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EMPLOYERS OF THE FUTURE: A FORTUNE INDIA-WORK UNIVERSE STUDY OF FUTURE-ORIENTED WORKPLACES

War On Inflation P. 42 | Sustainability: Hydrogen Play P. 98 | Relentless Chinese Imports P. 34

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ADANI'S AMBITIONS

IN THREE DECADES, GAUTAM ADANI CREATED A $30 BILLION INFRASTRUCTURE GIANT ACROSS 22 BUSINESSES. OVER THE NEXT EIGHT YEARS, HE BETS $70 BILLION ON GREEN ENERGY. WHAT DRIVES THE WORLD'S 5TH RICHEST MAN?


ROGER FEDERER


GARBIÑE MUGURUZA


BJÖRN BORG

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SPECIAL ISSUE:
EMPLOYERS OF THE FUTURE

FORTUNE INDIA —exchange

GAME CHANGERS IN MANUFACTURING booklet along with this issue

THIS ISSUE CONTAINS SOME PAGES UNDER THE FORTUNE INDIA EXCHANGE BANNER WHICH ARE IN THE NATURE OF ADVERTORIAL FEATURES. NO *FORTUNE INDIA* JOURNALIST WAS ASSOCIATED WITH THE CONTENT IN THESE PAGES.

COVER PHOTOGRAPH BY **NARENDRA BISHT**

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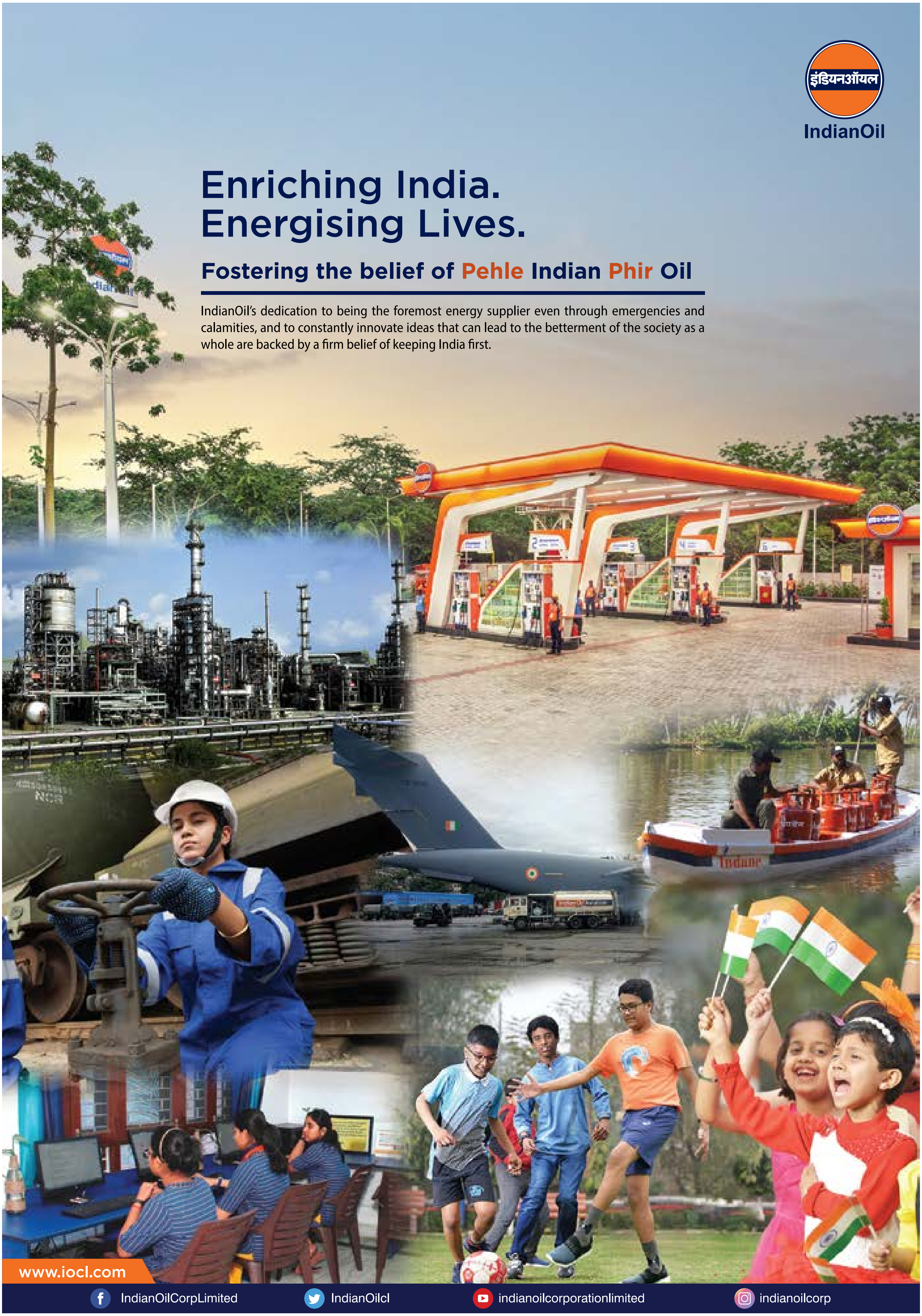

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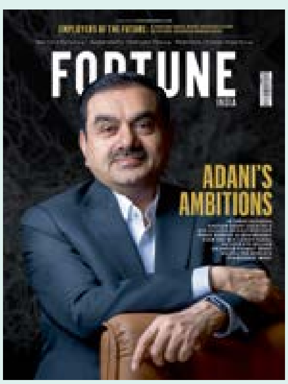
Audaciously Adani

‘Adjacency’! That is how Gautam Adani patiently explains the group’s rapidfire entry into the nearly two dozen businesses that appear totally unrelated to the outside world. From ports to airports; thermal, solar and wind power to cement; and edible oils and FMCG to city gas distribution.



“Adani group is nothing but India’s success story in infrastructure,” explains Gautam Adani in a 90-minute conversation sitting relaxed at the corner of a sofa on the 16th floor of Adani house, the group headquarters at Shantigram, its private township in Ahmedabad.

Adjacency along India’s infrastructure deficiency makes the ₹2.30 lakh crore group India’s biggest infra player: The biggest in ports, biggest in airports, India’s largest private power company; largest solar power company; largest in city gas distribution; largest in power transmission; and the biggest edible oil company; and now with Holcim, the second largest in cement.

The blinding expansion, a majority via acquisitions in two years of the pandemic, has catapulted the valuation of his stake in listed entities more than seven times from ₹1.4 lakh crore at the end of 2019 to ₹10.3 lakh crore on May 24, 2022. That makes the about to be 60 Gautam Adani the world’s fifth richest in just 34 years of the group’s existence.

But Adani’s ambition goes beyond this. He talks in small, well thought out sentences, assimilating thoughts into simple one-liners, as he goes about explaining another audacious bet — a $70 billion investment into fully backward integrated green energy capacity and infrastructure. “Today climate change is one of the biggest challenges. Those challenges also open up huge business opportunities. The opportunity in this case is energy transition, the transition from fossil fuels to renewables and to hydrogen. What the world has seen in the last 100 years of energy forms is set to change in the next 10-20 years,” says Adani.

Our cover story this issue is a peek into the mind of the one man whose ambition keeps growing bigger with each new milestone. Whom the whole corporate world is trying to decipher. Importantly, the big challenges before the first-generation group, including the ballooning debt, assimilation of massive acquisitions, entry into new businesses and transitioning of old businesses — all happening at the same time.

Our special issue this month is ‘Employers Of The Future’ — a unique study conducted with our partners Work Universe to identify some of the best practices among organisations who are on a mission to ready themselves for the future needs of their employees.

Our special gratitude to an eminent board of the ‘Employers Of The Future’, whose decades of HR experience guided us all along to form the bedrock of this study: Anand Kripalu, MD and global CEO, EPL; Deep Kalra, founder and group executive chairman, MakeMyTrip; Radha Ahluwalia, general partner, Work Universe; Rajeev Dubey, former group president, HR & corporate services, CEO, after-market sector & member of the group executive board, Mahindra & Mahindra; Rajkamal Vempati, head of human resources, Axis Bank; Santrupt Misra, director, group HR, Aditya Birla Group; Suresh Narayanan, CMD, Nestle India.

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SRM UNIVERSITY-AP: ON THE PINNACLE OF EXCELLENCE

SRM University-AP delivers world-class education that moulds visionary citizens of the future. The university gives paramount importance to bridging the gap between students' potential and the emerging industrial demands. Inter-Disciplinary Experiential Active Learning (IDEAL) curriculum; Undergraduate Research Opportunities Project (UROP), Capstone Projects; Industry Internships; rigorous training on coding and other skillsets; international language training for German, and Japanese, etc. ensure employment edge to the students.

Students are provided with the best opportunities through the core programmes- Placements, Internships and Training Sessions. Career counselling and personality development classes are part of the intensive corporate training modules. This has enabled the students to prove their mettle by securing placements on both global and domestic fronts. International placements and internship opportunities from the USA, Italy, Poland, Europe, and Germany acquaint our students with leading enterprises across the globe.

The placement cell at SRM University-AP is dedicated to conducting rigorous professional development programmes. As a result, the brilliant maiden batch of SRM University-AP secured 100% placement and international offers up to 50LPA in 2021. The drive for the Class of 2022 is going on with lucrative Marquee, Dream, and Super Dream offers. The top recruiters include Amazon, Microsoft, Bank of America, Standard Chartered Bank, Infosys, Barclays, and TCS, to name a few.

SRM University-AP is committed to making the students' educational experience multifaceted and holistic. Students are offered exposure and global educational experience through the Semester Abroad Programme at UC Davis, University of Wisconsin-Madison, Northeastern University, Asia University - Taiwan, EFREI-France, and Flinders University-Australia, among others. The university has MoUs with more than thirty global universities to offer international degree pathways such as dual degree programmes, joint degree programmes, transfer programmes and twinning programmes. The class of 2022 has achieved a 100% acceptance rate to top-ranked QS universities worldwide with exciting scholarships up to $21000.

Dr. P. Sathyanarayanan
President, SRM University-AP

Cutting-edge research of an outlay of Rs 23.9 crores that benefits society betides in SRM University-AP. Consequently, 800+ research papers by students and faculty members are published in high impact Scopus indexed journals. The university has filed/published/obtained 24 patents, 50 state-of-the-art laboratories, and has 35 ongoing research projects. In addition, our brilliant students have received prestigious research scholarships, presented papers at international conferences and attained opportunities to do internships at notable institutions such as Harvard Medical School. The students have developed nature-friendly e-bike and face shields with biodegradable elements and received copyright from the Indian Patent Office.

The Innovation, Design and Entrepreneurship Academy (IDEA) of SRM University-AP facilitate the incubation of successful student startups. 10,000+ sqft, state of the art incubator space and Seed funding are provided to every eligible student venture. 40+ student startups, 200+ industry mentors, ₹10000000+ turnover, and $120,000 angel investment are peculiar to the conducive entrepreneurial environment of SRM University-AP. The university further promotes student-run labs such as Next-Tech Lab and Ennovab, where students share their ideas to curate those into applications to benefit society.

The students of SRM University-AP never cease to bring laurels to their university. The university is proud to have Guinness Record Holders, Erasmus Mundus Scholars, INAE Fellows, budding entrepreneurs, national and international hackathon winners, and sports champions among its students. Be it cultural activities or tech-based challenges, the students of SRM University-AP have always proved their mettle.

ADMISSIONS

For students/parents who need support and guidance, the university counsellors are available via Helpdesk: +91-866-242 9299 / 1800-599-2233 (Toll-Free), from Monday to Saturday (except on public holidays), between 9 am and 5 pm or by email to admissions@srmap.edu.in

The Conversation

GAUTAM ADANI, CHAIRMAN, ADANI GROUP

A GANPATI IDOL HOLDS A PRIDE OF PLACE ON THE 16TH FLOOR CHAIRMAN'S OFFICE OF ADANI HOUSE, THE GROUP HEADQUARTERS IN PRIVATE TOWNSHIP 'SHANTIGRAM' IN AHMEDABAD. LIGHT SEMI-CLASSICAL INSTRUMENTAL MUSIC FLOWS IN THE BACKGROUND IN THE MINIMALLY DECORATED CHAIRMAN'S LOUNGE. GAUTAM ADANI WALKS IN BRISKLY AND SETTLES DOWN AT THE CORNER OF A SOFA WITH A WARM, INFORMAL DEMEANOUR. HE IS AGILE, SPORTS AN UNFLINCHING AIR ABOUT HIM AND A FACE THAT DEFIES THAT HE TURNS 60 ON JUNE 24. GAUTAM ADANI SPEAKS TO FORTUNE INDIA ON WHAT DRIVES HIS AMBITION THAT HAS STUNNED THE CORPORATE WORLD FOR HIS SEEMINGLY INSATIABLE APPETITE FOR NEW BUSINESSES — AND A BOLD $70 BILLION GREEN MISSION. INTERVIEW BY RAJEEV DUBEY AND P.B JAYAKUMAR

THIS EDITED Q&A HAS BEEN CONDENSED FOR SPACE AND CLARITY.

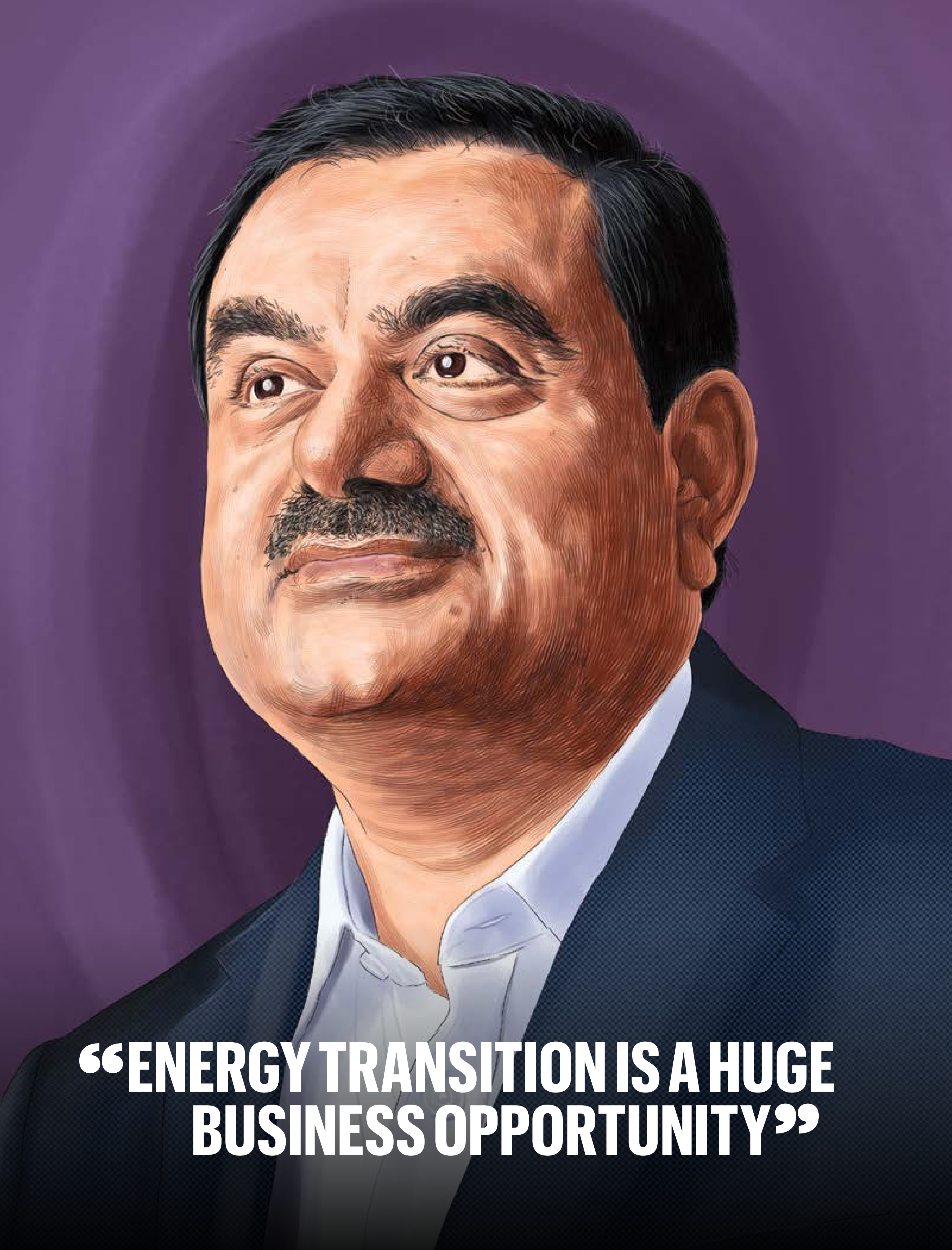
> "If India commits 500 GW of renewable power, we can't depend on China for solar panels."

VISION — AND MISSION

What is the larger vision driving the Adani group?
My vision for the Adani group has always been about nation building. Current global situation offers our nation unprecedented opportunities. Climate change is one of the biggest challenges. But it also opens up huge business opportunities in energy transition — from fossil fuels to renewables and hydrogen. What the world has seen in 100 years of energy forms is set to change in the next 10-20 years. Academia and research are working on how to make green energy [1] affordable. India has a great advantage — geographically, and in producing cost-effective electrons, converting into green electrons. We can be completely self-reliant. India can also eye exporting energy. If India is to grow, we must find ways to increase per capita electricity consumption. We need to sharpen our focus on industries, rather than services and agriculture. Without self-reliance or *'atmanirbharta'*, we can't serve 1.4 billion people. This is a huge opportunity for India to become *'atmanirbhar'*, and move from *'atmanirbharta'* (self-reliance), to *'bharatnirbharta'* (reliance on India). Right now, the world is dependent on what China makes. India can play this role for the world.

How do you bring *'atmanirbharta'* into energy transition?
We are not going to import anything. Silica (sand) is available here. From silica you can make polysilicon and ingots and wafers. From wafers, you can make PV cells and from the cells you can make solar modules. For making modules, you require glass. You require aluminium frames. About 97-98% value addition can be done within the country.

You announced an even larger $70 billion green investment plan for the next 8 years...



“ENERGY TRANSITION IS A HUGE BUSINESS OPPORTUNITY”

We are the only group to announce huge investments with a 2030 target. This is feasible and the best opportunity for India. We have already started implementing and the manufacturing ecosystem is under development.

We must be willing and capable of capitalising on India's natural advantages. India is blessed with an abundance of sunshine, which we must economically capture and convert into electrons. At the last COP, Prime Minister Modi announced an enhanced target of 500 GW by 2030 [2]. Quite clearly, India is pushing ahead with green policies.

The government is playing its role. It has announced the right policy structure and is leading the way to '*atmanirbharta*' with support schemes like the Production Linked Incentive (PLI) scheme. Now corporates need to step up and play their roles in developing the entire green ecosystem. If India commits 500 GW of renewable power, we can't depend on China for solar panels to create this infrastructure. During Covid, China raised the prices of panels from 18 cents to 30 cents. At 30 cents, your development programme gets stuck and can't produce cheap electrons. Without cheap electrons, you can't have a sustainable energy transition.

DRIVING FORCE

How do you pick businesses to get into? You chose energy, logistics, and now you are in so many unrelated businesses...
We follow a model that picks new businesses based on adjacencies to our existing businesses. This 'adjacency' business model is a strategy that we have fine-tuned over decades into a hard-to-copy differentiator. Our story is India's infrastructure story — be it ports, logistics, thermal power plants, green energy, transmission, distribution and now hydrogen. For western economists and management experts who look at core competence, these are diverse industries.

Our core competency is infrastructure. The issue with some overseas companies developing greenfield projects in India is that they expect returns to be provided to them. What one needs to keep in mind is that India is a developing country and, like in any other developing country, one has to take risks and work with the local processes and systems to succeed. You have to be long on India.

What philosophy drives entry into a new business?
We started as a trading house. In 1994, we listed our trading platform. Two years later we realised the issue. People said Adani does not purchase any assets. In their eyes it was a finance or trading company with individual expertise and no assets.

Then India started opening public-private partnerships. We entered ports because we were into trading and were using over 20 ports. That is how our infrastructure journey started. When you have a port and a large tract of land next to it, and being the largest importers of coal, it was natural to get into thermal power plants.

In 2006-07 there was a huge energy crisis. In 2003, the Electricity Act was amended and in 2006, the rules were changed. That is how the cycle with energy started. After 4-5 years of power generation, it was natural to get into transmission and then distribution. When the government started focussing on renewables, we started renewables.

About 10-15 years ago, when the gas policy was not clear, the Gujarat government started piped gas distribution. It was an opportunity for us to develop city gas distribution in

Q: Will you be able to make all these at the cost of what China produces?

India can produce cheaper than China as their labour costs have increased. This is a huge opportunity and we have to capture it right.

BETWEEN THE LINES

151.4GW
(1) India's installed renewable energy capacity as of December 31, 2021.

50%
(2) Of India's energy requirements will come from renewable energy by 2030, PM Modi said at COP26 Summit in Glasgow in October 2021.

Ahmedabad. In 2014, CM Narendra Modi became Prime Minister and visualised what he did in Gujarat for gas distribution for the entire country. We participated in all the bids and won many. That is why we have a huge energy portfolio.

Then we looked at other areas. Delhi and Mumbai airports were privatised after 2005. Airports in Hyderabad and Bangalore were developed by state governments. Then the government came up with privatising six more airports. We thought of it as an extension from ports to airports. These are adjacencies and we entered at the right time. We did not enter telecom because there is no connection for us.

But you entered food and agri business...
We were the largest importers of edible oil. Our partner Wilmar approached us 25 years ago, when we started developing the port. They had the vision of port-based agri-refineries. Everyone sees India as a huge market. When anyone sees 1.4 billion people, it is a huge opportunity. You have to work on tapping the opportunity. As part of adjacencies and areas that are essential to be aligned with the government's policy and India's growth, we see media and healthcare becoming big businesses in future.

What about data centres, water management, defence etc?
Defence is nothing but how to secure our country. To strengthen your economy, you have to strengthen your defence. Otherwise, your economy could go for a toss. After 70 years of Independence, we are still the largest importers of defence equipment. Don't you think that is a shame?

How do you assess political risks of new geographies? Your announcement of investment in Bengal was a surprise...
I can tell you Bengal is a huge opportunity...Orissa, Jharkhand etc... somehow it has not been explored to potential. There are many reasons. Once upon a time it was a great state, but it deteriorated. Mamata also understands the same and importance of development of the state. When you want to work with the government, you also have to understand such issues will come.

I am clearly seeing the changes happening in every state. Orissa, Jharkhand, Bihar, Kerala. In infrastructure long-term view is needed. One thing is you go and then go on complaining. I always look at how things are improving and how we can keep working with them. There are positivities and negativities...you have to go with the positivities. In Kerala we start with ₹10,000 crore. In Gujarat we can start with ₹50,000 crore. I can't look at the political system and what I am going to get in that state. I can't go everywhere expecting the same treatment I get from Gujarat or Rajasthan. And so, I can't decide I will not go to Kerala or West Bengal. They also want to start working with you.

