farmers increase their production and incomes

Dilip Rajan, *Managing Director*
East-West Seed India

So far, we have trained more than 10,000 smallholder farmers across five states by providing knowledge on better farming practices in high-quality vegetable seeds.

Q How can vegetable farming offer a better opportunity for farmers in these troubled times?

Vegetables represent a real contribution to the development and offer a better economic choice for the smallholder farmer- high-value crops grown on smaller farms can yield better returns. For instance, a thousand square meters of land planted with bitter gourd will give a farmer roughly the same income as one hectare planted with rice. Vegetables can be harvested quickly (45-55 days), 3-4 crops can be cultivated throughout the year to meet the increased demand for vegetables, and changes in food consumption in these troubled times.

Q What is the opportunity for India?

ICRA projects the vegetable seeds industry to double from the current levels to around Rs. 8,000 crores in the next five years - registering a CAGR of around 10%. India, as the second-largest producer of vegetables in the World, must seize this opportunity to increase its vegetable exports. India would need to adopt newer technologies and practices, existing policies must be repurposed and infrastructure built to foster increased exports. Vegetable production offers additional income for farmers and traders, enhances the health and nutrition of consumers, while reviving our stalled economy - a triple win… when vegetables rise, people thrive.

₹4.2 L cr

Estimated size of India's restaurant industry; organised restaurants account for 35 percent of it

SHUTTERSTOCK

FOOD & BEVERAGES

'We Are Confident We Won't Leave Sales On The Table'

Smita Jatia, managing director, Hardcastle Restaurants Pvt Ltd, which operates the McDonald's franchises in India's west and south zones, on business during and after the three-month lockdown

RAJ K RAJ / HINDUSTAN TIMES VIA GETTY IMAGES

Not only delivery, drive-through and takeaway are also doing well for McDonald's

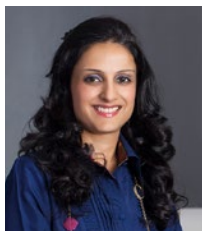
Q What have the past few months been like for McDonald's, and what are your plans to reopen?

Once food delivery was declared essential early in the lockdown, we started opening hubs in different cities. We didn't need to open all outlets—with no one on the streets, we were able to cover the entire city from a few restaurants, keeping operating costs under control. In April, we had 98 restaurants open—about 37 percent of our total stores. In May, certain states eased rules for takeaway, and we opened 191 restaurants. In June, dine-in is also opening in some states. By the end of the month, we're hoping 83 percent of restaurants will open, 50 percent of which will be operating dine-in.

Q What is your strategy for the next few months—will delivery continue to be the focus?

Not only delivery, drive-through and takeaway are also doing very well for us. We are going to further leverage our digital strategy to create an omni-view of the customer; this means the same customer wants to order delivery in the office, or pick up a cup of coffee as takeaway. We have introduced a new delivery feature called 'on the go', where you can have your order delivered to your car.

COURTESY: HARDCASTLE RESTAURANTS



"PEOPLE WILL HAVE TO FIND PLACES WITH SAFE MEALS AND VALUE FOR MONEY."

Q For a fast-serve chain like yours, how will you keep up with the pace of sanitisation?

We started a work-from-home programme for employees during the lockdown, to teach them about new sanitisation norms. We have an extensive 42-point list our crew has been trained in. No bare hands touch any food or surface. We've made blocks through the restaurant for people to stand in, to maintain social distance. We'll be doing temperature checks for customers as well as crew, and customers won't be able to come in without masks.

Q What does the future of QSRs look like?

A lot of customers will now use us for convenience, versus earlier, when they would come in to hang out. But once offices and colleges open, people will have to find places with safe meals and value for money. The difference is that they may order or takeaway. But we won't be leaving any sales on the table.

The customer in India is going through unpredictability, and a bit of fear psychosis too. They are going to be very conservative, and big-ticket items will be impacted. However, every person is going to want to get out after 70+ days of lockdown. That's human tendency. Eating out is a big part of that journey. You have to be very cautious in your approach as a business on how to move forward, take these couple of months as a bump on the road, and come back bolder and better.

• PANKTI MEHTA KADAKIA & KATHAKALI CHANDA

17.51%

Job loss rate across India in the week ended June 7, according to the Centre for Monitoring Indian Economy

SHUTTERSTOCK

INTERVIEW

'Consider Urban Employment Guarantee And Cash Transfers'

Professor Santosh Mehrotra, editor of the book *Reviving Jobs*, talks about India's high unemployment rates, and how to tackle them in future

MICHAEL WARD

Q What are the reasons for increasing unemployment in India, and what is the way forward?

There are two sets of reasons for the employment crisis, and they existed even before the pandemic.

Between 2004 and 2014, the economy was growing at 8 percent per annum on an average and was generating 7.5 million new non-agricultural jobs every year. The economy has been slowing after 2014: The Economic Survey of 2019-20 reports that the growth rate of 2014-15 was in fact 7.5 percent, and 8 percent in 2015-16. Now growth has slowed to 4.3 percent in 2019-20. So the economy slowed, and created fewer jobs.

The second reason for unemployment is the increasing number of new entrants to the labour force. While 2 million people per annum were joining the labour force between 2004 and 2012, it increased to 5 million. Simultaneously, the number of jobs created started shrinking.

Q What is the dual synergies model for tackling this issue, which you have mentioned in the book?

We have argued that there is a case for understanding the whole economy through the dual synergies model. The first synergy states that separate interventions in health, education, nutrition, water-sanitation, fertility control, and education complement each other and increase the impact that one intervention has on another. This leads to a certain level of human capital that a country develops. The second synergy is between poverty reduction and economic growth, and this human capital. We argue that the relationship between economic growth and poverty reduction is weak in India; the most important reason, from the point of reviving jobs, is this relationship is mediated through job creation, especially in the non-agriculture sector.

Unless India invests much more in health and education, it is unlikely to return to the growth rate of 2004-2014.

"THE ECONOMY SLOWED AND THE NUMBER OF JOBS CREATED STARTED SHRINKING."

Q India's GDP growth for the March-ended quarter slowed to 3.1 percent, an 11-year low. With the current pandemic-related job losses, what is the way forward?

The government's stimulus package is rather weak. What the economy needs is revival in demand, which can happen with fiscal stimulus, and this fiscal stimulus is only 1 percent of the GDP, compared to the 2008 fiscal stimulus, which was 4 percent of the GDP. It is true that the government has increased money for MNREGA [rural jobs], but around 8 to 9 million people have migrated back, which will lead to a drop in agricultural wages. The government should think about urban employment guarantee as well. There should also be some cash transfer, as a minimum income guarantee, to poor households.

Q What social policies are required for the informal sector?

The economy is going to take a long time to revive, but the government should come up with a visionary code that will enable social security for all informal workers. All non-agricultural workers must be given EPFO coverage, while poor unorganised workers must get state-funded social insurance. It would cost no more than 0.65 percent of GDP.

• POOJA SARKAR

1,154

Number of confirmed coronavirus cases in New Zealand before the country became virus-free on June 8

SHUTTERSTOCK

NEW BILLIONAIRE

Sound Prognosis

Dr Arvind Lal joins the ten-figure club as his labs conduct thousands of Covid-19 tests each day across India

IN LATE MARCH, AS THE coronavirus sent India into a nationwide lockdown, Dr Arvind Lal, 70, sprang into action. His Dr Lal PathLabs, one of India's largest diagnostic chains, quickly won regulatory approval to conduct Covid-19 tests, becoming one of the first private labs able to test the country's masses.

That's been a boon for the publicly traded company, which is now conducting several thousand Covid tests per day across its labs in New Delhi, Kolkata and Indore. While the tests themselves do not add significantly to revenues, the company is benefiting from favourable sentiment toward the diagnostics sector. Shares are up by 19 percent since Prime Minister Narendra Modi instituted India's lockdown on March 24, enough to make Lal—its chairman, he owns a 57 percent stake in the chain—newly a billionaire.

In addition to the tests, which the company says require nasal and throat swabs and can produce a result within 48 hours, it rolled out sample-collection vans to help speed the process, and trained staff in contamination avoidance. "We conduct regular training drills to ensure that safety protocols are maintained," says Vandana Lal, Lal's wife, a pathologist who heads its clinical research and R&D. In May, however, the Delhi government, which is monitoring Covid testing in the city, launched an inquiry into discrepancies in the firm's test reports.

PRABHAS ROY / HINDUSTAN TIMES VIA GETTY IMAGES

The company did not respond to a request for comment on the inquiry.

IN ADDITION TO THE TESTS IT CONDUCTED, DR LAL PATHLABS ROLLED OUT SAMPLE-COLLECTION VANS

Last year Lal PathLabs—which operates more than 200 clinical laboratories and nearly 6,500 sample-pickup points across India—brought in revenue of $174 million.

Lal's path to billionaire status began in 1977, when he was 28. He had earned his medical degree and was taking a postgraduate course in pathology at the Armed Forces Medical College in Pune.

After his father died suddenly, Lal returned home and took over management of the diagnostic lab and blood bank his father had founded in 1949. He expanded it through a series of acquisitions and took it public in the year 2015.

His daughter, Archana Lal Erdmann, a geneticist, is a non-executive director at Lal PathLabs. Lal's son, Anjaneya Lal, is a freelance wildlife photographer.

• ANU RAGHUNATHAN

THE LIST

CELEBRITY 100

From Netflix to Yeezy: How this year's top-earning stars turned the business of celebrity into $6.1 billion, $200 million shy of last year's haul

Kanye West

JEAN-BAPTISTE LACROIX/AFP VIA GETTY IMAGES

2011 Year in which Oprah Winfrey ended her eponymous talk show. She returns to the *Forbes* Celeb 100 List this year

SHUTTERSTOCK

1. **Kylie Jenner**
$590 MLN • PERSONALITY

2. **Kanye West**
$170 • MUSICIAN

3. **Roger Federer**
$106.3 • ATHLETE

4. **Cristiano Ronaldo**
$105 • ATHLETE

5. **Lionel Messi**
$104 • ATHLETE

6. **Tyler Perry**
$97 • PERSONALITY

7. **Neymar**
$95.5 • ATHLETE

8. **Howard Stern**
$90 • PERSONALITY

9. **LeBron James**
$88.2 • ATHLETE

10. **Dwayne Johnson**
$87.5 • ACTOR

11. **Rush Limbaugh**
$85 • PERSONALITY

12. **Ellen DeGeneres**
$84 • PERSONALITY

13. **Bill Simmons**
$82.5 • PERSONALITY

14. **Elton John**
$81 • MUSICIAN

15. **James Patterson**
$80 • AUTHOR

16. **Stephen Curry**
$74.4 • ATHLETE

17. **Ariana Grande**
$72 • MUSICIAN

18. **Ryan Reynolds**
$71.5 • ACTOR

19. **Gordon Ramsay**
$70 • PERSONALITY

20. **Jonas Brothers**
$68.5 • MUSICIANS

AXELLE / BAUER-GRIFFIN / FILMMAGIC / GETTY IMAGES

Kylie Jenner

IN ONE OF THE biggest celebrity cash-outs of all time, Kylie Jenner agreed to sell 51 percent of her Kylie Cosmetics to beauty giant Coty in November. Her cut: $540 million before taxes, by *Forbes*'s estimates—more than Wall Street thought it was worth, and more than enough to crown her this year's top-earning celebrity. Right behind her at No 2 is brother-in-law Kanye West, who brought in all but $10 million or so of his estimated $170 million in pre-tax earnings from his high-end sneaker brand, Yeezy.

But this cash-grabbing clan would rather talk about their "billions" than their millions. "It's fair to say that everything the Kardashian-Jenner family does is oversized. To stay on-brand, it needs to be bigger than it is," says Stephanie Wissink, a consumer product analyst at Jefferies. That's what led Kanye to open his books to *Forbes* in April to prove he's a billionaire. America's hip-hop genius sent over documents outlining the massive royalty cheques Adidas sends him, plus an accounting of his assets, all the way down to $297,050 worth of livestock on his Wyoming ranches. We pegged his net worth at $1.3 billion. (Kanye maintains he's worth well more than double that.)

Why insist on paperwork? When dealing with such oversized ambitions, verification is key. The Coty sale backed up our estimate, based on the value of Kylie Cosmetics, that Kylie Jenner was the world's youngest self-made billionaire. (Her net worth has now fallen below $1 billion as *Forbes* has re-evaluated her business amid the pandemic.) But new filings released by Coty lay bare one of the family's best-kept secrets: Kylie's company is substantially smaller than she claimed. Kylie and her mother, Kris Jenner, who helps run the business, had been insisting that Kylie Cosmetics was generating over $300 million in revenue every year since 2016—even going so far as to provide *Forbes* with tax returns, which she signed and says were submitted to the IRS. While we can't prove that those documents were fake (though it's likely), it's clear that Kylie's camp has been lying. The filings indicate that sales were just $125 million in 2018, not $360 million as her reps had previously claimed. Then there's Kylie's skin care line, which it said did $100 million in sales in less than two months last year; the filings show it was actually "on track" to end the year with revenue of $25 million.

Pressed for answers on the many discrepancies, the typically chatty Jenners did something out of character: They stopped answering our questions.

21. The Chainsmokers
$68 • MUSICIANS

22. Dr Phil
$65.5 • PERSONALITY

23. Ed Sheeran
$64 • MUSICIAN

24. Kevin Durant
$63.9 • ATHLETE

25. Taylor Swift
$63.5 • MUSICIAN

26. Tiger Woods
$62.3 • ATHLETE

27. Kirk Cousins
$60.5 • ATHLETE

28. JK Rowling
$60 • AUTHOR

28. Post Malone
$60 • MUSICIAN

28. Ryan Seacrest
$60 • PERSONALITY

31. Carson Wentz
$59.1 • ATHLETE

32. Rolling Stones
$59 • MUSICIANS

33. Mark Wahlberg
$58 • ACTOR

34. Tyson Fury
$57 • ATHLETE

35. Marshmello
$56 • MUSICIAN

35. Russell Westbrook
$56 • ATHLETE

37. Ben Affleck
$55 • ACTOR

37. Diddy
$55 • MUSICIAN

39. Shawn Mendes
$54.5 • MUSICIAN

40. Vin Diesel
$54 • ACTOR

40. Lewis Hamilton
$54 • ATHLETE

42. Jay-Z
$53.5 • MUSICIAN

JASON MENDEZ / WIREIMAGE / GETTY IMAGES

RYAN REYNOLDS

The hotshot who plays a billionaire on Netflix's *Six Underground* and stars in its upcoming film *Red Notice* collected $48.5 million from the streaming giant in the past year, more than anyone on this list; all together, the stars here pulled in $220 million from Netflix, up by 200 percent from 2019, bringing the five-year total to nearly $600 million

KARWAI TANG / WIREIMAGE / GETTY IMAGES

BILLIE EILISH

Winner of five Grammys this year. 'When We All Fall Asleep, Where Do We Go?' was the No 1 album of 2019, with 3.9 million units sold. She reportedly collected $25 million from Apple for a documentary about her life and career, and if the coronavirus hadn't killed her arena tour, she might have cracked the Top 20

43. Billie Eilish
$53 • MUSICIAN

44. Rory McIlroy
$52 • ATHLETE

45. Simon Cowell
$51 • PERSONALITY

45. Jerry Seinfeld
$51 • COMEDIAN

47. BTS
$50 • MUSICIANS

48. Kim Kardashian West
$49.5 • PERSONALITY

49. Drake
$49 • MUSICIAN

49. Jared Goff
$49 • ATHLETE

49. Judy Sheindlin
$49 • PERSONALITY

52. Akshay Kumar
$48.5 • ACTOR

53. Conor McGregor
$48 • ATHLETE

54. James Harden
$47.8 • ATHLETE

55. Giannis Antetokounmpo
$47.6 • ATHLETE

56. Jennifer Lopez
$47.5 • MUSICIAN

57. Anthony Joshua
$47 • ATHLETE

57. Pink
$47 • MUSICIAN

59. Deontay Wilder
$46.5 • ATHLETE

60. David Copperfield
$46 • MAGICIAN

60. Rihanna
$46 • MUSICIAN

62. Lin-Manuel Miranda
$45.5 • ACTOR

62. Luke Bryan
$45.5 • MUSICIAN

64. Backstreet Boys
$45 • MUSICIANS

$20 mln Amount Cristiano Ronaldo gets from Nike annually. The company signed him for a lifetime deal in 2016

SHUTTERSTOCK

64. Tom Brady
$45 • ATHLETE

64. Phil Collins
$45 • MUSICIAN

67. Drew Brees
$44.8 • ATHLETE

68. Novak Djokovic
$44.6 • ATHLETE

69. Will Smith
$44.5 • ACTOR

70. Blake Shelton
$43.5 • MUSICIAN

71. Sean Hannity
$43 • PERSONALITY

71. Sofia Vergara
$43 • ACTOR

73. Celine Dion
$42 • MUSICIAN

74. Kyrie Irving
$41.9 • ATHLETE

75. The Eagles
$41 • MUSICIANS

75. Adam Sandler
$41 • ACTOR

77. Phil Mickelson
$40.8 • ATHLETE

78. Julio Jones
$40.5 • ATHLETE

78. Metallica
$40.5 • MUSICIANS

80. Jackie Chan
$40 • ACTOR

80. Rafael Nadal
$40 • ATHLETE

82. Heidi Klum
$39.5 • PERSONALITY

82. Travis Scott
$39.5 • MUSICIAN

84. Kevin Hart
$39 • COMEDIAN

85. Klay Thompson
$38.8 • ATHLETE

86. Katy Perry
$38.5 • MUSICIAN

KEVIN WINTER / GETTY IMAGES

TRAVIS SCOTT

He played the Super Bowl for free, but his Astroworld tour grossed $53.5 million in 2019, the year's top hip-hop road show. He followed it with a free Fortnite concert series for over 27 million viewers—far more than saw Astroworld—when the pandemic hit, helping boost sales of his Cactus Jack products: Sneakers, action figures and more

QUALITY SPORT IMAGES / GETTY IMAGES

NAOMI OSAKA

A mix of Japanese and Haitian heritage (and a monster backhand) make her a dream for marketers, including Nike, Nissan and a dozen others that signed endorsement deals with the 22-year-old ace ahead of the Tokyo Olympics. Back-to-back Grand Slam wins and a massive overseas following have made Osaka the top-earning female athlete for the first time

87. Bon Jovi
$38 • MUSICIANS

87. Lady Gaga
$38 • MUSICIAN

87. U2
$38 • MUSICIANS

90. Naomi Osaka
$37.4 • ATHLETE

91. Canelo Álvarez
$37 • ATHLETE

91. Damian Lillard
$37 • ATHLETE

91. Paul McCartney
$37 • MUSICIAN

91. Oprah Winfrey
$37 • PERSONALITY

95. DJ Khaled
$36.5 • MUSICIAN

95. Kiss
$36.5 • MUSICIANS

97. Sebastian Vettel
$36.3 • ATHLETE

98. Serena Williams
$36 • ATHLETE

99. Angelina Jolie
$35.5 • ACTOR

100. Mohamed Salah
$35.1 • ATHLETE

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METHODOLOGY:
This list ranks "front of the camera" stars worldwide using pre-tax earnings from June 2019 through May 2020 before deducting fees for managers, lawyers and agents. Figures are based on information from Nielsen Music/MRC Data, Pollstar, IMDB, NPD BookScan and ComScore, as well as interviews with industry experts and many of the stars themselves

ARVIND YADAV / HINDUSTAN TIMES VIA GETTY IMAGES

'The Future Lies In Blended Learning'

HRD Minister **Ramesh Pokhriyal** on making India a global hub for education, building digital classrooms during Covid-19 and the new policy to grow into a knowledge superpower

By MANU BALACHANDRAN

It's been a challenging period for Human Resource Development (HRD) Minister Ramesh Pokhriyal. In the wake of the Covid-19 pandemic, numerous companies withdrew the job offers they had made to students of the country's top institutions, including IITs and IIMs. Besides, with the outbreak disrupting the academic year and exams, the ministry has been at the forefront of setting up online classrooms. In an email interview, Pokhriyal, who was previously chief minister of Uttarakhand, talks about the future of education in India. Edited excerpts:

Q What has been the biggest learning from the Covid-19 crisis?

One of the key learnings has been the need to promote and implement online education. We have always believed in the power of the internet to take education to the masses and have come up with several initiatives over the last few years to help more students learn online. With the impact Covid-19 has had, we are doubling our efforts in this direction.

Q What is the HRD ministry doing to ensure delivery of education to students during this period? And will that set a precedent for the future?

With determination and dedication, the current crisis can be turned into an opportunity. We are laying more emphasis on online resources, platforms, bandwidth, and availability of technological solutions, rather than physical spaces. We understand that these facilities are dynamic and will evolve with changing times. According to me, the future lies in 'blended learning'.

At the school level, through operation Digital Board, we aim to strengthen the existing digital infrastructure of our schools. Diksha, E-Pathshala, NROER (National Repository of Open Educational Resources), Swayam (Study Webs of Active-Learning for Young Aspiring Minds), and other e-platforms are providing high quality and engaging digital resource materials to teachers, students, and parents which are in line with the prescribed school curriculum.

The programme will also speed up the setting up of digital classrooms. Digital and smartboards will be provided in all government and government-aided schools having secondary and senior secondary classes. This will address the problems of bandwidth and connectivity.

To address the digital divide, the HRD ministry has tied up with the ministry of information & broadcasting to air Swayam Prabha channels on DTH platforms. For remote areas that neither have access to the internet nor electronic gadgets, we plan to provide them with books, both new and old, free of cost or at a very low price. We are also in the process of exploring the option where All India Radio can transmit the curriculum to students.

Q Will the new education policy be more technology-oriented?

To understand the challenges and opportunities on ground, I travelled across the country and visited Kendriya Vidyalayas and IITs. I even interacted with various stakeholders to understand what they want since the new policy will directly impact them. The policy will focus on the promotion of research and innovation, internationalisation and conservation of Indian knowledge systems. In the longer run, I envision India to be a global knowledge superpower with a robust education system.

Q The crisis will force many students to look within India for higher studies. What can institutions do to become more attractive?

We are taking several measures to ensure students get world-class education in India itself. Students from Indian institutes hold various leadership positions in some of the top corporations globally and that validates the quality of the Indian education system. That said, initiatives like Sparc (Scheme for Promotion of Academic and Research Collaboration) will facilitate academic and research collaborations between the top-100 Indian institutions as per NIRF (National Institute Ranking Framework) and the best institutions in the world from 28 selected nations. This will ensure visits and long-term stay of top international faculty and researchers in Indian institutions to pursue teaching and research. But with the situation at hand, we will work out a blended learning model so that the students can get the best of both worlds.

We are determined to make India a global hub of education. India has a huge network of over 1,000 universities and more than 55,000 degree colleges. With a deep focus on online and distance learning, we are making every effort to provide quality education. The ministry has launched a special programme called 'Study in India' to facilitate foreign students coming to India for higher education. We have introduced several disciplines under Study in India and are constantly working towards making India the preferred destination.

Q Yet, India's universities have been found wanting when it comes to global rankings.

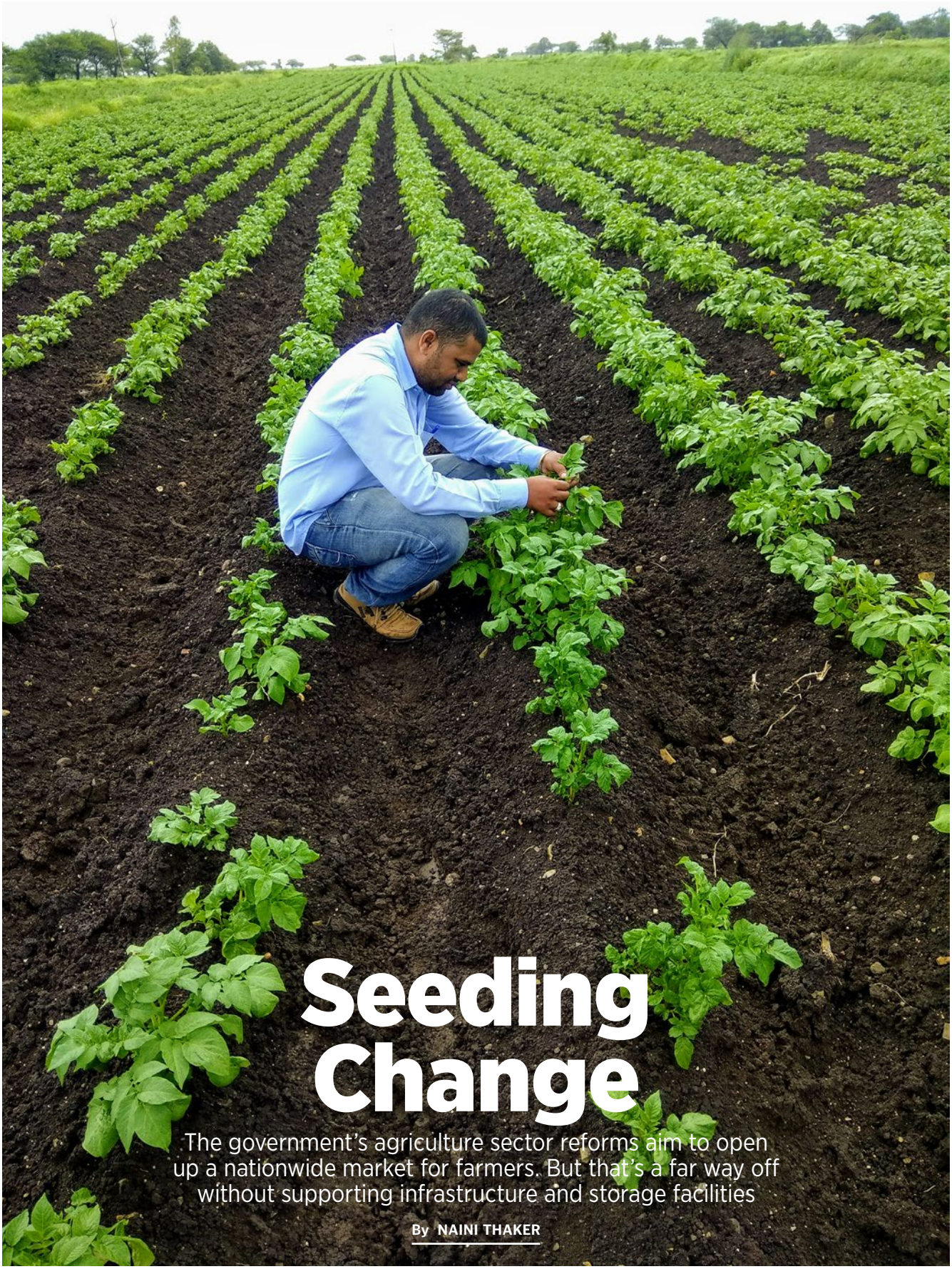
Indian students have been doing quite well if you look at the global scenario. Last year, we had 24 Indian institutions in the top thousand with three institutions making it to the top 200. As far as promoting research is concerned, we are dedicated to developing a world-class research infrastructure. We believe by making a significant investment in the infrastructure of our institutions we can make them more competitive. The Higher Education Financing Agency (HEFA) provides financial assistance for the creation of educational infrastructure and R&D in India's premier educational institutions. It will fund projects to the tune of ₹100,000 crore by 2022. As of December 11, 2019, projects worth ₹37,001.21 crore have been approved, out of which loan amount worth ₹25,564.52 crore has been sanctioned and ₹5,537 crore has been disbursed. The number of educational institutions that have availed funding through HEFA stands at 75.

Q The placements at many IITs and IIMs had run into trouble with companies pulling out after making offers. How effective has been the task force that you set up?

We received several complaints regarding this. I have appealed to companies to not withdraw any job offers. I have spoken to the heads of institutions, my officers, and requested them to personally look into this matter. Companies have assured us that they may postpone the dates of joining, but offers will not be revoked. We are looking at individual complaints and following up with the employers. It's a difficult time and the entire ecosystem needs to work together. It will be unfair not to hire these students who are bright and can contribute towards pulling the country out of this situation. We are trying our best to reach out to various stakeholders. F

Initiatives will facilitate collaborations between the top 100 Indian institutes and those from 28 select countries

Sambhaji Jaid at his farm in Manchar, Mahrashtra



Seeding Change

The government's agriculture sector reforms aim to open up a nationwide market for farmers. But that's a far way off without supporting infrastructure and storage facilities

By NAINI THAKER

COURTESY: FARMPAL

For years, Dnyandev Hon travelled 20 km with his produce in a rented vehicle, twice a month, to the Kopergoan Agricultural Produce Market Committee (APMC) mandi in Maharashtra. On some days, he even travelled about 200 km when he needed to sell his produce—onions, wheat or soyabean grown on his 1.5 hectare farm—at the Pune APMC mandi.

"The involvement of middlemen didn't allow us to get a fair price for our produce. It was painful to see that all our hard work and sacrifices had no value, with the middlemen pocketing 50 to 60 percent," recalls the farmer, adding that sometimes they were unable to recover even the transportation costs.

One thing was clear to him—he had to educate his three children enough so they didn't have to go through what he did. He remembers telling his children, "Work hard, and become anything in life, even if it's a clerk or a peon at a bank, but don't become a farmer."

Karan, Dnyandev Hon's son, became an engineer, went and worked with tech giants like Tech Mahindra in Denmark and SAP in Australia, then returned to India. In 2017, he set up Farmpal, a farm-to-market company, to ensure other farmers did not have to suffer like his father. The company lets farmers know the price of their produce before they harvest the crop, pays them a premium of 15 to 30 percent over what they would get in a mandi, collects the produce from them, processes it and sells it to retailers and hypermarkets.

"At the local mandi, we had to sell at whatever price the local trader offered," says Sambhaji Jaid, a farmer from Manchar, about 60 km from Pune, who jumped at the opportunity when Farmpal reached out to him three years ago.

But farmers like Jaid and startups like Farmpal were still restricted to selling and buying in particular states, due to the stringent rules and regulations. Now, with the new agriculture reforms announced in June, Farmpal is looking at nationwide expansion and Jaid will have far more options.

"The reforms were long overdue, but it is better late than never."

KARAN HON,
FOUNDER, FARMPAL

The reforms announced were three-pronged: First, an amendment to the stringent 65-year-old Essential Commodities Act (ECA), removing cereals, edible oil, oil seeds, pulses, onions and potato from the list of essential commodities. "The freedom to produce, hold, move, distribute and supply will lead to harnessing of economies of scale and attract private sector/foreign direct investment into agriculture sector," said the press release. Secondly, farmers and traders will enjoy freedom of choice relating to sale and purchase of farmers' produce; with the barriers to inter-state and intra-state trade removed, a farmer can also do e-trading of agricultural produce. Thirdly, an ordinance has been passed to allow contract farming, which lets farmers make contract arrangements with retailers, exporters and processors.

In 2017, when he was setting up Farmpal along with his co-founder Puneet Sethi, Karan recollects, "We had to go through a number of obstacles to get a licence to operate in Maharashtra." Besides, the access of agritech players like Farmpal was restricted to farmers in a certain geography, as each state had its own licence, underlying processes, paperwork and costs. "These reforms were long overdue, but it is better late than never," says Karan, adding that the three-year-old startup can now expand rapidly across the country.

"Since there is no stock limit on essential commodities now, we can choose to store our produce in a cold storage, if prices have crashed," explains Jaid, who gets his payment via direct bank transfer within three to four days of sale. He adds, "We now have the choice to sell to whoever gives us the best price, not just within the state but in other states too."

With a push from the government for e-trade of agriculture produce, Mumbai-based startup AgriBazaar too sees a lot of potential for growth. The startup has replicated the physical mandi to an e-mandi aggregator model, where once a farmer registers and uploads his produce, buyers can place orders for purchase.

"Why does a farmer go to an APMC mandi? To sell his produce, get a fair price via auctions, and logistical support," says Amit Agarwal, CEO and co-founder, AgriBazaar. "Through our platform, we are enabling each of these functions. Right from an option between negotiable trade and fixed auction to transferring funds via our digital wallets and facilitating logistics." Currently, the startup is working with over 2 lakh farmers in 21 states. However, as with Farmpal, AgriBazaar's licences limit it to trading in individual states.

AgriBazaar is like a private counterpart to the pan-India electronic National Agriculture Market or eNAM platform, except that eNAM does not help facilitate

logistics. Now, with these reforms in place, Agarwal says eNAM might be open to tie-ups with private players like AgriBazaar.

The Mandi Conundrum

APMC is a marketing board established by each state government, under which as per earlier rules farmers had to make the first sale of their produce at APMC's market yards or mandis. The objective was to ensure farmers get fair prices and are safeguarded from exploitation by large retailers. "There are inspectors in the yards to ensure traders do not cheat our farmers," says PS Gajera, secretary of the APMC in Junagadh, Gujarat. He agrees that the reforms are likely to benefit farmers, but "even with the market open, I feel farmers will benefit the most if they come to the market yard," he adds.

Apart from fair prices, farmers get insights from traders about what sells better in the market. According to Gajera, auctions in the real world are best taken place in the yard. Though eNAM is in place, he says, "For farmers to use the platform, specific details about the produce need to be mentioned, otherwise a trader will be unsure of what he is buying. Once this is done, online auctions will pick up."

Private and foreign investment coming into the market will also bring in more competition in the form of private mandis, so APMCs will have to focus on improvements to ensure farmers continue trading via the yard, says Gajera. APMC yards usually provide facilities like waterproof platforms to store produce, and facilities for farmers to sleep and eat.

With farmers under no compulsion to sell at APMC mandis, the food supply chain is likely to evolve, and these mandis might need to rethink their role in providing improved linkages between farmers and customers, since the economics work out better that way. "APMC mandis can play a facilitative and value-added role in connecting farmers to organised players as well as e-markets like eNAM," says Arindam Guha, partner, leader-government and public services, Deloitte India.

Hemendra Mathur, venture partner at Bharat Innovation Fund, an early-stage venture fund that invests in agri innovation startups (among other sectors), adds that there will be a co-existence of multiple supply chains. "There will be more de-layering and disintermediation in the supply chain, allowing for a more direct connect between farmers and customers," he says.

But APMC mandis are unlikely to be substituted entirely as they are an important medium for price discovery. Besides, though it has been argued that farmers might obtain a higher price by selling to buyers of their choice, R Ramakumar, Nabard chair professor, School of Development Studies, Tata Institute of Social Sciences, believes there is no evidence that amending the APMC Act will, by itself, improve the price realisation of farmers. In fact, he says, "The absence of APMC markets may lead to a huge void in the agricultural marketing sector, which might open up the field for acute exploitation and harassment of farmers."

According to him, procurement should be expanded, larger public investments should flow into creating modern farm storage structures, and these storage systems should be efficiently aligned with the expansion of the public distribution system. "The government does not want to invest in farm storage, but leave the sector open to investment by private players. The ECA is being amended since it is believed to be the reason why no private investment is flowing into warehousing and storage spheres. However, he points out, that Kerala had no APMC Act and Bihar nullified its APMC Act in 2006. "But in neither of the two were there any major inflow of fresh investments from the private sector," he says.

The Way Forward

While the reforms look good on paper, they won't translate into benefits unless accompanied by investments in infrastructure, logistical support and cold storage facilities. Jiyalal Chauhan, who moved from Delhi to Dehradun in Uttarakhand to do

APMC mandis, like the one in Azadpur near Delhi, will have to rethink their role by providing improved linkages between farmers and organised clients

SANCHIT KHANNA / HINDUSTAN TIMES VIA GETTY IMAGES

organic farming in 1996, used to sell in APMC mandis when he started out, but stopped after he saw the exploitation taking place. Currently, he only supplies to his customers via home deliveries. "We used to sell at the weekend organic food mandis in Dehradun, but stopped doing that since farmers would sell regular produce as organic and our customers started losing trust in us."

But farmgate collection remains uneconomical. "There is a need for smaller collection centres near villages that could be set up by large corporates," says Mathur. Foodgrains in India are usually stored in archaic warehouses and open plinths without any use of technology. According to Food and Agriculture Organisation estimates, nearly 40 percent of the food produced in India is lost or wasted.

With the opening up of intra-state selling, Jiyalal is also confident he can harvest a lot more produce and sell to other states, but he doubts the logistical support from private firms will reach small farmers like him.

"Farmers don't have money for logistics, and are in a hurry to sell the produce."

NUPUR AGARWAL,
FOUNDER, KIWI KISAN WINDOW

"The reality is that an Indian farmer does not have enough money to pay for logistics and as the product is highly perishable, he is always in a hurry to sell his produce as soon as possible," explains Nupur Agarwal, founder of Kiwi Kisan Window (KKW), which works with farmers like Jiyalal directly to generate employment by procuring fruits, vegetables and grains from them. In her opinion, these reforms never end up reaching the grassroots.

The current need is to improve sustainable storage facilities. Private sector companies like Adani Agri Logistics for instance, have been a pioneer in bulk handling, storage, and transportation by creating silo capacities nationwide, wherein the loss of grains is negligible. Adani Agri Logistics has created a silo capacity of 8,75,000 tonnes across Punjab, Haryana, Tamil Nadu, Karnataka, Maharashtra, West Bengal, and Madhya Pradesh.

Agarwal of AgriBazaar adds that for farmers to sell goods to other states, there needs to be a strong network of cold-storage facilities as well, which is currently inadequate. There are very few private cold-storage facilities in Uttarakhand, and the few times Jiyalal has paid the hefty rent to use them, he has been cheated. "They exchange our good quality potatoes with their bad quality produce. I have no trust in them," he says.

"Currently there are only large cold-storage facilities; what we need are smaller facilities near villages," says Mathur of Bharat Innovation Fund. Besides, there is also a need for a digital platform that can enable the collection and dissemination of information on the pricing and produce across mandis in real-time, he adds. The reforms, he says, are also an opportunity to use technology like satellite mapping for national-level planning, including deciding the location of warehouse or cold-storage facilities.

From Dnyandev Hon to Sambhaji Jaid, things in the agriculture sector have changed, but at a slow pace. The hope is these reforms will give a boost to the sector in the right direction.

Agri Reforms

	Before	After
Essential Commodities Act	1. Farmers unable to get better prices due to lack of investment in agri infrastructure	1. More private and foreign investment, since not as much regulatory interference
	2. A lot of wastage of produce, especially during bumper harvest seasons	2. Modernisation of agriculture infrastructure
		3. Freedom to produce, hold, move, distribute and supply, hence less wastage
Barrier-free trade in agriculture produce	1. Restrictions for farmers in selling agri-produce outside the notified APMC market yards	1. Farmers and traders will enjoy freedom of choice of sale and purchase of agri-produce
	2. Barriers on inter-state and intra-state trade	2. Barrier-free inter-state and intra-state trade
		3. Electronic trading permitted
		4. Separate dispute resolution mechanism for the farmers to be set up
Farmers empowered to engage with processors, aggregators, wholesalers, large retailers, exporters	1. Due to market unpredictability and weather dependence, agriculture is considered risky and inefficient, both for input and output management	1. Empowers farmers to engage in contract farming
		2. Risk of market unpredictability from the farmer to the sponsor
		3. Reduce cost of marketing and improve income of farmers
		4. Access to modern technology

INFOGRAPHIC: SAMEER PAWAR

Team Delhivery: (From left) Sandeep Barasia, Mohit Tandon, Suraj Saharan, Sahil Barua, Ajith Pai and Kapil Bharati

MADHU KAPPARATH

GET, SET, PIVOT

How Covid-19 has forced a clutch of startups to move away from its core, or to add to it

By RAJIV SINGH

March 3, on board the Tejas Express The train from Ahmedabad to Mumbai was cruising at a top speed of 130 km per hour. The passengers had finished dinner and were about to doze off, except for Sahil Barua. Food and sleep were last on the mind of the co-founder of India's biggest ecommerce logistics player. Rattling him, even at 10 pm, was a simple question: Should Delhivery shut down its corporate offices on March 4?

Covid-19 cases was wreaking havoc in China, where Delhivery had one of its overseas offices. But in India, with cases still in low double digits, the situation was not alarming. Barua, though, didn't want to take a chance. From the train, he went on a conference call with 20 people from his core team. The call ended at midnight. Delhivery decided to close all its corporate offices.

"From March 5 onwards, all my meetings were either on Zoom or Hangouts," recalls Barua. It was work from home for Delhivery for the next 10 days.

DELHIVERY, A LOGISTICS STARTUP UNICORN BACKED BY SOFTBANK

Pre-Covid-19: Into institutional deliveries; biggest ecommerce logistics player

Now: Adds hyperlocal delivery

SCALE OF OPERATIONS

Revenue: ₹1,642 crore in FY19; ₹2,760 crore in FY20 (unaudited numbers)

Tonnage delivered: 280K+ in FY19; 1,300K+ in FY20

Headcount: 23,500+ in FY19; 30,000+ in FY20

"We are the most hyperlocal delivery business in the country with over 7,000 distribution points across 2,500 cities."

SAHIL BARUA, CEO AND CO-FOUNDER, DELHIVERY

Cut to Bengaluru. March 25, Day 1 of India's lockdown

Early morning, Avinash BR went on a Zoom call with three other co-founders—Gururaj S Rao, Arvind M and Santosh Narasipura. Things had turned chaotic for Clover, a greenhouse agritech startup supplying fresh produce to hotels, restaurants and cafes. "Demand for our business evaporated overnight," recounts Avinash, who had been planning to press on the accelerator pedal after raising over $5.5 million in a Series A round from Omnivore and existing investors Accel and Mayfield. The plan was to expand operations to Mumbai, Pune and Chennai. "But what we ended up pressing hard was the brake," he rues.

Meanwhile, in Mumbai, a few days before the lockdown began, co-founders Pradyumn Singh and Amit Backliwal had seen the bounce rate jump to a staggering 70 percent at Pharmarack, a plug-and-play health care platform for pharma makers, distributors and chemists. Bounce rate is the rate at which demand for medicines is not fulfilled by distributors. In January, the figure was just 8-10 percent for India's largest B2B pharma supply chain provider. At 70 percent, the alarm bells began to ring. "There was demand, but no supply," recalls Backliwal.

Back in Gurugram, on Day 1 of the lockdown, Delhivery got down to rejigging its annual operating plan for the April 2020-March 2021 fiscal. The original plan had been approved by the board just a week earlier after factoring Covid-19 as a potential risk. "The potential risk became actual risk within seven days," recalls Barua.

Some 80 days after the first lockdown was announced, there are few signs of the virus cooling down. Thousands have died, lakhs have been infected, millions of workers have gone back to their villages, and scores of businesses have shuttered; many of those afloat are grappling with paycuts and layoffs. A recent Nasscom report stressed that 30-40 percent of tech startups have either

Pharmarack Co-founders Amit Backliwal (right) and Pradyumn Singh

AALOK SONI

PHARMARACK, A B2B INTEGRATED HEALTH CARE PLATFORM

Pre-Covid-19: A plug-and-play platform for pharma makers, distributors and retailers

Now: Adds fulfilment, starts inter-city and intra-city medicine delivery to pharmacies

SCALE OF OPERATIONS

Founded in **September 2015** and backed by Patni Group's **Currae Healthtech Fund** and **IvyCap Ventures**

Claims to have annual revenue run rate of **₹15 crore**; over **1.82 lakh** deliveries in **May**

"Now we have orders, fulfilment and payment to offer a complete solution to distributors and retailers."

AMIT BACKLIWAL, CO-FOUNDER, PHARMARACK

temporarily halted their operations or are in the process of closing down; 70 percent have a runway (cash to run operations) of less than three months. Panic and pandemonium seem to be the new normal.

Barua, though, didn't press the panic button. The SoftBank-and-Tiger Global-backed unicorn instead pressed the 'pivot' button. The B2B logistics major turned into a hyperlocal delivery player. The results were stunning. In April, the company delivered over 2.5 million orders of medicine; 10,000 tonnes of grain; and 10,000-12,000 tonnes of raw material, including sanitisers, masks and grocery. "In June, we are doing pre-lockdown volumes," claims Barua. "Now we are carrying more (essential and non-essential goods) than what we did in February and March on a daily basis," he adds.

"What Covid-19 has done is changed the structure of the company from predominantly B2B to predominantly B2C."

AVINASH BR, CO-FOUNDER, CLOVER

CLOVER, A GREENHOUSE AGRITECH STARTUP

Pre-Covid-19: B2B sales to hotels, restaurants and cafes

Now: Ropes in third-party logistics for delivery

SCALE OF OPERATIONS

Started in **May 2018**; backed by **Omnivore, Accel** and **Mayfield**

Operational in **Bengaluru** and **Hyderabad** since **May**

Like Barau, Avninash too stayed calm, and started delivering directly to consumers. Over the last two months, Clover has been supplying to over 3,500 customers. "The business is back to pre-Covid levels," he claims. What Covid-19 has done, he adds, is transformed a predominant B2B company into a predominant B2C one. And he is not complaining.

Backliwal of Pharmarack also took a leap of faith and started delivering medicines to chemists,

Clockwise from left (standing): Arvind M, Gururaj S Rao, Avinash BR and Santhosh Narasipura of Clover. It has been supplying fresh produce to over 3,500 customers in the last two months and has upskilled its employees at warehouses to handle new products

Zypp Founders Akash Gupta (left) and Rashi Agarwal. The two-wheeler sharing startup delivered groceries during the lockdown by tying up with departmental stores and kiranas

doctors and patients in need of speciality drugs. In May, it delivered 1.25 lakh orders across 15 cities. Moreover, it supplied medicines to over 5,000 doctors in seven cities.

Pivot, which tech entrepreneur, blogger and author Eric Ries, describes as 'change in strategy without a change in vision' is increasingly being embraced again by startups across the world which find themselves disrupted by the coronavirus pandemic. In his blog post written a decade ago, Ries underlined the basics of a pivot: Changing direction but staying grounded. "One foot in the past and one foot in a new possible future," he outlined in his blog titled 'Pivot, don't jump to a new vision'.

Back in India, pivots are happening in all shapes and sizes; among small as well as big players; and in most cases, the core remains intact. Take, for instance, Zypp, an electric two-wheeler sharing startup. Present in Delhi-NCR, it quickly tweaked its business model, started delivering grocery by tying up with departmental stores and kiranas, and built its own fleet of riders. Last month, it had 265 of them, and the plan is to scale up operations and riders.

If Zypp stayed true to its vision of keeping ebikes as the core of its business, then Cars24 too didn't tinker with its foundation.

An online used car buying platform, backed by biggies such as Sequoia Capital, Unbound and Agnelli Family and endorsed by MS Dhoni, Cars24 changed its business strategy. If the wheels were oiled by business coming through its 210 outlets across 73 cities—a little under 5 percent of business used to come through paid home inspection—it doubled down on free home inspection. The results were startling. Now, home inspection numbers have shot to 80 percent. Result? Fifty percent of seller traffic and 80 percent of buyer traffic is back to pre-Covid days. Cars24 also started a new vertical of two-wheelers. With the concept of sharing a car or a bike gone for a toss—at least for the next few quarters or maybe years—people would prefer to own their own vehicle. "It's a shot in the arm for the used car business," says Gajendra Singh, co-founder

"Covid is the demonetisation moment for logistics."

AKASH GUPTA,
CO-FOUNDER, ZYPP

ZYPP, AN ELECTRIC TWO-WHEELER SHARING STARTUP

Pre-Covid-19: Bike rentals to individuals and corporates

Now: Starts own fleet; adds hyperlocal delivery; ties up with departmental chains and kiranas

SCALE OF OPERATIONS

Operational in **Delhi-NCR**; backed by **IAN**

From **0 delivery riders** in January, the number has shot up to **265** in May

From **640 scooters** in January to **1,025 scooters** in May

Cars24 reaped the benefits of doubling down on free home inspections after the coronavirus brought the country to a standstill. The company also started a new vertical of two-wheelers, as people may not want to share a car or a bike in these uncertain times

and chief marketing officer.

For lingerie player Clovia, which started selling PPE (personal protective equipment) and masks, it might appear as if the company changed its vision. But it didn't. The mask has turned out to be an integral part of its business. "Masks will be a part of our lives now, whether we like it or not," says Pankaj Vermani, founder of Clovia. The company, he claims, sold over 2 million pieces of PPE and masks over the last two months. In May, Clovia claims to have done 80 percent of pre-Covid business. In fact, it turned Ebitda positive (profitable at an operating level) for the first time since its inception in 2012.

Pivots, reckon venture capitalists and analysts, are back with a bang. Around 54 percent of tech startups are looking to pivot post Covid-19, Nasscom highlighted in its report. While 40 percent want to diversify into health care and edtech, 50 percent are focusing more on emerging technologies like artificial intelligence and cloud.

Course correction by entrepreneurs, contends Anil Joshi, founder of Unicorn India Ventures, usually happens when the product or the service either doesn't have the right market fit or is way ahead of its time. Pivots rarely used to happen due to external factors. Covid-19 has changed the rules of the game. Incidentally, there is demand but due to the lockdown or the inability to deliver products or services, startups are forced to work on alternative options to stay in the business. The current time, Joshi stresses, is to find a way to survive, not scale. The survival kit might result in a game-changing pivot. "The smart entrepreneur would find an opportunity to make a small change or pivot to a big opportunity," he adds.

For Kanika Tekriwal, Covid-19 has indeed thrown a big opportunity, but as a byproduct. An online marketplace for online jets and choppers founded in 2014, JetSetGo was confined to a super-premium niche. Then, as the pandemic raged, Tekriwal started chartered services for those above 55 and kids below 10 as they seemed to be most vulnerable to the virus. That altruistic beginning is now morphing into a business opportunity where people can buy seats rather than the old model of giving the entire plane or chopper. "Imagine, those who are were not flying charter are doing now," she says. And the reasons are not hard to fathom. Boarding a charter helps one bypass various layers of touchpoints which a normal traveller encounters at airports. From home pickup to boarding from a separate terminal, Tekriwal is ensuring that passengers have minimum stress. "It (the pivot) is a big positive," she says.

Another positive for entrepreneurs, and thanks to Covid-19, is a sudden killing of the negative perception that pivoting had. Most people from the investing community would not encourage pivoting; it was widely—and wrongly—perceived to be a failure. The stigma made it tough for entrepreneurs to openly talk about it. But not anymore.