How does entry into cement and Holcim fit in with your ESG goals?
We recognise the cement industry needs to be greener. We are positioned to become the world's greenest cement manufacturer and provide affordability that every Indian consumer needs. India's per capita cement consumption is 240 kg, against the global average of 525 kg. An apt comparison would be China with per capita consumption of 1,600 kg. Acceleration will come from infrastructure: 100 smart cities, 200 new airports, housing for all, concrete highways and the ministry mandate

"As part of adjacencies, we see media & healthcare becoming big businesses in future."

34.3%
(3) Estimated share of coal in India's power generation by 2040, a steep decline from 66.4% in 2022.

- India wants to reduce the carbon intensity of its economy by more than 45% by 2030.
- India is the third-largest global emitter of CO_2, despite low per capita CO_2 emissions.
- Domestic coal-fired power plants account for 1,104 million tonnes of CO_2.

SOURCE: IEA

stipulating minimum 25% of concrete volume in national highways, expressways, the rise of dedicated freight corridors — the possibilities to drive cement consumption are endless. It is a game of supply chain and energy efficiency. Our natural adjacencies look highly attractive. Be it mining, ensuring raw material availability, fuel sourcing, supply of power, or efficient logistic capabilities, all are existing synergies. The ability to utilise fly ash from power plants and use it in cement production is a significant advantage. There could not have been a better way for us to jump-start this business. From the current 70 million tonnes, we expect to reach 100 MT in 3-4 years and 130 MT in six years.

So, these 'adjacencies' are natural extensions of existing businesses? You don't make a choice: '*iss mein galti ho sakti hai*' (things can go wrong)...
Things can go wrong. It is not that it cannot go wrong. But you have to ensure you have expertise and capability to overcome mistakes..

GREEN POWER

When the Australia project came, that was a big move for you, probably at a time the group did not have the capability to handle a big mistake...
You have to see the group's DNA. Perseverance is a very powerful tool in business. Seven of 10 groups in thermal power got into trouble. All 10, including Adani, can get into trouble. Why did the Adani group come out of those troubles? It is because of perseverance, wherewithal and push to correct things. Today we are the only group — not even NTPC—setting up a greenfield thermal power plant in addition to 20,000 MW of green power.

Perseverance is strength. In Australia we were fighting for 7-8 years. It requires perseverance to fight up to the last mile. We held on. NGOs and so-called foundations and philanthropists work with their own agendas. They do not understand we are replacing 2 metric tonnes of dirty Indian coal [3] with 1 tonne of high-quality Australian coal. They don't appreciate Adani spends 80% capex on green initiatives. By blocking Adani on this, you are blocking their capital which can be pushed to other green initiatives. They are not appreciative. That is fine. We work with the Government of Australia and local governments.

Have you moderated your ambitions in Australia?
There is no question of moderating plans. If you enter a pipe, you have to get out at the other end. You cannot get stuck inside. Many people got stuck in between and died. You have to get out. Now we are through. Coal production has started.

Energy transition will move from fossil fuels to renewables, EV, LNG and then hydrogen. We depend on coal for 65% of electricity. How do you look at this transition?
We are looking at net zero by 2070 [4]. That is 50 years away. The Adani group is nothing but the faraway India story. India is committing the transition, but we don't know how it will happen and when we will be net zero. We should not commit a net zero roadmap which is not feasible.

The real issue is per capita electricity consumption – ours is 1,100 units against the world average of 3,300, while China is at 5,500 and America at 12,000. We need to ensure all citizens have electricity. That is the

Q: Your M&A spend is the highest ever. Is this the time to get into more non-fossil fuel businesses?

Over 80% of our capex is on green investments. We still have to invest 20% of capex to sustain energy transition. It is at least a 30-year journey.

BETWEEN THE LINES

$160 bn/ year
(4) Investment needed across India's energy economy between now and 2030 to reach net zero emissions by 2070

$80 bn
(5) Estimated domestic market size of renewable batteries, green hydrogen and other low-carbon technologies by 2030.

SOURCE: IEA

way to uplift people. Today, Adani is committing because it is aligned with India's ambitions.

In your view, what are Adani group's core strengths?
The great part of growth is connecting adjacencies. We created many adjacencies. Very few groups in India possess the strength to conceptualise and implement large greenfield projects. We have 15 ports connecting the country and a large land bank. We are now working with Sri Lanka to generate wind energy there and bring it to Indian shores.

How do you execute big, complex infrastructure projects such as Mundra port and power plants?
We have become experts in project execution. We may be short on many issues, but have one of the greatest outcomes in execution. We conceptualise large, complex, difficult projects and execute per schedule, or ahead. That gives confidence.

Green energy was less than 5% of your generation five years ago and your plans are to increase it to 35% plus in another five years...How?
The world is going through an energy crisis due to the Ukraine-Russia war. You cannot push ESG and transition the way people in developed world are pushing it. Users want 24X7 power. Renewable can give intermittent power for only eight hours. Someone has to supply for the balance 16 hours.

How will green hydrogen [5] play out?
Construction is on. India today imports LNG at $12 and $15 per mmBtu. Hydrogen at scale will most certainly cost us less than that. Green hydrogen will cost us even lesser given that renewable power prices continue to drop. Therefore, as we build out an end-to-end value chain, from sand for silica to green electron and our own green hydrogen electrolysers, we will be one of the most influential hydrogen players in the world.

31.4%
(6) Estimated share of solar in India's power generation by 2040, against 5.9% in 2022, according to IEA.

The cost of solar power has declined 90% over the past two decades across the globe, and is expected to go down 15-25% in the upcoming decade, according to global research firm Wood Mackenzie.

You have committed 45GW of solar [6]. How viable will this be as prices are down to ₹2 and even less?
Ultimately it is headed to zero cost.

BUSINESS & FAMILY

If you look at family & professionals in family driven groups, there's a certain way of handling it, especially in the first generation. How are you readying the group for perpetuity?
Neither pure family run nor only professional-run companies are going to give perpetuity. If you can build a board with family members and professionals on the same table, divide responsibility, you will get best governance, growth and shareholder returns. The family does not think of one-two quarters performance and how the share market will move. Therefore, in operations, no family members are involved, except when doing reviews of monthly and quarterly budgets. According to me, a blend of entrepreneurship, family and professionals is the best combination. But family should know when to enter decision-making and when not to.

Within the family, how do you debate, agree and disagree on things. How does that work?
We have a family constitution, a family business office. We are the first and second generation in business. They talk online. We lunch together for an hour and debate on issues. It is a closed meet within the family.

How will you ensure family disputes and dissent don't arise? This is the first and second generation. It is still manageable. Once you have a second and third generation...
Family is nothing but a partnership of multiple generations. It depends on your family structure, responsibility, and respect among members. Give equality, opportunity to every capable member. You can't have all five fingers of the same size. Yet, five fingers together will have more power.

THE BRIEF

BUSINESS. DISTILLED.

LIC IPO

More Downside In Store For LIC Stock?

The dismal market debut shows the country's largest life insurer is yet to prove its mettle before investors.

BY V. KESHAVDEV

PHOTOGRAPH BY **NARENDRA BISHT**

It was meant to be the jewel in the government's crown but the public market debut of the country's biggest life insurer, the Life Insurance Corporation of India (LIC), proved to be anything but that. In fact, at the press conference to announce the launch of LIC's initial public offering, Tuhin Kanta Pandey, secretary, Department of Investment and Public Asset Management, had a tough time fending queries on why the government was selling LIC so cheap.

The IPO was valued at 1.1x LIC's embedded value of ₹5,40,000 crore compared to listed peers' 2x to 4x. Pandey told journalists at the interaction that comparing LIC in terms of embedded value to other players may not be the correct approach given the difference in sizes. While the media felt the government was selling its prized jewel cheap, in hindsight it seems the government and the bankers knew the worth of what they were selling.

The government got the valuation that it wanted but it has left investors with losses, for now. The Centre sold over 22.13 crore shares (3.5% stake) at ₹949 a share, but the insurer listed at a discount of 9% to the issue price on May 17 and slipped further 13% over the subsequent sessions to end at ₹840.20 on May 19. Not just retail investors but policyholders and employees' investments, too, have turned negative despite being offered a discount. The insurer had offered a discount of ₹60 to policyholders and ₹45 to retail investors and employees, translating into an issue price of ₹889 and ₹904, respectively.

While bankers and the government would argue that the listing came amid global rout across markets, there were already enough indications that the debut was a risky proposition.

Subhash Chandra Garg, former finance secretary and chief policy adviser at Subhanjali, told *Fortune India* that LIC was always a recipe for disaster considering that on a price to earnings multiple the stock was exorbitantly priced. The insurer's earnings per share (EPS) averaged at ₹4.47 in three preceding years and stood at ₹2.38 for the first half of FY22. At the offer price of ₹949, the multiple that the insurer commanded was in excess of 200 times, and despite the correction the current multiple is around 185 times. "That's pretty expensive by any standards," says Garg.

Considering the multiple of listed peers SBI Life and HDFC Life, which averages around 90 times, LIC's stock should be quoting at ₹402, says Garg. That's more than 50% lower from the current price.

However, a section of the market believes that profits in the coming years

Sea of Red...

LIC stock will continue to flounder among loss-making PSU stocks till its springs a surprise with its financial performance.

COMPANY	SECTOR	OFFER PRICE (₹)	LMP (₹)	DIFF (%) OVER OFFER PRICE
PUNJAB NATIONAL BANK	BANKS	390	29.95	**-92.32**
IRCON INTERNATIONAL	INFRASTRUCTURE DEVELOPERS & OPERATORS	475	39.6	**-91.66**
GIC	INSURANCE	912	114	**-87.50**
PUNJAB & SIND BANK	BANKS	120	15.55	**-87.04**
NEW INDIA ASSURANCE COMPANY	INSURANCE	800	104	**-87.00**
CENTRAL BANK OF INDIA	BANKS	102	17.8	**-82.55**
OIL & NATURAL GAS CORP.	CRUDE OIL & NATURAL GAS	750	161.8	**-78.43**
OIL INDIA	CRUDE OIL & NATURAL GAS	1050	239.55	**-77.19**
NBCC (INDIA)	REALTY	106	34.1	**-67.83**
UNION BANK OF INDIA	BANKS	110	36.05	**-67.23**

LMP: LATEST MARKET PRICE; RETURNS AS ON MAY 20

... Sea of Red

COMPANY	SECTOR	OFFER PRICE (₹)	LMP (₹)	DIFF (%) OVER OFFER PRICE
ENGINEERS INDIA	INFRASTRUCTURE DEVELOPERS & OPERATORS	150	59.55	**-60.30**
BANK OF BARODA	BANKS	230	99.45	**-56.76**
MOIL	MINING & MINERAL PRODUCTS	375	167.6	**-55.31**
NMDC	MINING & MINERAL PRODUCTS	300	146.35	**-51.22**
HUDCO	FINANCE	60	33.85	**-43.58**
PTC INDIA FINANCIAL SERVICES	FINANCE	28	16.1	**-42.50**
BANK OF MAHARASHTRA	BANKS	23	16.05	**-30.22**
COCHIN SHIPYARD	SHIP BUILDING	432	324.15	**-24.97**
COAL INDIA	MINING & MINERAL PRODUCTS	245	185.9	**-24.12**
DREDGING CORPORATION	MISCELLANEOUS	400	312.7	**-21.83**
GAIL (INDIA)	GAS DISTRIBUTION	195	156.2	**-19.90**
IRFC	FINANCE	26	21.5	**-17.31**
SHIPPING CORPORATION OF INDIA	SHIPPING	140	121.4	**-13.29**
LIC	INSURANCE	949	826.25	**-12.93**
NHPC	POWER GENERATION & DISTRIBUTION	36	32	**-11.11**
UCO BANK	BANKS	12	11.48	**-4.33**
SBI CARDS & PAYMENT SERVICES	FINANCE	755	741.45	**-1.79**

LMP: LATEST MARKET PRICE; RETURNS AS ON MAY 20; SOURCE: FORTUNE INDIA, CAPITALINE

will increase from the past, following the bifurcation of the single policyholders' fund into participating and non-participating funds last year. Under a participatory fund, a policyholder can get a share of the profits of the company unlike non-participatory funds.

Prior to the listing, the insurer used to distribute 95% of the profits made every year in the form of bonuses to participating policyholders and the rest to shareholders. As a result of the split, the embedded value jumped nearly five-fold to ₹5,39,686 crore (as of September 2021) compared with ₹95,605 crore in March 2021.

Post the split, participating policyholders' profit pool will be limited to the fund belonging to them, whereas new shareholders, the government, and new investors, will have rights to the surplus from non-participating policyholders' funds. As a result, some analysts believe profits for shareholders will increase in the coming years.

However, a lot hinges on LIC's ability to diversify its product mix to include high-margin non-participating products, says Suresh Ganapathy, analyst at Macquarie Securities India. Though LIC has a 1.3-million strong distributor network, Ganapathy feels there will be several challenges in scaling up the non-par business.

Credit Suisse, however, believes LIC has an edge. The foreign brokerage house points out that LIC's gross non-par margin is 83% versus 11% for participating products. A switch towards non-par products can raise the insurer's profitability, as a 10% shift in the annual premium mix from participating plans to non-participating plans can push new business margins to 20%.

Garg feels that expectations of bumper profits ahead are misplaced. Against ₹2,971-crore profit generated for its shareholders in FY21, LIC raked in ₹1,672 crore for the nine months of FY22. Garg feels even if the insurer were to generate profits of ₹3,500 crore, translating into an EPS of ₹5.54 per share, investors will not be better off. "Even if 100% profits are distributed to shareholders, the investment yield works out to 58 paise per share. For a modest 2% dividend yield, the share should be trading at ₹275," says Garg.

The challenge about earnings also comes from the fact that LIC generates lower returns on its assets under management. In FY21, its gross yield on life fund at 8.3% was the lowest compared with six other life insurers' earnings of 8.6-9.9%. "LIC's investment record and policies do not inspire confidence that it would be able to earn such investment returns," feels Garg.

LIC has publicly stated that it's unlikely to come out with follow-on public offer for at least a year. But given its performance amid the market meltdown, it's quite likely that the corporation may continue to stay in the list of PSU stocks that continue to trade below their IPO prices.

APEXON: THE FUTURE OF WORK IS AGILE, COLLABORATIVE AND DIVERSE

APEXON, FORMERLY INFOSTRETCH IS REDEFINING THE BLUEPRINT FOR SUCCESS IN THE DIGITAL WORKPLACE OF THE FUTURE

Apexon offers a new generation of technology services focused on helping organizations accelerate their digital initiatives from strategy and design to development, testing, implementation, and data intelligence. Backed by Goldman Sachs Asset Management and Everstone Capital, Apexon's custom digital engineering solutions leverage deep technical expertise, agile methodologies, and cutting-edge development to create a scalable digital roadmap.

SRINIKETH CHAKRAVARTHI; CEO, APEXON

Sriniketh has a remarkable track record of growing, managing, and transforming businesses. He achieves outstanding results by balancing the needs of employees, customers, and the business, and ensuring that all stakeholders and systems are wired to grow and succeed together. As CEO of Apexon, he leads a team of nearly 6,500 people across 18 global offices, setting the agenda for the company as it goes through a period of hypergrowth and market consolidation.

LEILA MODARRES; CMO, APEXON

Leila is a creative thinker, never afraid to explore new territory and try new things. She oversees Apexon's global branding and communications, covering everything from market positioning, awareness-building and employer branding through to demand generation initiatives. Her innovative mindset has led to Apexon's pioneering approach to marketing, which has won numerous accolades including its award-winning YouTube channel, DTV.

LEILA MODARRES ▸ WHAT SHOULD FORWARD-LOOKING EMPLOYERS BE PRIORITIZING RIGHT NOW?

SRINIKETH CHAKRAVARTHI ▸ From my perspective leading a company that specializes in helping clients drive digital disruption, it's clear we're witnessing a major disruption of the workplace. Organizations are transforming away from clunky, system-centric processes to agile, diverse, employee-driven businesses, laser-focused on delivering customer success. Post-pandemic, too much discussion has centred around the pros and cons of remote working, instead of focusing on the bigger opportunity to re-orient the business around their employees and their goals.

LM ▸ HOW CAN EMPLOYERS DO THIS?

SC ▸ At Apexon, we're ahead of the curve in both feeling the acute demand for digital skills and responding to it. First, comes the shift in mindset to thinking about employee experience in the same way as digital leaders now think of customer experience. The workforce has never been more diverse and just as expectations have shifted how we shop and enjoy leisure activities, so we expect more from the workplace. We understand this, so we make sure Apexon puts employee experience first, identifying goals, supporting learning and enabling career ambitions.

LM ▸ WORKPLACE CULTURE HAS ALWAYS BEEN INTEGRAL TO LIFE AT APEXON. BUT WITH THE SHIFT TO AN EMPLOYEE-DRIVEN WORKPLACE COMBINED WITH INCREASED REMOTE WORKING, HOW WILL TEAM CULTURE EVOLVE?

SC ▸ Culture is key and you're right that Apexon's character and values are what set us apart. Work culture is more important than ever, arguably more so than compensation because while a higher salary might trigger a candidate to consider switching jobs, team culture is what makes them stay. Collaboration, transparency and respect are all values we live by. This is what enables us continually innovate, driving people to push their own boundaries, driving customer success and increasing business performance.

LM ▸ DIGITAL SKILLS HAVE NEVER BEEN MORE IN DEMAND. WHAT'S YOUR STRATEGY FOR ATTRACTING AND RETAINING THE BEST TALENT AT APEXON?

SC ▸ It's about recognizing that we succeed or fail as a team. Business success at the expense of employee satisfaction doesn't work long-term. We know that employees who feel understood and supported perform better individually and collaborate more effectively. In today's climate, employees and prospective candidates are in a powerful position to shape their careers in technology. So, we ensure we enable life-long learning through initiatives such as Apexon University, we build teams that thrive together based on mutual trust and we actively support career goals.

Are you looking for your next career move? Do you want to join a team that thrives on collaboration and problem-solving? Do you want to solve the biggest digital challenges of our times? https://www.infostretch.com/about/careers/

Apexon

ADANI'S GREEN AVATAR

Gautam Adani created a $30 billion infrastructure giant across 22 sectors via rapidfire acquisitions and break-neck entry into new businesses. With India setting a 500 GW renewables target, he bets $70 billion on green energy. What drives the world's 5th richest?

By **P.B. Jayakumar**
Photograph By **Narendra Bisht**

Number 20 holds special significance in the life of Gautam Adani, chairman of the rapidly growing Adani group. All good things at the ₹2.30 lakh crore group begin with number 20. It's the sum of the birth date of 'Gautam-bhai', as everybody addresses him. It's also the sum of the number plates of each of the eight cars he owns, including the blue BMW 7-Series and Toyota Alphard, his favourites. All family owned and company owned cars sport 20 as the sum of their registration plates. The postal code of Shantigram, an 800 acre township housing the Adani group headquarters on the Sarkhej-Gandhinagar Highway, is 382421. You guessed right, it adds up to 20!

So it was only fitting that 2020 was the year that catapulted Gautam Adani from one among the large business houses in the country to the only one out to challenge the largest — Reliance and Tata — in depth and breadth of operations and value. The valuation of his holdings in seven listed companies shooting from ₹1.4 lakh crore on December 31,

SCALE MAKES AN INFRA GIANT

APSEZ
India's largest port operator handling 312 million metric tonnes of cargo at 15 ports.

Adani Airports
India's biggest private airports player with 7 airports under management and rights for one more under construction.

Adani Power
India's largest private thermal power company with 14,000 MW of thermal and lignite plants.

Adani Green Energy
India's largest solar company with 5,400 MW installed capacity and 14,600 MW under construction.

Adani Total Gas
India's largest city gas distribution company with 33 geographical area licences.

Adani Transmission
India's No.1 private power transmission and distribution company with 18,795 circuit kilometers.

Adani Wilmar
India's largest edible oil player with an 18.9% market share with brand 'Fortune'.

Adani Enterprises
India's largest coal importer, commodity and minerals trading company; among top global players.

2019 to ₹10.3 lakh crore as on May 24, 2022, overwhelming Mukesh Ambani's ₹8.7 lakh crore and nudging Tata Group promoter stake worth ₹12.6 lakh crore. In the process, he overtook large entrenched business groups such as Aditya Birla (₹2.2 lakh crore) and Mahindra (₹79,966 crore).

"Adani group is nothing but India's success story in infrastructure," explains Gautam Adani in a relaxed 90-minute conversation with Fortune India at the Chairman's Lounge on the 16th floor.

He speaks plain English, in well thought out small sentences, often assimilating complex business equations and jargons into easy one-liners. Lacing them with appropriate similes, euphemisms such as "For me, partnership is not a percentage — it is all respect, trust and transparency" or "Forget individual enterprises, India as a country faces shortage of capital" or "India is 10 years behind China."

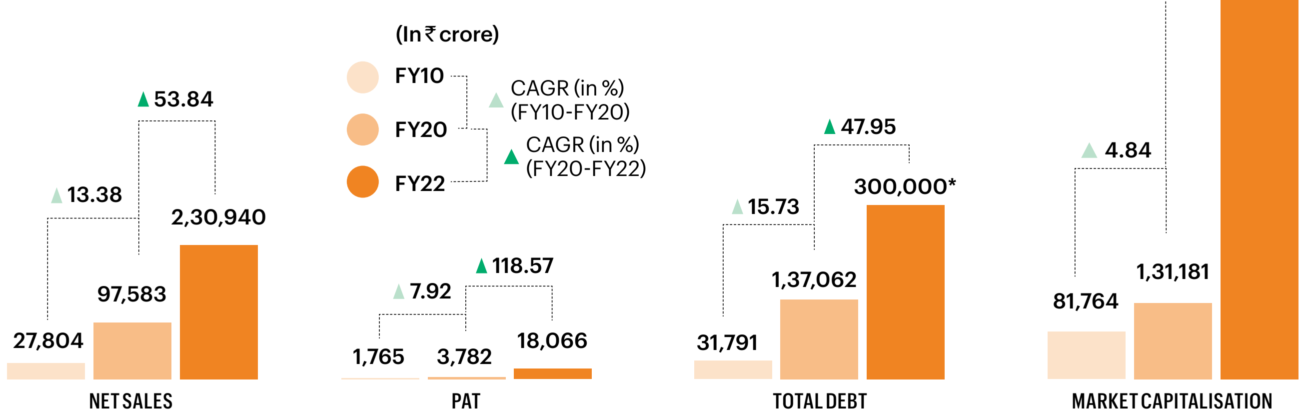
Running up to the inflection year 2020, Adani had already built an enviable empire, tapping India's grave infrastructure deficiency. Now he has set up one of the boldest green plans globally with a proposed $70 billion push in solar, wind, hydrogen, green gas, green cement, green steel — all to be implemented by 2030.

With its breadth of massive infrastructure operations, the group is already India's largest port operator handling 312 million metric tonnes (MMT) of cargo against No.2 JNPT's 76.14 MMT tonnes in 2021; India's largest private airports player with seven airports under management and rights for one more under construction; India's largest private thermal power company with 14,000 MW of thermal and lignite plants, followed by Tata Power's 8,860 MW thermal capacity; India's largest solar power company with 5,400 MW installed capacity and 14,600 MW under implementation; India's largest city gas distribution company with operations in 33 geographical area (GA) licences, Gujarat Gas is No.2 with 27 GAs; India's largest private power transmission and distribution company with 18,795 circuit kilometers; and India's largest edible oil player with an 18.9% market share with brand 'Fortune' in a highly unorganised industry.