"Hopefully, Covid-19 has shattered

"Covid-19 has turned out to be a shot in the arm for the used car business."

GAJENDRA SINGH, CO-FOUNDER AND CMO, CARS24

CARS24, AN ONLINE USED CAR BUYING PLATFORM

Pre-Covid-19: Home inspection was just 5% of business, and it was paid

Now: 80% business through home inspection, which is free; adds bike vertical in Delhi-NCR; pan-India expansion soon

SCALE OF OPERATIONS

Present across **73 cities** and **20 states**; over **210 outlets**

Backed by **Sequia Capital**, **Unbound** and **Agnelli Family**, **Cars24** also counts former India skipper **MS Dhoni** as investor

Team Clovia: (From left) Soumya Kant, founding member; Pankaj Vermani, founder & CEO; Neha Kant, founder and CRO; Abhay Batra, CFO. The startup now also makes masks and PPEs

the stigma," says Mark Kahn, managing partner at Omnivore. A pivot, he asserts, is a fact of startup life. It's not a dirty word. The real issue, Kahn explains, is the timing of the pivot. It's more negative when you have been operating for over three years after raising significant funding and realise the model isn't working. "But if you're at the early stages, pivots can definitely transform a startup," he says, adding that ultimately great teams can build amazing businesses, even if the original idea changes along the way.

For Barua, and his gang of seven co-founders, hyperlocal was always part of the original idea. In fact, Delhivery—which now delivers across 17,500 pin codes—started as a hyperlocal food delivery startup in 2011. Its second tryst with hyperlocal happened in 2015 when the company invested in Bengaluru-based hyperlocal startup Opinio.

Going back to hyperlocal in Covid-19 is nothing but revisiting the original idea while keeping the core intact: Delivery. "We didn't shift to hyperlocal. Demand became hyperlocal," says Barua, explaining how and why Delhivery can be termed as the most hyperlocal player in India. He starts with the distribution reach: Over 7,000 points across 2,500 cities. Now comes consumer reach. The average distance of the company, he contends, from an Indian customer would not be more than 2-3 km. "So our network has always been designed as a local delivery business," he says, adding that of late, people confuse hyperlocal to food delivery. "Our core is intact. It has gathered momentum. For the last 10 years, we have fulfilled all forms of commerce."

Sandeep Barasia, chief business officer and managing director, agrees. "It doesn't matter if it's an ecommerce, B2B or B2C. It's the same thing for me," he says. Every year, he lets on, the company adds a new line, and the business evolves. (That is much like how Naveen Tewari, founder of India's first unicorn InMobi, looks at a pivot—see interview.)

If the transition to hyperlocal was seamless for Delhivery, it was quite a challenge for Clover. As demand vanished overnight—hotels

"Masks will be a part of our lives now, whether we like it or not."

PANKAJ VERMANI,
FOUNDER, CLOVIA

CLOVIA, A LINGERIE STARTUP

Pre-Covid-19: Sold lingerie products

Now: Adds PPEs and masks, which will continue to be a part of its business over the long term

SCALE OF OPERATIONS

Has sold over **2 million** pieces of **PPE** and **masks**

In May, claims to have done **80%** of pre-**Covid** numbers in terms of business

Turns **Ebitda** positive in May for the first time since 2012

Kanika Tekriwal, founder and CEO of JetSetGo. Instead of booking an entire plane or a chopper, the startup allows people to now book seats

"People who were not flying charter are doing so now."

KANIKA TEKRIWAL,
CEO, JETSETGO

JETSETGO, AN ONLINE MARKETPLACE FOR PRIVATE JETS AND CHOPPERS

Pre-Covid-19: Aircraft and chopper charter

Now: Starts seat-sharing model with JetSetCare

SCALE OF OPERATIONS

Founded in **2014**, **JetSetGo** is backed by former India cricketer Yuvraj Singh

and retail outlets closed and even vehicles carrying essentials were obstructed during the initial days of the lockdown—the immediate task was to figure out a new set of consumers. While earlier a few varieties of produce were grown and supplied, now the end consumers—those living in residential societies—demanded more choice. "The portfolio of produce handled now is nearly double compared to pre-Covid days," says Avinash. Another challenge cropped up in terms of upskilling staff at warehouses in handling new products. While they were trained on video calls, several members in the

'Blitz Pivots Aren't Good For Anyone'

Venture capitalist Sid Talwar on the dangers of rushed and drastic changes in business models

Over the past month, I've had a few conversations with founders who have been running exciting startups, raised quite a lot of money and had big plans. I use the word 'had' not because their companies shut down, but because halfway through each conversation they explained how they pivoted since the lockdown to a completely different business model. And most of them went on to say they did it to show investors that their company had the grit to thrive, and not just survive, no matter what came their way. These conversations have sent a chill down my spine. These teams (like every other startup) had left their jobs to follow a dream. They had convinced themselves and their families that these companies were their calling. They spent years working on making these ideas come alive. And then suddenly they're doing something else. Not because the original idea was faulty but because external conditions changed (in many cases for the short term) and because (horror!) they feared investor backlash.

That's a scary place to be in. And, yet, every day there are articles about startups considering sudden and massive changes in their entire business.

There seems to be a prevalent fear within the ecosystem that startups need to find revenue wherever they can... irrespective of their original model. And if they can't find revenue, they'll never get funded again. No matter how costly that revenue is, both in terms of margins and people. This is leading companies to do a blitz pivot—essentially where entire business models are changed, normally in a rushed decision. And blitz pivots aren't good for anyone.

Startups are already a hard business to run. And if suddenly the founder changes the mission, realigns the vision, and repositions the company in the minds of the investor, there is a good chance that business is in trouble. And while it's possible that even the most daring "Hail Mary" of pivots can deliver success, the chances of that happening are never high. Especially if it's being done just to re-engage investors.

This pandemic is obviously a time to reflect and make hard decisions. There is a good chance it will force many companies to pivot. But all pivots are not equal.

Meet the bricolage pivot (yes, it's French... but not as fancy as it sounds). Bricolage loosely means to tinker with something.

A bricolage pivot has two parts. One, it involves making strategic changes to a business model while either maintaining the product, selling related products to an existing customer base or evolving the customer base. Two, it involves a thoughtful, data-driven approach, leading to a calculated change in direction where all sides of a startup (the founders, the team and the investor base) are aligned.

Don't get me wrong, even these pivots are painful to live through. But with a little bit of luck and right timing, they have a better chance of success. Founders need to be bricoleurs (someone who practices bricolage) when it comes to pivots, even during worldwide recessions caused by pandemics. Pivots test your creativity, persistence, resilience, focus, passion and grit in the best of times. A blitz pivot, especially to prove something to someone else, might be the best way to shut your company down.

(THE AUTHOR IS PARTNER AT LIGHTBOX VENTURES)

AMIT VERMA

'Pivot is Evolution'

Naveen Tewari, founder of InMobi, India's first unicorn, on keeping the core intact and adding to it

For Naveen Tewari, two words that don't gel together are survival and growth. Survival, reckons the founder of InMobi—India's first unicorn—is all about 'not getting out'. That's what the Indian cricket team used to do a long time back. But in the world of technology, he adds, the only way to survive is to be aggressive. This holds true especially in a world where somebody else is innovating quicker than you. "One needs to play on the front foot," says Tewari, who is unofficially billed as India's Badshah of Pivots.

Founded in 2007 as mKhoj, and rebranded as InMobi the next year, the Bengaluru-based company is backed by marquee investors, including SoftBank. It became India's first unicorn in 2011. Though the gritty entrepreneur prefers to use the term 'evolution' rather than pivot, he asserts that an entrepreneur must look to grow, not survive. "If you are only thinking of survival, you would not end up winning enough," he says. And if you want to win enough, Tewari adds, then you have to play differently. Edited excerpts from an interview:

On the art of pivoting

I see it (pivot) more in the form of an evolution. Pivot is typically understood as when one stops doing something, and starts doing something else. Generally this has been the definition: Somebody who was doing A is now doing B. And B becomes the main thing. That has been the connotation of pivot, in general.

The way I see it, there are two things to a pivot: Evolution and progression. Now how I define progression is doing more of the same but in a better way. Evolution, in contrast, is when you are able to create new S curves in your businesses generally through innovation. Now this means exponential growth as you are creating new S curves in addition to the already existing ones.

On InMobi keeping its core intact as it grew

In 2015, ad-tech was the only angle to our business. We did three things in addition to the core business. First, we added marketing technology, but never got rid of ad-tech which kept growing, and still continues to grow. That was the evolution of the core InMobi business. Second, we created Glance, a mobile content platform. This was our second S curve. And then we created data management platform Trufactor in 2018. This was our third S curve. But all of them were still deeply linked to our core capabilities. Because your one foot is grounded (in basketball during a pivot), it gives you capability to do more things. This is evolution to me. In general, when people talk of pivot, they think that one foot is not grounded. This understanding leads to a negative connotation.

On the negative connotations of pivoting

The issue is with the word, not with the concept. As long as you don't use the word pivot, and you use any other word related to it, everybody is absolutely fine with it. In fact, everybody loves that. So if you ask anybody in InMobi about pivoting, they are more likely to frown at you, and might reply 'We never pivoted. Why do you think we pivoted?' Whatever be the dictionary meaning of pivot, the understood meaning is what confuses people. That's the core issue.

Evolution comes because of a couple of reasons. First is that one is intrinsically looking at the business and asking what more can I do. And there are linear and non-linear innovations. The former is normal growth, while the latter is evolution. So in InMobi, adding marketing technology, Glance and Trufactor was non-linear. It doesn't mean that our core business has been down. It means that we added more to the core growth, which is faster now. That's how I look at pivoting. As entrepreneurs and CEOs, one must look at adding S curves, otherwise your business will get hit badly in a rapidly changing world of technology. It's wrong to think that one must add new cycles when the old ones are not working. Today a lot of the companies confuse linear movement with innovation.

On innovation for survival

One doesn't need to innovate to survive. Innovation is for hyper growth. Look at big companies. Take, for instance, Reliance Industries. It has not pivoted, but it has evolved and created telecom and internet businesses, which are now bigger in value terms than all past businesses put together. This is evolution, and adding S curves to the existing core. I mean how many oil companies in the world have created an internet company? None. Take Google, Microsoft and Amazon as other examples. They kept evolving since their inception. And the beauty of this model is that if you create a new S curve on the back of the existing S curve, it takes you to an escape velocity.

team had to double up as customer service agents to handle queries on delivery time and payments.

For Vermani of Clovia, the biggest challenge was to ensure that the workers didn't end up migrating to their native places. There were around 3,000 workers employed in various factories making products for Clovia. But for most of the factories, Clovia was the only client. As the business dried up overnight, nobody had a clue on how to keep factories engaged. "That's how we entered into PPE and masks," recalls Vermani, who set up a core team and within 10 days, work was done on a war footing, and production started. Though the entire business was in disarray in the beginning, Vermani didn't panic. Perhaps a lot has to do with his background and experience. He graduated from IIT-Delhi during the dotcom bust, and his two ventures in the past—a travel search engine in 2004 which was acquired by California-based advertising major Exponential, and edtech company Vriti that may have been ahead of its time—had survived the Lehman crisis. "So I was not scared," he says. "I have adapted in the past."

Akash Gupta, co-founder of Zypp, too had adapted his ebike rental business since its inception in 2017. While theft and vandalism of ebikes during the early part of the startup's journey forced Gupta to add layers to his core business—he started renting out bikes on a monthly and weekly basis to delivery guys—Covid-19 made him discover his mojo. Gupta now plans to go deep with his fleet of bikes and bikers in expanding his delivery business in Delhi-NCR. "Covid has turned out to be the demonetisation moment for logistics," he says.

Investors, though, sound a word of caution. "Blitz pivots aren't good for anyone," contends Sid Talwar, partner at Lightbox Ventures. A pivot to prove something to someone else might be the best way to shut the company down (see box).

Raman Roy, father of BPO in India, though applauding the entrepreneurial spirit of those who are venturing into different services or categories to keep the engine running, wants entrepreneurs to also look at the larger picture. "If you are suddenly delivering liquor or making sanitisers, it's good. But is it for the long run? Does it make business sense," he asks. At the end of the day, whatever pivot one takes, it needs to make financial sense. It's not the speed at which you pivot, but the speed of having control over the vision.

Barua, too, believes in speed, but only when one is on the right track. "When you stay on course," he says, "being fastest is a virtue. But when not on course, being fastest is dangerous." F

The Coming Default Deluge

The Covid-19 crisis is a risk that lenders never modelled for. Default rates could rise three times, says credit scoring platform CreditVidya

By SAMAR SRIVASTAVA

You're in your early 20s and you've just landed your first job. The first pay cheque is earmarked to upgrading the four-year-old phone. No matter that the new iPhone you have your eyes on costs as much as the pay cheque itself. After all, the cost can be split among six easy-to-pay EMIs. By the end of the first year, you've also taken loans for your first overseas holiday, and to renovate your parents' home.

The bank puts you down as a model customer. Monthly salary credits point to the payments, which make up 40 percent of your salary, as being manageable. With an expected 20 percent pay increase after the first year, the loans are bound to occupy smaller share. Those who joined the company a year before you already bought their first motorcycle. That's next on your list. Soon, you will be able to say goodbye to those cramped train rides to work.

But then Covid-19 hits, and half the team you work with is laid off. Your salary is cut by a fourth and, at 53 percent, the monthly loan payments are making it hard for you to pay rent. Your bank announces a moratorium and you opt in. Interest accrues but your account is still classified as good.

But for how long? That's the question few have answers to.

Over the last five years, as traditional lending engines—credit to companies, home loans and auto loans—had slowed, banks and finance companies had grown their consumer book. This included quick loans to buy mobile phones and televisions, personal loans and payday loans. The last two years had also seen the emergence of loan apps, through which borrowers had to upload their income data and were instantly credited with money in their accounts. But, over the last three months, India's consumer economy has been on pause.

According to RBI data, personal loans and credit card debt outstanding rose from ₹19,21,142 crore in 2018 to ₹24,90,791 crore in April 2020, an annualised growth rate of 14 percent. In the same period, total bank credit grew at 9.5 percent. Borrowers confident about their future increased the size of the leverage they took, faster than their growth in incomes. India's household savings rate fell to a decadal low of 17.2 percent in 2017-18.

In two years since 2018, personal loans and credit card debt outstanding had risen at an annualised growth rate of 14 percent. The pandemic has thrown out of the window the bad loan provisioning that banks and finance companies had done prior to Covid-19

KUNI TAKAHASHI / GETTY IMAGES

Banks and finance companies have provisioned for bad loans on account of the pandemic, but all solutions to the loans going bad are based on best guesses and data from past delinquencies. Those models for forecasting defaults are unlikely to be useful this time, according to Abhishek Agarwal, co-founder and chief executive at CreditVidya, an analytics company that works with lenders. His data paints a grim picture.

When Agarwal set up CreditVidya in 2015, it was to address a gap in the market. Lenders would decide on loans based only on credit scores that provided information on past intent of servicing loans. If someone had borrowed and successfully paid a loan they had a high chance of getting another loan even if they had little or no income. The Covid-19 crisis has demonstrated the shortcomings of this approach. "You need to match past

repayment history with cash flow data and if you do that you have a far better way of modelling the probability of default," says Agarwal. His company set about building these models.

Out of the 40 million customers that CreditVidya has surveyed, it took 500,000 to understand income and consumption patterns in March and April. They allowed for the fact that there are several Indias, and divided customer segments into the affluent market (earning ₹60,000 a month, saving ₹23,000), mid-market (earning ₹20,000 to ₹60,000 a month, saving ₹11,000) and mass market (earning ₹10,000-20000 per month, saving ₹4,000).

Banks and NBFCs preferred to lend to the affluent and mid-market customers, while the mass market was disproportionately (50 percent) served by fintech firms. And while the pandemic has affected each segment, it is the mass market that has borne the brunt. "What emerges from this report is that some of the impact could be more medium-term than lenders are forecasting, as jobs and incomes get disrupted, and steady-state loan delinquencies could be higher and evolve to a new baseline," says Gautam Chhugani, director, Indian Financials at Bernstein. He also forecasts an increase in credit costs for lenders. For now, while banks and NBFCs have provisioned for defaults, they offer no guidance on what the quantum of defaults could be.

Prior to the Covid-19 crisis, the data set analysed by CreditVidya showed a 121 percent rise (note: there is no absolute number here as the data is for a cohort) in personal loans as Indians were feeling confident about the future. Most of these loans were for consumption spending, such as buying appliances, holidays, and entertainment. While personal loans rose three times in value over the last seven quarters, pay day loans increased by 11 times.

There was also the rise of a phenomenon known as 'loan stacking'

"Past credit risk models of forecasting defaults are unlikely to work during the crisis unless they are married with cash flow data."

ABHISHEK AGARWAL,
CO-FOUNDER AND CEO, CREDITVIDYA

among mass market loan seekers. This means customers would take 30- to 90-day loans at usurious (18 to 24 percent) rates. They were often self-employed—such as delivery personnel, sales personnel or temporary staff—and had no job security, but were confident of landing another job once their current one was over. They'd take new loans to pay off the previous loan, and as long as jobs were available fintech companies were happy to lend.

So, how did the pandemic affect India's consuming class in April? Income was down 42 percent on account of significant wage cuts and furloughs. As a result, consumption was down 43 percent, both on account of lack of avenues to spend as well as the need to conserve cash. In May, there was a 15 percent rise in both incomes and consumption as green zones opened for business but the numbers are still much below pre-Covid-19 times.

Within this, the mass segment was hit the hardest. Think of it this way. When you don't call a plumber to fix something at home, or don't use an Uber to commute to work, incomes for the segments fall to zero overnight. The mass market saw a 56 percent fall in earnings, the mid-market 14 percent and affluent 12 percent. The mass market is also saving more—10 percent more in April.

CreditVidya's risk assessment model points to a link between higher incomes and default rates, indicating how vulnerable the mass segment is. A person saving ₹30,000 a month is three times less likely to default than a person saving ₹1,000 a month. For the mass market, the 500,000-strong cohort pointed to non-performing assets (NPAs) increasing by three times, for mid-market by 1.8 times and for the affluent by 50 percent. If the pandemic is a prolonged one, the risk for the mass market increases.

This also points to a significant slowing of the consumer economy for the next year. Agarwal points out that a lot of fintech companies will see their net worth wiped out and shut shop, leaving few credit options for the mass market. As for the well-capitalised banks and NBFCs that serve the mid- and affluent markets, they have no choice but to keep trying to grow. "If bad loans increase and the loan book doesn't grow, the NPAs as a percentage of total loans increase sharply. So for them [despite the risks] growing the book is still the only viable strategy," he says. F

The Mass Market is the Most Vulnerable

	Population	Income	Savings	Default Risk Rise
Mass Market	359 million	₹ 10000-20000	₹ 4000	3x
Mid Market	160 million	₹ 20000-60000	₹ 11000	1.8x
Affluent Market	16 million	above ₹ 60000	₹ 23000	50 percent

SOURCE CreditVidya; sample size 500,000

INFOGRAPHIC: SAMEER PAWAR

The New MF Paradigm

Why the pandemic-induced volatility is a wake-up call to ensure measured and diversified asset allocation, and relook portfolios

By MONICA BATHIJA

About five months ago, the founders of Agile Connects, an Internet of Things startup, put the entire corpus they had raised recently for business expansion plans into the Franklin Templeton Ultra Short Bond Fund. But on April 23, Franklin Templeton announced a closure of the fund along with five others on account of liquidity issues in the debt papers they were holding; Agile has been left with no option but to wait. The company, which thought the funds were safe and liquid, finds itself in a hard spot as it has reserves that will only last a couple of months.

"If the money is stuck for the next three years, it impacts our planning ability. Right now we have raised some invoices with our clients to pay salaries and other overheads, but if that money doesn't come we are looking at a challenging time ahead even to pay salaries," says Arvind Khungar, chief strategy officer at Agile Connects.

As investors continue to grapple with the effects of the pandemic, and the financial crisis and volatile markets accompanying it, it's a wake-up call as good as any to ensure measured and diversified asset allocation, and relook portfolios.

After a massive outflow of ₹19,239 crore in April from credit risk funds, the panic seems to have abated for now; the outflow slowed to ₹5,173 crore in May, according to the Association of Mutual Funds in India (Amfi). [Credit-risk funds typically invest in lower-rated securities (below AA-) and gained in popularity because of their potential for double-digit yields]. The data also shows that investors have moved to categories with low credit risk, allocating more to banking and public sector debt, gilt and liquid funds. Flows into debt mutual funds rose to ₹63,665 crore in May from ₹43,431crore in April.

"Earlier, debt funds were equal to fixed deposits for a section of investors, they conflated the two

"We are looking at businesses with the balance sheet, liquidity and capability to survive this crisis."

NAVNEET MUNOT,
CHIEF INVESTMENT OFFICER, SBI MUTUAL FUND

SAMEER PAWAR

things," says Anish Teli, managing partner and fund manager at QED Capital Advisors. "Now at least people are asking questions, they know there's a credit risk, and there is an interest rate risk, and they do not want to get stuck in a credit risk situation."

The problems with fixed income funds are not new. There have been a few shocks in recent times, starting with the IL&FS crisis in September 2018, followed by mutual fund investments in the papers of Dewan Housing Finance Ltd, Yes Bank Ltd and the Essel Group companies going bad. April saw the peaking of that risk aversion.

"In between a lot of things were done by (market regulator) Sebi, which were good for investors. But, at the same time, they brought all the risk to the forefront, it became visible," says Dhirendra Kumar, CEO of Value Research, an independent financial advisory firm.

In fact, the risks would have come to the fore even without the Covid-19 crisis, considering the issues in the economy, the banking system and NBFCs—the pandemic simply accelerated the process. "Covid-19 was not the cause of the problem, it exposed the risks being taken in funds to collect higher AUMs (assets under management)," says Ajit Dayal, founder of Quantum Asset Management Company (AMC). AMCs often take risks in credit risk funds to generate high returns, but in the process, dangerous products are created. After the IL&FS shock, says Dayal, some AMCs restructured a few of their products while others, like Franklin, got more aggressive.

In fixed income funds, investors have the option of withdrawing their money anytime, but this might not be possible for all the investments the fund manager has made as there may not be buyers for the debt paper these funds have. Markets for debt paper in India are illiquid except for very high quality government and corporate paper. In cases of such asset-liability mismatch, if a lot of investors turn up, a credit event like the Franklin case occurs. And when investors are unable to take out their money, they also tend to take it out from elsewhere. "Everybody will say, never mind the high returns, let me get my capital back for now," adds Kumar.

"Earlier, debt funds were equal to fixed deposits for a section of investors, they conflated the two things."

ANISH TELI,
MANAGING PARTNER AND FUND MANAGER, QED CAPITAL ADVISORS

The advice right now is to invest in liquid funds and funds that own government paper. "Until there is an economic recovery, any private sector paper has an inherent risk of going bankrupt. So the only debt fund you should be buying is one that owns government paper," says Dayal.

Financial planners also think it is a good time for investors to take a hard look at their portfolio depending on their goals, and get rid of any junk they might have collected.

"In 2008, while a lot of people were invested in direct stocks, this time they are there through mutual funds, which is a good thing," says Anish Teli of QED. However, what may be different this time around is the severity of job losses and salary cuts, and their effect on investing behaviour is yet to play out.

The general advice is not to change things around too much, if you don't need to. Because for those in the accumulation phase, whose goals are 10 to 20 years away, even if the market outlook remains grim for two years, it doesn't make much of a difference.

But for those who have not rotated their portfolios in some time, it's a good time to relook and get into the large cap category and index funds. "And make that the core, and on the satellite part you can still look at maybe middle, small [caps], and then some direct stocks or some sectoral bets," says Teli.

A third of the investment in equity can also be invested abroad.

Millennials and first-time investors, especially those facing a reduction in income, should use the opportunity to learn not to be impulsive with big spends, and should not waste the crisis by investing all the money they can save. "If you don't understand where to invest, start with a recurring deposit," advises Kumar.

It is, however, the retirees, who are dependent on withdrawals from their investments, that are going to have a difficult time especially if they have retired over the last four to five years and have been channelised into a balanced fund or an equity savings fund as well as having invested it in lump sums and risked getting in at a high level.

For a retiree investing into equity and debt, the advice is to stagger the equity portion over a period of time, rebalance annually and ensure that the withdrawal rate from the investment does not exceed 6 to 8 percent. "Most of these

people believe that if they're getting dividends from their investment, their investment is working, but it just might be eating into their capital. You can consume only the real return on your investment, which is return minus inflation," points out Kumar.

He adds that in the current situation it pays to be cautious considering the outlook for the economy remains grim. With company earnings getting substantially dented, things might not be very rewarding in the next couple of years. "Because at the end of the day, market performance is a function of companies making money and growing," adds Kumar.

Considering the uncertain economic outlook coupled with job losses, and population displacement due to the pandemic and the subsequent lockdowns, mutual fund managers too are looking at companies that will come out stronger on the other side while reducing their exposure to leveraged companies.

Across portfolios, whether debt or equity, fund managers are looking at low to moderate leverage. "I want to ensure that whenever the upturn comes, my company should be surviving so that I can participate in the upturn. Leverage is lethal and we are moving away from leveraged companies," says Nilesh Shah, managing director of Kotak AMC.

SBI Mutual Fund, too, is focused on the resilience of companies rather than taking large thematic or sectoral calls. "We are looking at businesses which have the balance sheet, liquidity and capability to survive this crisis. And where we believe managements are taking the right actions to thrive on the other side of the crisis," says Navneet Munot, chief investment officer at SBI Mutual Fund.

Unlike in a regular economic slowdown, where industries across the board are affected and then slowly come out of it, the current crisis will have some long-term consequences for a few industries —and some might not even make it to the other side or will take a very long time to come out.

VIKAS KHOT

"Covid-19 was not the cause of the problem, it only exposed the risks being taken in funds to collect higher AUMs."

AJIT DAYAL,
FOUNDER, QUANTUM AMC

Sectors like hospitality, airlines, malls, movie halls belong to the latter category while those in the production sector will bounce back faster. "In the auto sector and personal mobility, the fear factor will play a role at least until the health crisis is resolved and two wheelers and small cars looks interesting," says Chandresh Kumar Nigam, MD and CEO of Axis AMC. They are also looking at the global trend towards reducing outsourcing dependence from China which might play out some interesting stories, perhaps not in the large cap space but in the middle, small cap space.

With work from home becoming the norm, the commercial real estate sector is up for a tough time at least for a year to a year and a half, which will also affect associated sectors like office security, office stationery and public transportation. However, in the long term, with the global economy under pressure to control costs, large parts of operations might get outsourced and might play out in a manner beneficial to the country.

Changed consumer behaviour in a post-Covid world and how companies adapt to is also a factor affecting allocations. "Discretionary spends might see some pent-up demand in the next three to four months, but incomes will not really support consumption or discretionary spends in a big way, be they travel holidays or white goods," says Nigam.

"Everything that is luxury will be cut. So every company will have to think about how they can create a shampoo bottle to a sachet model for their products and services. If I am only going to sell shampoo in a bottle, there may not be any takers because that guy's spending power has come down. But if I convert it into sachets, they will probably keep on buying one sachet every week and I will still have some amount of growth," points out Shah .

He adds that companies that are unable to make a transition to online will also find it very difficult. "So we are trying to observe change in consumer behaviour and relate it with how our portfolio companies are adapting. If they are not adapting, then it is not worth investing with them because when the upturn comes, when the post-Covid world comes, they will be a misfit over there."

Fund managers also think there is value in looking at opportunities that are not available in India. "The entire technology and innovation space... there are pockets of that which we do have, what we call as consumer internet businesses, but the Netflixes and Amazons of the world are not listed on the Indian bourses. I think there's some opportunity for us to start allocating money there," says Nigam.

"Invest In Multiple Tranches"

One of the differences between previous financial crises and the current one is that this time more people are invested through mutual funds rather than direct stocks. Greater awareness also means that people have been resilient in continuing with their investments so far. In an interview with *Forbes India*, **Nilesh Shah**, chairman of the Association of Mutual Funds in India (Amfi) and Kotak AMC managing director, speaks about the broader performance of the sector, growth in the number of mutual fund investors and on investing in uncertain times. Edited excerpts:

MEXY XAVIER

Q On creating wealth

Since the mid-90s we have seen the development of mutual fund products as well as the distribution base, and over the years we have gone through various ups and downs. But by and large we have enabled fantastic wealth creation for our investors. Today, we have more than nine crore folios, over 2.25 crore unique investors, and a pan-India presence. Obviously our equities in January 20 were looking far better than in May 20, but most of the fund houses have done tremendous alpha creation in terms of outperformance over benchmark indices.

Q On investing in uncertain times

Our recommendation at any point of time has been to define your financial objective, have a good advisor and get a good plan. And then execute that plan with three guru mantras: Long term investment, regular investment and disciplined asset allocation. If you have a good financial plan, and follow the three mantras over a period of time, your financial objectives will be achieved.

Obviously at times like this your plan does get shaken up a bit. But time and again we have seen that these crises are an opportunity. On a market cap to GDP ratio, India is looking cheaper vis a vis the historical average. And if you invest at this point of time, whenever the market is in reversion you will be able to make money. But should you put all the money at one go because markets are trading at below historical averages? That's not the right way to invest because markets are markets, they will be volatile and you never know how markets will behave in the days to come. So try to invest in multiple tranches, and be overweight in equity and gold. By doing multiple tranching, you will be able to average yourself into the market.

Q On recent events in the fixed income category

Despite certain credit events that have occurred, by and large the mutual fund industry has done a done a fantastic job in managing fixed income. There have been challenges, but within those challenges we have improved the capital allocation process. We have been able to streamline market rates, our size is small, but many a times we have acted as a price setter with quick decision making. And, while there are certain credit events, if you see the overall non-performing asset (NPA) ratio of the mutual fund industry vis-a-vis banks or insurance companies, or other sectors like NBFCs (non-banking financial companies) or AIFs (alternative investment funds), we are at a much lower NPA.

"Define your financial objective, have a good advisor and get a good plan. And then execute that plan with three guru mantras: Long term investment, regular investment and disciplined asset allocation."

Q On improving corporate governance

Most of the large NPAs of the banking system have not been able to raise any money in the capital market. They may have succeeded once, but thereafter they have never raised money. In fact, in a few cases, foreign portfolio investors have invested money in those companies, but Indian mutual funds by and large have stayed away. So with money flow or capital, there has been a push on the promoter to improve governance.

Q On MFs as a vehicle for financial inclusion

People associate mutual funds with rich people, but that's no longer the case. When we started, we were more urban-centric and our distribution network was mainly in the top cities. Even today, we are still getting a bulk of our money from the top eight cities, but digital enabling has helped us reach out to every nook and corner of India. And we have seen tremendous growth in the number of investors in the last three to four years, compared to the previous 20 years. Distributors and other people have helped small investors like maids, drivers and other employees create retirement nests, providing an alternative to a money lender or a chit fund.

Recently, a domestic help sought a loan for a medical emergency and her employers, who had been doing SIPs (systematic investment plans) for her, told her she already had this money. She was pleasantly surprised because she never knew that her investment could deliver this kind of return. So even at the bottom of the pyramid, where they have very limited savings and don't have access to formal financial investments, if you give them a financial saving, whether in an equity fund or a fixed income fund, they are able to build their nest.

Q On MFs' role in deepening the capital market

Clearly there was a bond market, equity market, derivatives market well before mutual funds came into play, but over a period of time mutual funds have exercised far more weight. Today, our equity markets have one of the highest volumes in terms of number of trades. We have a fairly sophisticated derivatives market and mutual funds have played a reasonable role in deepening the market and bringing it at par with global standards. F

'I Don't Expect A Protracted Recession For India'

Confederation of Indian Industry (CII) President Uday Kotak says banks are likely to face significant NPA pain in the consumer lending space, but the country must get its investment mindset back

By SALIL PANCHAL

KOTAK MAHINDRA BANK LTD

Veteran banker Uday Kotak, managing director and CEO of Kotak Mahindra Bank, sees 2020 as a year in transition hurt by the "deep shock" of the lockdown. Ruling out a slide towards recession, he forecasts that corporate earnings and GDP growth will pick up in 2021-22. Speaking to *Forbes India* after taking charge as president of the Confederation of Indian Industry (CII), he warns banks will see the most pain—in terms of bad loans in the consumer lending space. The government, he says, cannot overreach at this moment due to fiscal deficit constraints, and argues against the need to bail out a specific troubled sector. Edited excerpts:

Q You take charge at a time when India is in its most challenging phase. We have no option but to ease the lockdown to get economic activity and jobs up again although we don't have a grip over the coronavirus. Do you agree?
It is a significant challenge and a once-in-a-century event. Most of us have not encountered a situation like this where a tiny virus has completely disrupted the way humans live. It was easy to get into the lockdown, but it has a huge economic cost, and it is difficult to get out of it. We are coming to a situation where the world is moving towards a different place and assumptions we made of the world have changed today. The government and the prime minister are realising that.

The original positioning was '*jaan hai to jahaan hai* (if you are alive, the world is yours)' and then it changed to '*jaan bhi, jahaan bhi* (life and the world are equally important)'. This is a classic battle where we have to balance lives and livelihood.

Q You speak about moving towards a different place... which businesses are getting reset?
This is a core theme we, at CII, are working on. Our secretariat and the national council of 180 members had meetings on June 3. We usually announce a GDP forecast and sectoral growth trends; this time we said it is not possible for anyone to have a correct prediction of GDP for the current year. In fact, we should monitor it granularly, month-by-month. We have a theme—lives, livelihood and growth.

Q We are growing at a slowest pace in 11 years. Could you spell out what corporates and lenders need to do?
There will be significant loss and pain in the system. The first category will be individuals and businesses... a lot of inter-business negotiations will happen—between a lessor and a lessee, and an employer and employee, about who will bear the pain. The next part is the government, which has given a stimulus, but there is a significant drop in its revenue. After the support package from the government and a drop in revenues, the fiscal deficit of the Centre and state governments combined will be 11-12 percent of GDP, against the 6.5 percent that economists projected in February. In an economy of our size [$2.9 trillion], the five percentage-point difference is a hit of ₹10 lakh crore... the government is taking that shock. The rest of the shock falls on the financial sector. All the three segments need to figure out how the pain is going to be distributed.

We have to look at 2020 as a year in transition—a deep shock—and then decide how we take things forward

Q Should we write off the first half of FY21 and assume that demand and labour would come back only in the second half?
There was complete standstill in business activity in April; in May, we saw gradual stirring. If we were a 100 percent economy and you saw a sharp shock during the lockdown in April and May, the most dangerous thing to do is to predict the year 2020 on averages. We should focus on objective parameters such as electricity consumption, goods and services tax (GST) collections, road traffic, passenger car sales, freight movement month-on-month, to tell us how the economy is faring. We have to look at this year as a year in transition—a deep shock—and then decide how we take things forward.

Q Some of the Reserve Bank of India's (RBI) Monetary Policy Committee members fear it will take years to repair the economy. Is recession inevitable then?
It is hard to predict at this point the likely trajectory of the economy. Certainly, I do not expect a near-term recovery, but at the same time, I do not expect a protracted recession. I would expect a gradual recovery over the coming year, so that starting in 2021-22, company earnings and overall GDP are likely to start growing at a faster rate. This is consistent with the market expectation as well.

Q The government measures targeting migrant labourers, low income and small businesses are well intended. But the fresh fiscal impact through the five-tranche package announced by Finance Minister Nirmala Sitharaman is only `1.5 lakh crore... is this adequate?
Whether you spend or have reduced revenues, the net impact is that the fiscal deficit bloats. We are already

With Unlock 1.0, India has started its business activity and movement of goods and services after months. Kotak says the country will have to focus on parameters like electricity consumption, car sales, GST collection etc to determine the state of the economy

XAVIER GALIANA / AFP VIA GETTY IMAGES

seeing a gap of ₹10 lakh crore... to that extent, the shock is being taken by the Centre and the states. More needs to be done, but how do we balance the need for doing more with the reality that we don't have a global currency? We have to be careful about doing more, but not overreaching in terms of the size of our fiscal deficit where we have sharp shocks to our external accounts. The good news is that our external accounts are fine, but the domestic finances need to be handled with care.

Q The government has addressed the supply side of the economy, but there is no trigger to boost demand. How can this be resolved?

There are many demand-boosting measures such as the cash transfers to the underprivileged people and the credit guarantee to micro, small and medium enterprises (MSMEs). However, the immediate spending by the government is limited due to its extended fiscal position. I believe more will be done as and when required, but we should be careful to not trigger financial instability by sharply increasing the fiscal deficit and public debt.

Q Some of the hardest hit sectors by Covid-19—hospitality, airlines, tourism (which faces potential job losses of 41 million)—have been ignored. Would you seek a bailout for these sectors?

We need to prioritise sectors—first protect lives and livelihood (jobs). The government should be thinking about a backstop: It should create a social security net for the low-income (salaries below ₹25,000 per month). We have neglected health care, with just 1.3 percent of GDP invested in health. We need to strengthen our sanitisation and hospital facilities; trained medical staff and e-medicine systems from here onwards. Germany could withstand Covid-19 better due to its cutting-edge health care systems. We need to focus more on education and not take the environment for granted. As far as the bailout is concerned, it is not in the hands of the government. It depends on what the consumer wants in the future. If you decide not to go to a movie hall for six months, that's the choice you've made. There will be a limitation to the amount of resources the country will have after the losses it suffers. We have to ensure that what we are doing is structurally right for the new world and be careful not to succumb to lobbies or people who are making the loudest noise, whether justifiable or not.

Q With the moratorium on repayment of loans being extended, it means potentially a longer level of indebtedness in the system, which is never good...

It is a fair concern that investors have voiced, whether it runs the risk of moral hazard—where borrowers get used to not paying. We need to have a proper credit culture. I understand that the RBI has to balance things due to the economic

impact of the virus. But we will have to take a call on which entities are credit-worthy and which are not. In that context, I am appreciative of the government's recent MSME guarantee system. [Through this scheme, banks will provide ₹3 trillion as automatic collateral-free loans to standard MSMEs. The government will also provide credit guarantee to banks and non-banking finance companies for both principal and interest till October 31].

Q But the fear is come September 1, people will say they cannot pay as they would have seen a salary cut or lost a job. How bad will retail NPA get?

There will certainly be pain, and it is always difficult to predict a number. But the segment that will see significant amount of pain will be the unsecured consumer, particularly the urban consumer [loans]. The MSME sector has been well buffeted by the government and a lot of the large businesses which are not highly leveraged should sustain.

My simple principle is to apply Finance 101: When you are lending, first look at sensitive sectors and how they will sustain in a post-Covid-19 era, then look at businesses with high fixed operating costs—they will also face pain. And then look at companies with high debt: Equity ratios on how businesses fare.

And I do believe that interest charge during the moratorium should stay, which is the RBI's view too. Banks and financial companies get money from depositors and lend it to borrowers. You cannot have a situation where the borrower is not allowed to pay and the depositor, obviously, must be paid. That would create a discontinuous situation. If you see the crux of the Banking Regulation Act, it is protection of the depositors' money which is most important.

Q The suspension of the Insolvency and Bankruptcy Code (IBC) for a year—while offering relief to weak companies—means that banks have to sit on bad assets for a longer period. How does it help?

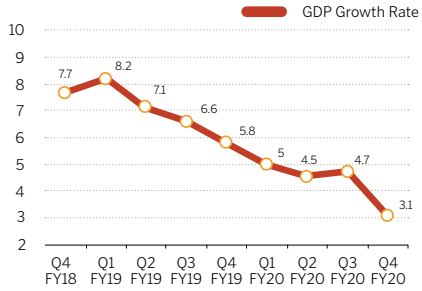
At least a six-month window was required. But the year starts from March 25, 2020 [the ordinance just passed says no case of corporate insolvency can take place till September 24, which can be extended to March 24, 2021].

Q How would you explain the complete disconnect between the surge in stock prices and the state of the economy?

One of the two scenarios is right; I do not know which one. On a serious note: Think of any company facing turbulence ahead due to the virus outbreak and seeing an uptick in the stock markets.

Key Economic Indicators Continue to Weaken

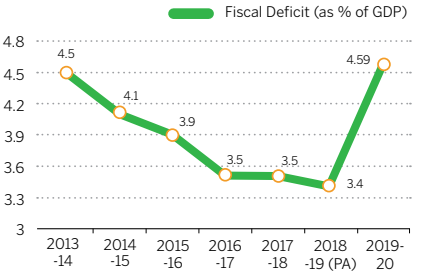
India's worsening GDP



SOURCE RBI

India's Gross Fiscal Deficit

Fiscal deficit rising again



(PA) As per provisional account

SOURCE Economic Survey

Why not go raise capital? Several companies have already done it. If my real economic need is to have more risk capital, I should go out and take it. If I am in a boat in the high seas and there is a thunderstorm, and if there is another stronger boat that is bigger and stronger (and that is what capital does), why not take advantage of the situation?

Q How many banks are at a risk of falling away, with weakened balance sheets, poor asset quality, low profitability and little sign of recapitalisation for public sector banks?

Sector after sector will see consolidation: Companies that will survive will also grow in scale—as seen with the telecom sector in earlier years—and weaker players must raise risk capital. The markets, as you rightly said, have a disconnect, so corporates need to use that to raise capital.

Q Can Indian corporates take advantage of the anti-China wave or create new supply chains? Or is this just a political statement?

I relate to the prime minister's statement and use it in a broader context. A self-reliant India (Atmanirbhar Bharat) also includes our self-sufficiency on our health care and education system, reverse migration, how to create balanced regional growth in rural India. It is upon us to bring about a transition where we create a well-balanced India with strong broadband connectivity. There is great opportunity to reset what India means.

Q And where does one start—it just cannot be like a Skill India or Make in India campaign?

Look at personal protective equipment (PPE)—India could manufacture these and make them available. We must get the investment mindset back... we cannot be cowed down by Covid-19. F

SAMEER PAWAR

Corporate Covid Responsibility

Companies are channelising a big chunk of their CSR money towards the coronavirus response, leaving initiatives for other social causes scrambling to stay afloat

By DIVYA J SHEKHAR

Drawing from the experience of working in the social sector for over 20 years, and now in the tribal regions of Odisha and Jharkhand, Liby Johnson says people in these villages—including migrant workers who have come back home from the metros—will start feeling the pinch of the coronavirus pandemic more severely only by August.

State governments had sprung into action since the lockdown was first enforced in March, ensuring that the public distribution systems supplied food to people. Johnson, whose non-profit Gram Vikas works with about 1,500 villages to secure water, sanitation and rural livelihoods, says the villagers had managed to get sufficient food at home in April and May.

This security might not last, he says, because of a few challenges: First, cash income has reduced since public work through the National Rural Employment Guarantee Act (NREGA) and other schemes had stopped during the lockdown. Second, the 20 percent increase in village population (as per Johnson's estimates from the regions he works in) due to reverse migration will put additional pressure on drinking water, sanitation, unpaid domestic labour for women, and housing, among other resources. "Third, fatigue will set in within the government system in a month or so, after which food supply and other essential services will not reach the poor easily," he says.

Johnson has started to aggressively conserve organisational resources to prepare for these eventualities, along with another looming challenge: There won't be enough monetary support coming in. Gram Vikas spends approximately ₹22 crore annually in social projects, about 35 to 40 percent of which comes from companies as part of their corporate social responsibility (CSR). Already, in March-end, a private corporation pulled the plug on a major funding that would have ensured water security in over 100 villages in east Odisha over the next three years, and diverted the money instead to PM Cares, the Covid-19 relief fund announced by Prime Minister Narendra Modi.

"Helping the nation fight Covid-19 will take precedence this year."

SUDHA MURTY,
CHAIRPERSON, INFOSYS FOUNDATION

"We are yet to establish connection with our public sector undertaking (PSU) donors. They will take more time to finalise all the outlays, but have already announced hefty CSR support for Covid relief," Johnson says. "The Jal Jeevan Mission was supposed to be launched [by the water resources ministry] this year, and it was supposed to bring in a lot of CSR support to drinking water and sustainability, but I reckon that will also be affected now."

Under the Companies Act, 2013, India has mandated that every company with a net worth of at least ₹500 crore, or turnover of at least ₹1,000 crore, or a minimum net profit of ₹5 crore during any financial year, should allocate at least 2 percent of average net profits of the last three years toward its CSR policy.

This money can be deployed by the company directly, or through trusts and societies set up by it, or by non-profits acting as implementation agencies on the company's behalf. According to Sattva Consulting, a social enterprise working with NGOs and corporates to implement CSR projects, over 50 percent of total CSR funds are deployed by companies through non-profits.

Data by the ministry of corporate affairs (MCA) as of June, analysed by Sattva, indicates that in the last five years, companies have cumulatively spent over ₹71,277 crore across 105,358 CSR projects in various sectors. The number of companies coming under the ambit of CSR and the amount of money they spend have also seen a year-on-year increase (*see box*).

A report on the CSR outlook for 2020-21 published by Sattva's data platform India Data Insights (IDI) studies outlays announced by the top 300-odd companies by revenue, which collectively account for over ₹10,000 crore of the yearly CSR funds in India. The annual CSR amount is pegged at around ₹15,000 crore based on an average of 2016-19.

According to the report, corporates have already allocated ₹7,853 crore to PM Cares and other Covid-related measures (*see box*). This means that only another ₹7,100-odd crore will be available for all CSR projects in other social sectors, provided companies do not make further allocations to the Covid response. PSUs have made the highest Covid-related contributions, setting aside as much as ₹2,500 crore out of their ₹3,000 crore budget for PM Cares, and another ₹18-20 crore for other Covid relief measures.

"Over 50 percent of the total CSR money has already been spent on Covid-19 relief, and we estimate at least a 30 percent reduction in company profits this year due to the state of the economy. This means there will be that much less available for CSR next year," says Srikrishna Murthy, founder, Sattva.

Another June 2020 report by Crisil Foundation, the charitable arm of

ANIRUDDHA CHOWDHURY / MINT VIA GETTY IMAGES

analytics firm Crisil, estimates that CSR money already given away by companies to Covid-related causes might be as high as 80 percent. "With the notification from the MCA on mandated activities/spending which qualify as CSR spending under Covid-19; as well as assuming companies will continue spending around the mandatory CSR mark, allocation to other—even ongoing—projects could come down," the report states.

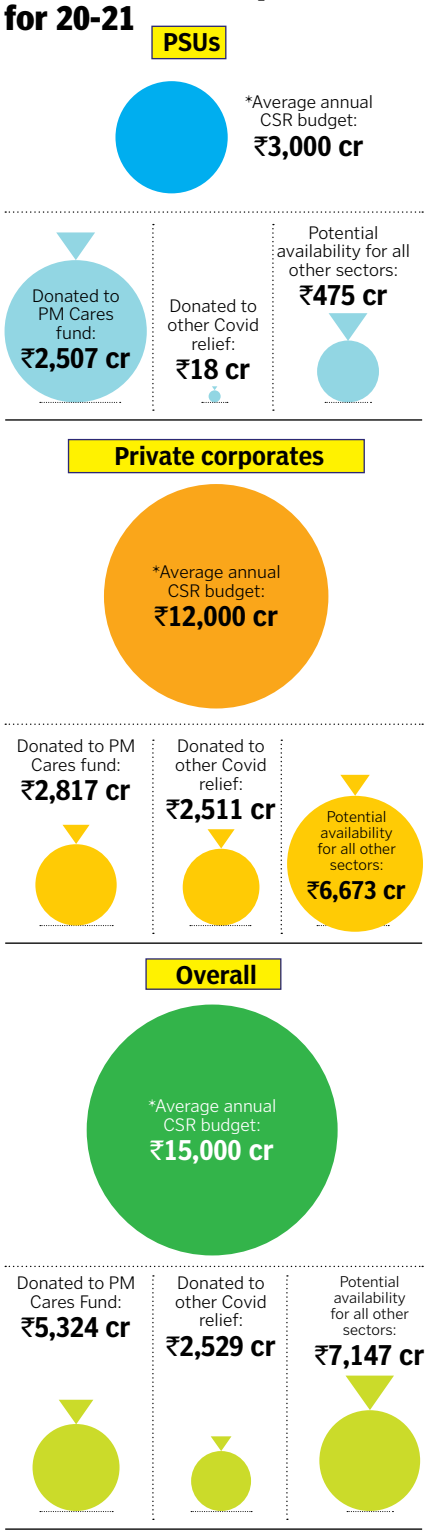
Covid-related causes range from relief to rebuilding, explains Murthy. This includes immediate measures like providing personal protective equipment (PPEs), ventilators and testing kits for hospitals, creating community awareness, distributing sanitisers, masks and meals to the poor, and building Covid health care infrastructure, and longer-term initiatives like upskilling, reskilling and employment avenues. Other critical social sectors that are currently taking a backseat in corporate priorities include water security, sanitation, sustainability, non-Covid health care, arts, sports and nutrition.

"There are several areas in which we operate. However, helping the nation fight Covid-19 and trying our best to positively impact lives will take precedence over many things this year," says Sudha Murty, chairperson of the Infosys Foundation, over email. The non-profit arm of software major Infosys has committed ₹100 crore towards Covid relief. According to the Infosys annual report, Covid-19 forms the biggest chunk of expenditure for the Foundation among various social programmes in fiscal 2020.

Out of a total of about ₹360 crore spent during the fiscal, Covid-related expenditures are approximately ₹73 crore, where ₹50 crore went to PM Cares, and the rest were spent for other relief measures. The latter included protective gear and health supplies to hospitals, food rations to the poor and financial assistance to daily wage labourers.

The remaining ₹283 crore CSR expenditure, as per the report, is divided among 35-odd traditional social sectors, including causes like education, flood relief work, rural development projects, environmental sustainability and health care [like oncology, infant and maternal health]. "It is understandable that the world as we have known is changing rapidly due to this pandemic, and we have to try our best to keep our focus steady and morale high," says Murty, explaining that her team will continue to monitor the situation over the course of the year and extend support accordingly.