In recent times, some of this growth came from 35-plus acquisitions worth ₹82,600 crore in last five years. Of that, over ₹33,500 crore was spent in 2021 alone. In 2022, months after incorporating Adani Cement, the group acquired Holcim India's 70 million tonne (MT) cement capacity for $10.5 billion (about ₹81,360 crore) to emerge as India's second-largest cement manufacturer, behind Aditya Birla Group's 117 MT. With 20,000 MW of solar power capacity under development, Adani aims to be the world's biggest solar power company by 2025.

Such rapid-fire growth and acquisitions have shot up group revenues from ₹70,463

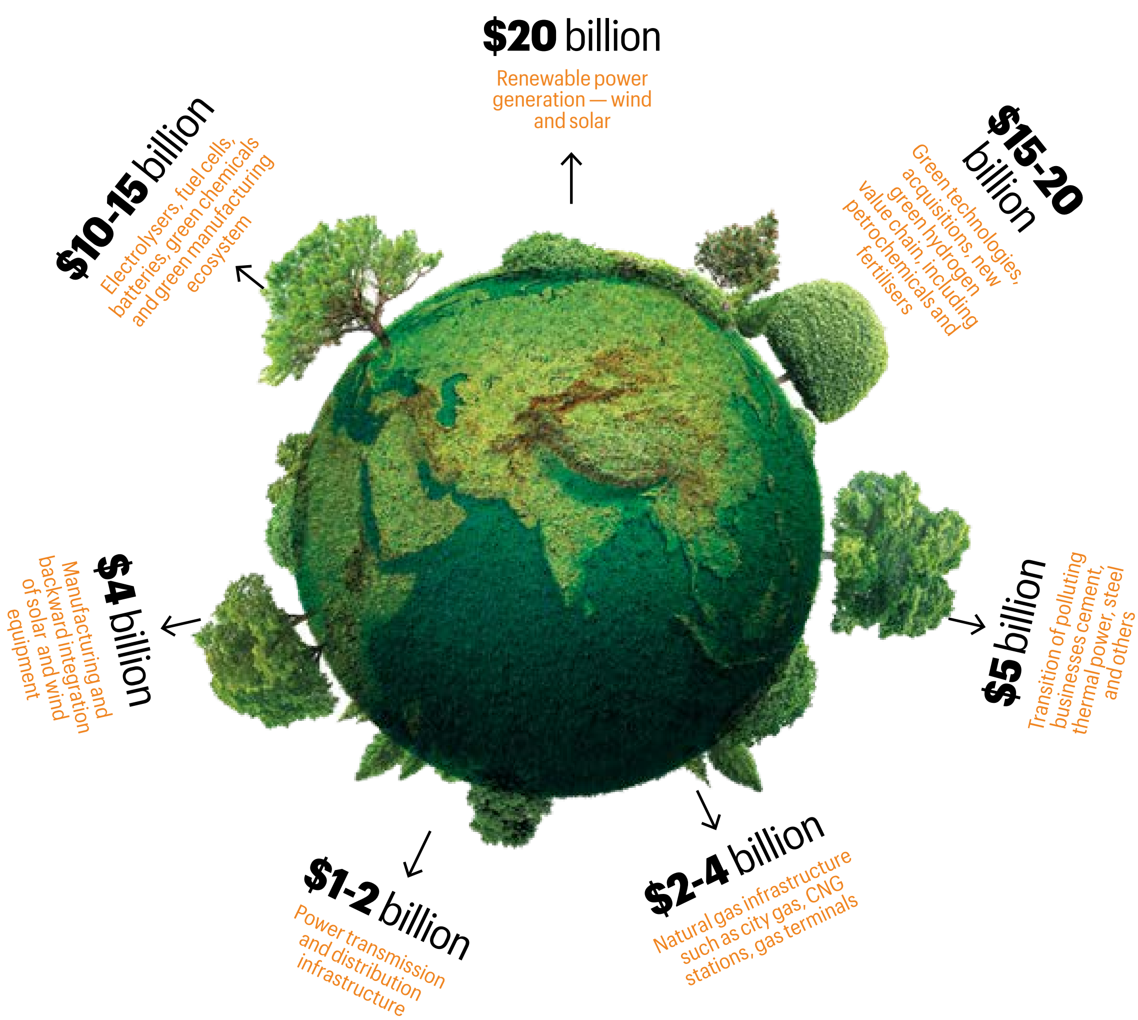
THE GROUP: THEN AND NOW



FY22 NUMBERS, TOTAL DEBT AND MARKET CAP FIGURES ARE INCLUSIVE OF THE HOLCIM DEAL; * ESTIMATED (ADANI GROUP'S DEBT STOOD AT ₹224,408 CRORE AS ON MARCH 31, 2022); MARKET CAP FOR 2022 AS ON MAY 24; SOURCE: FORTUNE INDIA, CAPITALINE

$70 BILLION GREEN INVESTMENT IN 8 YEARS

Where it will be deployed



crore five years ago to over ₹2.30 lakh crore today. Of that, an astounding 53.84% was added since 2020. From losses of ₹858 crore five years ago, it clocked profits of ₹18,066 crore in FY22. "Gautam Adani has not only diversified group portfolio but has done it keeping emerging growth sectors in mind and achieved all these within a short period of time," says Dr. Kavil Ramachandran, professor of entrepreneurship (practice) and senior advisor, Thomas Schmidheiny Centre for Family Enterprise at Indian School of Business (ISB), Hyderabad.

But acquisitions are not cheap. The recent acquisitions worth ₹1.6 lakh crore, have ballooned group debt from ₹1 lakh crore five years ago to around ₹3 lakh crore in FY22 (including the Holcim deal). That makes the 34-year-old Adani group, India's second-most indebted group after Tata (₹3.5 lakh crore), and ahead of Reliance Industries (₹2.8 lakh crore), as per the latest available listed company information.

In January 2021, senior political leader Subramanian Swamy tweeted without providing evidence, accusing Adani of creating ₹4.5 lakh crore

Backward integration in solar, wind manufacturing

PLANT	CAPACITY	INVESTMENT ($ billion)	TAKE-OFF
Poly-silica	30 KTPA	1.2	FY25
Ingots & wafers	10GW	1.1	FY23
Copper smelter	500 KTPA	1.2	Q4 FY23
Ancilliary like glass & aluminium	10GW	0.4	FY25
Wind machinery & auxillary	3GW	0.1	FY24
Total investment:		**4**	

GW: GIGAWATT; KTPA: KILO TONNES PER ANNUM

80%

The group's capex on green initiatives

5,400 MW

Installed solar capacity. Another 14,600 MW is under construction

as NPAs to banks. Adani group refuted the allegation saying it has maintained an "impeccable record of not a single NPA in three decades of existence."

Sanjay Sethi, managing partner & CEO, Nestor Capital Consulting LLP says Adani has cash-generating businesses to fund equity expansion and maintains prudent financial discipline by refinancing previous rupee debts with low-cost bonds, bringing in external investments. And is adept at tapping primary and secondary markets.

Business is more than just money power. After expanding rapidly in 22 different businesses — seven of them added in the last two years —does the group have the capacity to absorb the massive transition or management and operational bandwidth to make it a success? Why did Adani enter seemingly unrelated businesses that are far removed from core competence?

Adani's 'Adjacency' Theory

Gautam Adani starts off slowly, patiently explaining his 'adjacency' theory behind the group's entry into each of the businesses. As a listed trading company in 1994, investors often asked him why flagship Adani Enterprises had no assets. "People said Adani does not purchase any assets that can sustain. In people's eye it was a finance company, a trading company. It is just individual expertise and not corporate. That was the real issue and we started thinking how to adjust," explains Adani.

By then, Adani Enterprises was already India's largest coal importer, using 20 ports to unload imported coal. Fortunately, India began opening public-private partnerships and Adani entered the port business at Mundra. "It was a natural extension for us to support our prime activity. That's how our infrastructure journey started with a port," says Adani. Power generation came next: "When you have a port and a large tract of land next to your port, and being the largest importers of coal, it was a natural extension to get into thermal power."

Adani was also India's biggest edible oil importer. While the port was being set up, Singapore's Wilmar—from whom Adani imported edible oils—approached with a vision to set up port-based agri refineries, keeping in mind the potential of India's huge market. "Everyone thinks of India as a huge market. When anyone sees 1.4 billion population, it is a huge opportunity. You have to only work to tap that underlying market. No one can deny the potential," says Adani.

Almost 4-5 years after entering power generation, it was natural to get into transmission and then distribution, explains Adani. When the government began focusing on renewables, Adani entered solar power. About 10-15 years ago, when the Centre's piped gas policy was yet to evolve, the Gujarat Government pioneered piped gas distribution to create a large piped gas network in the state. Adani entered city gas distribution in Ahmedabad. In 2014, then Gujarat chief minister Narendra Modi became Prime Minister and he planned to replicate Gujarat's gas distribution success across India. "We participated in all bids and won many. That is why we have a huge energy portfolio," explains Adani.

"After our port and energy related ambitions were fulfilled, we looked at other areas. Delhi and Mumbai airports were

WHAT MAKES HIM TICK...

Takes audacious, risky bets early enough. Never relents, never backs off.

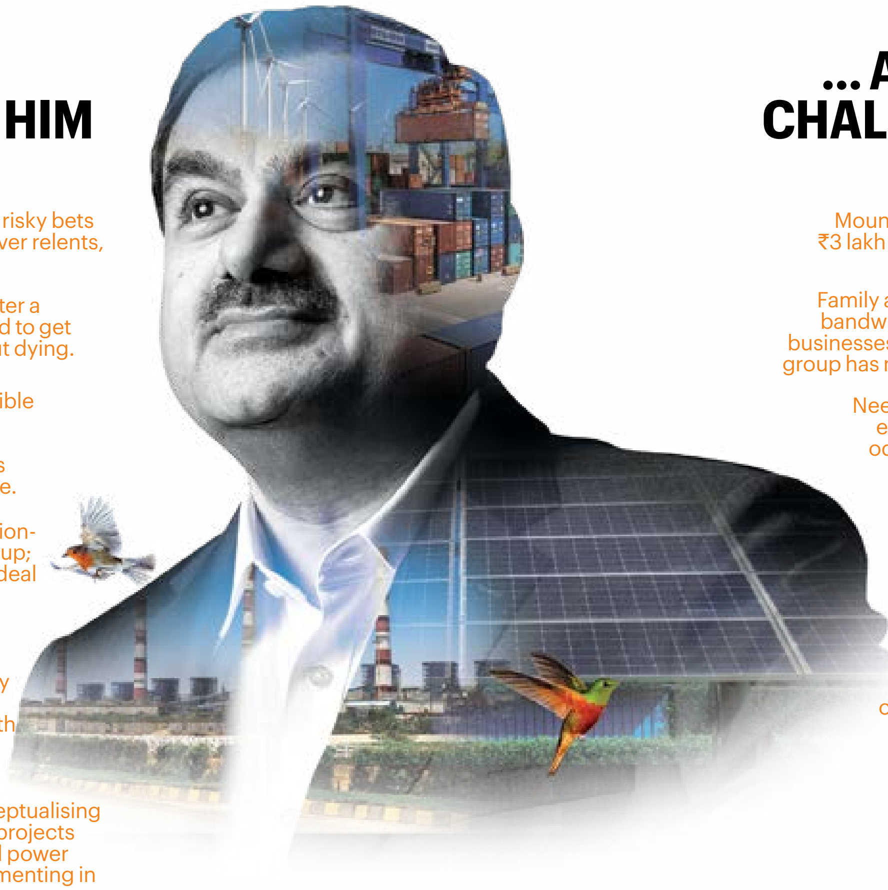
Believes if you enter a pipeline, you need to get out of that without dying.

Sets near impossible deadlines and pushes the team to achieve targets ahead of schedule.

Leads swift decision-making in the group; $10.5 bn Holcim deal was sewed up in 30 days.

Propounds the unique 'adjacency theory' to explain the group's growth in seemingly unrelated areas.

Strength in conceptualising large green field projects such as ports and power plants and implementing in time.



... AND THE CHALLENGES AHEAD

Mounting debt of nearly ₹3 lakh crore after Holcim acquisition.

Family and management bandwidth to run 22-odd businesses, many where the group has no prior expertise.

Need for rapid project execution in dozen-odd new businesses simultaneously.

Sector-specific challenges in businesses such as worsening financials of state electricity boards, demand for scrapping power agreements and coming price crash in renewables.

Technologies yet to mature for renewable storage and green hydrogen as viable businesses.

privatised after 2005. Airports at Hyderabad and Bangalore also were developed by state governments. For the first time the government came up with privatisation of six more airports. We thought of this as an extension from ports to airports. These are adjacencies and we entered at the appropriate time. We did not enter telecom because there is no connection," says Adani.

Now in cement, steel and aluminium, Adani not just sees the same 'adjacencies' but also enormous opportunity as India embarks on a great infrastructure push through massive Centre-funded public expenditure to keep the country's growth engine kicking amidst a prolonged slowdown. "The drivers for this (Holcim) decision have been based on two primary factors—the demand-supply gap, and synergies with our existing businesses. When we combine the cement demand pattern with existing businesses adjacencies that include Adani group's ports and logistics, energy, and real estate businesses, we are well positioned to build an integrated and differentiated business model that will be competitive and hard to match," says Adani right after acquiring Holcim's cement business in a swift deal. The group banks on India's low cement consumption: Just 240 kg per capita against the global average of 525 kg. In China, per capita cement consumption is over 1,600 kg.

The group's foray into defence is based on four priorities — collaborate with global partners, focus on platforms and technologies of critical importance to meet emerging security and defence needs, set up an ecosystem of capabilities through investment in MSMEs and facilities and capabilities — says Adani. Adani Defence and Aerospace established India's first Unmanned Aerial Vehicles (UAV) manufacturing facility at a 20 acre Adani Aerospace Park in Hyderabad in collaboration with Elbit Systems of Israel. In 2018, the group signed an agreement with Swedish fighter craft maker Saab to make Gripen series fighter aircrafts in India.

PHOTO ILLUSTRATION BY **AMIT SHARMA**; PHOTOGRAPH BY **NARENDRA BISHT**

Never Back Off Mantra

Industry observers notice incredulous tenacity in Adani's actions. He neither relents, nor backs down, say close family circles and executives. Once convinced about a project, he sets near impossible deadlines and pushes teams to achieve targets well before deadline, meeting and monitoring them every month. Re-consideration is never on the agenda under any circumstances.

Some bold audacious bets with a lot of luck went behind the group's astronomical growth. Rivals do point to this coinciding with the rise and rise of Prime Minister Narendra Modi right from when he was chief minister of Gujarat, Adani's home state, to being the Prime Minister of India. Adani doesn't shy away from appreciating PM Modi on policy initiatives and his vision for energy security and defence. He narrates how he could launch city gas distribution in Ahmedabad, thanks to then chief minister Modi's vision.

In 2006, Adani's ambition to set up a large coast-based power plant at Mundra was shattered when his bid didn't make it to the ultra mega power project (UMPP) awarded to Tata Power and later three more to Anil Ambani's Reliance Power. But having made up his mind, Adani went ahead to set up the 4,620 MW Mundra Thermal Power Station right next to Tata Power's 4,000 MW UMPP at Mundra. It is the world's 11th-largest single location coal-based thermal power plant.

Or take the case of the widespread opposition to Adani's coal mining project in Australia. A project with high-quality potential coal reserves of 11.05 billion tonnes — enough to meet India's entire coal needs for 12 years. The group has already spent nearly $3.5-4.5 billion in developing the mines, including a 200km rail line and a coal-handling terminal while protests erupted against the project among environmentalists and local communities.

We asked if Adani moderated his expectations from the project. "There is no question of moderating plans," Adani shoots back. "If you enter into a pipe, you have to get out at the other end. You cannot get stuck inside a pipe. Many people got stuck

FAMILY MATTERS

RAJESH ADANI,
MD, Adani Enterprises

Younger brother Rajesh associated with the group since inception. In charge of the group's operations and responsible for developing its business relationships.

PRANAV ADANI
MD, Agro and Oil & Gas

A Boston University graduate, nephew Pranav Adani is director, Adani Enterprises; heads coal mining and integrated coal management, agri, city gas distribution and real estate businesses.

KARAN ADANI
CEO, APSEZ

The eldest son of Gautam and Priti Adani is an Economics graduate from Purdue University, U.S.; CEO of Adani Ports and APSEZ since January 2016; handles Adani ports since 2009.

SAGAR ADANI
Executive director, AGEL

Rajesh Adani's son Sagar Adani leads the group's renewable energy foray; associated with Adani Green Energy since 2015, after graduating in Economics from Brown University, U.S.

JEET ADANI
Vice president, Group Finance

The younger son of Gautam Adani joined the group in 2019 after attending University of Pennsylvania School of Engineering and Applied Sciences. Started in the Group CFO's office, looking at strategic finance, capital markets and risk & governance policy; Works with all listed verticals; heads Adani Airports business and Adani Digital labs.

MEGA INFRA CREATION

Mundra Port
Created India's largest commercial port and SEZ on 35,000 acres from barren lands and marshy seas. The all-weather port handled over half of the 312 million tonnes cargo volume of FY22 among its 15 ports. APSEZ aims to be the world's largest port operator by 2030 with over 500 MMT capacity. Mundra also has one of the world's largest coal-handling terminal.

Mundra Thermal Power Station

The 4,620-MW Mundra Thermal Power Station with four 330 MW and five 660 MW units is India's second-largest operational power plant, and the world's 11th largest single-location coal-based thermal plant. All units commissioned between May 2009 and May 2012, two years before schedule.

Carmichael Mine & Rail, Australia

Bought Carmichael Mine in Galilee Basin of Australia's Queensland in 2010. Built a 200-km narrow-gauge rail line and a coal handling jetty at Abbot Point port. Ships have started sending coal to India. Have been awarded contracts worth over $1.5 billion.

Kamuthi, Tamil Nadu Solar Power Project

At 648 MW, India's largest single-location solar power projects across 2,500 acres. Total investment at around ₹4,550 crore. It has 2.5 million solar modules, 38,000 foundations, 30,000 tonnes of structure, 6,000 km of cables, 576 inverters and 154 transformers.

Vizhinjam International Port, Kerala

Will be India's only transhipment deepwater multipurpose seaport. Project awarded in 2015. First phase to be completed by 2023. Capacity of 1 million TEUs and another 6.2 million TEUs in phases.

in between and died. You have to get out. Now we are through. We have got out of it (coal production has started). Already three ships have come to India," says Adani emphatically. Adani's voice thickens, then becomes heavy to near agitated while narrating how he was haunted for a decade by what he calls "so called environmentalists and philanthropists with agenda" against his Australian coal adventure. "It requires wherewithal and perseverance to fight up to the last mile," he proclaims.

Execution Is key

Adani's tenacity rubs off on the group's execution skills, which conceptualised large greenfield projects — from ports to power plants, transmission lines and solar projects — and implemented them under tight schedules. "Perseverance and wherewithal to execute are strengths and DNA of the group," says Adani.

His teams say Adani cherishes infrastructure execution challenges for the nation. At Mundra port, you can't miss Muhammad Iqbal's patriotic song "*Saare Jahan Se Achchaa...Hindustan Hamaraa*". It reverberates in each of the lifts of all group facilities at Mundra. When Adani took up the port in 1995, it was a ruined coastal port town with a barren coast, mostly marshy surface waters and land devoid of vegetation or habitat.

Construction began in 1995 and within three years the group operationalised the first two berths to anchor the first ship on October 7, 1998. Today the Mundra port and SEZ is spread over 35,000 hectares with over a lakh people directly and indirectly working there. Meanwhile, Mumbai's Nhava Sheva Port was commissioned in 1989, after decades of planning and construction.

Projects are centrally managed by a Project Management and Assurance Group (PMAG) and 125 Energy Network Operation Centres (ENOC), which provide real-time data monitoring on electricity generation, locations of plant faults, and rectification. Drones are used to monitor solar farms and wind turbines. Adani Green Energy Ltd (AGEL) has also set up a 2 lakh-plus vendor ecosystem across the country for components. Insiders say the mission is led by Sagar Adani, nephew of Gautam Adani and director, AGEL, along with Vneet S Jaain, MD and CEO, AGEL, who was earlier heading the thermal power business.

The group had no power plant experience before committing to the 4,620 MW Mundra Thermal Power Station. Yet all its four 330 MW and five 660 MW units were commissioned between May 2009 and March 2012, almost two years before schedule. It is among the fastest built mega power plants in the world in 60 months. Tata Power's 4,000 MW UMPP at Mundra took nearly 100 months.

In the 648 MW Kamuthi solar power project in Tamil Nadu in 2015, then the world's largest single-location solar project across 2,500 acres, 8,500 people worked 24x7 to complete the project in a record eight months. Adani is now replicating that in a much bigger 1,500 MW capacity solar park spread over 9,981 acres at Fatehgarh, Jaisalmer and a 500MW capacity solar park in Bhadla, Jodhpur.

Like a family patriarch, Adani showers praise on his team on ground for their operations and execution skills. "I'm biased towards our team's execution skills," says Adani.

The $70 Billion Green Push

Gautam Adani's home 'Shantivan' on the prime Shantipath behind

HOW GAUTAM ADANI MADE IT BIG...

Jun 24, 1962: Gautam Adani, one of six siblings born in Ahmedabad to Shantilal and Shantaba Adani. Father was a textile trader.

1978: Drops out of school, moves to Zaveri Bazaar, Mumbai to work as diamond sorter.

1981: Returns to run brother's plastic unit in Ahmedabad.

1985: Starts importing primary polymers for small-scale industries.

1988: Starts Adani Exports for trading edible oils and coal, it later became Adani Enterprises, holding company of the group

1991: Enters into trading of metals, textiles and agri-products

1994: Adani Enterprises gets listed; bags management of Mundra port and sets up first jetty in a year

1996: Starts Adani Foundation.

1988: Released after abduction in Ahmedabad; sets up Adani Ports & Special Economic Zone (APSEZ).

1999: Forms JV with Wilmar to foray into agri-processing and edible oils; starts mineral-commodity trading.

2000: Starts Adani Wilmar JV in oil refining

2001: Starts city gas distribution in Ahmedabad

2006: Starts power generation with 4x330 MW units at Mundra

2007: Lists Adani Ports & Special Economic Zone

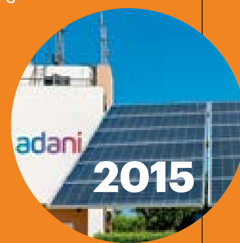
2008: Acquires coal mines in Indonesia; escapes 26/11 terrorist attacks at Taj Mahal Hotel, Mumbai

2009: Adani Power IPO raises Rs 3,020 crore

2010: Acquires Carmichael Mine in Queensland, Australia.

2012: Reorganises businesses; launches new brand identity.

2014: In the group's first acquisition, APSEZ buys Dhamra Port Company Ltd (DPCL) for ₹5,500 crore.



2015: Enters solar power generation.

2017: Starts manufacturing of solar panels with imported wafers at Mundra.

2018: Demerges Adani Gas and Adani Green.

2019: Becomes second-largest mineral-commodity player in the world.

2020: Forays into airport business, buys Mumbai airport from GVK; wins world's largest solar bid by Solar Energy Corporation of India (SECI) worth $6 billion — 8GW plants and 2GW of equipment

2022: Becomes Asia's richest person, surpassing Mukesh Ambani in February 2022; in May, is listed among top five richest in the world; buys Holcim's India cement business for $10.5 billion.

35	**₹1.6**L cr	**₹81,360** cr
Acquisitions in the past 5 years by the Adani group	Acquisition cost in last 5 years (including Holcim)	Size of Holcim deal

Karnavati Club on Ahmedabad's SG Road, is powered by a 53 KV rooftop solar power plant with 153 panels.

Green is where Adani's heart is now. He sees India's energy landscape transitioning in just 10-20 years, opening up numerous opportunities in the country. It could also position India and the Adani group for a shot at world markets, just like China did. "Climate change is one of the biggest challenges. It also opens up huge business opportunities. The opportunity here is energy transition—from fossil fuels to renewables and hydrogen. That is what the whole game is about. What the world has seen in the last 100 years of energy forms is set to change in the next 30-40 years. The entire academia research is working towards how to make more affordable green energy," says Adani as he explains his vision — and mission.

The group is aware that going forward it will become difficult to find funds for polluting and non-ESG compliant businesses since globally banks, funds, corporations and governments are committing to sustainability goals. "Global fossil fuel majors are rapidly repositioning themselves as green energy companies — investing in solar and wind power generation as well as planning large green hydrogen capacities. Adani group already has a sizeable presence in green power generation and is now doubling down on expanding its footprint both organically as well as through acquisitions," observes Nestor's Sanjay Sethi. "More than 80% of our capex is on green investments. We still have to invest 20% capex to sustain energy transition, which is not going to happen overnight. It is a journey of a minimum 30 years," says Adani.

The group announced an investment of $70 billion by 2030 to transition towards a green future. It is spending over $20 billion to set up 45,000 MW of solar and wind energy generation capacity. To protect itself from the vagaries of imported components, it will be backed by fully backward integrated manufacturing of an entire ecosystem of solar and wind power equipment. A $4 billion investment is currently under implementation to build a poly-silica plant, solar wafers & ingots plant, copper smelters and ancillary aluminium and glass factories at Mundra. All of this is expected to take off in the next 2-3 years. It is also entering into wind turbine and auxiliary machine manufacturing. Adani-Total will be investing ₹20,000 crore ($2.57 billion) in city gas distribution in 33 GAs.

If green EBITDA constituted only 4% of Adani group's utility business in 2015, it has grown to 43% by 2021. The group aims for renewable utilities to contribute 70% of utility EBITDA by 2025. A majority of the investment in recent times was in green infra assets such as SB Energy's solar and wind farms in India, Essel's advanced transmission lines and the Mumbai International Airport.

At the core of that strategy is fully backward-integrated manufacturing to support the green push — from solar cells and panels to wind turbines, all within the country for self-reliance. "Without self-reliance or '*atmanirbharta*', we can't serve 1.4 billion people. You have to be atmanirbhar. This is a huge opportunity for India to become atmanirbhar and move from '*atmanirbharta*' (self-reliance), to '*bharatnirbharta*' (reliance on India). Now the world is dependent on what China makes. India can play this role for the world," says Adani.

One of the big triggers was Covid-led supply chain disruption. Adani says Covid-19 was an eye opener for the Indian solar industry and government. More than 80% of solar equipment needed for planned projects in India is imported mainly from China, Vietnam or Malaysia. Imports of solar equipment since April 2021 have been consistently over 800 MW per month. Cumulatively, domestic manufacturers make only 4GW of solar cell and 16GW of modules, according to the All India Solar Industries Association (AISIA). There is no capacity for basic raw materials like ingots and wafers and polysilicon, which makes domestic manufacturers uncompetitive. During Covid-19, China raised prices by 50-60% to nearly 30 cents per panel from 18 cents, hitting Indian project equations.

To mitigate this, Adani is developing a big green solar manufactur-

ing ecosystem in Mundra, investing $4 billion. That is also going to act as a platform for the group's green hydrogen ambitions. "It is happening on ground and we are not going to depend on any external suppliers," says Adani.

This future investment play is projected to be backed by green funds. The group's renewable energy arm Adani Green was the first energy utility from India to raise $2 billion Global Medium-Term Notes (GMTN) or Sustainability Linked Bonds (SLB). Unlike in the past where the group took loans from local banks to fund cash-guzzling infra projects, as of March of FY21, at least 50% of total debt was secured from bonds, mostly low-cost green bonds. Just six years ago, in March of FY16, 55% of his debt at group level was taken from public sector banks and 31% from private banks. Now PSU banks fund only 21% and private banks' share of the debt has come down to 11%. For equity, the group is unlocking value in mature green businesses by bringing in external investors and multinationals with technological expertise.

Adani Green Energy brought in global energy major Total Energy as a strategic partner, investing ₹3,707 crore for a 50% stake in three SPVs and later diluted 20% stake in AGEL to Total for a $2.5 billion investment commitment and a board seat. In gas, Adani and Total have equal stake of 37.4% each. Recently, the International Holding Company (IHC), the Abu Dhabi-based conglomerate, also committed to invest $2 billion (₹15,400 crore) in three of Adani's green energy driven companies — ₹3,850 crore each in Adani Green Energy and Adani Transmission and ₹7,700 crore in Adani Enterprises.

AGEL sources say it has tied up 'diversified growth capital' with a revolving facility of $1.35 billion to fully fund its entire project pipeline. In September last year, it raised $750 million from green bonds for funding equity capex for underlying renewable projects under construction.

Next on the agenda is green hydrogen where Adani will be competing with Mukesh Ambani's Reliance Industries in the race to be the largest green H2 producer and exporter in the world. He is banking on the group's core competencies in ports, logistics and manufacturing. Adani group says it will set up electrolyser making units to split hydrogen and plans to get into production of green ammonia, green urea and methanol — the future way of making them with green hydrogen.

In this quest for the renewable energy chain, for the first time, Adani will come head to head with RIL in green chemicals, coal to PVC as well as hydrogen. "Competition between the Adani group and the Ambani group will make the green energy market more competitive, help develop green energy ecosystem and the entire value chain — R&D, development, storage, distribution and boost new employment opportunities too," says professor Ashish Pujari of DeGroote School of Business at McMaster University, Canada.

From ports to airports to data centres and at his main hub in Mundra, Adani envisions a greener future in all his current businesses. A journey that has already begun. For instance, fly ash from thermal plants will be

ADANI CAN EXTRACT 10 MT OF COAL EVERY YEAR FROM THE AUSTRALIAN MINE.

RIVALS POINT TO HIS GROWTH COINCIDING WITH THE RISE OF PM MODI FIRST AS CM OF GUJARAT AND THEN AS PRIME MINISTER. ADANI DOESN'T SHY AWAY FROM APPRECIATING MODI'S POLICIES — AS CM AND PM.

PHOTOGRAPH BY GETTY IMAGES

RAPIDFIRE ACQUISITIONS

		Deal value (₹ crore)
2022	Adani to acquire Holcim India assets for $10.5 bn	81,360
	International Holding Company to invest $2 billion in three Adani Group's green companies	15,400
	Adani acquires India's largest marine services company Ocean Sparkle	1,530
2021	Adani Transmission to acquire Warora-Kurnool Transmission from Essel	3,370
	APSEZ acquires Dighi port and minority in Gangavaram port	2,695
	APSEZ acquires 58.1% controlling interest in Gangavaram Port from DVS Raju Family	3,604
	Adani Green acquires SB Energy's India assets	26,000
	Takes over Mumbai International Airport	Not disclosed
2020	Total invests in Adani Green's three SPVs	3,707
2019	Adani Power Completes Acquisition of GMR Chhattisgarh Energy	3,530
	600MW Korba West Power Co. acquired by Adani Power	1,800
	Adani Green buys Essel's 205 MW solar assets	1,300
	Qatar Investment Authority to invest in Adani Electricity Mumbai Limited	3,200
	APSEZ acquires Krishnapatnam Port	13,500
2018	Adani Transmission acquires Reliance Infrastructure's Mumbai electricity business	12,101
2015	Adani Power acquires Lanco Infratech's Udipi Power Plant	6,300
2014	APSEZ acquires Dhamra port	5,500

used in cement plants; Adani Ports plans carbon neutrality by 2025; the group plans to run the entire Mundra operations powered by renewable energy; renewables share in Mumbai power distribution is targeted to grow from 10-15% to 30-40%; besides hydrogen value chain it plans investments in biogas, biomethane and low-carbon mobility; and, Adani has tied up with US-based EdgeConneX to set up green data centres, and the group plans to make green airports and smart buildings.

"One cannot take a static view of the market and we have two trends coming mainstream — one is the irreversible growth of renewable power and second, the continued improvement in technologies that will keep dropping cost of generation," observes Adani, who predicts price of power can even go to zero in future. "While there may be some site-wise variations and instances of aggressive bidding in the market by some players, large mega solar power parks that have scale is precisely where we will have competitive advantage and can create value. Execution, scale, backward and forward integration, procurement expertise, learning curve advantages, financial discipline and operational excellence, all of these must be synchronised to create value and it is our belief that there are very few companies in the world that can do this as well as us," he says.

Fossil Fuel Play To Go On

Adani also knows his big coal mining project, which has finally started production in Australia, will need to continue to contribute to revenues in the coming years. "For the next couple of decades, coal will be needed alongside renewables — the future is not about coal versus renewables. It is about coal and renewables contributing to a sustainable energy mix as the world transitions to a lower carbon future," says Adani.

Eyeing the vast untapped coal reserves of Galilee basin in Western Australia, he had bought the Carmichael mine in 2010, with reserves of 11.05 billion tonnes. From that mine, the group can dig out 10 million tonnes of thermal coal every year.

Despite environmentalist protests, he went ahead and invested over $3.5-4.5 billion over the past decade. Already three ships have come to India with coal. "They (environmentalists and 'so called philan-

THE GROUP'S TOTAL DEBT HAS GROWN FROM ₹1.04 LAKH CRORE IN FY17 TO ₹2.24 LAKH CRORE IN FY22. POST THE ₹81,360 CRORE HOLCIM DEAL, IT IS PROJECTED TO BE AROUND ₹3 LAKH CRORE. NET DEBT IN FY17 WAS ₹99,830 CRORE, WHICH WENT UP TO ₹2 LAKH CRORE IN FY22.

thropists') should understand that we are going to replace every two tonnes of India's dirty polluting coal with one tonne of higher grade and cleaner Australian coal," explains Adani.

The group is setting up one metric million tonnes per annum (MMTPA) capacity of coal to PVC (polyvinyl chloride) project at Mundra, with plans of using green hydrogen as fuel in future. India consumes about 3 million MTPA of PVC and the domestic supply caters to only 50% of total demand. India's PVC consumption is likely to grow at a CAGR of 7.6% due to rapid industrialisation and speedy growth in urbanisation, say industry observers. Ambani is also entering into PVC production and other chemicals in a JV with Abu Dhabi Chemicals Derivatives Company RSC Ltd, with production facilities planned in West Asia.

A Mountain Of Challenges

Even as the Adani empire expands at a pace never seen before in India's corporate history, industry observers believe Adani faces multiple challenges. While the adjacency theory has widened the breadth of operations into nearly two dozen businesses does the group have the management and execution bandwidth to acquire and absorb new ones such as Holcim or airports, enter solar, wind manufacturing and generation, steel, aluminium and data centres and yet transition old businesses such as power plants, ports — all at the same time?

Family business expert Kavil Ramachandran says it is difficult to imagine the next generation can operationally drive the group's businesses without bringing a significant level of professionalism and empowerment of non-family professionals. "This is not easy to achieve in a family business. Corporate governance will have to be strengthened further with the creation of a more active board to balance stability and entrepreneurship," he says.

Adani counters this saying if he can create a board and professionals sitting on the same table and divide responsibility, he will get the best of governance, best of growth and best of shareholder returns. "Family does not think of one-two quarters' performance. Therefore, in the operations, no family members are involved, except when doing reviews of monthly and quarterly budgets. A blend of entrepreneurship, family and professionals is the best combination," says Adani. He takes enormous pride in his team of family and professionals that execute his vision, without naming any from his brothers, sons and nephews. There is also an army of professionals and former senior bureaucrats to manage the business empire.

The other challenge emerges from the ballooning debt from the ambitious expansion. Total debt has grown from ₹104,519 crore in FY17 to ₹224,408 crore in FY22. Net debt in FY17 was ₹99,830 crore, which grew to ₹200,021 crore in FY22, the third highest among India's largest business houses, already 44.62% higher than a year ago. As interest rates rise, servicing debt at this scale gets costlier. Following the Holcim acquisition, Adani group's revenues will jump to ₹2.30 lakh crore and debt to ₹3 lakh crore. Even though the Holcim acquisition has been done through a private family entity, Adani plans to service debt by deleveraging books of Ambuja and ACC, both listed in India, say analysts.

Gautam Adani knows his first-generation business, which has overtaken many century old business houses, has miles to go. With group strategy firmly aligned to India's strategic vision of a green future, all eyes are now fixed on how this ambition will translate into viable businesses on the ground.

RIVERBED: EMPOWERING ORGANIZATIONS IN THEIR DIGITAL TRANSFORMATION JOURNEY

Incorporated in 2002, Riverbed is a globally well-respected and admired IT solutions company. Back in the day, it solved the most pertinent issue of bandwidth availability and cost constraints which plagued all businesses with latency and traffic slowness across their networks. The same solution with innovative and enhanced advancements today solves the most pertinent issues of the modern day's IT challenges. Over the years, the company has helped the world's largest organizations empower their digital experience and drive enterprise performance.

Riverbed provides accelerated performance for applications across hybrid and complex network infrastructure which is spread across on-prem, cloud, & SaaS, for employees and partners who are now working in hybrid work environments, branch offices, home offices, and mobile offices. The company is a critical technology provider, delivering leading end-to-end unified observability and network performance and acceleration solutions that provide actionable insights and help organizations maximize the productivity of their digital and IT investments.

"Our best-in-class WAN Optimization, Network performance management & diagnostics (NPMD), Application performance management (APM), end-user experience management (EUEM), Application acceleration, and Enterprise-grade SD-WAN offerings have helped 96% of the Fortune 100 and 83% of the Forbes 500 organizations maximize the performance of their networks and applications to reach the full potential of their IT investments," says Alex George, Country Manager for India & South Asia, Riverbed.

The company has over 30,000 strong clients across verticals like Manufacturing, Pharmaceuticals, Banking, Finance, etc. Some of their clientele includes SBI Group, ICICI Bank, Axis Securities, Lupin Pharma, Timken, Kennametal, Bharati Infratel, Maersk, Shell, Pfizer, OneMain Financial, Rignet, Alstom, and more.

Riverbed has over 300 technology patents and has been recognized 15 times as a leader in Gartner Magic Quadrants (MQs) for Network Performance Monitoring and Diagnostics (NPMD) and WAN Optimization. The company has been named a "Value Leader" in the EMA Radar Report: Network Performance Management, 2021.

- ALEX GEORGE, Country Manager for India & South Asia, Riverbed Technology India Pvt Ltd

"Our goal is to have sustained and consistent growth through value addition for both our customers and partners using our cutting-edge and innovative solutions. We plan to achieve it by being laser-focused on improving the performance of applications end-to-end from the end-user device through the various networks and the infrastructure platforms. We want to provide customers in India with the best visibility that Riverbed's DEM technology and creativity can deliver"

LEADING BY DOMAIN KNOWLEDGE

The company provides organizations with actionable insights that transform IT operators into technology leaders enabling them to drive value for the business by delivering:

- Frictionless performance
- Increased productivity and efficiency, and
- Seamless business continuity.

They help their customers to prepare for a new horizon that is hybrid and all about digital experience and performance.

"Our goal is to have sustained and consistent growth through value addition for both our customers and partners using our cutting-edge and innovative solutions. We plan to achieve it by being laser-focused on improving the performance of applications end-to-end from the end-user device through the various networks and the infrastructure platforms. We want to provide customers in India with the best visibility that Riverbed's DEM technology and creativity can deliver," Alex asserts.

Recently, the company has made a strategic decision to bring together the best-in-breed assets of Riverbed and Aternity (previously a division of Riverbed) to deliver its customers the most comprehensive end-to-end visibility solution in the industry. The new branding for the unified observability portfolio is called ALLUVIO by Riverbed. The Alluvio portfolio leverages the industry-leading visibility tools (available today) for network performance management & diagnostics (NPMD), IT infrastructure monitoring (ITIM), and digital experience management (DEM)—application performance management (APM) and end-user experience monitoring (EUEM), used by thousands of customers around the world.

Unlike other observability solutions that limit or sample data, the Alluvio portfolio captures full-fidelity user experience, application, and network performance data on every transaction across the digital ecosystem. It applies AI and ML to contextually correlate disparate data streams that help to provide the most accurate and actionable insights.

Complementing the Alluvio portfolio, Riverbed Acceleration solutions provide fast, agile, secure acceleration of any app over any network to users, whether mobile, remote, or on-premises.

TECHNOLOGY MATTERS

Technology has allowed a substantial portion of the workforce to move beyond the walls of a traditional office. This technological revolution brings many benefits, including a more realistic work-life balance and borderless talent recruitment.

The company's new report, Riverbed | Aternity Hybrid Work Global Survey 2021, found that 83% of global business and IT decision-makers believe that at least one-quarter of their workforce will remain hybrid post-pandemic.

Accelerated by the global pandemic, hybrid work environments provide numerous benefits with 94% agreeing hybrid work helps with recruiting talent and competitiveness, and 84% believing hybrid work will have a lasting and positive impact on society and the world. Yet, while most organizations were swift to embrace the digital shift brought on by COVID-19, others were slow to modernize their IT environments, presenting a risk to their future growth.

Alex concludes, "We have reached that critical point in time when a high-performing hybrid workplace is required for organizations to push to the next level of employee and customer satisfaction and sustainable financial success. Organizations must invest in technologies to modernize their IT environments, and underinvesting can have severe consequences. With the DEM solutions from Alluvio by Riverbed, organizations can maximize their visibility and performance across networks (using NPMD), applications (using APM), devices (using ITIM), and the end-user experience (using EUEM) so they can fully capitalize on their digital and hybrid workplace investments."

DRAGON STRIKES

IMPORTS FROM CHINA WERE THE HIGHEST EVER IN FY2022. BUT THIS DOES NOT SIGNAL THE FAILURE OF INDIA'S STRATEGY TO REDUCE DEPENDENCE ON CHINA.

By **JOE C. MATHEW**

IN JUNE 2020, Praveen Khandelwal, secretary general of Confederation of All India Traders (CAIT), the apex body of Indian traders, said its 80-million members will not buy or sell goods from China. This was the result of growing anti-China sentiment in sections of pro-BJP organisations, including the ruling party's ideological mentor Rashtriya Swayamsevak Sangh and its affiliates Swadeshi Jagran Manch (SJM) and Vishwa Hindu Parishad. One reason was skirmishes between Indian and Chinese armies in border areas. Another was Covid-19, which had originated in Wuhan in China and caused global supply chain disruptions. There was also the huge trade deficit and dependence on raw material from China for making several essential goods, including life-saving medicines. All this made government, too, realise the need to find alternatives to Chinese imports.

However, value of goods imported from China touched an all-time high of $85.14 billion during April 2021-February 2022. The last time Chinese imports had touched this level was in FY2018 ($76.38 billion). Imports from Hong Kong make these numbers even bigger. During April 2021-February 2022, India imported $17.24 billion worth of goods from Hong Kong, higher than $13.57 billion in April 2021-February 2022 period. Combined imports from China and Hong Kong touched $102.38 billion in the first 11 months of FY2022.

Coming after loud anti-China campaigns by traders and civil society groups, government's initiatives to

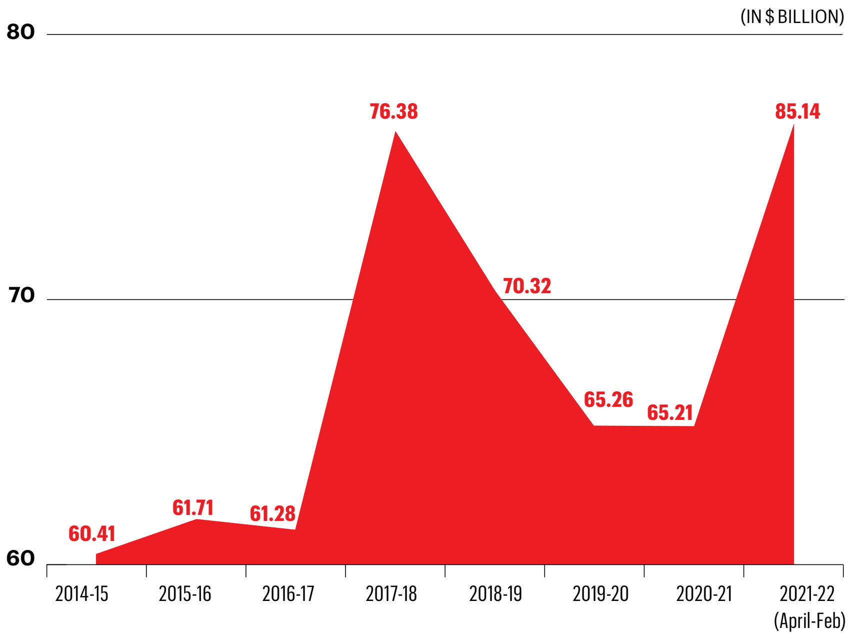
PHOTOGRAPH BY GETTY IMAGES

Top 10 Commodities Imported From China By Value ($ billion)
2019-20
2020-21
April-Feb 2021-22
19.1
20.33
23.20
ELECTRICAL MACHINERY, EQUIPMENT AND PARTS
13.32
13.99
18.09
NUCLEAR REACTORS, BOILERS, MACHINERY
7.97
8.97
11.56
ORGANIC CHEMICALS
2.72
2.53
4.04
PLASTIC AND ARTICLES
1.82
1.55
2.75
FERTILISERS
1.34
1.73
2.33
MEDICAL OR SURGICAL INST. AND APPARATUS PARTS AND ACCESSORIES
1.21
1.39
1.57
MISCELLANEOUS CHEMICAL PRODUCTS
1.59
1.32
1.55
ARTICLES OF IRON OR STEEL
1.27
1.38
1.56
VEHICLES AND PARTS AND ACCESSORIES
1.12
0.895
1.22
IRON AND STEEL
SOURCE: COMMERCE MINISTRY

reduce trade imbalance, Centre's high-profile pitch for *atmanirbharta* (self-reliance) and ambitious production-linked incentive (PLI) scheme to promote local manufacturing, these record imports pose a big question: Did government's attempts and citizens' resolve to reduce Chinese imports fail?

There are no straight answers. The surge in import numbers is more complex than it seems. First, increase in value of total imports does not always reflect product-specific volume trends. There are sectors where imports from China—both in value and volume—have declined. There is also a subtle but positive change in the type of products being imported—less finished goods and more raw materials and intermediate goods. The boycott has had an impact, but irrespective of whether Indian consumers boycott Chinese goods or not, China remains, and will remain in the foreseeable future, the main source of raw materials for Indian industry.