Outlook of CSR Spends for 20-21



- PM National Relief Fund has historically received about ₹200 crore annually from corporate CSR contributions
- The PM Cares Fund for Covid response has garnered 25x, more than ₹5,300 crore, in a month

(*Based on average of 2016-2019)
SOURCE Sattva, India Data Insights report

INFOGRAPHICS: SAMEER PAWAR

Survival of the fittest

The uncertainty surrounding the pandemic makes it difficult to determine the exact extent to which other social sectors will get affected, says Abhishek Humbad, founder, Goodera, a technology platform that maps and manages CSR projects for over 200 corporates in India that are in turn associated with over 6,000 non-profits. He believes that it will all come down to NGOs that have strong on-ground networks versus those that do not. "Corporate support will come easily to those organisations that prove that even with lockdowns or other restrictions, they will be able to reach the last mile at the grassroot level," he says.

Murthy of Sattva says non-profits could be forced to make their programmes leaner. "Scholarships and school programmes may stop, child nutrition schemes might get diluted... this will obviously affect beneficiaries," he says, explaining that he is already working with non-profits facing financial crises to see how they can effectively scale down full-blown programmes with minimum adverse impact.

Organisations like Tomorrow's Foundation in West Bengal, which works on primary education for marginalised children and skill development, are seeing layoffs. "A large software company recently

pulled out funding for one of our in-school programmes, saying they do not have money to spare... we had no option but to let go of five people working on that project after paying them a month's salary," says co-founder Swaroop Ghosh.

Since the government is not running any programmes currently, funding for them has also stopped, Ghosh says. "Our only request to corporate donors has been to at least provide enough money to cover staff salaries so that layoffs don't happen. We are already taking money for operations from our contingency fund. It has been a bit of a tough time, but we have to live with it."

An article by advocate Sanchitta Sridhar for online portal *The Wire* states that CSR money going to government funds like PM Cares is contradictory to the recommendations made by high-level committees constituted by the MCA to study CSR spending in the country. The latter has stated that the whole philosophy behind CSR was to use the business efficiencies and innovations of the private sector in delivering public goods and services. The inclusion of PM Cares into the CSR ambit, therefore, is "a convenient tool to soften the outcome of inadequate fiscal preparedness", the article states.

Murthy of Sattva insists that the "intent" of PM Cares is in the right place, but there is "an anxiety about when and how the money will be spent, and the impact it can have on social programmes".

Innovating to stay afloat

Many non-profits and corporations are keeping their existing community associations and projects alive by tying them up to Covid-related causes for the time being. In a note shared with *Forbes India*, Tata Power explains that it reorganised its CSR initiative Dhaaga in which the company enabled women to make and find a market for fashion garments and accessories. During the pandemic, about 1,050 women in the network switched to creating homemade cloth masks. "They have successfully supplied more than 120,000 face masks in Maharashtra and Jharkhand," the company states, indicating that ecommerce site Amazon has expressed interest in procuring cloth masks from the women, providing them a source of additional income.

Companies are currently working on a post-Covid CSR strategy, relooking at social causes, budgets and the teams required to execute these projects, says Humbad. "It will help if NGOs understand these focus areas and weave a narrative around their cause that has a strong Covid link. For example, arts projects could talk about protecting livelihoods of artisans during the pandemic, while those working in education for the vulnerable could focus on helping their beneficiaries adapt to the digital shifts in the sector."

Ghosh is working to launch an impact investment programme to encourage corporate investors. "Instead of just 'free money for jam', this programme will be market-focussed where funders will get some social return on investment," he says, while stating that there is need for companies to have their ears to the ground while allocating CSR funds and go deeper into causes and sectors beyond Covid that need help.

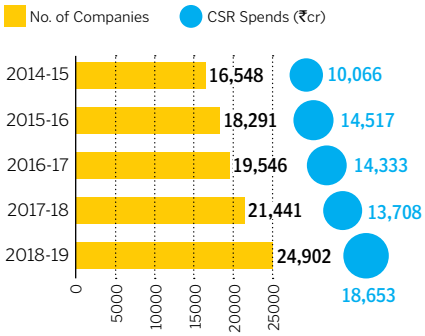
Another hopeful indicator is that companies are going beyond the mandatory 2 percent CSR outlays, meaning that more money could be made available for non-Covid causes. The Crisil Foundation report states that about 64 percent companies spent more than 2 percent on CSR in FY19, compared to 54 percent four years ago.

Humbad says individual corporate employees are signing up to be virtual volunteers, helping NGOs in the non-Covid sectors with essential skills. "For example, they will manage administration or accounting, helping the NGO save that cost," he says. Between February and May, the number of people volunteering to help with their skill sets on the Goodera platform increased from 25,000 to 100,000.

Sattva's Murthy believes that this fund crunch has opened up avenues for capital beyond CSR, including individual donors, crowdfunding, HNIs and family offices. "In the next two-three years, non-profits will have to become more efficient, come up with more innovative, low-cost delivery models. We have to fill this gap together, and hopefully, the government will also help."

Year-on-Year CSR Spends

(Data as of June 2020)

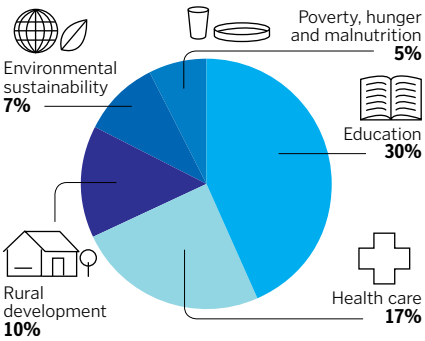


SOURCE Sattva, India Data Insights report, MCA

Most-Funded Sectors

Between 2014 and 2019, the following development causes received most corporate support

70 percent of total CSR money was spent on the following sectors:



Remaining **30 percent** was spent in as many as 23 different sectors, ranging from **arts, sports and women empowerment to water security, animal welfare and senior citizens welfare**

SOURCE Sattva, India Data Insights report

CHAITANYA DINESH SURPUR

Davids Vs Goliaths

Companies across sizes and sectors are tapping into the increasing demand for hand sanitisers, but survival in a crowded market will be an uphill task

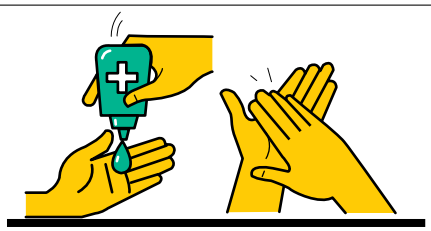
By PRANIT SARDA

Nitin Totla recognises a business opportunity when he sees one. After dabbling in multiple small-scale ventures in the manufacturing industry, including making e-rickshaws, renting out JCB machines and forging metal, the businessman from Indore turned towards the sanitiser market earlier this year. When a nationwide lockdown to tackle the spread of the coronavirus was announced in March, the 48-year-old saw people frantically buying hand sanitisers to prevent infection, and there was a huge gap between demand and supply. Without wasting time, Totla set up Farmacium India Pvt Ltd to secure his place in the growing personal hygiene market.

A report by data analytics company Nielsen India states that as many as 152 new players entered the sanitiser manufacturing market in March. Totla's brand, 'Dr Sanitizer' was one of them. The businessman's strategy to survive the competition was to meticulously follow World Health Organization (WHO) guidelines, which mandated that sanitisers must have over 70 percent alcohol content to be effective. One bottle of Dr Sanitizer contains as much as 80 percent alcohol, and Totla manufactures sizes ranging from 90 ml to 50 litres. Declining to reveal sales or revenue numbers, Totla explains that he sells to various government offices across Madhya Pradesh.

"I know sanitiser manufacturers who add 10-20 percent alcohol but claim it has over 70 percent. Those sanitisers are easily available but don't solve the purpose," he tells *Forbes India*. Given an encouraging initial response, Totla—whose friends from the local hygiene and alcohol market of Indore helped him with the technical knowhow—is now planning to start retailing his product.

Sanitiser manufacturers can be broadly categorised into three segments: Market leaders like Reckitt Benckiser (Dettol), Hindustan Unilever (Lifebuoy), ITC (Savlon) and Himalaya (Pure Hands); recognised businesses entering the industry due to the demand surge, such as N Ranga Rao & Sons (Healing Touch), Marico (Veggie Clean and Mediker), Asian Paints (Viroprotek) and Emami (BoroPlus sanitisers); and fledgling, small-scale players like Totla.



The Demand Surge

Month	Total Unique Buyers	Litres of Sanitiser Sold
January	35	42,000
February	105	215,000
March	3,630	26,41,900
April	3,750	40,12,500
May*	4,918	52,62,260

*For the first 22 days of May

SOURCE TradeIndia

There were two main reasons for new players to enter this market, according to Charu Sehgal, partner and leader, life sciences and health care, at Deloitte India. "First, the huge demand for and the relative ease in making sanitisers made sure many new players entered the industry. Second, a lot of small-scale players who lost their regular business entered this space," she says.

Experts, however, believe the sanitiser market is unlikely to remain so crowded in the long run: While a few players are in this business with a vision to stay and expand, others, particularly the smaller ventures, have entered the market only to reap the benefits of the sudden surge in demand and profit margins created by the pandemic, and are likely to exit as soon as things normalise.

> **"The month-on-month growth has been nearly 4x, and these are just early days."**
>
> **ANGAD AHLUWALIA,**
> VICE-PRESIDENT, BIOPLUS HEALTHCARE

Same product, different strategies

"The month-on-month growth has been nearly 4x, and these are just early days," says Angad Ahluwalia, vice president of Bengaluru-based Bioplus Healthcare, a 70-year-old pharmaceutical company that has launched the SterloMax brand of hand sanitisers and surface disinfectants.

Since mid-April, the company has sold approximately 200,000 units of sanitisers, priced at ₹250 for 500 ml and ₹2,500 for five litres. "As new entrants, we were able to develop a product that was purpose-built to address the [need created by] Covid-19 pandemic," Ahluwalia says, explaining that he was able to leverage the existing supply chain and distribution networks built by his company over the years to help the sanitisers reach the market more efficiently.

Legacy FMCG players like Marico who have entered this space in the last two-odd months believe their brand equity and recall will help them carve a niche in the sanitiser market. The company has launched a sanitiser in April under its 50-year-old brand Mediker, which currently offers hair oil and anti-lice treatment shampoo in the personal hygiene portfolio.

"While this launch was already a part of our plan, the timelines were moved up in order to meet the hygiene demands of consumers during the crisis. The product was launched in record time, keeping in mind the urgency of the situation and the need of the hour," says Koshy George, chief marketing officer, Marico.

The company also launched Veggie Clean in April—a fruit and vegetable cleaner containing no harmful preservatives, soap, chlorine or alcohol—when it realised that people

SAMEER PAWAR

were looking for ways to sanitise fresh produce without chemicals.

Other players in the market include distilleries, who have easy access to the extra neutral alcohol (ENA) that is required to make sanitisers. According to a *Livemint* report, the consumer affairs, food and public distribution ministry on March 26 stated that it had already given permission to about 45 distilleries to start manufacturing sanitisers, and was likely to grant permission to about 55 more.

That is how Diageo India, among the largest alcohol manufacturers in India, joined the bandwagon in March with an aim to produce around 300,000 litres. Separately, the company, as part of its corporate social responsibility (CSR), is also donating about 500,000 litres of ENA.

Alcohol manufacturing giant Radico Khaitan also started supplying to government authorities and primary health workers as part of their CSR programme. Soon, however, the company realised the business potential of the segment, and set its sights on a commercial product. "The use of sanitisers will be an essential part of our living now," says Amar Sinha, chief operating officer, Radico Khaitan.

The manufacturing process came with its own share of challenges. "Every organisation is used to a plan, a prediction, and a capacity they have created. Smaller organisations can get up and start producing whatever they want, [but] for larger organisation the constraints are greater," says Sehgal of Deloitte. Some of these challenges included overcoming transport restrictions, procuring PPE kits for the staff, maintaining social distancing in factories etc.

The survival game

According to the Nielsen India report quoted above, the market share of three dominant brands—Dettol, Lifebuoy and Pure Hands—fell from 85 percent in January and February to 39 percent in March. This was not because of lack of sales, but due to an unprecedented rise in demand and panic buying among consumers, where they settled for a product without caring much about the brand.

"The market has embraced local players like me in this crisis, but in the long term, we can't survive with only this."

ARJUN RANGA,
MANAGING PARTNER,
N RANGA RAO & SONS

Even with the growing competition affecting their overall market share, established sanitiser brands stand to benefit because of economies of scale and volume, given that the government has capped the price of sanitisers at ₹0.5 per ml. "In future, a lot of the demand will come from institutional buyers. The larger, established players will be able to capture that market because buyers would want to go to just one or two suppliers," says Sehgal.

Arjun Ranga, managing partner at Mysuru-based N Ranga Rao & Sons, producer of the Cycle brand of agarbattis and a new entrant in the sanitiser segment, believes it is only a matter of time when the traditional leaders re-capture the market. "Local players like me have come up during this emergency and the market has welcomed us, but in the long term, we can't survive with only this. These [dominant] players will come back, maybe not to the 85 percent market share they had earlier, but they will regain a significant share they have lost," he says. Ranga is drawing on the seven-odd decades of experience his company has in working with perfume fragrances and agarbattis to produce a range of ayurvedic sanitisers certified by the ayurveda, yoga and naturopathy, unani, siddha and homeopathy (Ayush) ministry.

Other smaller players agree that capturing and retaining market share will be an uphill task. "Our strategy will be that which has already given us considerable success in the first few months [of operations]," says Ahluwalia. "We will innovate and develop purpose-built products and delivery systems that cater to the evolving need of consumers. We would also like to look at specific areas of usages. For instance, creating a product that helps in disinfecting shoes as you enter a building."

Totla's survival strategy is to develop PPE kits made of surgical cotton, and expand offerings to include disinfectants and floor cleaners. George of Marico says the company will explore innovations in the health foods segment, since the global shift towards them seem like a permanent one. With public hygiene standards becoming more stringent, there will be innovations in sanitiser dispensing mechanisms too, says Rajiv Gupta, country business leader, health care business for 3M India, a hygiene product manufacturer. The company claims to have seen a huge surge in demand for their range of hand sanitisers, for which the manufacturing capacity of their plants was "increased by about 50 percent".

Ahluwalia believes that with its robust R&D systems, India has the potential to create more advanced sanitisers and delivery mechanisms. "Globally, companies can take a page out of Indian manufactures' books and develop economic solutions to serve and reach all segments of society." F

Sweetened Pill?

Homeopathy medicines such as Arsenicum album 30 and Camphora 1M are being mass distributed as 'preventives' for Covid-19. However, experts say, without enough evidence to support the claim, it is irresponsible to distribute or consume them

By PANKTI MEHTA KADAKIA

Homeopathy medicines, such as Arsenicum album 30, being distributed free of cost under Ministry of Ayush directives in Burdwan, West Bengal

Lakhs of bottles of homeopathy pills—containing Arsenicum album 30 and Camphora 1M variants in particular—have made their way to people across the country and to Indians in other parts of the world as they fight Covid-19. They're being distributed for free by local hospitals, municipalities, even at police stations—and are selling for as low as ₹10 per bottle through homeopaths in India, or as much as about ₹700 (£7) in cities like London.

As Covid-19 cases in India climb steadily, so is the fear of contracting the virus. In just the first week of June, Riddhi Khursange, a corporator from Mumbai's western suburb of Borivli, distributed 15,000 bottles of Arsenicum album 30 in the area. Each bottle has about 70 pills; each family member is required to take just three doses, so the bottle can typically last well beyond a single household.

Arsenicum album 30 is a solution used in homeopathy, made by diluting arsenic trioxide, typically distilled over three days, such that there is little or no trace of the original arsenic molecule left in the final solution. In powder, liquid or pill form, it has been used to treat gastric disorders, inflammation, coughs and asthma.

On January 29, the government's Ministry of Ayush (ayurveda, yoga and naturopathy, unani, siddha and homeopathy) issued a health advisory

SHUTTERSTOCK

to prevent the novel coronavirus, recommending the homeopathic medicine Arsenicum album 30 as a prophylactic. It stated that the Central Council for Research in Homeopathy (CCRH) and a group of experts "have recommended that homeopathy medicine Arsenicum album 30 could be taken as prophylactic medicine against coronavirus infections. It has recommended one dose of Arsenicum album 30, daily on empty stomach for three days. The dose should be repeated after one month by following the same schedule in case coronavirus infections prevail in the community".

In the following months, this and other homeopathic drugs have been prescribed across the country as 'coronavirus preventives'. State governments of Rajasthan, Karnataka, Tamil Nadu, Andhra Pradesh and Kerala have endorsed its usage too, and in Maharashtra, it is being recommended by the Brihanmumbai Municipal Corporation, government hospitals and the state police.

The state police has also recommended another homeopathic drug called Camphora 1M, which uses the active ingredient camphor, used in over-the-counter cough and cold remedies. This drug gained popularity as an immunity builder against the novel coronavirus when Rajiv Bajaj, managing director, Bajaj Auto, gave an interview to *India Today*, endorsing its use. According to the report, Bajaj Auto set up a homeopathy centre in Pune and distributed more than 67,000 bottles of Camphora 1M. Bajaj said his employees were given homeopathy preventives during the swine flu menace in India 10 years ago too, and none contracted the disease, even though Pune was the epicentre in India.

Experts, however, say there is little scientific evidence to support these claims. As per the Ministry of Ayush notification, Arsenicum album 30 has been declared the 'genus epidemicus', a term in homeopathy that refers to a 'combined symptoms of a large group of people afflicted with a disease or epidemic, or a remedy that covers all the symptoms which that particular epidemic is capable of producing'.

"This genus epidemicus was declared on January 29, when the first Covid-19 case in India was detected only on January 30," says Dr Bahubali Shah, former president of the Maharashtra Council of Homeopathy. "The question arises, where have they collected the data from? I've been asking for the source of data and size of sample since Day 1, to no response. At a time like this, we need transparency. Give us the analysis; tell us the three or four medicines that were considered, and why Arsenicum album 30 was picked as the genus epidemicus."

According to Shah, a genus epidemicus is considered a correctly identified prophylactic for a disease if more than 60 percent of patients respond well to it. "What sort of follow-ups have been done? If I am to declare this drug a prophylactic, I need to follow up with patients and see how they are reacting to it. It is the responsibility of the CCRH to fix a protocol for this."

Repeated calls from *Forbes India* to the office of CCRH director general in-charge, Dr Anil Khurana, went unanswered.

Pills for the Pandemic

Homeopathy drugs being used against coronavirus:

Arsenicum album 30: The most popular variant in India, endorsed by the government's Ministry of Ayush as the genus epidemicus, or choice of prophylactic, to fight against the novel coronavirus

Camphora 1M: Used in over-the-counter medicines to treat coughs and colds, popularised by Rajiv Bajaj, MD of Bajaj Auto, as an immunity builder against Covid-19

Bryonia alba: According to a report in *The Hindu*, a trial on 44 Covid-19 patients in Agra showed Byronia alba as more beneficial than Arsenicum album 30. The findings were submitted to CCRH and doctors are enrolling more patients for trials

Eupatorium perf 30 and Lycopodium 30: Two generic homeopathy variants recommended by Dr Kalyan Banerjee's Clinic in New Delhi, to be taken in combination with Arsenicum album 30 for 14 days; dosage could be continued if in containment zone, with doctor's consent

"The right approach would be to conduct a proper scientific randomised trial to understand the efficacy of the said homeopathic medicine," says Dr Ramakanta Panda, leading cardiovascular thoracic surgeon, and vice chairman and managing director of Asian Heart Institute, Mumbai. "It can be used if the study findings suggest so. My concern, however, is that it should not give people a false sense of security. People should not become complacent and stop following the recommended preventive measures to avoid transmission of coronavirus—maintaining physical distance, wearing masks and frequent hand-washing."

Panda cites the example of hydroxychloroquine, which is under debate as a treatment in Covid-19 clinical trials. "The jury is still out on its efficacy," he says. "It has now been found to cause heart rhythm problems in some patients, and therefore should be administered only under medical supervision."

There are two ways in which a human body develops antibodies against a virus to neutralise it, Panda adds: Administering clinically proven antiviral medication or vaccines; or supportive treatment to improve the body's immunity to fight. "The body's immunity can be improved in many ways, including a good night's sleep, regular exercise, consuming vitamin C and D, and so on—these have all been scientifically proven to increase immunity. However, Dr Anil Khurana [of CCRH] himself has said that homeopathy is being used in trials as an adjuvant, and not standalone."

The most effective way to prevent Covid-19, Panda adds, is if both parties in contact are wearing a mask and maintaining social distance. "These are protocols that can bring down your risk of contracting infection to 1.5 percent. No medicine can make that claim yet."

While there isn't enough data to promote the homeopathic drugs

INFOGRAPHICS: SAMEER PAWAR

as preventives in this pandemic, many believers say they could still do the job of boosting immunity, and since they are diluted, cause little in way of side effects.

There are two issues when it comes to this—one is that with local corporators, NGOs and so on giving them out by the thousands, there are virtually no records of where and how the pills were prepared; the second is a false sense of security. If not diluted to the extent required, arsenic poisoning can be toxic, even causing cancers.

"If taken in the dosage that is suggested, there are few chances of side effects," says Shah. "However, if I'm a layman, I could obtain three bottles from three different sources, and I might think that taking more medicine will make me more secure. The recommended dose is one a day for three days, but since they are not under direct doctor supervision, people could take it for 15 days, even three weeks. When you administer such a medicine to a healthy person, in large doses, it has the capacity to produce the very symptoms it is meant to cure. It is highly irresponsible to distribute it at mass levels."

"One of the bigger dangers is that it leaves the field open for any practitioner to advise any medicine, and depending on his or her sphere of influence, ensure that it is taken," adds Dr Kushal Banerjee, consultant homeopath at New Delhi's Dr Kalyan Banerjee's Clinic, which operates branches in 18 countries. "Clear instructions on continuing to follow public health advisories need to follow the prescriptions."

Dr Kalyan Banerjee's Clinic, by March, had advised a homeopathic plan to about 15,000 patients in 18 countries. "One of the components of our protocol to improve immunity, keeping in mind the symptomology of Covid-19, includes Arsenicum album 30. But we're also advising Eupatorium perf 30 and Lycopodium 30, two other generic, easily available homeopathic medicines. We feel that the rate of infection of something like Covid-19 and the parts of the body it can potentially affect are best covered by these medicines."

"The right approach would be to conduct a proper scientific trial to understand its efficacy."

DR RAMAKANTA PANDA,
VC & MD, ASIAN HEART INSTITUTE, MUMBAI

Homeopathy: Debate Around the World

- Homeopathy became popular as an alternative to traditional medicine in the 19th century. However the global medical community has been divided on its recognition as a full-fledged form of discipline
- Detractors say that homeopathy drugs are too diluted to have any effect beyond placebo; however, practitioners believe it is an individualised form of remedy that can stimulate the healing process
- India leads the world in the number of people using homeopathy, according to the Homeopathy Research Institute. As per a 2007 study, 100 million people depend on it as their only form of care
- In 2020, a Spanish court ruled that it "is not only ineffective, homeopathy can put [a person's] health at risk"
- In 2017, the UK's National Health Service (NHS) said general physicians and other prescribers should stop providing it, because they found "no clear or robust evidence to support the use of homeopathy on the NHS", since it is typically privately practiced
- In France, the health minister announced that she would phase out insurance reimbursement for homeopathy by 2021. In 2018, Austria's Medical University of Vienna stopped teaching homeopathy to students
- In countries, including India, Dubai and the US, it is a widely well-regarded discipline. The Government of India has given it new impetus and legitimacy with the setting up of the Ministry of Ayush

Even so, Banerjee is cognisant of the limited evidence available. "At the time the advisory came out, it was based mainly on an analysis of what symptoms were known to us. But we also conducted our own survey in March, to go back and see if it does have a protective effect. We got responses from about 11,500 people. We found that the protective effect is significant, but this is limited to our three-medicine protocol. We couldn't get details from outside our practice."

"It's important to point out that there are limitations to a study like this too, and we're still in the process of getting it published and going through the hoops that you have to, to get something like this into the public domain," he adds.

"Some of the limitations are that we are all observing other protective measures as well. For homeopathy to be given all the credit is not correct either. But in terms of an evidence-based approach, and given that it is a novel entity, this is a small step in creating the best evidence that we have."

Banerjee adds that the doctors at his clinic have been asked to go out of their way to explain these limitations to patients—by May 1, about 50,000 patients had been given the protocol advice, along with the caveats. "It actually reduces interest in taking the medicine, but it's what we're ethically bound to do," he adds.

In the third month of the lockdown, as India begins to reopen with restrictions, there's a lot of fatigue setting in even among those who have been extra careful. "People are tired of taking precautions," says Banerjee. "So somehow, taking what you think will protect you against the virus may additionally feed that fatigue."

Splendid Isolation

Snapshots of life in quarantine in the midst of a pandemic

By NAINI THAKER & MADHU KAPPARATH

COURTESY: TANVI HUBLI

Tanvi Hubli

Age: 21
Amateur golfer

The greens were replaced with a carpet and the golf course with a hotel room for amateur golfer Tanvi Hubli, when she travelled from Ahmedabad to Bengaluru, and went through a seven-day quarantine at The Leela Palace.

Hubli has been training in Ahmedabad for the past few years. When the lockdown was announced, "I was living in a service apartment with two roommates. But the landlord was creating several issues, including not maintaining proper hygiene," she recalls. Soon she moved to a friend's home. "I had a great time and felt like a part of their family," she says. "But I really wanted to go home."

However, there was no clarity on where she would be staying after returning to Bengaluru. "It was only after landing that I was given the options," she says. Being a sportsperson, living in a confined space for seven days does not come naturally to Hubli. "But I was prepared." To keep herself busy, Hubli would either putt or work out. Apart from the loneliness, her quarantine experience was quite smooth. "The staff was very helpful; they had a doctor on call; if we ordered something they would pick it up and deliver it to our room," she adds.

Things were not normal when she finally made it home. "I came home after six months, but I couldn't hug my parents, sister or my grandmother," she recalls, spending time in isolation in her room. "This is like a full-stop to everything. It made me realise I had forgotten how to enjoy life."

Pavit Dhillon

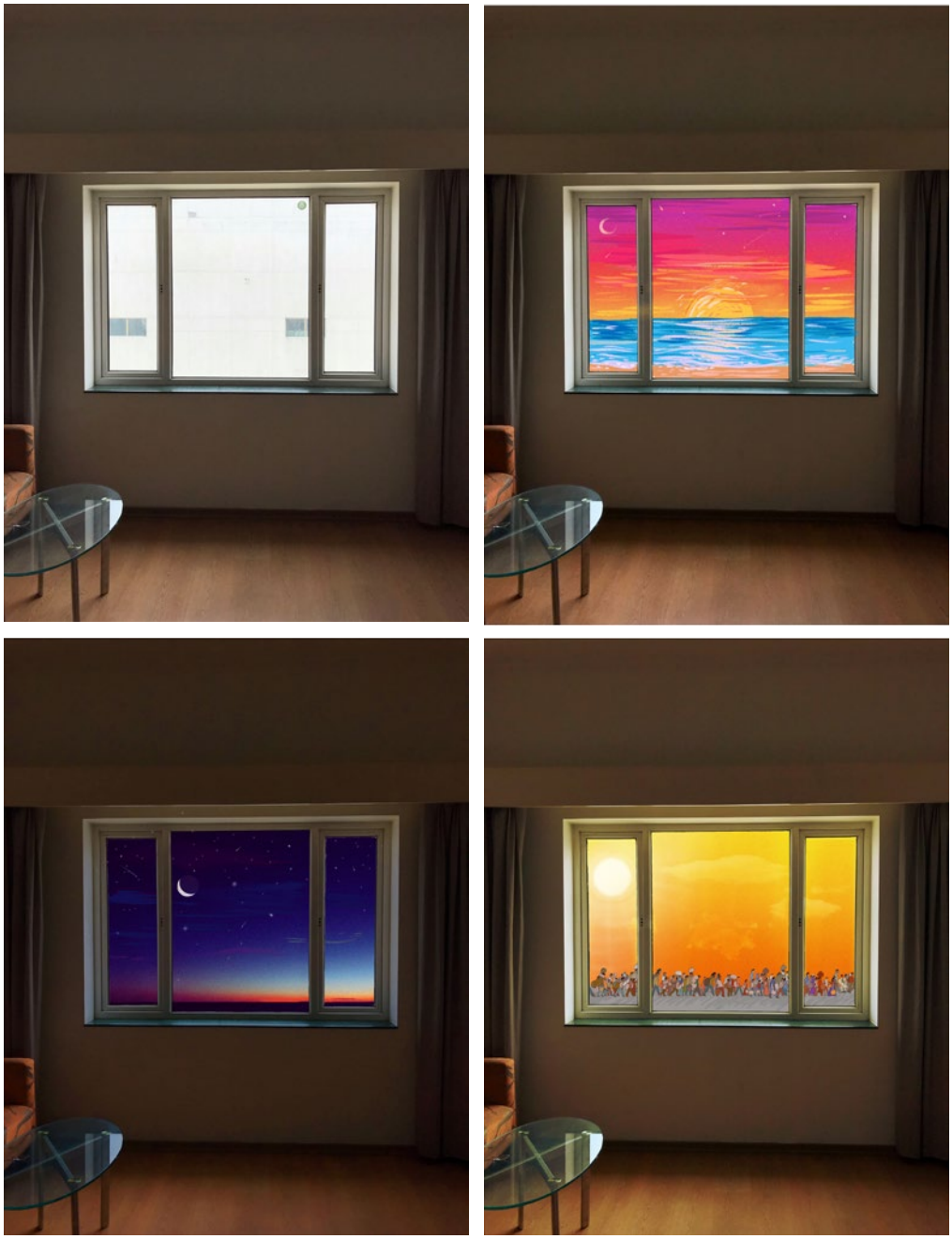
Age: 27 **Pilot**

Pavit Dhillon had just finished his course at JetExe Aviation in Sacramento, California, and was all set to come back home on March 22, when India announced its lockdown. He was stuck in Sacramento for exactly two months and two days, with nothing to do. "I was done with everything I was supposed to, and we weren't even allowed to work," he says. Luckily for Dhillon, his landlord allowed him to extend his stay, but "we were paying through our nose". There were other Indian students who were stuck, so there was good company. "There was no lockdown in the US; it was a stay-at-home order. So we played board and card games."

However, Dhillon had not seen his family for more than a year and couldn't wait to return. "In April, the Indian embassy had asked us to register so they could keep tabs on how many Indian students were stranded and wanted to come back," he says. "Once the Vande Bharat mission was announced, on May 10 I got to know I was selected to fly on the May 13 flight back to Delhi."

On landing, he was put in a 14-day quarantine at Le Meridian, New Delhi. "I picked this hotel since it was close to home," he says. "The experience was pretty amazing; they were serving us three meals. I couldn't complain." But, as expected, the stay was expensive, Dhillon paid ₹45,000 for 10 days. "I could have stayed at a government facility, but I chose to prioritise my safety."

COURTESY: PAVIT DHILLON



COURTESY: PRIYADARSHINI KACKER

Priyadarshini Kacker

Age: 35
Landscape Architect and Illustrator

"This room is so depressing," Priyadarshini Kacker thought to herself, the minute she stepped into her hotel quarantine room at Lemon Tree Hotel in Ghaziabad.

Kacker was in Australia for a vacation when the lockdown was announced. For close to two months she stayed in an Airbnb in Gold Coast. "I was happy to stay for longer, if that meant avoiding quarantine in India," she explains, "but my father is high risk and my parents were alone, so I decided to come back."

"It wasn't the journey back I was anxious about, it was the quarantine," says Kacker, who took the first Vande Bharat flight from Sydney. And unlike what she expected, it was packed. She says that despite asking repeatedly, she was not informed where she will have to quarantine till she reached India. "The quarantining rules weren't clear and the lack of communication was getting on my nerves," she says. Contrary to popular belief, idividuals had to pay for the flight and hotel stay, and Kacker says it was not cheap.

The only thing that kept her going was her iPad. When she saw the view from the window, she says, "It was like a blank canvas, and I started drawing after months, 'A room with a view'.

Swati Ganeriwala

Age: 28
Head (accounts), Vinod Garments, Nashik

Every evening at 5.45, Swati Ganeriwala would wait in the balcony, connected to the living room, but separated from it by a glass door. It would be time for her husband to be back home, but unlike the usual hug, she'd only see him through the glass door.

Ganeriwala went to visit her parents in Guwahati on March 16 and was scheduled to return on March 30. And although the pandemic had reached India, she didn't expect things to turn out as they did. "We never expected the flights to stop," she says. "Even when they did, I had made my peace with the three-week lockdown. Then the situation kept getting worse, and after the third lockdown I was fed up."

When the flights finally started on May 30, she flew back to Mumbai and then drove to Nashik. "Of course I knew the risks and took all possible precautions, not letting my guard down even once through the journey," she says.

Once she was home, she isolated herself in a room for seven days. "Every free minute my mother-in-law and grandmother got in the day, they kept me company," she says. "Once my husband and father-in-law were home from work, they spent all their time with me." Ganeriwala likes having a plan and having things under control, but the one thing this experience taught her was patience and learning to deal with uncertainties.

SHRUTI JAIN

Sonali Bhadani

Age: 27

Assistant manager, finance, InterviewBit

When the nationwide lockdown was announced, Sonali Bhadani had three weeks left in her notice period at Ernst & Young India, and was expecting to begin her new job at Bengaluru-based startup InterviewBit on April 20. She had assumed things would be back to normal in a few weeks. But they only kept getting worse.

Bhadani had not expected to be greeted by her new teammates over a Zoom call on the first day of her new job. A week into it, she was already struggling to balance work and home chores. "One might think it's easy, but it is really not," she says. "There were days when my roommate and I were so caught up with work, our only proper meal would be dinner."

Finally Bhadani took the tough call of flying back home to Ranchi. "We did a lot of research and took all the necessary precautions—from gloves to face shield—I was prepared to wear a PPE kit too," says Bhadani. "But my younger brother, who is a doctor, told me how suffocating it is inside a PPE kit." The anxiety of travelling during a pandemic remained with her till she reached home. "At every step, I was reconsidering the decision."

From June 5, Bhadani was isolated in her room for seven days. "Even though I am home, this situation is not easy. It gets very depressing at times," she says. "I have a niece and a nephew, both one-year-old. This is only the second time I am seeing them. I want this to end, so that I can go and hug them."

Isha Shah

Age: 33 **Lawyer**

R.TORDY

In the first week of March, a day before her flight back from Cologne in Germany to Mumbai, Isha Shah had to undergo an emergency surgery, and was asked to avoid travel for at least 10 days. Once better, she could travel back but would need to undergo institutional quarantine in a government facility. "Given that my immunity was already very low, I decided to avoid travelling," she says, "which, in hindsight, was a good decision. I developed some post-surgery complications, and was hospitalised again."

The 33-year-old lawyer was on holiday in Germany for two and a half weeks, which turned into a four-month stay. "I was between jobs, and decided to come visit a friend here and attend the Cologne Carnival," she says, from her friend's home in Cologne. "Not only have I learnt the German way of living, but also experienced some medical tourism." Her visa was first extended till June-end, and then till the end of July.

Although there were uncertainties, Shah has been enjoying her stay. Even when things were bad, "there was a lot of confidence in the way testing was being done, people were allowed to leave the house in pairs and it was reassuring to see people following rules and being disciplined," she says.

In the next few weeks, Shah is set to fly back as soon as there is a direct flight to Mumbai, and stay quarantined in a hotel. "Nothing in life is certain. One day you think you are going on a holiday, and then a pandemic hits, and changes everything."

Shivangi Dave

Age: 25

Student, MDes Design Innovation, Massachusetts College of Art and Design, Boston, USA

"After two months at home, stepping outside my house was a surreal feeling," says Shivangi Dave, who finally took her father's bicycle for a spin when lockdown restrictions were eased. "I have never seen Ahmedabad this peaceful. I have started observing the little things, like how people smoke now—they have a mask, they remove it, and put it back on every other second. It's live entertainment." During the weeks at home, though, it had been an overdose of technology, with watching TV shows or movies, and listening to music.

Two months ago, Dave had little choice but to pack up and fly back from Boston. "All my relatives were in the red zone. I either had to find accommodation outside my campus overnight, or come back home." And given that the rest of her semester would have online classes, she chose to return. She landed in Ahmedabad on March 22; and thus began a 14-day room quarantine for her, and a home quarantine for her family. "My mom would do video calls with me," Dave laughs. "My online classes were continuing as per Boston hours. So it felt like I was still living there."

Being confined in a room was not easy. But college assignments kept her busy. Finally, getting out was a relief. "I would find excuses to go and buy groceries, even if it was a 5-minute drive," she says. "The roads were empty, but I would drive slowly, just so I could enjoy being outdoors."

JAY DAVE

TANVI MURJANI

Kamlesh Murjani

Age: 44

Former head of operations, Artista, Dubai

Kamlesh Murjani was in Dubai when countries across the world started announcing lockdowns. Although he had been there on work for close to six months, the anxiety of not being with his wife and children in Bengaluru in the midst of a pandemic was giving him sleepless nights. "I wanted to be there for my family," he says.

Murjani knew the economy was in a bad state and would only get worse. Yet, he quit his job at Dubai-based architectural and interior product company Artista, and booked himself on one of the repatriation flights. But the fear of travelling loomed large in his mind. "I had to take the tough call because there was no certainty of when this would end," he explains. "I couldn't be away from my family for that long."

Once he reached Bengaluru, he was in a hotel for seven days. Murjani's coping mechanism was simple: To treat quarantine as though it was a regular work day. "I avoided all possible negative thoughts and my family and friends were constantly in touch with me," he says. "But the fifth day is when the solation finally got to me." When he got home, it was another seven days of home quarantine.

On June 5, when his quarantine ended at 9.45 pm, his wife Tanvi and children got him a cake to celebrate. "Usually, when I come back from Dubai, I'm very excited to see them. But this time I felt emotionally drained, as though some war had just ended."

Speed-dialling Change

A flurry of investments in RIL's Jio Platforms means the pace of evolution for all players will rise multi-fold

By SALIL PANCHAL

India's top telecom companies—Jio Platforms, Bharti Airtel, Vodafone Idea and the state-run BSNL—are in the midst of a phase they have not seen in years. A series of investments flowing into the leading player Reliance Industries Limited's (RIL) Jio Platforms has led to private equity firms, investment bankers and analysts closely mapping the average revenue per user (ARPU), subscriber costs and churn of these firms. It is a far cry from recent years when they battled more stringent regulatory hurdles and price wars, while competing among nearly 10 players.

In about six weeks, Facebook and eight other global giants—Silver Lake Partners, Vista Equity, General Atlantic, KKR, Mubadala Abu Dhabi, TPG, L Catterton and Abu Dhabi Investment Authority (Adia)—announced 10 separate investments into RIL's wholly owned subsidiary Jio Platforms, which has evolved from a voice-and-data connectivity player to one with integrated ecommerce and online payments platforms. (RIL is the owner of Network 18, publisher of *Forbes India*.) Over a fifth—22.38 percent—of Jio has been sold to these investors for a combined total of ₹104,326.65 crore (around $13.7 billion).

The fresh interest in India's telecom space continues to be driven by the potential of internet usage and consumption per user

Facebook—seen as a strategic investor with a 9.99 percent stake in Jio—is keen on the verticals related to retail and digital payments, and in building synergies with RIL. It brings its strength of data analytics and the experience of building platforms such as Instagram. Global technology investor Silver Lake had backed China's ecommerce giant Alibaba prior to its IPO in 2014, and RIL is hopeful the same would work for Jio. Most of the other investors are of a financial nature, though Adia, which has a special focus on insurance, could find synergies with RIL and Jio in the future.

Jio's rivals, Bharti Airtel and Vodafone Idea—for whom cash flows and profit could come under a cloud on account of past dues to the government—are unlikely to be overlooked. American technology giant Amazon is believed to be in talks to buy a 5 percent stake in Airtel for a value of $2 billion. Talk of a potential investment by Google into Vodafone Idea is also doing the rounds, though both Airtel and Vodafone Idea have denied such developments.

Connectivity is the backbone to growth engines such as community, content, commerce, currency and capital, in order to build a digital technology matrix, says Greyhound Research, a digital and technology research and advisory firm. These

SUMIT YELPALE / EYEEM / GETTY IMAGES

are the areas that Jio and Airtel, which have the financial muscle, have covered and compete in with a vast range of products (see table).

"Reliance's strategy has been vertical integration, by owning assets and portfolios, essentially the supply chain end-to-end," says Sanchit Vir Gogia, founder and chief executive of Greyhound Research. Airtel, backed by SingTel, the largest shareholder in holding company Bharti Telecom, has grown in size through partnership-led strategies.

Backed by entertainment content from partners such as Zee5, HOOQ, Netflix, Amazon Prime and Eros Now, Airtel's Xstream and Wynk—which competes with JioSaavn—will continue to drive growth in the coming quarters. JioSaavn, a market leader, announced a special offer for June to get brands to advertise on it, after LinkedIn's former director for marketing solutions, Virginia Sharma, joined the streaming platform in May.

With the country under lockdown for 10 weeks, telecom had remained one of the backbones of activity, as people increased the usage of voice calls, home broadband and video conferencing applications to communicate and continue with business activity while working from home (WFH). Just a few months prior to the Covid-19 outbreak, telecom companies had announced a steeper-than-expected hike in tariffs for pre-paid plans in December 2019.

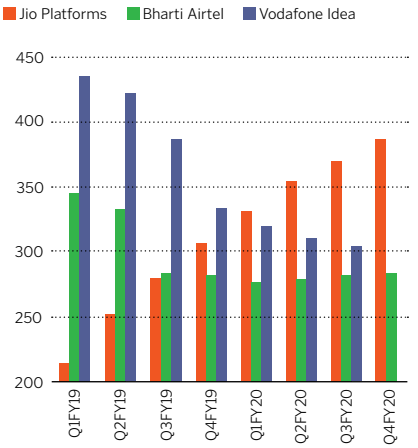
In May, Airtel reported an 8.1 percent jump in revenues at ₹23,723 crore, its highest in at least 30 quarters, led by strong ARPUs, which firmly indicate that it will be able to bridge the widened revenue gap with Jio. During the first four weeks of the lockdown, Vodafone Idea has upgraded 66,000 cells (a geographic area that is covered by a single transmitter) with more capacity across India, and it is on course to complete its network integration—as part of the Vodafone India and Idea Cellular merger—by end of June as scheduled.

Jio Platforms vs Bharti Airtel: A Glimpse of Some Products

Category	Jio Platforms	Bharti Airtel
Connectivity		
Smartphones	Co-branded devices	Co-branded devices
Fibre to homes	Jio Fiber	Airtel Xstream Fiber
Mobile broadband	4G	4G
Content		
Learning	eEducation	Shaw Academy
Music	JioSaavn	Wynk Music
Entertainment	Jio Cinema, JioTV	Airtel Xstream (content from Zee5, HOOQ, Netflix, Amazon Prime and Hotstar)
Commerce		
Consumer electronics	Reliance Digital, Jio Digital Life	Airtel Stores
Groceries	JioMart	Big Bazaar partnership
Workplace collaboration software	JioMeet	Video, audio conferencing, partnership with Google for G-Suite
Currency		
Online payments	JioMoney wallet, Jio coin	Airtel Money wallet
Capital		
Payments Bank	Jio Payments Bank	Airtel Payments Bank

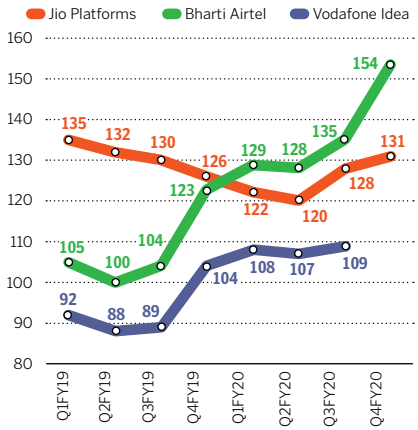
SOURCE Greyhound Research

Total Subscribers (mln)



SOURCE Companies
* Vodafone Idea is yet to announce its Q4FY20 earnings

ARPUs (₹): On the Rise



SOURCE Companies, Motilal Oswal Securities, Jefferies India

MAKE-OR-BREAK PHASE

"This is the time to put a shot in the arm; it is the make-or-break period," says Gogia. Earlier there was no lead player but now Jio has emerged as the new incumbent, leading in both revenues and market share. "The pace of change has now risen manifold due to its presence."

The fresh interest in India's telecom space continues to be driven by the potential of internet usage and consumption per user, even as Indians—backed by cheap data plans, inexpensive mobile handsets and an insatiable need for content—are upgrading to 4G networks. Of the 1.1 billion subscribers of telecom services, only 55 percent use the internet. But data consumption per Indian is high, at 11 GB per month, according to data by Nokia this

February. "This is why investors such as Facebook and others are betting big on India," says Isha Chaudhary, director at Crisil Research.

Since March, home broadband and improved Wi-Fi and bandwidth levels have become essential due to increased video conferencing, webinars and streaming of live events. Zoom, WhatsApp and Microsoft Teams have emerged as the most frequently used online communication tools in the Covid-19 world, according to Voice&Data. Jio has already started to promote WFH through Jio Connectivity and Microsoft Teams. The Jio-Microsoft alignment is "similar to how Microsoft started its engagement with Ola", says Gogia.

Critical among all elements will be how Facebook's WhatsApp develops in India, its biggest market, with over 400 million monthly active users. WhatsApp has signed a commercial agreement with Jio—through its ecommerce venture JioMart—to boost Reliance Retail's commerce business. From an ordering platform, the aim is to provide a payments solution on the same app. But WhatsApp will have some catching-up to do with Google and Amazon, which already have digital payment apps.

DIGITAL ADVERTISING: THE NEW MARKET

With Jio gaining leadership position among subscribers and Airtel stabilising its position as a worthy rival, global technology giants understand the need to invest in these digital platforms. Despite huge databases, telcos have little or no capability to process and drive digital advertising.

"In India, these technology giants find a large and captive customer base, which is the largest market left for them in the world, especially since all of them got cut out of China," says Rohan Dhamija, head (Middle East and India), Analysys Mason, a global consultancy and research firm. "There are synergies that can be driven by these technology companies selling their products or increasing units to this captive base."

"Reliance's strategy has been vertical integration, by owning assets and portfolios, essentially the supply chain end-to-end."

SANCHIT VIR GOGIA,
FOUNDER AND CHIEF EXECUTIVE, GREYHOUND RESEARCH

According to Dentsu Aegis Network, a global ad and marketing services group, the digital advertising industry is set to grow to ₹58,550 crore by the end of 2025, clocking a CAGR of 27.42 percent. Though digital advertising rates for buyers have dropped in the past two months, they are likely to improve in June and July.

While the focus is on Jio's evolution, Airtel—with its deep pockets, and a steady subscriber base—cannot be displaced. Its wireless revenues and ARPUs grew faster (see box) than Jio's in the March-ended quarter, and "it reinforces our view that Bharti may have closed the gap with Jio on revenue trends, and market share between the two players should not diverge here on", says Manish Adukia of Goldman Sachs. Airtel's stock has gained 25 percent year-to-date at the BSE.

To repay government dues, Airtel had raised $3 billion through a qualified institutional placement and a foreign currency convertible bond in January. Airtel maintains it has paid off its outstanding adjusted gross revenue (AGR) dues, which it estimates at ₹13,004 crore, but is only a third of the department of telecom's (DoT) assessment.

FIGHT FOR MARKET SHARE

With higher capital outlays in the form of government dues—estimated to be ₹58,250 crore by the DoT—and additional investments required towards upgradation of 4G networks, Vodafone Idea is not comfortably placed, considering that both parent companies Vodafone Group and Idea Cellular are unlikely to pump in fresh money soon. The Supreme Court has asked telcos to file individual affidavits detailing the roadmap they propose to clear the dues.

When the Vodafone India and Idea Cellular merger was announced in 2018—it will be completed by June end—it was the largest telecom firm in India, with 408 million active subscribers and 41 percent of the revenue market share. It has since lost 10 percent market share. "Vodafone Idea will continue to shrink to retain a 15 to 20 percent market share on a pan-India basis, and India will become a 2.5 player market over the next few quarters," says Dhamija. Vodafone Idea declined to comment on its future strategy, being in a silent period. A company spokesman says: "Vodafone Idea is moving to a new operating model, which is leaner, agile and more cost-efficient." It will see its pan-India presence of 22 circles being clubbed into 10 clusters.

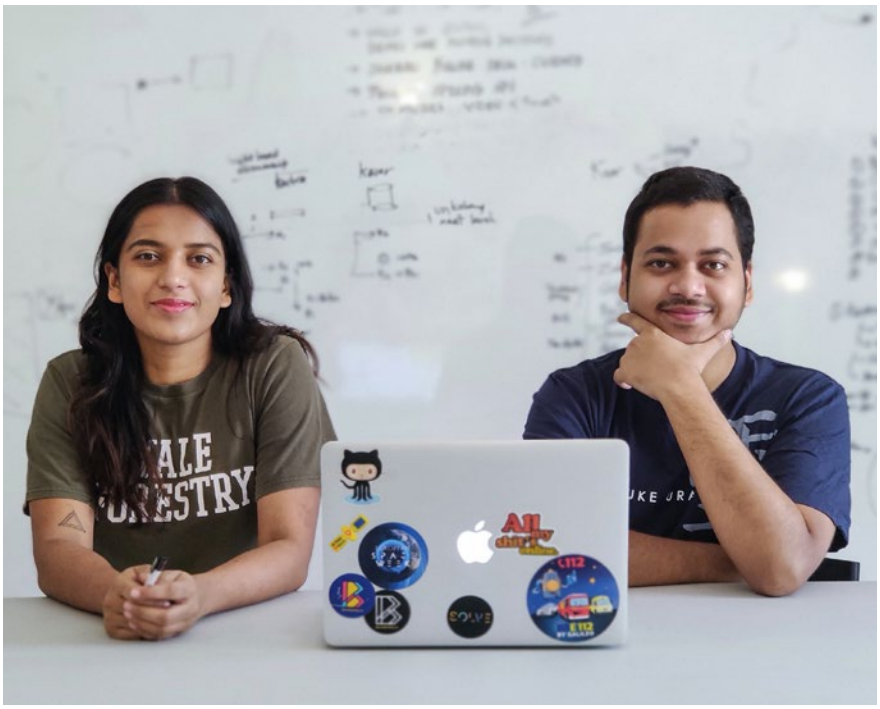
It will need to focus on these clusters—where in some areas it is the leader—and try to ebb the loss of subscribers by investing more in 4G network. Gaurav Dua, head of capital market strategy, Sharekhan by BNP Paribas, says: "There is scope for it to improve cost efficiencies by cost-optimisation and investing in re-farming of spectrum [re-deploying spectrum and re-allocating it to others]." He pegs Vodafone Idea's enterprise value to be at a 25 percent discount to Airtel, in terms of valuation, which factors in the uncertainties relating to outlays.