Rising Imports From China Over The Years



SOURCE: COMMERCE MINISTRY

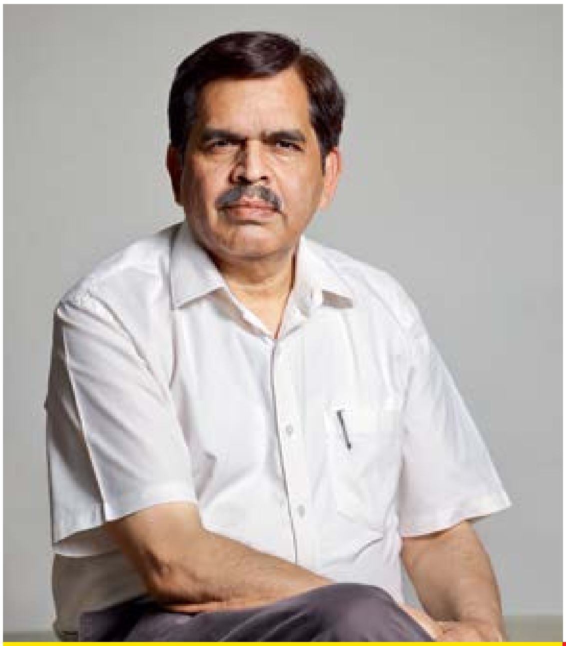
THE SURGE

A glance at commerce ministry data shows that every item in the list of top 10 merchandise imports from China has gone up in value. India imported electrical machinery and equipment worth $26.01 billion in the first 11 months of FY2022, higher than $20.33 billion during FY2021. The category of nuclear reactors, boilers and machinery (largely the latter) saw imports worth $18.09 billion during the April-February period, higher than $13.99 billion for the entire FY2021. Imports of organic chemicals, the third most valuable item in the list, were $11.56 billion, higher than $8.97 billion in FY20. "There are various explanations. One, there is suddenly a spurt in economic, manufacturing activity (post Covid-19 disruption) because of which demand for raw materials and intermediates has picked up. Second, in last one year, government has acted against under-invoicing. With (tax) evasion under attack, the value has gone up. Thirdly, there is increase in prices, especially of electronic products," says Ashwani Mahajan, national co-convener, Swadeshi Jagran Manch (SJM), adding, "You can't make sweeping remarks (on reasons for the import surge)."

R.K. Sharma, secretary general, Federation of Indian Mineral Industries (FIMI), says while there has been an increase in mineral and metal imports from China, one cannot qualify it as good or bad. "Increase in overall consumption in our country is the major reason for this. Our (mineral) production is not meeting our demand. This is not the right time to see whether our policy to reduce import dependence has worked or not. Government schemes are in place, results will be evident after a period. How long? We can't say now, but two or three years are certainly not enough. May be, for some products, five years are enough, for others, 10 years, and for others, even more," says Sharma.

In fact, metals and minerals, including coal, accounted for about 25.4% imports from China. Value of mineral imports, excluding coal, is four times the value of domestic production. As per data from mines ministry, in 2016, only 114 out of 154 mineral blocks offered could be auctioned. Out of those, even after six years, the 63 greenfield projects are far from operational. FIMI points out that India is 100% dependent on imports for several metals such as nickel, cobalt, lithium, germanium, strontium, rhenium and beryllium. China remains a key source for these metals.

One more reason for increase in prices of some products is anti-dumping duty. India has initiated at least 30 anti-dumping investigations in last two years against products from China. Industry points at least



> There is a spurt in economic, manufacturing activity because of which demand for raw materials and intermediates has picked up."

Ashwani Mahajan, national co-convener, Swadeshi Jagran Manch

one instance where lifting of anti-dumping duty increased imports from China. "We had an anti-dumping duty on basic raw material to make MMF (man-made filament) fibre. Two or three years ago, government removed that. Polyester in India is expensive in comparison to China because basic raw material is expensive (in India). Since the world is switching over to MMF, people were importing (the raw material) from China," says Rajesh Masand, president, Clothing Manufacturers Association of India. He says FY2021 was also the period of dip in India's MMF production. Government has, in fact, announced a PLI scheme to promote local production of MMF, though it will take a couple of years to make a difference.

Another big product category where import growth is evident is basic chemicals. Nipun Jain, promoter of New Delhi-based pharmaceutical firm Pharmchem, says he is not sure if there has been an increase in import volumes, but prices of imported key starting materials and intermediates have more than doubled in last three years. "Erythromycin thiocyanate, which was $55-60 a kilo, has gone up to $85. N-methylpiperazine was at $5.4 a kilo just one year back. Today, it is at $15.4," says Jain. Prices of even a common product like citric acid, used by the food and pharmaceutical industry, have shot up from ₹60 a kilo to ₹210 a kilo.

POSITIVE SIGNALS

High raw material prices are an issue, but non-availability is a bigger problem when these imports are used to make finished goods, as in pharmaceuticals. Ajay Sahai, director general and CEO, Federation of Indian Export Organisation (FIEO), says some imports from China are vital for India's economy. "The basic strategy should be to look into finished products that China is supplying and see whether we can substitute them with products made domestically. If you are importing fertiliser or coal to meet the economy's requirements, I don't see any problem. It should be finished goods that we must be careful about," says Sahai.

A preliminary analysis of China's imports and exports by Murali Kallummal, professor (Tariffs, Standards, and FTA), Centre for WTO Studies, Indian Institute of Foreign Trade, suggests there is good news hidden behind broad numbers showing rise in imports. When we disaggregate data into intermediate goods, raw materials, capital goods and consumer goods, we find that volume and price rise has been more pronounced in raw materials than other categories. Import of more raw materials—as opposed to finished products—indicates greater value addition within the country. At $27.46 billion, import of finished capital goods during FY2022 (April-

PHOTOGRAPH BY **NARENDRA BISHT**

November) is yet to cross the $29.69 billion figure touched in FY2021 or $28.07 billion in FY2020. However, India imported raw materials worth $812.1 million during April-November FY2022, much higher than $497 million in FY2021 and $637.4 million in FY2020.

Similarly, India imported consumer goods worth $10.17 billion in FY2022 (April-November), lower than $13.61 billion in FY2021 and $14.55 billion in FY2020. Intermediate goods follow the same pattern. At sectoral level, Kallummal's analysis shows that in case of electrical machinery, finished goods (or consumer goods category) imports during April-November FY2022 were $4.94 billion, lower than $7.14 billion in FY2021 and $6.52 billion in FY2020. There is similar trend in consumer goods category, non-electrical machinery, minerals and metals and chemicals.

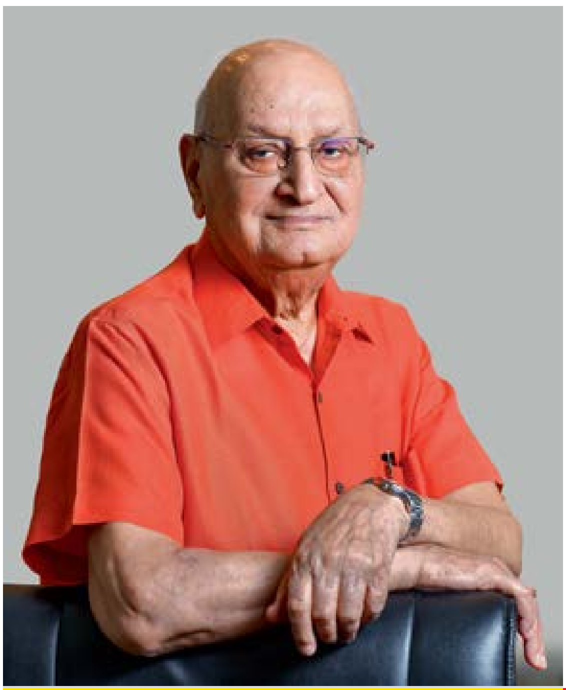
Kallummal also tracked changes in unit prices. Though unit price is merely indicative as the unit is different (kilo, litre, etc) for different products, it can show if increase in value of imports is only due to price increase or imports have risen in volume too. A rise in unit value indicates that import cost has gone up irrespective of import volumes. However, one reason for increase in unit value could be minimum import price-based measures imposed by the government.

The analysis shows that the unit value of capital goods in general came down from $17.2 in FY2021 to $15.9 in April-November FY2022. The value fell in electrical and non-electrical machinery but rose in minerals and metals. The change was more prominent in consumer goods. While the overall unit price declined from $5.7 to $4.2, the change was very clear in case of chemicals (consumer goods category)—from $3.2 in FY2021 to $2.7 in April-November 2021. Kallummal's analysis also shows rise in unit prices of raw materials. Overall, the price went up to $2.8 in FY2022 (April-November), from $1.7 in FY2021 and $1.9 in FY2020. The steepest increase is in minerals and metals that come under the raw material category, $4.6 in FY2022

$812.1

MILLION

Raw material imports during April-November FY2022, much higher than $497 million in FY2021 and $637.4 million in FY2020.



"This is not the right time to see whether our policy to reduce import dependence has worked or not. Results will be evident after a period."

R.K. Sharma, secretary general, Federation of Indian Mineral Industries

PHOTOGRAPH BY **NARENDRA BISHT**

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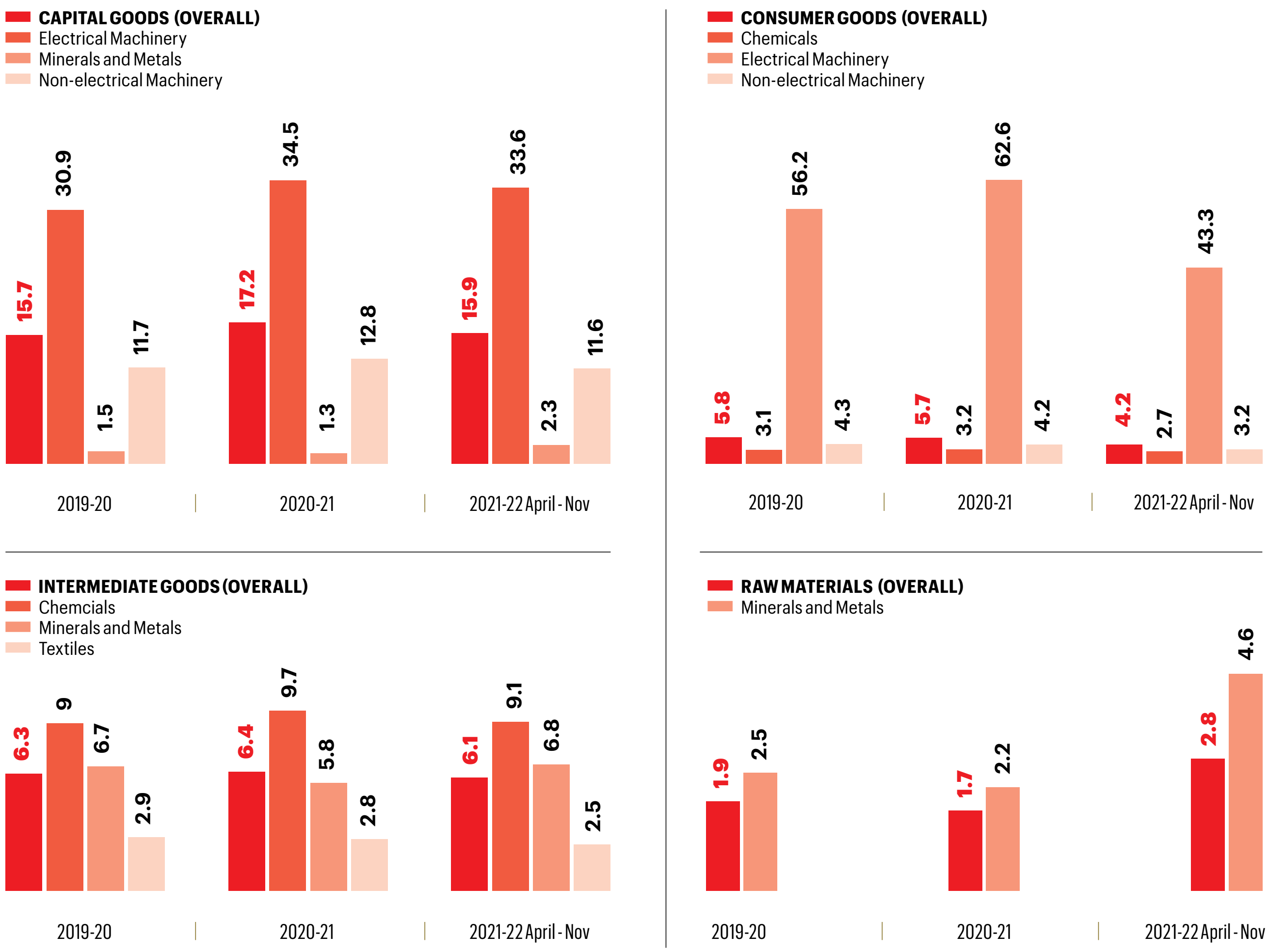
Raw Material Import Prices Rise Faster Than Finished Import Prices

Unit Price (in $) Trend in Imports from China



SOURCE: EXIM DATA BANK, MINISTRY OF COMMERCE

(April-November), from $2.2 in FY2021 and $2.5 in FY2020. Kallummal carried out a similar exercise to understand import trends from Hong Kong. The average unit price followed the same pattern as imports from China in capital goods, consumer goods and intermediate goods. The only category where there has been an increase in unit price in April-November FY2022 is raw materials. But one should keep in mind that the period of increase is not a complete year and may change.

A recent online survey by community social media platform LocalCircles illustrates this further. A total of 39% households said they have not bought made-in-China products in last 12 months. Out of households which bought China-made products during the period, 67% said they have reduced their purchases as compared to a year before. The survey also found out that "gadgets and electronic/mobile accessories" are the top categories where Indians buy Made-in-China products. The survey indicates the impact of boycott calls over the last couple of years. Hard numbers also suggest reduction in import of popular consumer goods like toys or consumer electronics from China, though the reduction gets nullified by increase in import of raw materials and intermediate goods.

Imports from China are at a record high, but that is not necessarily all bad news. ■

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President, Sharp Software Development India Pvt. Ltd

GLOBAL SCENARIO AND CHALLENGES

The global outbreak of COVID-19 brought almost all of us home from our places of work in droves, prompting many firms to hunt for technology solutions that would allow our teams to work from home or other locations. IT leaders have finally recognized the critical importance of scaling up digital workplace technology stacks in order to assure long-term viability of organizations' operations.

A growing interest in emerging technologies is being sparked by the demand for alternatives to existing activities that take place in person. Consumers and markets are demanding sophisticated products and applications in a short span of time. The buyers expect the latest technologies, enhanced designs, superior quality, and enriched user experience. Organizations are determined to provide users with long-lasting impressions of software applications, which can differentiate their products from the competition. As a result, product engineering companies are continuously in the process of innovation, customization, and ensuring holistic quality to meet these demands.

Talking about SSDI, the organization is committed to delivering world-class software products and solutions alongside global office electronics equipment from SHARP Corporation that will meet the demands of the industry in the realms of future offices, digital transformation of documents, workflows, business processes, professional signage, virtual workplaces, and cognitive analytics. Along with keeping up with the futuristic technology developments, we also contribute to the market's needs for legacy document scanning and faxing solutions, as well as secure printing solutions.

WHO WE ARE

Established in 1999, Sharp software development India Pvt. Ltd is a software product and solutions engineering company that has had a long-standing relationship with the Japanese organization. Having joined Sharp Corporation's global research and development network as a member firm, we have quickly established ourselves as a Software R&D center of excellence, preserving and containing Sharp Corporation's specialized knowledge in Digital office equipment and professional display systems. SSDI's software and solutions are now available on a variety of platforms, including desktop, web, cloud, mobile, and touch.

We enable our business groups to add value to their products via software by partnering with India's select software engineering talent with a mindset of learning and continuous improvement, cutting-edge tools, and innovative systems development techniques.

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Digital imaging applications (such as document management systems, business workflow systems, accounting applications), Network device management systems, Smart TV (widgets, portals), Cloud applications (Cloudbased Mobile office), Virtual office platforms and applications, SMB Enterprise applications, Displays applications (such as digital signage, touch, and gesture-based applications) are some of the areas of expertise. Embedded software, Device drivers, Desktop application, Web/SaaS/Mobile applications, UI/UX, and typical application layers are all included in the aforementioned systems. The company serves 11 global markets and a large number of electronic product lines. Testing for functional, performance, load, security, usability, and localization/OEM are all necessary to ensure that quality is reached above all.

The organization now takes tremendous delight in consistently accomplishing its targets and watching its business thrive. SSDI, an ISO and CMMI Level 5 firm, is devoted to comprehensive quality improvement throughout the development process by utilizing predictive, quantitative models of project and quality management.

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We have an inspiring learning environment, work style for self-motivated teams who are always willing to help one another and an open office environment. Abiding by our motto "Quality in our Heart and Mind," we dedicate our success to the group of engineers who are focused on product quality and innovation.

INVITING COLLABORATIONS AND TEAM MEMBERS

We continue to take on new challenges in Digital Transformation and office solutions for small to medium workgroups as the market and technology advance. Scope for software innovation is shifting to the cloud, mobile, IoT, AI, and big data as technology trends evolve. We are here to delight you, whether you are a possible collaboration partner or an aspiring team member in our mission!

WAR ON INFLATION

RISING PRICES ARE THE LATEST THREAT TO INDIA'S ECONOMIC GROWTH. WITH RBI INCREASING RATES, INVESTMENT CLIMATE SUBDUED AND UKRAINE WAR IN FULL SWING, GOVERNMENT FINDS IT HARD TO CHECK INFLATION WITHOUT HURTING ECONOMIC GROWTH.

By **Ashutosh Kumar**
Photograph By **Sanjay Rawat**


TATA SAMPANN MASALE
with natural oils intact
TATA sampann
Chilli Powder
Turmeric Powder
BACHAT BAZAAR
SOULFULL
RAGI BITES

ON FEBRUARY 7 this year, Prime Minister Narendra Modi said inflation is an issue connected to the common man and his government has tried to handle it with utmost "caution" and "sensitivity." The context was high-decibel protests by Indian National Congress and other opposition parties over soaring prices of fuels, fruit/vegetables and other daily-use goods.

Tearing into opposition and specifically hitting out at Congress, he said during his reply to motion of thanks on President's address in Lok Sabha that the country was reeling under double-digit inflation during most of last five years of Congress rule with party leaders conceding they won't be able to handle the situation. Emphasising that consumer inflation was 5.2% in FY2022 till then, despite the pandemic, while food inflation was under 3%, he said inflation control is "primary objective" of government's economic policy.

Even as he was talking about his government's record on tackling inflation, markets globally were planning a surprise. Prices had already started rising after October 2021 as a result of expansion of central bank balance sheets and government doles to lower the impact of Covid-19 on businesses and common man. The liquidity found its way to commodity markets and started pushing up prices. Russia-Ukraine war worsened the crisis by increasing energy rates and disrupting supply chains that were already under stress due to the pandemic. The result: Inflation is at decades-high in all major economies like U.S., Europe and Australia and has mutated into a full-fledged threat to global economic recovery by forcing central banks to increase rates and roll back liquidity at a faster pace than anticipated earlier.

India is no exception. Retail inflation touched an eight-year high of 7.79% in April. Food inflation was 8.38%, up from 1.96% in April 2021. Also, registering 13th consecutive month of double-digit rise, wholesale price index-based inflation touched a nine-year high of 15.8% in April, up from 10.74% in April 2021. Reserve Bank of India seemed to have had a whiff of April inflation numbers. Reports say it was thinking of an off-cycle interest rate increase a month before it decided to bite the bullet on May 4 lest it be seen behind the curve in fighting inflation, especially when other central banks had started increasing rates and sucking out liquidity months ago. So, hours before U.S. Federal Reserve was scheduled to announce a hike in its benchmark lending rates, RBI hiked repo rate by 40 basis points to 4.40%, reversing the low-rate regime introduced two years ago after the Covid-19 lockdown.

"Global crude oil prices are above $100 per barrel and remain volatile. Global food prices touched a new record in March and have firmed up further since then. Inflation-sensitive items relevant to India such as edible oils are in short supply due to conflict in Europe and export ban by key producers. Jump in fertiliser and other (agriculture) input costs has a direct impact on food prices in India," RBI Governor Shaktikanta Das said while giving the rationale for the decision by the monetary policy committee (MPC), which also announced ₹87,000 crore liquidity withdrawal via 50 basis points increase in cash reserve ratio. Market players anticipate that RBI will restore repo rate back to the pre-pandemic level of 5.15% by the end of the year or even before. Rattled by the April numbers, the government announced measures to control inflation on May 21. Finance minister Nirmala Sitharaman announced excise duty cut of ₹8 per litre on petrol and ₹6 per litre on diesel along with LPG subsidy of ₹200 per cylinder. This will cost government ₹1 lakh crore.

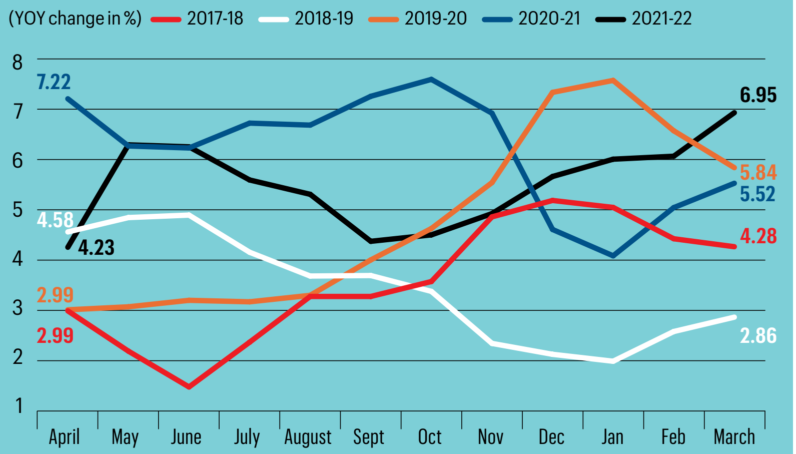
In essence, within months of the prime minister's tough talk, the tide has turned, decisively. Reversal of interest rate cycle will impact private investment and dent private consumption while also hitting exports that have of late been a major engine of economic growth. With rising inflation expectations fuelling bond yields, government, too, will have to pay more for loans. This assumes significance in the context of plans to borrow ₹14.31 lakh crore in FY2023, of which ₹8.5 lakh crore will be raised in first six months of the year. This is almost double FY2020's ₹7.10 lakh crore. Also, cut in excise duty on petroleum products and other measures may impact the fiscal deficit target. Barclays says India's fiscal deficit will overshoot to 6.9% of GDP in FY23, as against the Budget estimate of 6.4%.

Inflation is threatening to play villain in India's economic revival story. RBI and government have a tough battle on their hands.