In the near future, tariffs will continue to rise and ARPUs too will improve as customers spend more. So, will networks remain neutral? The debate will continue. The next 24 months will decide the new direction the industry will take. F

A Bloomberg For Green Data

Blue Sky Analytics collects and processes environmental data that can be used by governments and companies to help deal with situations arising out of climate change

By MANU BALACHANDRAN



Abhilasha Purwar and her brother Kshitij founded Blue Sky Analytics in 2018

In the early 1980s, soon after he was sacked as a partner at Salomon Brothers, Michael Bloomberg knew what he had to pivot to. Data was fast emerging as the new oil. It was all about providing accurate real-time data to help decision-makers, corporates and traders in their quest for profits. Over the past four decades, economies have boomed and corporate fortunes grown, and the gamble has paid off. Today, Bloomberg is the world's 16th richest man with a fortune of over $60 billion.

His eponymous Bloomberg LP has become one of the world's largest financial information and media companies. The Bloomberg terminal has over 325,000 users with subscriptions costing between $20,000 and $24,000 annually. It is a powerhouse of data and research on companies, financial instruments and exchanges from all over the world, which helps traders, analysts and executives make financial calculations, compare investments, analyse and make decisions.

Inspired by the business model, Abhilasha Purwar and her brother Kshitij—working out of a basement in Gurugram—are laying the foundation to build a Bloomberg for the environment. Founded in 2018, their company Blue Sky Analytics collects raw environmental data from public and private sources, uses its technology to decipher the data and makes it user friendly before offering it to potential buyers, including governments, insurance companies, health care providers and agroforestry companies.

Blue Sky Analytics was the winner of $360,000 in prize money at MIT Solve, an impact-focussed initiative of the Massachusetts Institute of Technology, in May. "A health care company may need to provide medicines in case of severe air pollution and plan its supply chain based on the crisis," says Purwar, 29, who is CEO. "Similarly, insurance companies need to make decisions based on environmental risks. We aim to be a platform that can provide all kinds of environmental data that is easy to understand. We are building the Bloomberg for environment data."

The focus on environment is now more crucial than ever. In the past year, the world witnessed the Australian and Amazon forest fires apart from numerous cyclones and unpredictable weather patterns. India ranked 5th in the Global Climate Risk Index 2020, prepared by Bonn-based think tank Germanwatch. In 2017, it was the second most affected country in terms of casualties related to extreme weather. According to the World Health Organization's global ambient air quality database, 11 of the 12 cities with the highest levels of small particulate matter (PM2.5) are located in India. "To deal with the climate change crisis, we need to have important data... we can't solve it without adequate data sets," says Purwar.

The company crunches terabytes of complex data from numerous satellites owned by Nasa, European

Space Agency and various private providers before doing multiple levels of processing and advanced analytics on it through its proprietary artificial intelligence-enabled infrastructure.

Already, two products, Breezo, an app that helps study air quality data across days, months and years from all pollution control boards in India, and Zuri, a platform to measure and monitor farm fires and stubble burning in India, have been launched. Blue Sky Analytics is in the midst of building a database on forest fires, underground water levels and the storage capacity of lakes, among others. It has started providing environmental data to the governments of Delhi, Madhya Pradesh and Maharashtra.

"Our vision is to build the world's largest spatially and temporally continuous dataset on key environmental parameters and transform the monitoring, diligence and risk assessment systems in India and globally," says Purwar.

Blue Sky Analytics also won the AI Innovation Challenge hosted by Schmidt Futures, the foundation run by former Google CEO Eric Schmidt, in addition to the Copernicus Masters Social Entrepreneurship Challenge at the Space Oscars event in December 2019. The company raised angel funding from investors, including Shobhit Shukla and Rahul Agarwal, co-founder of location-based data analytics company Near, and Dalberg Asia partner Gaurav Gupta.

Purwar and Kshitij, who is chief technology officer, grew up in Ghaziabad near New Delhi. After graduating in 2012 from IIT (BHU), Varanasi, Purwar worked with the Abdul Latif Jameel Poverty Action Lab and was consultant to the ministry of environment. She then went to Yale University as a Fulbright scholar to graduate in environmental management.

The turning point came in 2018 when Purwar read about the massive pile-up of vehicles on the Yamuna Expressway near New Delhi during winters. "That shook me and I kept thinking about what we can do," she says. That's when she joined hands with Kshitij, who had dropped out of college but was a self-taught developer and programmer, to build Blue Sky Analytics.

"We figured that there were a lot of gaps in air quality, especially when you move out of the urban centres. Similarly, access to data on a lot of other environmental parameters such as the number of trees or underground water was missing. That's when we looked at geospatial data and there were a lot of nuances that it could offer... that's been a powerful driving force," says Kshitij.

Purwar has used her personal savings to fund this. "We are more interested in the impact and technology than revenues," she says. "That way, we are terrible founders."

The global geospatial analytics market is expected to reach $175 billion by 2027, according to Hyderabad-based Stratistics Market Research Consulting. Earth observation technology generated $7 billion in 2018 and the global air pollution monitoring market is expected to reach $5.5 billion by 2024, according to market intelligence firm BIS Research.

"We don't want to put a new terminal out," says Purwar. "We will work in the API fashion. Terminals happened because it made sense in those days. The relevance of environmental data, for instance, is that the Australian fires had a direct impact on the country's GDP. That had a direct impact on business and there are lakhs of funds that trade in the Australian commodities market. If we can put out these indicators, they can make informed choices."

Over the next five years, the brother-sister duo is looking to target revenues of $250 million in their quest to build a billion-dollar venture. But it won't be easy. "In India, the monetisation of data is a big problem," says Jatin Singh, founder and managing director of Skymet Weather. "What they are doing definitely has potential and promise. But, say in case of water, because it is entirely government controlled, the buyer will be the government and that will be a challenge. Hence monetisation can be troublesome."

"They are a bunch of high functioning nerds who can bring about a solution to a global problem," says Gupta of Dalberg. "This is a solution that needs to exist in the world. A strong Indian brand is solving a global issue... it is all about packaging the data and adding value to it... that makes it relevant." F

Derived from satellite data by Blue Sky Analytics, the images reveal the reduction in nitrogen dioxide levels over Delhi and Mumbai during the lockdown as compared to the same period last year

COURTESY BSA (BLUE SKY ANALYTICS)

The Man Getting America Back On Track

As the world grapples with how to make travel safe in the age of coronavirus, private equity billionaire Wes Edens is betting $9 billion that America's transportation future is passenger rail

By ALAN OHNSMAN & ANTOINE GARA

Shouting over the noise of diners at a Mexican restaurant on the floor of a casino, buyout billionaire Wes Edens has come to Las Vegas, one of the cities least friendly to mass transit, to talk about passenger rail. "It's not like I had Lionel train sets in my basement," he says. "I wasn't a train nut, but I love riding on trains. It's my favourite form of travel."

Even a couple months ago, that was audacious talk from the casual, sandy-haired 58-year-old who made his fortune with Fortress Investment Group and who co-owns the NBA's top team, the Milwaukee Bucks. In a post-Covid world, as people settle in for a period of minimal travel, especially if it involves being squeezed among others, a bet on train service sounds downright crazy, especially since it comes with a $9 billion price tag.

Wes Edens, co-founder of Fortress Investment Group, is betting on tax-exempt bonds to create high-speed train lines linking Orlando to Miami and Las Vegas to Southern California

DREW ANGERER/GETTY IMAGES

Edens's vision: Tax-exempt bonds to create high-speed train lines linking Orlando to Miami and Las Vegas to Southern California. He sees a service modelled on the Paris-to-London Eurostar and is so confident the plan will work that he's put more than $100 million of his own money into it. If things go right, his trains could haul nearly 20 million passengers in 2026, generate annual revenue of $1.6 billion and operating profit of almost $1 billion a year.

"Great fortunes are generally made by solving the most obvious problems," Edens says. "Drive from Miami to Orlando with your family; drive from Los Angeles to Las Vegas. It's a bad experience."

So is the money pit known as US passenger rail. Amtrak, since its creation in 1971, has consumed $52 billion of public funds and never made money. Its best year was the $30 million operating loss it reported in 2019. But inside those numbers, bloated by mandates from various members of Congress to run coast-to-coast operations in a country with little appetite for it, there's a bright silver lining: Amtrak's high-speed Acela service along the congested I-95 corridor between Washington, New York City and Boston earned $334 million in operating profit last year. In other words, find the right regions and

Sunshine Station: West Palm Beach is the current terminus for Wes Edens's Brightline service to Miami. "We'll know how it does in 2023."

passenger rail can work wonderfully.

"The lack of passenger travel by train in this country is a travesty," Edens says. "It's a gigantic opportunity." His role model: The 19th-century industrialist Henry Flagler—co-founder of Standard Oil with John D Rockefeller—whose rail projects essentially made the state of Florida economically viable.

Edens and Fortress took over Flagler's South Florida rail line for $3.5 billion in 2007, and as his ambition blossomed, he pitched its potential to governors on both coasts. The effort paid off.

He secured tax-exempt bonds over the last two years to expand his Brightline rail service from Miami north to Orlando, a project with total construction costs of $4.2 billion. In April, he won a $600 million private-activity allocation from California. Up to $2.4 billion worth of bonds from that award, provided to California by the federal government, can in turn be sold to private investors. If all goes as planned, by 2023 the train will be whisking passengers from Las Vegas to a far-flung Los Angeles suburb in 85 minutes at speeds of up to 200 miles an hour. The $5 billion desert train also snagged private-activity financing from the federal government worth $1 billion and is awaiting a bond allocation from Nevada.

"His ideas are so big," says friend and Los Angeles Lakers owner Jeanie Buss, a co-owner of Edens's Cincoro tequila brand alongside Michael Jordan and the owner of the Boston Celtics. "We need thinkers like that in this country, people who see possibility and opportunity, because we've kind of lost that as a country."

His public-private financing model is also exactly how big-ticket infrastructure will get built, says former HUD secretary and San Antonio mayor Henry Cisneros, who chairs a firm that specialises in securing funds for such projects. "There's pioneering work being done of a financial nature to unleash private capital," he tells *Forbes*. "If there's sufficient incentive to ensure that the [projects] will get built and can be moneymakers, there are investors and entities in our system of capital that want longer-term investments."

Edens's grand plans are compelling; his modern Florida and West Coast trains mean thousands of construction jobs when they're most needed, considering the unemployment and economic carnage wrought by Covid-19. But his track record suggests delivering them isn't a certainty.

After owning Flagler's railroad for a dozen years, the return for Edens and Fortress investors remains uncertain. According to *Forbes*'s analysis of public pension and securities filings, Edens and Fortress ploughed about $2 billion of equity into their rail bet, struck at the apex of the 2007 real estate and buyout bubble, and they've yet to recoup all that cash. Staring down a near-total loss on his career—and his rail wager—at the market bottom, Edens has spent a decade-plus quietly clawing investors back to even. Now, any meaningful next act hinges on his train bet paying off.

Florida-based Brightline is the starting point. Funded in 2017 with $600 million in private equity and tax-exempt bonds, the only private US passenger line began operating a 67-mile service in the dense corridor between Miami and West Palm Beach the next year. Its sleek yellow-black-grey-and-white Siemens trains chug along at a top speed of just 79 miles an hour. Brightline coaches feature soft white-and-blue interiors, roomy seats and free Wi-Fi. Passengers book through its app or at digital kiosks, and company president Patrick Goddard, a Dublin native with a luxury-hotel background, says premium customer service is a priority.

But it's far from a moneymaker. Last year it carried just over 1 million riders, with $22 million in revenue and a $66 million operating loss. That doesn't concern Edens, who says the current operation is just a taste of what's coming.

A big moment will arrive in 2022, when Brightline opens 170 miles of new track north to Orlando, funded with $2.7 billion of tax-exempt bonds and investor cash. Trains travelling up to 125 miles an hour will haul passengers between Orlando's airport and Miami in about three hours, an hour faster than by car. The ridership target is 6.6 million people in 2023, the first full year of service. Brightline also has a branding deal with Richard Branson's Virgin, renaming its Miami station Virgin MiamiCentral in 2018, and is in talks to add a second Orlando station at Disney World and an extension to Tampa.

"Wes is a spirited investor and has a true pioneering spirit with these major investments in US infrastructure and, in the case of Miami, real urban regeneration," Branson tells *Forbes*. Virgin's deal with Brightline hasn't included any investment.

Markets have been more sceptical. After raising $1.75 billion in high-yield tax-exempt bonds at a whopping 6 percent-plus coupon in April 2019, Brightline's debt trades below par. "Even though the early results are somewhat delayed and some people have criticised them as a disappointment, it's still in an early stage of the ramp-up," says John V Miller, head of municipal fixed income at Nuveen, a holder of $1.4 billion, or 80 percent, of the project's total debt.

Edens's West Coast plan is 180 miles of track connecting Las Vegas and Apple Valley, California, a high-desert city 90 miles east of Los Angeles whose claim to fame was being home to silver-screen singing cowboy Roy Rogers, his wife, Dale Evans, and his trusty horse, Trigger. Edens bought 300 acres there for a train station and parking structure. Trains on the line will be fully electric and run alongside Interstate 15.

In contrast to California's highly criticised publicly funded high-speed rail project, state treasurer Fiona Ma sees no local risk if it flops. "There's no hit to California taxpayers," she says. "It's just the allocation of [federal] bonds."

The trim, 6-foot-1 Edens navigated an unlikely path to his new-age industrialist vision. The grandson of a homesteader raised near Helena, Montana, he was educated at Oregon State and cracked into Wall Street in 1987 at Lehman Brothers. After making partner, he left in 1993 for fledgling bond manager BlackRock before founding Fortress in 1998.

Entering 2002, Fortress was mite-sized, with just $1.2 billion in assets, but it grew quickly. Edens's first two buyout funds, raised amid the dotcom bust, were among Wall Street's best

Wes Edens's proposed train lines could carry nearly 20 million passengers in 2026

performers, and Fortress became a giant in hedge funds and managing complex pools of debt. Assets soared 25-fold over a five-year stretch. Edens outraced billionaires such as Blackstone's Stephen Schwarzman and Henry Kravis of KKR by taking Fortress public in February 2007. Its shares soared 89 percent on their first trading day; Edens and his partners became billionaires.

The coronation was premature. Fortress descended into freefall as Edens, armed with $9.4 billion of buyout funds raised in 2006 and 2007, made mistake after mistake. He bet on a subprime lender, Nationstar Mortgage, just before defaults soared, and pressed an $8.9 billion buyout of casino operator Penn National Gaming, costing the firm a $1.5 billion termination fee when Fortress pulled out. Even a wager on skiing—Fortress's 2006 takeover of Intrawest, the owner of Whistler, Steamboat and Squaw Valley—was a catastrophe. When the 2010 Vancouver Olympics arrived, Edens was warding off foreclosure threats and working to sell assets like Whistler. From 2008 through 2010, investors pulled $12.8 billion from Fortress, which posted $3.2 billion in combined losses during the crisis, and its stock plunged. Edens spent years salvaging bad investments. "It's hard to express how difficult 2007, 2008 and 2009 really were in the business," he recalls.

With his back against the wall, he got creative, embarking on a 12-year odyssey to make his investors whole, leaning on his skill for making money in lowbrow areas of finance such as subprime lending. He repositioned failing bets like Nationstar Mortgage, which became a servicer of subprime mortgages as banks exited the troubled business, eventually selling it for over $1 billion in 2018. Fortress pressed this idea, buying large portfolios of ailing subprime mortgages to service from AIG and Citigroup, which it also exited in 2018 at a $3 billion–plus profit.

"We went into the financial crisis high on helium," says investor Michael Novogratz, Edens's former partner. "Wes did a lot of really crafty things" to claw his way back, he adds. "He kind of salvaged what would have been a real disaster for investors and his reputation."

Unable to corral large amounts of money for buyouts from pensions, Edens found the cash by turning Fortress into a financial alchemist, shuffling assets around and conjuring six public companies in a six-year stretch. He spun out four new listed firms between 2013 and 2015 that manage assets in media, mortgages, senior housing facilities and golf courses—and which pay Fortress hefty fees. Edens also shifted a large infrastructure fund into a vehicle called Fortress Transportation and Infrastructure, which houses rail facilities and aircraft leasing operations and was listed in 2015. In 2019, he created yet another public concern, New Fortress Energy, with a burgeoning liquefied natural gas business and a goal to supply hydrogen for electric-power generation.

The moves yielded Edens unheralded windfalls and new fee streams. When Fortress sold itself to SoftBank in 2017, earning Edens and his partners a pretax $1.4 billion, 40 percent of the fees it earned that year were paid to Fortress by the companies Edens had devised. The pandemic hit many of them hard. But the newer ones, particularly the rail and energy business, are now his focus.

"At this point in my life, I'm more of a builder," Edens says, adding, "upgrading our nation's infrastructure and building high-speed trains can be this generation's Hoover Dam and Tennessee Valley Authority."

Intelligence Agents

Normally, humans train artificial-intelligence systems to replace them. ASAPP's software trains customer-service reps to be better humans

By ALAN OHNSMAN AND KENRICK CAI

SHUTTERSTOCK

ASAPP CEO Gustavo Sapoznik at the St Petersburg International Economic Forum in 2016. Sapoznik's company uses AI to make call centre executives efficient at a time those for banks, airlines etc are overrun with queries from customers facing the pandemic

If you've ever felt your blood boil after sitting on hold for 40 minutes before reaching an agent . . . who then puts you back on hold, consider that it's often even worse on the other end of the line. A customer-service representative for JetBlue, for instance, might have to flip rapidly among a dozen or more computer programs just to link your frequent-flier number to a specific itinerary.

"Imagine that cognitive load, while you have someone screaming at you or complaining about some serious problem, and you're swivelling between 20 screens to see which one you need to be able to help this person," says Gustavo Sapoznik, 34, the founder and CEO of ASAPP, a New York City–based developer of AI-powered customer-service software.

Sapoznik remembers just such a scene while shadowing a call-centre agent at a "very large" company (he won't name names), watching the worker navigate a "Frankenstack" patchwork of software, entering a caller's information into six different billing systems before locating it. "That was an eye-opening moment."

The problem has only gotten

worse during the pandemic. Call centres for banks, finance companies, airlines and service companies are being overrun. Call volumes for ASAPP's customers have spiked between 200 and 900 percent since the crisis began, according to Sapoznik. Making call centres work isn't the sexiest use of cutting-edge AI, but it's a lucrative one.

According to estimates from Forrester Research, global revenues for call centres are around $15 billion a year. In all, ASAPP has raised $260 million at a recent valuation of $800 million, per data from Pitchbook. Silicon Valley heavy hitters, including Kleiner Perkins chairman John Doerr and former Cisco CEO John Chambers are on ASAPP's board, along with Dave Strohm of Greylock and March Capital's Jamie Montgomery. Clients include JetBlue, Sprint and satellite TV provider Dish, all of whom have signed up for multiyear contracts contributing to ASAPP's estimated $40 million in revenue, according to startup tracker Growjo.

ASAPP has drawn this investor interest by flipping artificial intelligence on its head. For years, engineers have perfected AI to perform repetitive tasks better than humans. Rather than having people train AI systems to replace them, ASAPP makes AI that trains people to be "radically" more productive.

"Pure automation capabilities are [used] out of an imperative to reflect costs, but at the expense of customer experience. They've been around for 20 or 30 years but they haven't really solved much of the problem," Sapoznik says. ASAPP's thinking: "If we can automate half of this thing away, we can get to the same place by making people twice as productive."

The company is a standout on *Forbes*' second annual AI 50 list of up-and-coming companies to watch, rated highly for its use of AI as a core attribute by an expert panel of judges. Its focus on using AI to keep humans in the loop is also what sets ASAPP apart, although it's competing in the same call-centre sandbox as fellow AI 50 listees Observe.ai of San Francisco and Cresta, which is chaired by AI legend Sebastian Thrun, the Stanford professor who greenlit Google's self-driving car programme.

ASAPP's focus is natural language processing and converting speech to text using proprietary technology developed by a group led by a founding member of the speech team for Apple's Siri. Its software then displays suggested responses or relevant resources on a call-centre agent's screen, minimising the need to toggle between applications. Sapoznik and his engineers also studied the most effective human representatives, trying to replicate their expertise into ASAPP software via machine learning.

That software then coaches call-centre staff on effective ways to respond to customer queries and tracks down critical information. If a caller asks how to cancel a flight, for example, ASAPP software automatically pulls up helpful documents for the agent to browse. If a customer reads a 16-digit account number, it's instantly transcribed and displayed on the agent's screen for easy reference.

When things go right, companies using ASAPP technology see the number of calls successfully handled per hour increase from 40 percent to more than 150 percent. That can mean lower stress for call-centre workers, which in turn reduces the high turnover associated with that line of work.

A licenced pilot with a fondness for classical music who studied math at the University of Chicago, Sapoznik first applied his coding skills to his family's real estate and financial business in Miami. "I'd been doing some work in investments where you build machine-learning product capabilities to trade the markets. The impact there is that

AI 50: America's Most Promising Artificial-Intelligence Companies

ABNORMAL SECURITY
CYBERSECURITY
Scans inboxes for malicious emails.

AISERA
WORKFLOW SOFTWARE
Automates IT, sales and customer-service tasks.

AMP ROBOTICS
ENVIRONMENTAL ENGINEERING
Makes robots that identify and sort recyclables.

ANDURIL INDUSTRIES
DEFENCE
Builds surveillance systems for national-security purposes.

ANYSCALE
SOFTWARE DEVELOPMENT
Helps software developers make machine-learning apps.

ASAPP
CUSTOMER SERVICE
Assists customer-service agents in real time.

ATOMWISE
HEALTH CARE
Discovers drugs with medical potential.

AURORA
AUTOMOTIVE
Makes software for self-driving cars.

BIOFOURMIS
HEALTH CARE
Monitors patients' health using wearables.

BLUE HEXAGON
CYBERSECURITY
Detects network or cloud cyberattacks.

CEREBRAS SYSTEMS
HARDWARE
Builds computing chips for AI use.

CRESTA
CUSTOMER SERVICE
Assists customer-service agents in real time.

DATAIKU
SOFTWARE DEVELOPMENT
Develops tools for enterprises to build AI apps.

DATAROBOT
SOFTWARE DEVELOPMENT
Makes software for companies to develop AI models.

DEEPMAP
AUTOMOTIVE
Produces 3D maps for self-driving vehicles.

DOMINO DATA LAB
SOFTWARE DEVELOPMENT
Provides tools for data scientists.

DOXEL
PRODUCTIVITY SOFTWARE
Detects and tracks construction-project problems.

DRIFT
PRODUCTIVITY SOFTWARE
Builds chatbots to automate customer interactions.

DRISHTI
PRODUCTIVITY SOFTWARE
Creates data sets by digitising human actions in factories.

EMBARK TRUCKS
AUTOMOTIVE
Creates software for self-driving trucks.

EXTRAHOP
CYBERSECURITY
Detects cloud cybersecurity threats.

FIDDLER LABS
SOFTWARE DEVELOPMENT
Helps companies build and monitor AI apps.

GENESIS THERAPEUTICS
HEALTH CARE
Discovers drugs with medical potential.

GHOST
AUTOMOTIVE
Puts self-driving tech into conventional cars.

GONG
PRODUCTIVITY SOFTWARE
Analyses sales conversations.

HIVEMAPPER
DATABASE SOFTWARE
Turns video footage into 3D maps.

ICERTIS
PRODUCTIVITY SOFTWARE
Analyses businesses' contract risks.

KARIUS
HEALTH CARE
Looks for pathogens in blood tests.

KRISP TECHNOLOGIES
COMMUNICATION SOFTWARE
Removes background noise from calls.

LEMONADE
FINANCIAL SERVICES
Sells insurance using bots.

LILT
PRODUCTIVITY SOFTWARE
Assists human language translators.

MOVEWORKS
PRODUCTIVITY SOFTWARE
Resolves IT tickets autonomously.

NURO
AUTOMOTIVE
Produces self-driving delivery robots.

OBSERVE.AI
CUSTOMER SERVICE
Analyses customer-service calls.

PONY.AI
AUTOMOTIVE
Makes software for self-driving cars.

RECURSION
HEALTH CARE
Discovers potential drugs for rare diseases.

SAFEGRAPH
DATABASE SOFTWARE
Creates data sets by tracking commercial spaces.

SCALE AI
SOFTWARE DEVELOPMENT
Helps engineers speed up AI development.

SHIELD AI
DEFENSE
Makes mapping drones for national security.

SIGOPT
SOFTWARE DEVELOPMENT
Develops software for enterprises to build AI models.

SYNACK
CYBERSECURITY
Spots cybersecurity vulnerabilities.

TEXTIO
PRODUCTIVITY SOFTWARE
Gives suggestions on how to improve writing.

TUSIMPLE
AUTOMOTIVE
Builds self-driving trucks.

TWOXAR
HEALTH CARE
Discovers drugs with medical potential.

UIPATH
WORKFLOW SOFTWARE
Creates bots that carry out repetitive processes.

UNITY TECHNOLOGIES
SOFTWARE DEVELOPMENT
Provides software for app or game development.

UPSTART
FINANCIAL SERVICES
Partners with banks to price loans.

VISE
FINANCIAL SERVICES
Offers financial planning and management.

VIZ.AI
HEALTH CARE
Analyzes stroke risk from brain images.

ZEBRIUM
PRODUCTIVITY SOFTWARE
Detects and resolves software problems.

there's a number that goes up or goes down," he says. Merely making money didn't excite him.

Sapoznik hopes optimising call centres is just a start for ASAPP, which he founded in 2014. He's searching for similar "gigantic-size" business opportunities with "brokenness and tonnes of interesting data". He thinks ASAPP can do that because it's built like a research organisation—80 percent of its 300 employees are researchers or engineers.

"The exciting thing about ASAPP is not so much what they're going after now, but whether or not they can go beyond that," says Forrester analyst Kjell Carlsson. "They, like so many of us, see the incredible potential of [using] natural language processing for augmented intelligence."

Summarising ASAPP's potential, Sapoznik draws on his experience as a pilot—in aviation, automation has transformed the cockpit. "It's increased safety from a pretty dramatic perspective, and it hasn't gotten rid of pilots yet," he says. "It's just taken away chunks of their workloads."

Optimism Rules

Scottish money manager Baillie Gifford didn't see the pandemic coming, but a positive attitude toward the overpriced momentum stocks in its $245 billion portfolio turned out to be perfect for life under lockdown

By ANTOINE GARA

When analysts and portfolio managers pitch ideas at Edinburgh, Scotland, investment firm Baillie Gifford, there's one rule everyone must follow. For the first 20 minutes, anyone speaking about the idea has to be positive, contributing only to the bullish case for the stock. Say anything critical and you're swiftly escorted from the room.

The optimism rule is designed to thwart what the partners believe is a natural tendency for smart people to be skeptical and shoot down ideas prematurely. But these days the rule takes on even more meaning as despair over the pandemic spreads. Like nearly everyone in the Western world, the firm's 1,317 employees are no longer able to congregate at its headquarters, where an imposing sign over the entrance reads: ACTUAL INVESTORS THINK IN DECADES. NOT QUARTERS.

"One of the things we feel is absolutely incumbent on us at this moment is to encourage the companies we back to be brave," says James Anderson, 60, a co-manager of Baillie Gifford's flagship strategies and a 37-year veteran of the 112-year-old investment firm. Baillie Gifford has gone so far as to mail letters to its portfolio companies, encouraging CEOs to forestall layoffs and cost cutting. It even offered new capital so they could maintain their growth plans.

It's an unusual stance for a large asset manager to take in a business landscape fraught with risks. But among fund managers, Baillie Gifford, with its $245 billion under management, is an outlier. The firm pays little attention to traditional valuation metrics such as earnings per share or price/earnings ratios. It's singularly focused on three things—growth, competitive advantage and staying power—and it doesn't mind parking its investors' money in stocks that would make value investors seasick. Here's a sampling: Zoom, the now-ubiquitous video-chat company, which has a price/earnings ratio of 400; ecommerce upstart Shopify, at 50 times revenues; online furniture merchant Wayfair, which lost

PATRICK T. FALLON / BLOOMBERG VIA GETTY IMAGES

Baillie Gifford partner James Anderson believes in encouraging the companies they back to be brave

$1 billion in 2019, double that of the prior year. But these very stocks, plus a good number of the 30 to 50 others held in each of their 14 mutual fund portfolios, are exactly the companies benefiting from existing trends accelerating during the crisis.

Name a hot coronavirus stock, and Baillie Gifford discovered it and built a massive position before the virus spread. The firm has long-held multibillion-dollar positions in Alibaba, Amazon, Tencent, Microsoft and Netflix. Newer buys include Zoom, Covid-19 vaccine hopeful Moderna, digital health upstart Teladoc and online textbook seller Chegg. It's a large shareholder in Wayfair, which first plunged as Covid-19 spread, then rose eightfold when sales skyrocketed as quarantined customers made home improvements. Baillie Gifford is also a top holder of surging Covid stocks Grubhub and Peloton, the cycling platform many are using to burn off their "quarantine 15" weight gain.

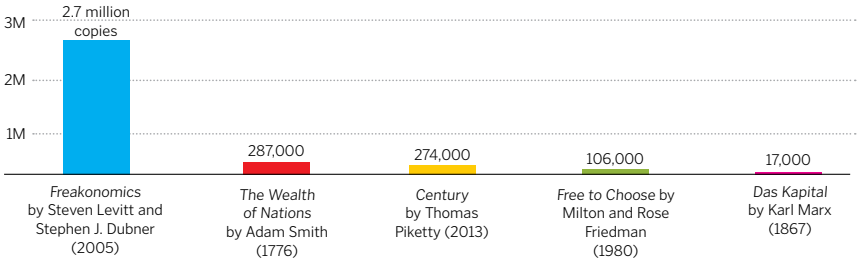
Baillie Gifford's returns to investors in 2020 have been nothing short of miraculous. Scottish Mortgage Trust, the $10 billion flagship Anderson co-manages, and a newer Long-Term Global Growth Fund with $40 billion in assets, are up about 20 percent year to date, beating the S&P 500 index by 30 percentage points. Both have posted similar average annual returns over the past five years, more than doubling the index. The firm's newer funds centered on US companies driving "Positive Change" have also done well, climbing as much as 25 percent. Even funds that are down have trounced their benchmarks.

While private equity firms and corporate chiefs have spent the past decade making companies lean and leveraged, Baillie Gifford's stock pickers ignore all that and seek out companies investing in research and technology. They particularly like projects that might not be immediately profitable but could propel the economy a decade from now. Quantitative investing is all the rage, but the Scottish firm is moving in the other direction, trading little and spending its research budget sponsoring literary prizes, investigating new philosophical ideas and endowing university chairs in genetics and computational biology.

LITTLE BIG PICTURE

Auld Reliable

Baillie Gifford's home base—Edinburgh, Scotland—can rightly be called the wellspring of modern economic theory. In 1776, Edinburgher Adam Smith published his timeless classic *The Wealth of Nations*. Even over the past 15 years, Smith's work has been outsold by few other business books—save for that modern retelling of acquiring and dispensing wealth: *Freakonomics*.



SOURCE NPD BOOKSCAN

Based in Edinburgh's 18th-century "New Town," a short walk from the city's medieval "Old Town," Baillie Gifford is too big and too old to be dismissed as simply lucky. The firm was founded in 1908, shortly after the Panic of 1907, by Colonel Augustus Baillie and barrister Carlyle Gifford.

The colonel had made his name fighting in the Second Boer War, while his partner, Gifford, later became known for helping finance Britain's World War II effort by selling the crown's trove of overseas assets, largely to investors in the US.

One of Baillie Gifford's first trades was to lend to tyre makers, believing Henry Ford's pioneering Model T automobile would revolutionise the world. After World War I, the firm decided America was a compelling "emerging market," and built positions in railroads including Union Pacific and Atchison, Topeka and Santa Fe, eventually investing 20 percent of its assets in the United States. In the 1960s, it was an early investor in emerging Japan.

When the internet stock bubble popped in 2000, Baillie Gifford suffered a setback, but as investors fled companies like Amazon, the firm backed Jeff Bezos' vision. It was Amazon's remarkable resilience and success that birthed the firm's think-happy-thoughts-first, be-critical-later approach. Its timing was perfect. Technology giants like Amazon, Google and Microsoft are now carrying the S&P 500. "We started noticing that big companies got better and got stronger, and their returns got greater as they grew, rather than the reverse," Anderson says.

"If you can just hit one or two of those exceptional companies that really drive markets over the long run, then they'll pay for the inevitable mistakes," says Tom Slater, 42, who co-manages some flagship funds alongside Anderson. By 2012, the firm latched onto emerging trends like cloud computing and Asian tech leaders like Alibaba and Tencent.

Following the crowd for Baillie Gifford has led to some big misses, including Eike Batista's ill-fated Brazilian oil company OGX, Vestas Wind Systems, LendingClub and Nio. It also holds stakes in troubled Airbnb and luggage maker Away. But wins like its 100-fold return on Amazon,

CHRIS RATCLIFFE / BLOOMBERG VIA GETTY IMAGES

Tom Slater, partner in charge of Baillie Gifford's US Equity Team, co-manages some flagship funds alongside Anderson

16-fold return on Tesla and a 17-fold gain on Naspers, the South African conglomerate that owns 31 percent of Tencent stock, have more than made up for its dogs.

Some $35 billion of Ballie Gifford's capital is invested in China. Big holdings include surging delivery companies like Meituan-Dianping and budding ecommerce platform Pinduoduo. In Europe it owns HelloFresh, a meal-kit delivery company, and the Amazon of Latin America, MercadoLibre.

London-listed Scottish Mortgage Trust holds most of Baillie Gifford's private investments, including stakes in Stripe, Ginkgo Bioworks, the biological engineering pioneer, and CureVac, the Bill Gates–backed coronavirus vaccine firm President Trump reportedly wanted to buy. The Scottish trust has risen fivefold over the past decade. Among its mutual funds available to US investors, Long Term Global Growth and US Equity Growth have performed best.

Baillie Gifford proudly embraces ESG (environmental, social and governance) investing. The firm says it works with Amazon on sustainability and worker conditions, encourages Google to pay more in taxes and voted against what it viewed as rich executive-pay packages at Apple.

What about the billions Baillie Gifford has reaped from its investment in Tesla, whose owner, Elon Musk, might be the poster boy for bad corporate governance? According to Anderson, Baillie Gifford grew concerned about Musk's "pedogate" Twitter battle during the 2018 rescue of children from a cave in Thailand, as well as his infamous "$420" tweet about taking Tesla private, which led to SEC sanctions. But it still voted in favour of Musk's recent $50 billion–plus incentive package, the largest potential payout in corporate history.

Says Anderson, "I think it's incumbent on us to back the extraordinary appetite for beneficial change and to look past any bumps in the road."

Proving that optimism can pay, so long as you don't sweat too many details.

HOW TO PLAY IT

FAANG Stocks of Tomorrow

COMPANY	BULLISH CASE
Denali Therapeutics	Promising treatments for disorders like Alzheimer's.
Sea Ltd. ADR	Tencent game distributor, ecommerce platform for Asia.
Adyen NV	Global payments platform—think Paypal and Square in one.
Ecolab	Boom times ahead for this office-cleaning-products firm.
Reliance Industries	May become the Amazon of India.

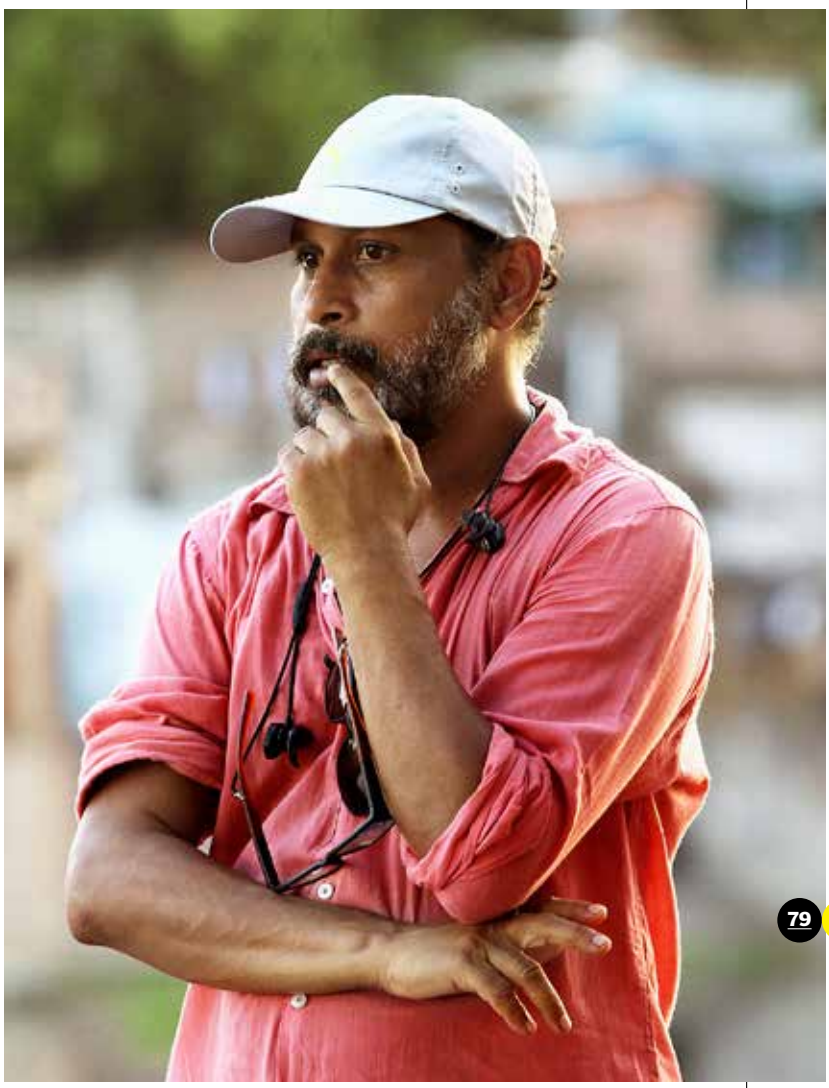
SOURCE Baillie Gifford

INTERVIEW

'I AM HAPPY I'M GOING DIGITAL; IT'S THE FUTURE'

Filmmaker Shoojit Sircar talks about adapting to new situations, the likelihood of theatres bouncing back post-Covid-19, and what makes Amitabh Bachchan special

By **KUNAL PURANDARE**



AMAZON PRIME VIDEO

Shoojit Sircar inadvertently found himself in the midst of Cyclone Amphan in Kolkata in May. "It went through my house... it was scary and chilling," says the filmmaker, who went to his hometown in the second week of March, and has been living there since, following the nationwide lockdown that came into effect later that month. The other storm he did not see coming was when he announced the release of his latest film *Gulabo Sitabo* on Amazon Prime Video. Theatre owners were miffed at his decision, while the industry contemplated the pros and cons of a digital-first release at a time when theatres are shut and uncertainty looms large because of the coronavirus pandemic.

In an interview with *Forbes India*, Sircar—director of films such as *Vicky Donor* (2012) and *Piku* (2015)—explains the rationale behind his move, gives his take on the future of entertainment in a post-Covid-19 world, and remembers his friend Irrfan Khan, who passed away in April. Edited excerpts:

Q You seem to have attempted a new genre with *Gulabo Sitabo*. How did the idea come about?

It's a new territory for me, for sure. The first idea came from Juhi [Chaturvedi, the film's writer] and we kept working on it. Yes, you can say it's a new genre because it's the first time I've tried satire. It's a world of several people, including a landlord and a tenant, who come from an economically lower strata of society. They are struggling, and somehow manage to live their lives in Lucknow. The film focuses on their lives, their relationships and their characters. The camera will actually penetrate their minds, issues and homes.

Q You reunite with Amitabh Bachchan, after directing him in *Piku*. What made you approach him, and what makes him special as an actor?

He was always on our radar. While we were writing the film, we had informed him that we would approach him. The only question was whether he would accept the offer... I was not sure. Thankfully, he liked the script. His speciality is that

he completely trusts the director and his vision. His biggest gift is his meticulous engagement, whether it's with the costume, looks, dialogue delivery, location or the background score. Amitabh Bachchan has an aura of his own, but he is one of the finest with his co-actors. He is the best for them... he is so giving.

Q When did you decide to go for a digital release of the film?
It was only when we crossed the theatre release date [April 17] that we decided we should think about having a digital release. We wanted to close this and move on to our next film. Even now, it's uncertain when the theatres will reopen. A lot of our technicians depend on us, and so we took this call to release the film on June 12. The situation demands this and we should adapt to it.

Q This is a new experience for you. Will you be open to this in the future?
I have taken the plunge and am glad that I did. I am happy to have experimented and will wait for the results. Amazon is a huge platform... the movie will release in around 200 countries. I'll see how it goes and then take a call on what I can do and what I cannot in the future.

Q So, this was a feasible decision given the circumstances...
Yes, it makes complete sense. It was a practical decision. I am happy that I am going digital as it is the future.

Q But theatre owners have expressed their disappointment. What would you tell them?
I understand their point of view, but I will tell them they should understand my point of view as well. The situation is such... I make one film at a time and a lot of people in my production house are dependent on me. We do whatever is best for the film. There is nothing beyond the film... the film dictates everything. I told them there is nothing personal in this. If we were not under a lockdown in April, the film would have released in theatres.

Sircar's *Gulabo Sitabo* starring Ayushmann Khurrana and Amitabh Bachchan will have a digital-first release on June 12

Q Is it any different, say, when it comes to promotions etc, when you release a film first on a digital platform?
I hate promotions. I am happy if there are less promotions... it's a tiresome process for me. At this moment there is a lockdown, so any release would have been the same. But I think it's the same... nothing changes.

Q As a filmmaker, are the jitters any different compared to a theatrical release?
I don't have to bother about the box office where people will hound me with numbers every day. I've made a film the way I want to and I am happy that it is releasing, so that's a big relief. The second relief is that I don't have to decide an interval point. In terms of experience, the film is not going to lose anything. Yes, watching a film in a theatre is a different experience. I cannot guarantee that... but I can definitely guarantee the kind of film that you can expect from my stable.

Q Will theatres bounce back once the lockdown ends?
Of course they will bounce back, but we will have to see how much time that takes. The fear, the hygiene aspect... all such things will matter. The fear will slowly fade away and theatres will eventually bounce back.

Q And digital platforms and theatres will coexist?
Yes, they will coexist. Cinema is a medium where you watch a film in a theatre with a lot of people. That's why it was made... the idiot box came later. But the good thing is that televisions have flat screens today and the picture and sound quality are good. So if you have a good TV or a laptop with nice headphones, and keep the lights off... that viewing is also interesting. It doesn't take away much, but yes, the 70 mm experience is different.

Q At what stage is your next film, *Sardar Udham Singh*, and will its release get pushed ahead?
We have finished shooting the film. It's in the post-production stage. Yes, the release date will be affected. The industry will be in a state of confusion when it opens up again. It has experienced a huge loss, as have other industries and sectors. There will have to be some guidelines, otherwise there will be

'SHOOJIT'S DECISION TO MAKE WHAT HE WANTS TO MAKE IS THE DEFINING FACTOR OF HIS WORK'

Amitabh Bachchan talks about his latest release, and the evolution of film-making

Q What attracted you to the script and character of *Gulabo Sitabo*?
Shoojit Sircar. My attraction was him; he was the script, he was the character!

Q Since you have worked with Sircar before, what do you like about his work and style of direction?
Shoojit's decision to make what he wants to make is the defining factor of his work. You could have suggestions, inputs, different viewpoints during the narration of the idea, but you must be prepared to understand that his stance on creativity shall be final. And it has been proved time and again that his finality has brought great results.

Q How was your experience of working with Ayushmann Khurrana?
He is a most accomplished competent talent, of enormous capacity.

Q What would you say have been the major technological changes in the way movie is made? From shooting on film to digital cameras, recording sound in studios to on-site recordings, post-production processes etc. How have these changes made the work of actors easier or more difficult?
I think you have enumerated the changes experienced in the making of films in your question itself, and they are factual and correct.

Factors relating to ease and difficulties in the workings are subjective in nature. In the 51 years of my working in the profession, several changes have occurred... one can compare them, but if you have decided to accept them, and accept you must if you wish to continue working, then the worry of whether they are easier or greatly difficult really is quite immaterial.

• JASODHARA BANERJEE

a bottleneck of films, and they will release together. It will have to be sorted out.

Q Will shooting be the same again in a post-Covid-19 world?
There will be proper guidelines regarding that and protocols will have to be maintained. But surely, in the beginning it's not going to be easy because shooting is a chaotic affair. There are 100 to 200 people even for a small shoot. So, there will be diktats and behavioural changes. If this virus stays for long, we will have to adapt to new ways of shooting.

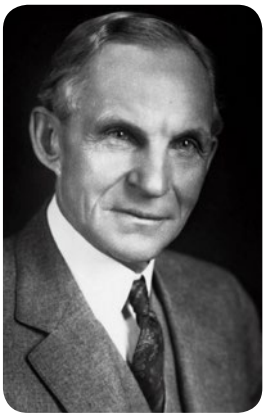
Q What have you been doing during the lockdown?
I am working so much at home that I have got a back pain. I am doing a lot of household work... it's exhausting. I don't get time to watch anything, but I managed to see some documentaries.

Q You lost your friend Irrfan Khan during this period. Have you come to terms with the loss?
He is a huge loss. As a friend, I cannot forget him so easily... he was so lively and such a nice human being. Not only me, but everyone else also feels it's a personal loss. If I am watching something on television, I feel he is going to come out of the screen. It is difficult to come to terms with the loss.

Q What next?
My immediate focus will be *Sardar Uddham Singh*. But I am going to take it easy. That's the lesson that I have learnt. F

VIKAS KHOT

BUSINESS PIVOTS



GETTY IMAGES

Whether you think you can or you think you can't, you're right.

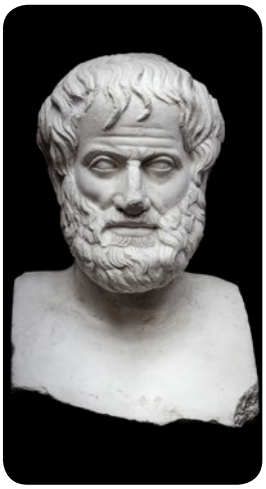
—HENRY FORD

The most difficult thing is the decision to act, the rest is merely tenacity.

—AMELIA RINEHART

When we are no longer able to change a situation, we are challenged to change ourselves.

—VIKTOR FRANKL

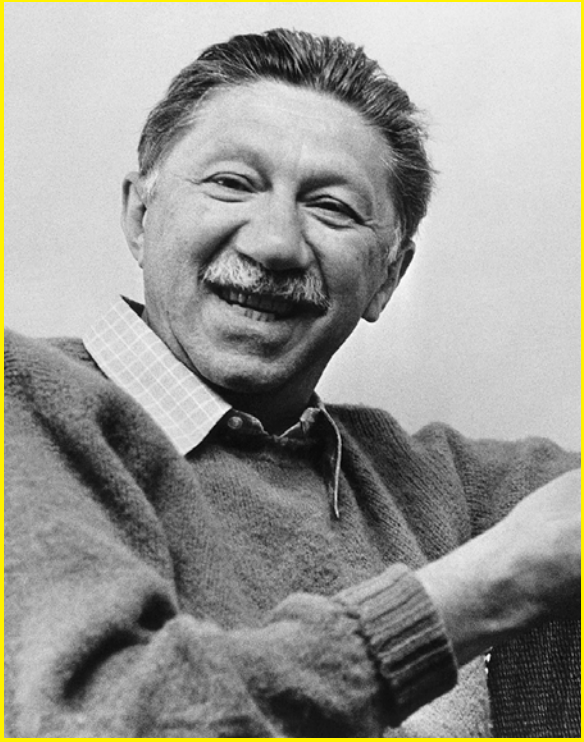


SHUTTERSTOCK

It is during our darkest moments that we must focus to see the light.

—ARISTOTLE

BETTMANN / GETTY IMAGES



In any given moment, we have two options: To step forward into growth or to step back into safety.

—ABRAHAM MASLOW

A pivot is a change in strategy without a change in vision.

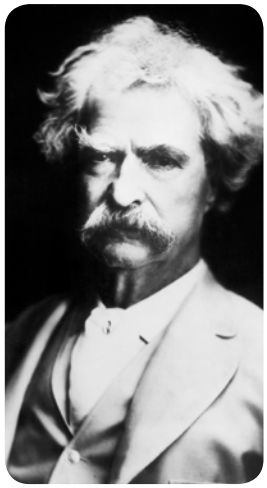
—ERIC RIES

In the past, jobs were about muscles, now they're about brains, but in the future, they'll be about the heart.

—MINOUCHE SHAFIK

If you don't change your beliefs, your life will be like this forever. Is that good news?

—W SOMERSET MAUGHAM



SHUTTERSTOCK

Courage is mastery of fear, not absence of fear.

—MARK TWAIN

Patience and perseverance have a magical effect before which difficulties disappear and obstacles vanish.

—JOHN QUINCY ADAMS

Leaders grow; they are not made.

—PETER DRUCKER

SHUTTERSTOCK

Failure is an option here. If things are not failing, you are not innovating enough.

—ELON MUSK

The biggest risk is not taking any risk. In a world that's changing really quickly, the only strategy that is guaranteed to fail is not taking risks.

—MARK ZUCKERBERG

An entrepreneur is someone who jumps off a cliff and builds a plane on the way down.

—REID HOFFMAN

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