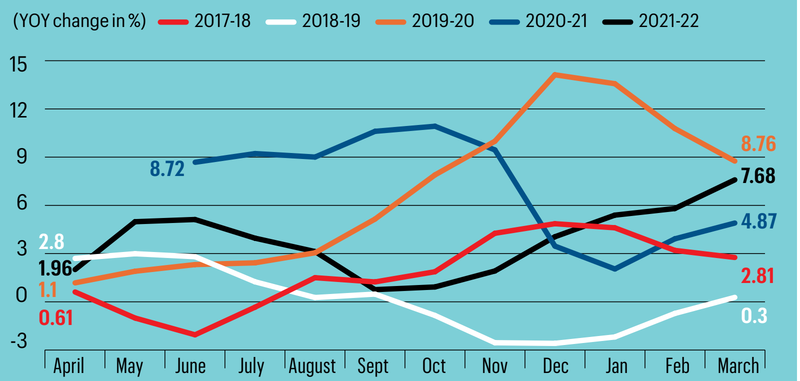
Macro Risk

Economic growth will undoubtedly be the first casualty. Morgan Stanley has revised India's FY2023 projected growth from 7.9% to 7.6% citing impact of inflation on global growth, which, it says, will slow from 6.2% in 2021 (calendar year) to 2.9% in 2022. Morgan Stanley says within Asia, India will be "most exposed to upside risk" from inflation owing to high energy import costs. World Bank, too, has cut India's FY2023 growth forecast from 8.7% to 8% due to supply bottlenecks and inflation. UBS has

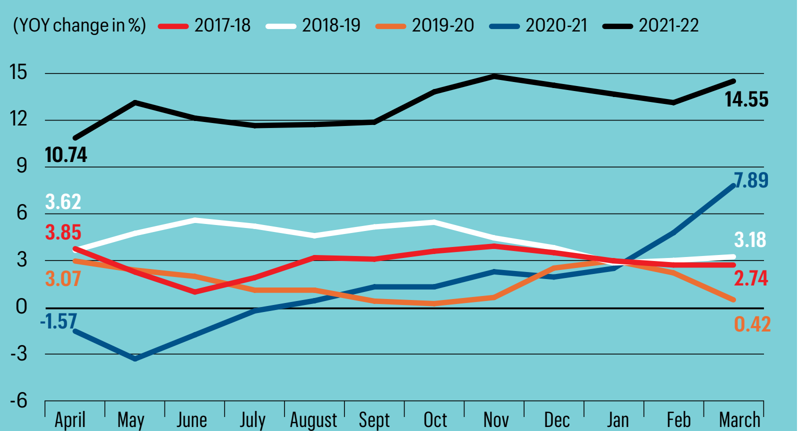
CPI Inflation: On the Edge



Food Inflation: Moving Up North



WPI Inflation: A Costly Affair



SOURCE: MOSPI

Runaway Inflation: Macro Impact

- High cost of borrowing.
- Lower GDP growth.
- Hit on consumption with erosion of purchasing power.
- Subdued real incomes, savings.
- Lower private investment.
- Hit on corporate margins.

High Inflation: A Global Worry

- Inflation at four-decade high in U.S.
- Annual inflation in Turkey at 70% in April.
- Headline inflation in Australia was 5.1% in April, a 20-year high.
- UK's April inflation at 9%, a 40-year record.
- Germany's April CPI at 7.4% was highest since 1981.

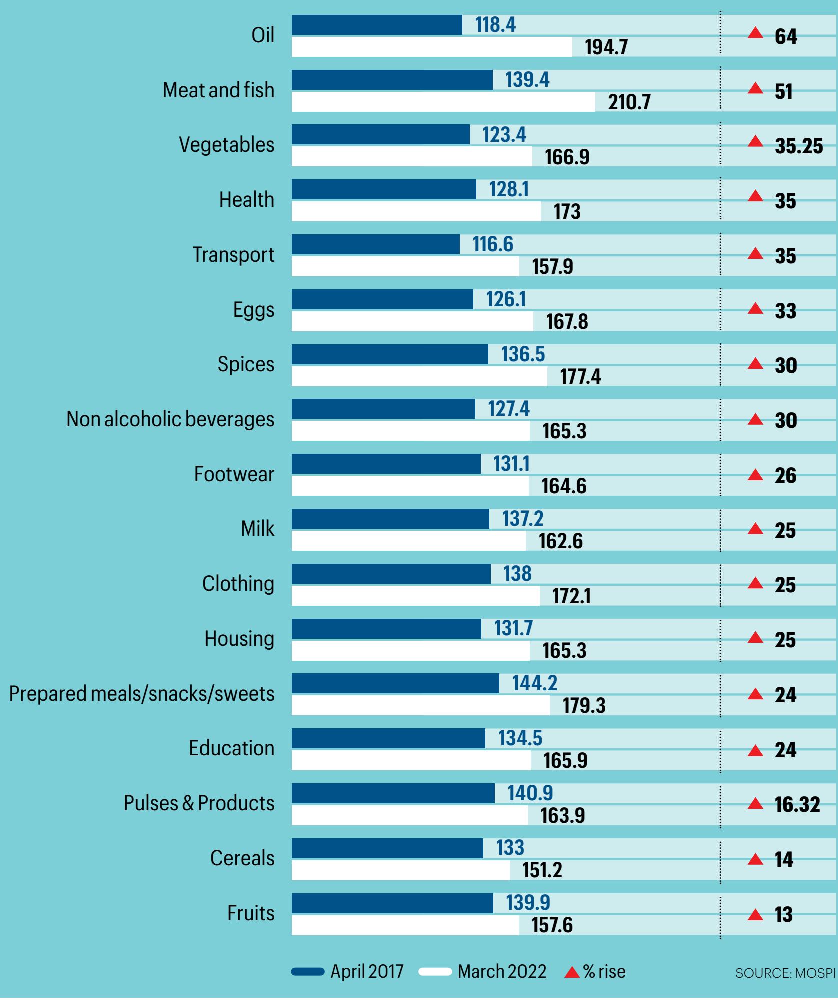
Factors Behind High Inflation

- Global liquidity post Covid-19 outbreak has found its way to commodity markets.
- Supply chain disruptions due to pandemic, made worse by Russia-Ukraine war.
- The war has pushed up prices of several commodities, especially crude oil, natural gas and basic metals.
- Retail inflation up due to high food prices, especially of edible oil, meat. and vegetables; edible oil up 18.7% in March as Ukraine is a major producer of sunflower oil.

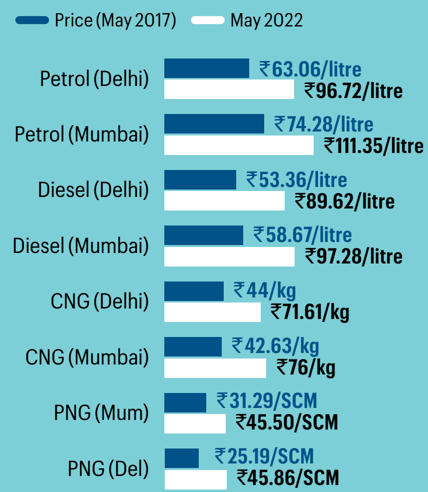
lowered its FY2023 GDP growth forecast by 70 basis points to 7% on account of high commodity prices and weak domestic demand due to rise in energy prices. "With higher interest rates, investment and growth may be affected. CPI may exceed 6% for at least the next four quarters," says

The Price Bomb

All India consumer price indices, Base 2012 = 100



Fuel On Fire



₹1 LAKH CRORE

Revenue loss to Centre from cut in excise duty on petrol (by ₹8 per litre) and diesel (₹6) in FY2023.

D.K. Srivastava, who heads policy advisory at EY India. "High cost of energy is a major concern. Industrial sector will face supply-side pressure due to higher energy costs and supply bottlenecks. As long as this continues, we will not reach our potential growth rate. The impact will be large on industrial sector but less on agriculture and services," he says. Index of industrial production had risen 1.9% in March 2022 compared with 24.2% in March 2021.

India Ratings and Research, a Fitch group company, has built two scenarios of the impact of Russia-Ukraine war. It had projected 7.6% GDP growth for FY2023. It has revised this to 7.2% if the war continues for three months and 7% if it continues for six months. "The impact will be higher if the shock continues," says Sunil Sinha, director, public finance, India Ratings.

S&P Global company Crisil says inflation will become more broad-based this fiscal and emerge as the "biggest headwind" to economic recovery. "Indian economy may have won the rounds against Covid-19, but there's a new opponent in the ring, rising prices, which are threatening to deliver a one-two punch. Inflation based on CPI has risen consistently for past seven months, reaching an eight-year high of 7.8% in April," Crisil said in a research note.

"CPI-linked inflation may have spent three years above 4%, the mid-point of the target range set by RBI. But it is set to become broad-based, across most goods and services, this fiscal, ominously rising to 6.3% in fiscal 2023," it said. This spells trouble for consumption, exports as well as Indian rupee.

Dousing the Flames

May 4

- RBI holds off-cycle MPC meeting.
- Hikes repo rate by 40 basis points (bps) to 4.40%.
- Cash reserve ratio (CRR) hiked by 50 bps to 4.5%; liquidity withdrawal worth ₹87,000 crore announced.
- Next MPC meet between June 6-8.

May 13

- Centre bans wheat exports.
- Demand for Indian wheat up globally in wake of the Ukraine crisis.
- Exports at 14.63 lakh metric tonnes in April 2022 against 2.63 lakh metric tonnes in April 2021.

May 21

- Central excise on petrol and diesel reduced by ₹8 per litre and ₹6 per litre, respectively.
- LPG subsidy ₹200 given for Ujjwala Yojana beneficiaries .
- Custom duty cut on raw materials/ intermediaries for plastic products.
- Import duty reduced on select raw material for steel.
- Export duty imposed on select steel products.

May 24

- Govt notifies duty free import of crude soya bean, sunflower oil for two years; to import 20 lakh MT per year.

Micro Impact

Private consumption showed resilience in FY2022 and was one of the major engines of growth. "Sectors such as FMCG, consumer discretionary, auto and construction could be hit as rising input costs coalesce with continued supply-chain disruptions," Sumant Sinha, Assocham president and CEO, ReNew Power, tells *Fortune India*. "Consumption demand has been coming from people in the middle of the pyramid who are not much impacted by inflation. Expectation that demand will become broad-based may not bear fruit due to higher prices. It will remain skewed," says Sunil Sinha.

Private final consumption expenditure was ₹23,21,609 crore in third quarter of FY2022, higher than the pre-pandemic level of ₹21,57,091 crore in third quarter of FY2020 and ₹21,69,130 crore in third quarter of FY2021. In fact, over past couple of years, private consumption expenditure and exports had been propelling economic growth as private investment was subdued. CRISIL Ratings expects bank credit growth to hit a four-year high of 11-12% in FY23, but sounds a note of caution. "After the second wave of the pandemic, we saw a good rebound in retail credit. But in scenarios of prolonged high inflation or if another wave of the pandemic accompanied with stringent lockdowns manifests, consumers can turn more cautious in spending and borrowing," says Krishnan Sitaraman, senior director and deputy chief ratings officer, CRISIL Ratings.

High inflation will also have a bearing on global demand and, hence, Indian exports. The country's merchandise exports touched a record $418 billion in FY2022 compared with $291.8 billion in FY2021 and $313.36 billion in FY2020.

> The world is passing through difficult times. Even as it is recovering from Covid-19, the Ukraine conflict has brought in supply chain problems and shortages of various goods. This is resulting in inflation & economic distress in a lot of countries."

Nirmala Sitharaman, finance minister

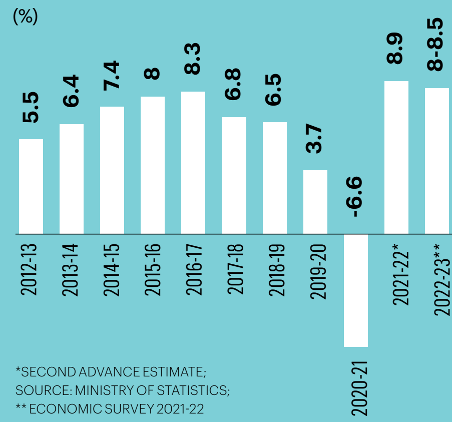
PHOTOGRAPH BY **SANJAY RAWAT**

Another casualty of rising inflation has been rupee. One reason is flight of capital from India as most countries increase rates. Rupee has plummeted to all-time low of 77.63 against the dollar. Rising crude oil prices will add to the pressure. Ravindra Rao, head (commodity research), Kotak Securities, says barring any major demand disruption, crude oil prices are likely to remain close to $100/bbl in the near term. "While crude oil prices have come off highs, they are likely to remain elevated as supply risks related to Russia persist," says Rao.

Even if crude oil prices stay elevated but stable, depreciation of currency in the wake of rising global interest rates can increase cost of energy imports, impacting current account deficit. "Rate hikes in coming policy meetings of U.S. Federal Reserve could lead to more outflows from emerging markets and make dollar stronger. Outflows from Indian government securities will weaken rupee further. A weaker rupee will put more pressure on already high prices of imported crude oil and raw materials," says Heena Imtiaz Naik, research analyst, currencies, Angel One, adding that if rupee breaks and sustains above 77.80 levels, the agency expects it to touch 78.20 levels.

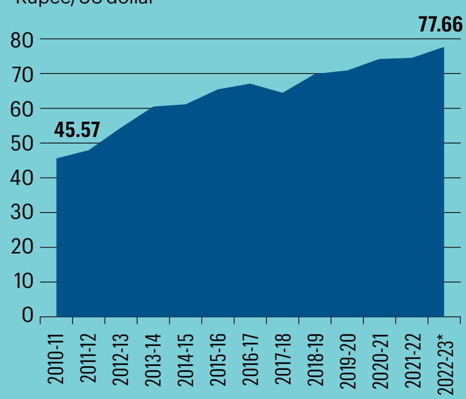
Under normal circumstances, a weaker currency provides a fillip to exports. Even if this happens in some sectors, this time, a bigger concern is impact of inflation and rising interest rates on global demand. "The way U.S. Federal Reserve is increasing benchmark rates is a signal that it wants to suck out money supply. This is bound to impact demand. Our worry is global demand and growth slowing down significantly," says Ajay Sahai, director general, Federation of Indian Export Organisations.

GDP In Troubled Zone...



*SECOND ADVANCE ESTIMATE;
SOURCE: MINISTRY OF STATISTICS;
** ECONOMIC SURVEY 2021-22

...Rupee Depreciates...



*TILL MAY; SOURCE: CMIE

> "Inflation swindles almost everybody. Extraordinary inflation has been seen. For two years prices have kept coming in higher."
>
> **Warren Buffett,**
> chairman & CEO,
> Berkshire Hathaway

World Trade Organization has projected 3% growth in global merchandise trade volumes in 2022 versus its previous projection of 4.7%. It has projected 3.4% growth for 2023 which, Sahai believes, will be brought down further.

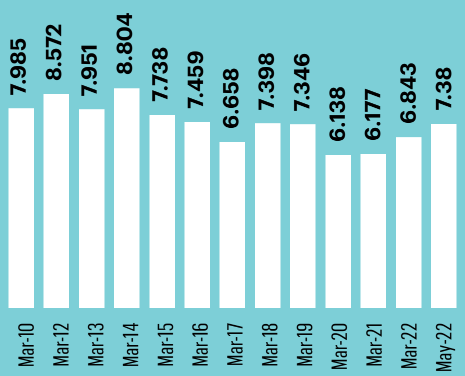
Hit on Businesses

While bigger businesses may be able to survive the inflation tsunami, micro, small and medium enterprises (MSMEs) will face a lot of stress. "The pandemic has hit MSMEs more than any other sector.

PHOTOGRAPH BY GETTY IMAGES

... While Bond Yield Rises...

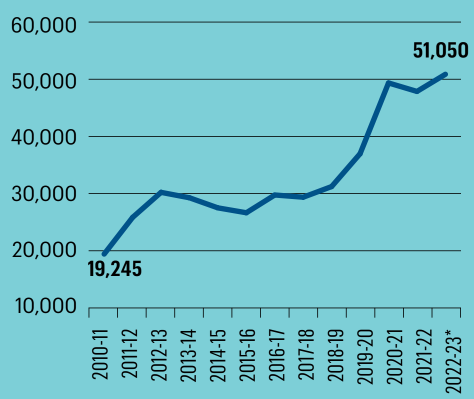
10-year bonds (%)



SOURCE: RBI

... And Yellow Metal Shines

Gold price Mumbai ₹/10 gm



*TILL MAY; SOURCE: INDUSTRY

Smaller size and scale and lower resilience make them vulnerable to macro challenges. ECLGS, which has now been extended and enhanced, and the restructuring schemes have provided support. At the same time, for some of these credits, return to pre-pandemic normalcy could take time and that coupled with adversities in the macro environment could result in NPAs rising going forward," says CRISIL Ratings' Sitaraman. Government had introduced ECLGS after the Covid-19 outbreak. RBI's latest financial stability report says NPAs among MSMEs rose from 16.8% in March 2021 to 18.5% in September 2021.

Ace investor Warren Buffett recently said inflation swindles almost everybody. At present, it is clear that it will affect economic recovery, exports, private consumption, currency, current account balance and corporate margins. For central government, though, it could bring some advantages, even though its borrowing costs may rise due to pressure on G-Sec yields.

Windfall for Centre?

The current spell of inflation is likely to create additional fiscal room for central government by pushing up nominal GDP and increasing tax collections, say experts. "With CPI at 6% and WPI at 10-12%, index of inflation, or implicit price deflator-based inflation, which marks the difference between real and nominal GDP growth, will be in the range of 7.5% to 8%. When nominal GDP growth is significantly higher than real GDP growth, tax buoyancy is high. This will have a positive impact on tax revenues of both Centre and states. The impact is already visible in GST collections," says EY's Srivastava. "So, there will be additional fiscal room. This can have a positive impact on growth if used judiciously," he adds.

Sinha of India Ratings says everything will depend on government priorities. "If government believes that additional tax revenues can be deployed for cutting deficit, it can do that. If it feels farmers and poor need to be supported, it may increase fertiliser subsidy or extend the food scheme."

Way Forward

While RBI has begun monetary tightening, ministry of finance has deployed fiscal levers. Ministry officials say there won't be any change in FY2023's ₹7.5 lakh crore capital expenditure plan. While cost of funds may rise with monetary tightening, it is important to see that key sectors such as housing, construction and manufacturing are not affected much. "Price stability must be a focus area in the short term," says Sumant Sinha.

SBI Ecowrap on April inflation mentions a very important point to ensure that housing sector is not hit by high rates. "Weighted average lending rate for housing loans was 7.48% in FY2022. We have estimated that 8.75% is the threshold rate for housing loans beyond which incremental housing loans will turn negative. This implies RBI should not increase repo rate by more than 1.25%. With 40 bps hike in May, repo rate may not be increased by more than 80 bps, that is, the upper limit should be 5.25%."

Claiming there is space for policy rates to go up to 5% or 5.25%, EY's Srivastava suggests it is time for private sector to take risks and invest as the entire world is scouting for alternative destinations for supply chains, an area where India has a huge opportunity. "Industrial sector is sitting on surplus since corporate tax rate cut. For three years, they have been waiting for an opportunity to invest. That opportunity is opening up," he says.

Former chief economic adviser K. Subramanian has always maintained that since the Covid-19 stimulus was biased towards supply-side measures, unlike the demand-heavy stimulus of FY2009, India has not witnessed the runaway inflation seen then. The assumption holds true. But the situation has now turned upside down. The Ukraine war has negated the advantages of the receding pandemic. Supply and subsequent price shock, high interest rates, diminishing real incomes, jittery equity markets, volatile currency and subdued private investments have emerged as new challenges for the economy. A check on inflation might be the answer to most of these problems.

INVESTING TO BEAT INFLATION

EQUITY MARKET REMAINS THE MOST PREFERRED ASSET CLASS FOR GROWTH INVESTING. IN TIMES OF RISING PRICES, THE KEY IS TO INVEST IN FIRMS AND SECTORS LEAST IMPACTED BY INFLATION.

By **Rajiv Ranjan Singh**

T**HE PAST FIVE DECADES** witnessed sea changes in the global financial landscape. In the 1970s, Fiat currencies unhinged from the Gold standard. The 1980s initiated the steady decline of sovereign bond yields. The 1990s witnessed the growth, and bursting, of the Internet bubble, while the 2000s saw the great financial crisis that led to quantitative easing with steady decline in interest rates, and the birth of the cryptocurrency ecosystem. Meanwhile, the 2010s prospered on low interest rates, and high sovereign debts.

The pandemic-hit 2020s may, however, be very different. Historic-high inflation is ushering in an era of rising interest rates. It is a challenging phase where high inflation clashes with high interest rates and causes low-growth or stagnant economy — a condition known as stagflation.

The past two decades of low interest rate have made equity markets the preferred asset class for growth investing. Market capitalisation of the BSE, for instance, grew from ₹90,836 crore in 1990-91 to ₹241 lakh crore on May 15, 2022. Hence, a generation of investors has mostly witnessed bull runs of the financial world propped up by benign interest rates. Out of the 9 crore demat accounts in India, only 2.1 crore existed in FY13, and 55% were opened after FY20 (See: *Growth in demat accounts*). When the bears emerge from hibernation due to anti-inflationary measures, nouveau investors are at risk of fleeing in droves.

In the past few weeks, bond, equity, and cryptocurrency have corrected severely globally. The start-up ecosystem is facing funding crunch, while new-age consumer tech companies are bearing the brunt of market pessimism. More than $11 trillion has been wiped out from the global stock

market this year, and the cryptocurrency market lost $1 trillion in just one month, between April and May.

Billionaire investor and Berkshire Hathaway chairman Warren Buffet once said, “Be greedy when others are fearful.” Amassing wealth involves both wisdom and patience. Understanding of the geo-political events and macro-economic trends helps one identify investments suitable for particular goals in volatile times.

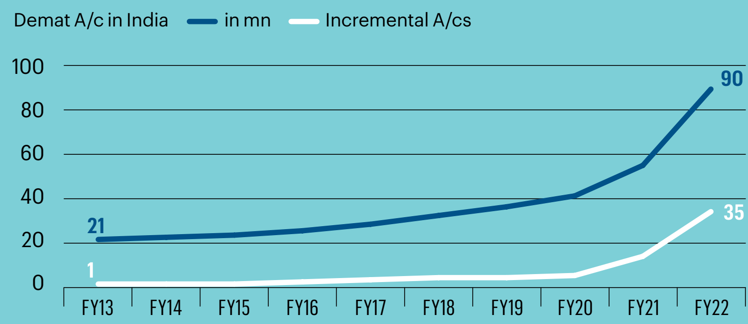
Soaring Commodities, Resurging Mercantilism

Liberalisation and globalisation, which have been trending for decades, are now being subdued by Mercantile Militarism — a scenario in which nations focus on controlling commodities and supply chains with the aid of a strong military. Indonesia, for instance, has banned palm oils exports, but has since started exports again.. Back home, India has banned wheat export to feed its huge population and assist its neighbouring countries attain food security. Now there is balkanisation of the global world order where nations are divided into various camps. Food and commodities are being used as weapons. Russia and Ukraine, the principal supplier of wheat to African nations, are leveraging their positions to garner support. Russia is also using supply of gas and oil, as weapons, to keep European nations in check.

The pandemic, followed by the Ukraine War has reduced cross-border flows of goods, capital, and people, while increasing digital activities. Soaring commodity prices, and rising inflation, on the back of reduced import competition, are hinting at physical de-globalisation.

The most potent macro-economic change is the strengthening of the US dollar against all major currencies. The rupee hit an all-time low of 77.63 against the dollar in mid May. Yen plunged past 130 to the dollar, a 12% decline since early March, and a 20-year low. The yuan exchange rate has dropped sharply, by around 3.9% against the dollar, since mid April. The euro has slid around 8% since January, to a five-year low of around $1.05.

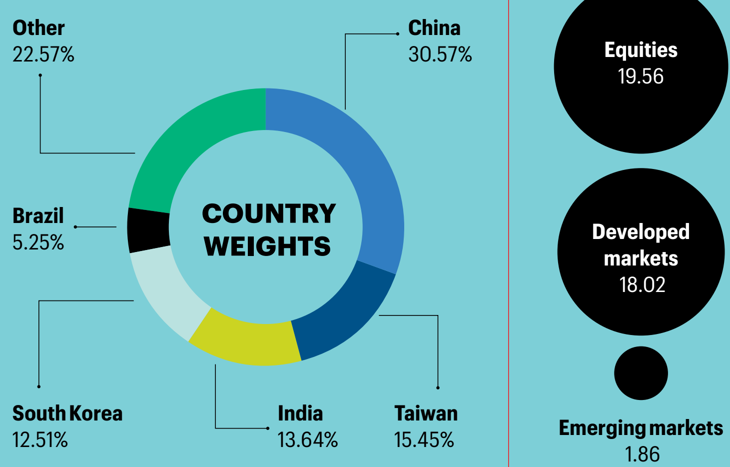
Most of the growth in demat accounts has been through CDSL...



SOURCE: ANGLEONE PRESENTATION, 4QFY22

The emerging market index

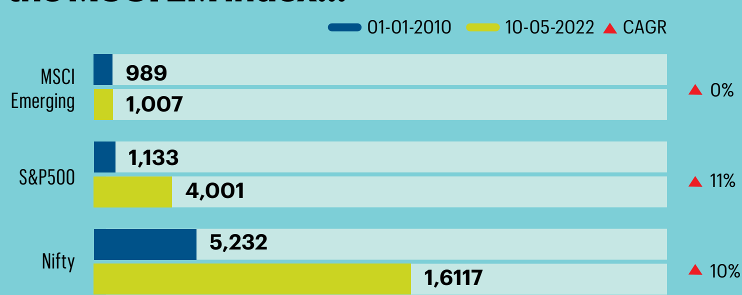
AUM ($ trillion)



SOURCE: RIMES; MSCI; MORGAN STANLEY REASEARCH

SOURCE : EPFR

The Nifty, meanwhile, has outperformed the MSCI EM index...



Taking Stock

- Inflation is primarily affecting companies trading at high PE multiples, and new-age consumer tech firms, say analysts.
- Businesses dependent on raw materials such as palm oil, imported coal and petrochem also face the double whammy of rising import costs and decline in demand due to inflation.
- Consumer staples and telecom companies have registered negligible volume growth.
- For consumer durables firms, Ebitda remains low due to high input costs.
- Britannia, Asian Paints and Marico have seen gross margins decline 4% between FY21 and FY22.
- FMCG, cement, and paints stocks are unlikely to perform well in the current scenario, according to experts.
- One should invest in sectors unaffected by inflation such as IT, pharma, oil & gas, metals, banking, financial services and insurance (BFSI) and defence, they add.

Impact On The Indian Market

A strong dollar is leading to asset re-allocation and portfolio realignment of global fund biggies. Foreign institutional investors (FIIs) have pulled out a record $20 billion from the Indian equity market in 2022, while resource-exporting nations such as Indonesia and Malaysia have seen an inflow of $5 billion and $1.7 billion, respectively. India's weight in the MSCI Emerging Markets index currently stands at 13.64%, while China is at 30.57%, and Taiwan at 15.45% (See: *The emerging market index*).

The current earnings growth in India is primarily led by cyclical businesses such as metals and mining, while high-growth sectors, including consumer durables, consumer staples and two-wheelers, are facing earnings cuts, says Abhiram Eleswarapu, head of equities, BNP Paribas India.

A larger contribution in EPS growth is coming from cyclical businesses that have historically traded at low earning multiples while earnings cuts are coming from businesses which are trading at much higher earning multiples. So even if EPS stands at the same levels, the contribution from low PE multiples businesses have increased. Hence, more earning growth is required to attain the same level the index was quoting six months back, which is a big issue, adds Eleswarapu.

"India is slated to show 9-10% nominal growth for the next five years," says Yogesh Kalwani, head of investment at InCred Wealth. "Do I have any other country in the world with a 10% growth for the next five years? I can't think of many options," he adds.

Margin Pressures

India's growth story is primarily built on consumption, which has been dampened by inflation. Businesses dependent on raw materials such as palm oil, imported coal and petrochemicals face the double whammy of rising import costs and falling demand due to inflation. Hence, FMCG, cement, paint stocks are unlikely to perform well, say analysts. While Britannia, Asian Paints and Marico have seen a 4% decline in gross margins between FY21 and FY22, HUL saw a 3% drop.

High inflation has also led to reduction in discretionary spending, adversely impacting many sectors. Consumer staples and telecom companies have registered negligible volume growth, and have hiked prices to boost revenue. For consumer durable companies, topline growth is not getting translated into bottomline growth, as Ebitda (earnings before interest, taxes, depreciation, and amortisation) remains low due to high input cost.

However, as far the equity market is concerned, the Nifty may not be severely hit since the weightage of the consumption sector, which includes FMCG (7.75%) and consumer durables (3.32%), is a meagre 11%.

"The Indian consumer doesn't really matter that much when you look at it from the index perspective," says Kunal Vora, head of research, BNP Paribas Securities India. He believes inflation is primarily affecting companies which were trading at high PE multiples and new-age consumer tech firms which are currently not making profit but will be in the black 10 years down the line. " The discretionary spending of the mass market will remain under pressure for a few quarters due to inflation," he says.

According to Dhiraj Relli, CEO, HDFC Securities, inflation will impact all possible industries for the next three to four quarters. Citing the example of HUL which has cut cost by 2% by curtailing advertising spends, he says such strategies could be used by other companies too. "The earnings will be subdued for most companies for the next few quarters."

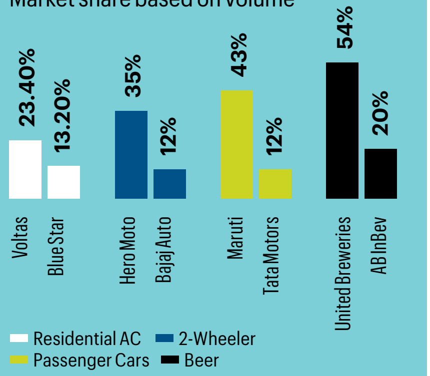
Companies across the board are seeing margin pressures and are not able to pass on cost increases since incomes have not kept pace with retail inflation. "Currently we are seeing a tough position for India Inc. as companies try to push higher utilisation levels and volume growth, but are ending up seeing a reversal of it," says Abhiram of BNP.

Portfolio Watch

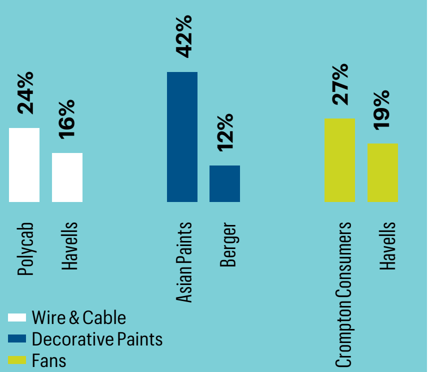
The key is to invest in companies or sectors unaffected by inflation. Service sectors such as IT will primarily remain insulated from the commodity cri-

The sector leaders

Market share based on volume



Market share based on value



SOURCE- BROKERAGE REPORTS, ANNUAL REPORTS, RHPS

13-14

Low earnings multiples of banks on a one-year forward basis, against the historic average of around 23-24.

sis, while pharma and healthcare are unlikely to be impacted by discretionary spending cuts. Sectors closely aligned with the government's agenda such as defence will get more business, while commodity and chemical-based sectors, including petroleum, coal, sugar etc. are at an advantage due to rising commodity prices.

Investors should focus on banking and finance as the sector has long underperformed and net interest margins of banks typically improve in an inflationary period, says Relli of HDFC securities. Around 45% of banks' liabilities come from current account, savings account (CASA) deposits. Banks do not pay any interest on current accounts, and only 4% on saving accounts. In inflationary times, banks increase their lending rates quickly, but cost of funds do not rise much, adds Relli. On a one-year forward basis, banks are also trading at low earnings multiples of 13-14 when historic average is around 23-24, according to Relli. "We believe private banks have significant value."

He suggests investors should focus on the oil and gas and metals sector where prices are moving up. Natural resources, metals and refining companies benefit in an inflationary regime. IT (which is leading the digital boom) and chemical companies are set to gain big as well. Chemical is an indispensable raw material for manufacturing companies, and till the time China is under lockdown, the sector will attract high premiums.

Kalwani of InCred Wealth says investors should park their money in companies that dominate their respective sectors (See: *The sector leaders*). "If India's nominal GDP grows 10%, sector leaders normally register 14-15% growth in corporate earnings," he adds.

But none of these is likely to dampen the India story. BNP Paribas is overweight on Indian equities since the country has several companies with a track record of strong earnings growth. "Our call may not be a call on India but one on 10-15 large bottom-up opportunities," says Abhiram. "What interests investors most about India is the fact that they have a choice of high-quality companies that have demonstrated strong and consistent earnings growth."

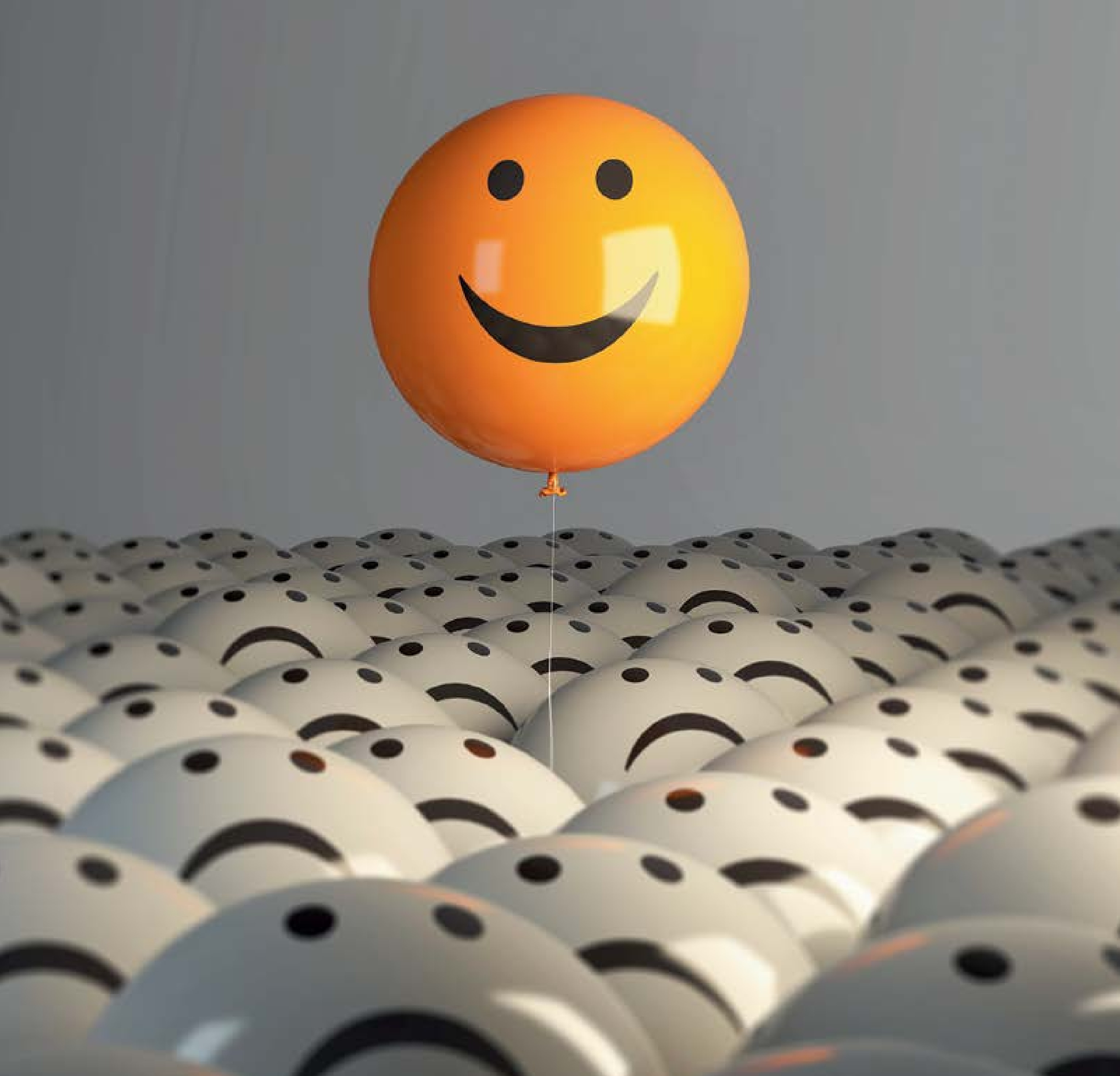
Long-Term Perspective

Interest rate hikes do not impact precious metals, especially gold, since the former is mostly used as a hedge against currency devaluation during inflation. Hence, investors can buy precious metals like gold and silver during dips and when currencies are losing sheen.

Another sector is real estate, especially domestic housing. Second-hand homes are ideal long-term, big-ticket investments as home-ownership comes with the added benefit of tax-savings, asset leverage for loans, passive income through rent, or saving on rental expenses.

While investing in cryptocurrency in India is subject to heavy taxation, the market for non-fungible tokens (NFTs) is steadily gaining traction. Indian companies that sell NFTs by accepting rupees are a legitimate investment. NFTs are like art investments. Enthusiasts can start by investing small sums periodically, and slowly build a portfolio.

The ecosystem of low interest rate and meagre inflation that led to the growth of FAANG-dominated investing is diminishing. FAANG stands for Facebook, Apple, Amazon, Netflix, Google. The investing world is now talking about FAANG 2.0, which stands for Fuels, Aerospace & Defence, Agriculture, Nuclear, Gold & Metals that provide anchor in a world of geopolitical risks and volatility. .



FORTUNE INDIA

EMPLOYERS OF THE FUTURE

The needs and aspirations of millennials and Gen Z joining the workforce are widely divergent from earlier generation of employees. How have human resources practices in India Inc. changed to meet the needs of the future?

Empowering Peacocks, Not Penguins

AS INDIA INC. EMBRACES A WORLD FULL OF UNCERTAINTIES, NOT ONLY DOES IT NEED OUT-OF-THE-BOX BUSINESS STRATEGIES, ITS EMPLOYEE STRATEGY NEEDS TO FOLLOW SUIT.

By **Ajita Shashidhar**

T **THE FIRST QUARTER** of FY21 was perhaps the worst ever for lifestyle major Titan Company. The pandemic had spread its wings far and wide and the country was under a complete lockdown. As people got confined within their homes and even lost their loved ones to the deadly virus, the last thing on the mind was to buy a piece of jewellery or indulge in a watch. The sudden change in consumer mindset was disastrous for the lifestyle major, as sales plummeted. Back at the Titan headquarters in Bengaluru, the easiest option to tide over the crisis was to cut down on employees or sever ties with a few vendor partners and distributors. C.K. Venkataraman, MD, Titan Company, decided instead to empower his stakeholders. “I could have shaved off ₹50 crore in FY21 by cutting down on employees and vendors, but I knew ₹50 crore is a small part of the total pie. I thought empowering and motivating 20,000-odd employees, vendors and distributors to steer out of the crisis would make better sense. And it worked. They gave back to the company with their commitment and innovations,” says Venkataraman.

Necessity is the mother of invention, and some of Titan’s best innovations came about during the pandemic, says Venkataraman. One of them was to melt its inventory (gold) and sell it. “The idea came from one of our

Tackling Uncertainties: Need Of The Hour

- Distributed Leadership — The top boss needs to empower teams to take decisions.
- Employees need to be encouraged to take bold bets by their managers.
- Three-four year strategies are passé, one needs to adapt to changes by the hour.
- Need to encourage a culture of innovation, entrepreneurship and authenticity.
- Need to create a culture where people are encouraged to learn from failures.
- Have a workforce which mirrors consumers.

younger team members. We decided to melt jewellery so that we don't have to worry about cash balance. Thereafter, there were 100s of other innovations which paved the way for better customer acquisition, capex control and capital utilisation, which led to better-than-expected sales in the following quarters," he adds. The company embraced technology and started selling jewellery and watches on video platforms. By the end of the FY21, over ₹ 1,000 crore of its revenue came from video selling, unlike earlier when digital sales contributed less than ₹1 crore to its overall revenue.

Conversations on agility, innovation, authenticity and empowerment are taking centre-stage in the boardrooms of India Inc. Covid-19 was just the beginning of an era where volatility and uncertainty have become a way of life. Be it unprecedented high inflation that followed the pandemic or the Ukraine-Russia war, which crippled the world economy, there is uncertainty around, and organisations are increasingly feeling the need to reinvent themselves to be able to embrace this reality.

Is your workforce agile and nimble to respond to volatility? Is consumer centricity and innovation at the centre of your organisation strategy? Are your teams empowered to take risks? Gone are the days when organisations could draw up three-year strategy plans and work towards them. Today's era is all about taking strategic decisions on the go. Annual plans have got crunched to monthly and sometimes fortnightly and even weekly reviews. For instance, when the news of the Ukraine-Russia war came in, one of the most impacted sectors was edible oil. Over 90% of India's sunflower oil (an important ingredient of edible oil) requirements are met by the two warring nations, and supplies completely dried up. The crisis got compounded with Indonesia banning export of palm oil. Edible oil majors had to immediately find out a possible alternative to sunflower oil and palm oil. "The premium on agility in this unpredictable environment has gone up. Are you able to change your tactics dynamically by the day is a question that is increasingly being asked," says Anand Kripalu, MD & global CEO, Essel Propack.

No wonder, Nestle India's top leadership at their recent off-site debated about 'empowering peacocks and not penguins' in their organisation. While penguins are stable, they are not agile. The peacocks on the contrary are restless and curious. "In an organisation which has worked by the book and has always delivered whatever it has been asked to deliver, what are we doing to shake the Ganga or melt the Himalayas?" Nestle MD and chairman Suresh Narayanan asked his colleagues. Most organisations, especially the legacy ones, always try to play it safe and want to do only those innovations which are less likely to fail. But the need of the hour is to have an extremely high appetite for risks. Narayanan says in today's times creating an organisation culture that is obsessed about consumer centricity and innovation is critical. It is important to have the ability to break stereotypes and think beyond the expected.

Building Agile Businesses

What firms need to do...

- Have a clear and common purpose, the autonomy to make decisions, and an ability to develop mastery in their craft.
- Provide a safe place to experiment with funds.
- Prioritise and reduce overhead roles to bring in more efficiency.

SOURCE: McKINSEY

An Agile Organisation Is Key

Breaking stereotypes need a mindset of adapting to changes quickly, or in other words building an agile work culture. The pandemic has forced organisations across the board to be agile. For instance, when traditional distribution networks collapsed, FMCG companies quickly embraced technology to make sure that products were available to consumers. Organisations such as ITC and HUL not just launched their direct-to-consumer platforms within months of the outbreak of the pandemic, but also partnered with logistics and supply chain firms such as Udaan and Shop X to create a parallel distribution network.

Building an agile organisation is all about being ambidextrous, says Anuradha Razdan, executive director, Hindustan Unilever. "It is about being able to win with our core strengths and being able to flex, open ourselves to different ways of working and understand that not every business model will be the same, some will have a high-risk, high-return ratio."

L'Oréal India, says MD & CEO, Amit Jain, empowered teams during the first lockdown in March 2020 to take operational decisions on the field, which continues even today, in line with the company's 'Fit For Future' initiative. "During Covid, state governments were deciding, even district magistrates were deciding when to open the market and when not to. We pushed operating decision-making to the field. We empowered 50 area managers to decide when to deploy products in their markets and take a call on how to respond to the DM's orders. Area managers were even empowered to give credit to customers/salons who sold our products."

“Earlier, we had to respect people because they sat in the chair. Today, a youngster is inspired only if the leader brings value addition to the table.”

Suresh Narayanan, CMD, Nestle

“The premium on agility has gone up. Are you able to change your tactics dynamically by the day is a question that is increasingly being asked.”

Anand Kripalu, MD & global CEO, Essel Propack

PHOTOGRAPH OF SURESH NARAYANAN BY **NARENDRA BISHT** AND ANAND KRIPALU BY **APOORVA SALKADE**

The company has launched ‘Simplicity 2.0’ which aims to burst silos and empower employees. The cosmetic major reached out to over 250 employees and asked them to list the ‘biggest time wasters’ in the organisation. The outcome was 106 suggestions. “We are currently focusing on the first 25 and will come up with clear solutions. The idea is to reduce complexities and help people collaborate better,” says Jain.

Similarly, Titan has passed on the responsibility for profit and balance sheet to a large number of people in the hierarchy. “Around 70-80 people started owning profit and cash responsibility,” says Venkataraman.

Marico, meanwhile, calls itself an organisation which inculcates an entrepreneurial mindset. Last year it launched an initiative called ‘Talent Value Proposition’, which asked employees to chart their own road map in the organisation. “It’s not about introducing new programmes and policies, we firmly believe that it is imperative to keep the entire talent value proposition contextual to the future of the industry and the organisation. We just didn’t want to retain and attract new talents, but we also wanted them to acknowledge our value proposition and help them stay and grow along with us,” explains Saugata Gupta, MD and CEO, Marico.

The pandemic, says, Arvind Laddha, CEO, Mercer India, has made organisations more open to taking risks and becoming agile. “They have managed to navigate uncertainty and are realising that it’s a given. But not all are walking the talk. One reason for this is the compulsion to protect what they have and not bend the house.”

Faridun Dotiwala, partner, McKinsey, agrees with Laddha. According to Dotiwala, while 80-90% companies say that agility is most important for them, only 30-40% are actually walking the talk. “The ones which are seriously trying to reinvent are just 3-4%. Companies that have done it have experienced a 30-40% increase in revenue and profitability,” he adds.

Dotiwala says most legacy organisations wanting to become agile have a tendency to equate speed with agility. “Agile organisations combine speed and stability. Agility has to be linked to the ability of the organisation to reconfigure people’s strategies, resources and structures to the most value-creating opportunities. It’s not just allowing people to do what they want, agile organisations are far more disciplined and transparent,” he further explains.

Culture Of Taking Risks

Agility comes with a huge appetite

for risk. Jeff Bezos, founder, Amazon, often tells his employees that taking risks and failing is important. "Jeff says learning from your failures and applying them to the next big idea is at the heart of delighting customers," says Deepti Varma, director, HR, Amazon India. She cites the example of Amazon phone, which didn't do well at all and was pulled out within months of its launch. Despite the innovation failing Varma claims none of the members who were part of that initiative were penalised. "In fact, the leader of that team today holds a senior leadership position. We have a process called COE (correction of errors), wherein we put down what we learnt from the failed initiative and how we would use that learning for our future innovations."

"We want to make risky jobs attractive, so we create a safe environment wherein if one does jobs that need fast turnaround or involve an element of risk taking, we invest time there and tell the employee not to worry about risk-taking," explains Razdan of HUL. She says the FMCG major has carved out a unit which focuses on creating new brands. "Their focus is very different from the core of the business. Employees who are part of it get short-term, long-term as well as team rewards. It is less about functional silos, and more about telling people to take risks," she adds.

Risk-taking is at the heart of innovations, and industry experts believe the onus is on leaders to create an environment where not only do they empower their employees to take risks, but also back them if they fail. Nestle's Narayanan cites the example of the Maggi crisis to drive home the point. He says after the company came out of the crisis (Nestle was accused of having lead content in Maggi noodles beyond permissible levels) in 2014, he asked his employees to build on the company's strength. "I told them to fast-track our innovative capabilities as a company. Instead of launching a new product in two-and-half years we should try coming up with an innovation every six months. One of the missives that I gave my team was if everything fails, as chairman of the company I will take the onus." The company came up with as many as 64 innovations within the first two years of the Maggi crisis.

Only one out of every 10 innovations succeed, but for that companies need to take risks and invest. The innovation could be a new product, packaging or even a service. Tanishq for instance, launched its 'Endless Aisle' programme during the pandemic, enabling consumers to shop from any store across the country on their mobile or tablet. A consumer in Jaipur got access to the inventory at the Tanishq store in Bhubaneswar and was able to buy a gold bangle unique to Odisha. Venkataraman says that the company managed to do ₹600 crore of sales through 'Endless Aisle' in FY21.

L'Oréal, on the other hand, trained over 2 lakh hair-dressers to give online beauty tips to their patrons during the pandemic. "All these ideas came from our empowered team," says Jain.

Hina Nagarajan, MD & CEO, Diageo India, is especially proud of how her team launched their maiden home-grown craft whisky brand, Epitome Reserve, in flat 85 days. The company also renovated the iconic Royal Challenge Whisky in 45 days. At the heart of these innovations, says Nagarajan, is the creation of an

"You take care of stakeholders (employees) and they will take care of the shareholders... I am leaving a lot to my team, so that strategy and vision are co-created."

C.K. Venkataraman, MD, Titan Company

PHOTOGRAPH BY **SELVAPRAKASH LAKSHMANAN**

Impact Of Agile Transformation

Customer Centricity	Operational Performance	Speed	Employee Engagement	Efficiency
30%	30%	5-10x	30	30%
Increase in customer satisfaction by creating teams with end-to-end customer missions **vs** 5-10% for less successful transformations	improvement in selected processes by removing hand overs and driving continuous improvement **vs** 5-10% for less successful transformations	increase in speed in driving change and decision making through simplified operating model **vs** 2x for less successful transformations	Percentage point rise in staff engagement by ensuring people have autonomy and purpose **vs** 5-10 percentage points for less successful transformations	efficiency gains through fewer hand overs, reduced overheads and strict focus **vs** 5-10% for less successful transformations

SOURCE: McKINSEY

organisation culture where people feel psychologically safe to take risks while not being worried about the consequences of failure. "We have cross functional teams, Sprints, which work together for 2-3 months on critical projects, to deliver specific outcomes. The Sprints teams are empowered to make decisions and come to the executive committee members only when they need help in any matter. No one is penalised for failure unless it is in the area of compliance and ethics," explains Nagarajan.

While the likes of Nestle, Diageo or L'Oréal are surely on top of agility and taking risks, the bulk of Indian companies are risk-averse. Most struggle to create a culture of innovation and entrepreneurship, agrees Kripalu of Essel Propack. ""Most large companies have annual rewards and bonuses. When the chance or opportunity for promotion comes then that one person who has had a failure will invariably be discriminated against negatively. I have struggled to make presentations where people stand up and talk proudly about failures."

"In most companies 70-80% of employees are sales and manufacturing guys who are absolutely metric and productivity driven. The innovation team most often is a small microcosm of the larger company and that's where it becomes hard to protect the sanctity of the peacocks," he adds.

Retaining Agile Talent

A common question most job seekers ask their prospective employers is how empowering their work culture is. "The employer-employee equation has changed," points out Laddha of Mercer. In fact, the new-age talent don't want to join organisations which are hierarchical and risk-averse. They expect to be given responsibility and also held accountable for it. According to Narayanan of Nestle, talent today is recruited on the basis of intellectual competence, and to add to this is the humdrum of delivering on a quarterly or annual basis, which prevents organisations from creating an environment of empowerment for their talent. "There are stereotypes that we operate upon. The peacocks may be doing brilliant work but your environment can stifle them quickly. So, how you recruit, reward and retain talent so that you manage the long-term innovation of your organisation becomes crucial."

Boss Isn't Always Right

To build a futuristic organisation it is important to have a leader who would enable a culture of empowerment. The role of a leader according to Gupta of Marico, should be to propel leadership and accountability down and across the organisation "The leader should define broad boundaries and set some guardrails but he/she should empower specialists and individual leaders within the team to take charge and deliver results, especially in a crisis situation," says Gupta.

Gone are the days of 'my boss is always right'. The leader has to earn the respect of employees. "The newer generation respects leaders only when they believe that he/she deserves respect. Earlier, we had to respect people

"At the heart of innovations is the creation of an organisation culture where people feel psychologically safe to take risks while not being worried about failure."

Hina Nagarajan, MD & CEO, Diageo India

because they sat in the chair, today, a youngster is inspired only if the leader brings value addition to the table," points out Nestle's Narayanan.

In fact, Jain of L'Oréal gets reverse-mentored every Saturday by young management trainees who invariably give him their two cents on digital marketing, data and analytics.

"Going forward, leading will be less about directing, and more about demonstrating a deep empathy for employees, by truly understanding how one's feeling and thinking to provide solutions that genuinely work. Building space for employees to take risks, ask questions and challenge the status quo will be even more critical to fuel innovation," says Sanjay Gupta, country head and vice president, Google India.

Rajkamal Vempati, CHRO, Axis Bank, however, feels that the burden on leadership is getting amplified. "Given the pace of change everything is getting pushed to leaders who may not know the answers. Leaders also need to be more empathetic. So, the entire construct of leadership has changed."

A leader is no longer the person who has all the answers, agrees Razdan of HUL. "He/she is the person who facilitates, has this larger picture to guide and knows what levers to pull. He/she lets people close to the ground to make the decision." HUL has a concept called Winning In Many Indias (WIMI), which has divided the business into regional clusters. Each cluster is managed by a leader who is empowered to take operational and strategic decisions. "They run the P&L independently and the management committee members don't step in unless they are asked to by the cluster head," she further explains.

"There is a conscious trend of leaders asking for help. They are trying to reorient their thinking to employer mindsets," points out Anupam Kaura, president and global HR head, CRISIL. "Today's leaders need to lead from the front. This is an ask which was not there earlier as much," he adds.

Leading organisations that are actually agile is much less work for leaders, but much harder, says McKinsey's Dotiwala. "Unlike earlier, when the leader could do what he/she thought was right, today it is more about enabling others in the team. The ability to be a coach and being able to sense when to dive in is hard."

Jain of L'Oréal agrees that the operating part of his role has been cut down by more than half ever since the company has been empowering its teams to take decisions at the ground level and not wait for central diktats. "But when you devolve authority and empower people, you need to stay close. I now aggressively engage with people one on one across all levels."

For Venkataraman of Titan, delegating leadership has deepened his multiple stakeholder obsession. "You take care of stakeholders and they will take care of shareholders," he says.

Indian companies are taking baby steps towards creating organisations of the future — where agility, innovation, and employee empowerment take centre-stage. The sooner they make the transition the better.

PHOTOGRAPH BY GETTY IMAGES

Diversity Goes Beyond Gender

FROM HIRING DIFFERENTLY-ABLED AND PEOPLE FROM LGBTQ COMMUNITY TO THOSE WITH DIVERSE EDUCATIONAL AND VOCATIONAL BACKGROUNDS AS WELL AS VETERANS FROM ARMED FORCES, INDIA INC. WANTS TO ENSURE ITS WORKFORCE MIRRORS ITS CONSUMERS.

By **AJITA SHASHIDHAR**

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THIRTY-YEAR-OLD Nikhita Bandi is a shopper market manager with FMCG major Marico. She is always on her toes, travelling from one city to another to understand shopping behaviour of consumers at modern retail stores such as Reliance Retail, DMart and Spencer Retail. The 2017 IIM-Bangalore alumnus' confidence and commitment to her job is remarkable. As she talks passionately about Marico's digital transformation journey and how she has benefitted from it on a virtual call, there is no way one can know that she functions with just one arm. "I am grateful to Marico for ensuring that my disability doesn't get the better of me," she says.

While Bandi is a role model for people with disabilities, for Marico, her passion for work is vindication of its conscious strategy to hire talent from various walks of life and ensure that its workforce is as diverse as possible. "We are a consumer business. To take right calls around innovation, it's important to have similar social representation in the organisation as we have in society," says Amit Prakash, CHRO, Marico.

A gender diverse workforce is a given in today's times. But now, companies, especially the big ones, are pushing the diversity needle further by trying to hire not only women but also people with diverse skill sets and industry experiences, apart from differently-abled and people from LGBTQ communities. "We are launching Kindle and Audible for visually and hearing impaired. How can we do that unless we have visual and hearing-impaired people in our teams who can give us the right inputs?" says Deepti Varma, director, HR, Amazon India.

Take Bacardi, where more than 80% team of blenders is millennial women. The company has launched premium blended whisky DEWAR'S which, according to its global master blender Stephanie McLeod, is not just targeted at whisky connoisseurs at large but also millennials and women who enjoy cocktails. "DEWAR'S lends itself beautifully to cocktails. Women and younger generation are not much into consuming whisky on the rocks. A new generation of consumers is coming up. We have to innovate for them," says McLeod.

Hindustan Unilever (HUL) swears by a similar strategy. It has launched a programme called #Belong as part of which it not just focuses on hiring differently-abled but also people from the LGBTQ community. It plans to increase representation of women from 44-50% and ensure that 5% workforce by 2025 comprises people with disabilities. Marico and L'Oreal India say 2-3% of their workforce will be differently-abled by 2023. "We need to create an enabling environment so that differently-abled are able to work without interruptions. Once we do that, you will see numbers spiralling," says Prakash of Marico.

Google India's mission is to organise the world's information and make it universally accessible and useful. It requires diversity in thinking and a workforce reflecting diverse thoughts

Diversity On The Menu

- By 2025, almost 5% of HUL's workforce will be people with disabilities; it aims to increase gender diversity in managerial cadre from 44% to 50%.
- HUL's Ahilya focuses on getting more women in frontline workforce. The target is least 5,000 women in frontline sales roles by 2025.
- L'Oreal India has a programme, License To Hire, to train hiring managers to overcome biases and respect diverse perspectives.
- Take-2 is L'Oreal India's initiative to get women who have taken a break into the workforce. Axis Bank, Marico and Amazon have taken similar initiatives.
- Axis Bank and Marico are actively hiring retired people.
- Amazon has been hiring veterans from armed forces; it has also launched Rekindled, which focuses on hiring women who lost jobs during the pandemic.
- Around 1% of Marico and L'Oreal India's workforce is people with disabilities; they are planning to increase that substantially.
- Marico is also focusing on hiring sociology, psychology and physics graduates instead of the usual business school graduates.

and ideas. According to Sanjay Gupta, country head and vice president, Google India, "In order to keep our culture inclusive, innovative and thriving, we hire for culture 'add' not culture 'fit', where people of different views and backgrounds can do their best work and show up for one another. Moreover, growing a representative workforce is crucial in launching programmes that support our diverse communities, and to build products that better serve all of our users."

The trend is clear. Gone are the days of one-size-fits-all. For organisations to succeed, they have to innovate for consumers from every walk of life. This holds true for B2B businesses such as consulting firms as well. "The more diverse the organisation, the higher the chances of success," says Suresh Subudhi, India recruiting chair, Boston Consulting Group. BCG, which has been a day-one recruiter in most leading business school campuses over past few years, has also started recruiting from schools in Tier-II and Tier-III India. It has been hiring graduates, lawyers, armed forces veterans as well as chartered accountants (CAs).

Marico is even hiring undergraduate students. Vedant Singh Rathore, a physics graduate from 2020 batch of St. Stephens College in New Delhi, wanted to become a physicist until he got a job at Marico. An opportunity to earn at 20 and that too in a company with a global footprint is indeed alluring. "We were told we needn't be economics graduates to apply. All that was needed was a passion to learn. Therefore, I decided to try it out," says the 23-year-old. After doing stints in sales, packaging and digital marketing in past two years, Rathore is now with data sciences division of the company.

Flexibility Spurs Diversity

Employees with disabilities are 11% more likely to prefer working in organisations which offer a hybrid workplace

70%

Women world over prefer hybrid workplace

13%

Members of the LGBTQ community prefer a hybrid work model

24%

Of LGBTQ members are likely to leave the workforce if it's not hybrid

14%

More employees with disabilities are likely to leave the workforce if it isn't hybrid

SOURCE: MCKINSEY

Diverse Thinking

The diversity strategy involves not just hiring from diverse walks of life. What is needed is diversity in thoughts and ideas too. Companies need bandwidth and empathy to accept diverse perspectives. Prakash of Marico gives an example of a personal care brand. "Though the brand has a loyal set of consumers and is extremely popular, a young trainee told us that it made sense to her mother and she would use it only if it was available in a particular format. The innovation team admitted that the brand did need a makeover. After it was done, we were able to cater to a larger consumer base."

Would Marico have taken an innovation idea from a trainee five years ago? Unlikely. Anand Kripalu, MD, Essel Propack, agrees that most legacy companies are yet to become nimble-footed in taking risks to innovate. "We have a mindset of analysis and presentations and five levels of approvals, and sometimes that bureaucracy doesn't let you cut through," he says.

Diversity in ideas and thought is much harder, agrees Faridun Dotiwala, partner at McKinsey & Company. "Diversity in thought impacts financial returns. More than often, I have heard people say that even before a person starts saying something, they know what he is thinking. This is because they have a homogenous thought process. It is easy to work with people having similar backgrounds. Therefore, you have to ensure that you have a truly diverse team which is able to come up with new ideas all the time. It takes effort to make it work."

Organisations are realising the importance of diverse and objective thinking. L'Oreal India has launched an initiative, 'Licence To Hire', which trains its 300-odd hiring managers to eliminate biases while hiring. "We train our managers to respect diverse perspectives. That way we are able to have a much better decision-making process," says Roshni Wadhwa, CHRO, L'Oreal India.

"To take right calls around innovation, it's important to have similar social representation in the firm as we have in society."

Amit Prakash, CHRO, Marico

"We are launching Kindle & Audible for visually and hearing impaired. Such members in teams give us the right inputs."

Deepti Varma, director, HR, Amazon India

Hindustan Unilever, on the other hand, uses technology to strengthen its listening skills when it interviews a candidate. Throughout the pandemic, the company has been onboarding new hires through digital platforms, which has enabled it to get rid of a lot of unconscious biases, says Anuradha Razdan, executive director, HR, HUL. "Covid-19 gave us an opportunity to listen to interviews... By listening you can see what are the points being checked again and again and what are the points getting eliminated." Apart from hiring within India, HUL has also been focusing on Indians studying in universities abroad.

Gender Diversity, A Long Haul

Though conversations around diversity of thought are gathering pace, companies across the globe are still struggling with ensuring adequate representation of women in their workforce. In fact, the pandemic forced more women than men to exit the workforce. According to ministry of statistics and programme implementation, over half a million women exited formal employment during the pandemic, nearly double the number for men. "Women exiting workforce is an extremely worrying trend," says Anupam Kaura, president and global head, HR, CRISIL.

However, with the pandemic enabling flexible working, organisations across the board are trying to get women back into the workforce. Amazon has launched an initiative called 'Rekindled', which focuses on hiring women who lost their jobs during the pandemic. L'Oreal India has 'Take-2 At L'Oreal" to attract women who have taken a break. "Women want to come back to corporate world due to flexibility available today. In a span of three months, we have put out 25 positions and received more than 1,500 applications," says Wadhwa.

At Diageo India, 50% of its executive leadership team and 27% of its top leadership team are women. It has also launched a 26-week paid family leave policy, which is applicable for all new parents, irrespective of gender or sexual orientation. Its wellness policy provides insurance benefits for same-sex and live-in partners, along with surrogacy and fertility treatment benefits for all. The alco-bev compnay has launched a 'thriving through menopause' policy as well.

Though larger companies are making the right noises around diversity, it is just the tip of the iceberg. Diversity in Tier II and Tier-III India is a huge challenge. India Inc. has miles to go to meet its diversity target.

Working On Your Own Terms

WORK FOR EIGHT MONTHS A YEAR OR 12 HOURS A WEEK, OR BE A PART-TIME CMO OR CFO — FLEXIBLE EMPLOYMENT MODELS ARE BECOMING EFFICIENT RETENTION TOOLS FOR INDIA INC.

By **APRAJITA SHARMA**

PHOTOGRAPH BY **GETTY IMAGES**

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FIFTY-YEAR-OLD Puneet Khanna is a chief financial officer. Where, you ask! Khanna is not your regular CFO working full-time with a single firm. He is a 'virtual CFO' for six companies working specifically on "smart and well-defined" objectives. He also serves as a virtual CEO with France-based Edenred. He is earning three-four times higher than what he did before — his last 'full-time' stint was with Brightstar Telecommunications India Ltd (formerly Beetel Teletech) — and has enough time to play catch up with a game of gold at the golf course near his Gurugram home or at the Delhi Golf Club.

"I worked full time for over 25 years only to wonder what I am getting in return for toiling so hard. This is when I thought I need to get control over my time. Now I work as a virtual CFO. I can work from anywhere and have flexibility to take time off," says Khanna. He co-founded the firm, Don't Hire Be Virtual, in April 2018, which he says is seeing much traction post Covid with more and more companies looking to hire virtual CXOs.

Khanna started out on his own in 2018, much before the pandemic hit the world. At that time, organisations were sceptical to allow employees to work part-time or even temporarily, since they believed flexibility would impact productivity. Working from home or working from anywhere was unheard of. The pandemic kind of legalised flexible working models, and organisations world over are now using flexibility as a tool to retain talent.

Hybrid with flexibility is the ask of the hour and companies are capitalising on the trend with better employment models. According to a McKinsey report released in 2021, over 75% respondents say they would prefer working in organisations which offer hybrid models in the long run. Of the employees currently working in a hybrid model, 85% want it to be retained going forward. The report also states that employers could run the risk of losing good talent in the absence of a hybrid plus flexible work model. In fact, 71% of the employees interviewed in the McKinsey report say they are likely to look for other opportunities if flexibility is not available at their current place of work. But the demand for flexibility and hybrid is higher among the younger generation. According to the report, 59% of the younger employees (18-34 year olds) are more likely to call it quits rather than the older ones.

The *Changing Trends in Workplace Flexibility in India* report by Indian HR services company CIEL HR also points to a similar trend. "Traditionally, salaries and incentives have been major factors for job change. Now, we see a phenomenal shift: Six out of 10 people are willing to forego high-paying jobs that require them to mandatorily come to office," says the report. Out of the 4.25 lakh jobs that CIEL has covered in its study, 5% are remote and 7% are hybrid, and the number, says CEO Aditya Mishra, is increasing rapidly.

Lack of flexible employment models has been touted as the main reason behind rising attrition rates and the 'Great Resignation' in IT. Attrition rates at Infosys and TCS touched record highs of 27.7% and 17.4% , respectively, in Q4 FY22. "It's no longer employers, but employees' market. The latter is on a higher pedestal, be it existing employees or interested candidates," says Himanshu Kishore, chief operating officer at Manya Education, a consulting firm in the foreign education space.

Roshni Wadhwa, CHRO, L'Oréal India, cites the example of a colleague who works in the digital marketing space and has opted for remote working. "He moved to Raipur during the pandemic and prefers to work from there. As an organisation we have accommodated his request as he is an asset we wouldn't want to part with."

Retaining Talent Via Flexibility

Flexibility and hybrid even feature in organisations' employer-branding

Flexible Employment Models

- L'Oreal India's 'Liquid Workforce' enables one to work from any location.
- BCG offers employees flexibility to work for 8/10 months a year, and get paid accordingly.
- Axis Bank's 'GIG-A-Opportunities' follows the work from anywhere model.
- Intel has 'Freelance Nation', designed to retain high-performing employees by offering them a flexible work style.

"We even have women, who exited the workforce due to maternity issues, returning back to work for project-based roles."

Rajkamal Vempati, CHRO, Axis Bank

"Flexibility is a win-win for organisations as well. It enables companies to go geographically wide in terms of talent search."

Roshni Wadhwa, CHRO, L'Oréal India

exercises. One of the earliest movers in this space is Axis Bank, which branded its flexibility initiative as GIG-A-Opportunities. A 'work from anywhere' model, it not just enables existing employees to move to flexible roles, but also seeks to generate employment opportunities for people in smaller towns. "Since these are 100% virtual roles (across functions), with some of them being project-based, short-term contracts, we even have women, who exited the workforce due to maternity issues, returning back to work, as well as retired people who want to work with us. The initiative has helped our workforce become diverse," says Rajkamal Vempati, CHRO, Axis Bank.

L'Oréal India calls its flexibility initiative, 'Liquid Workforce', while Hindustan Unilever (HUL) has 'You Work', which enables employees to move on to project-based roles. They are free to choose their hours of work and are even eligible for perks such as medical benefits.

Intel, meanwhile, has 'Freelance Nation', designed to retain high-performing employees who may want a more flexible work style. Selected candidates are eligible for telecommuting, working part-time and job sharing. Even sectors such as logistics and supply chain (where flexibility was unimaginable in the pre-pandemic era) are looking at hybrid work models. Allcargo Logistics has a hybrid model for select functional verticals. "WFH is an acceptable mode of work but approval from the manager is needed. Earlier managers would be sceptical about approving the request but now they

PHOTOGRAPH OF RAJKAMAL VEMPATI BY **PADMINI B** are fine with it because at the end of the day, delivery matters," says Indrani Chatterjee, group chief people officer, Allcargo Logistics.

At Manya Education, few employees in corporate offices have been given full-time work from home, while others can take voluntary WFH. "I believe working from office is better as it helps in development that comes with collaboration. But, we are being liberal about it. In fact, our few high-performing employees work completely from home and their output is phenomenal," says Kishore.

Gig Growing Big

Another trend that companies have been embracing widely is the gig culture. It is no longer just about blue-collar workers such as delivery boys and drivers, but has moved beyond to even senior leadership positions. According to a recent report by the Boston Consulting Group (BCG), the gig economy has the potential to service up to 90 million jobs in India. It can transact over $250 billion in volume of work and contribute an incremental 1.25% to India's GDP over the long term.

The top sectors leveraging gig talent include consulting, pharma/healthcare, FMCG, IT/IT services and the development/non-profit domain. Large companies are emerging as the largest users (32%) of flexible talent, driven by greater comfort due to the new ways of working, the need for agility and flexibility, as well as focus on skills and expertise to drive initiatives (Source: *Professional Gig Economy Report Card, Flexing It ® 2021*).

Such a model gives an opportunity to small businesses to hire high-skilled talent like those in the fields of cyber security and digital marketing, who otherwise may not be affordable in regular rolls. "If a company has to migrate the accounting system from GAAP to IFRS, high-level finance folks will be needed for guidance. Companies prefer part-time roles for such specific tasks. Other situations such as raising capital or planning an IPO require you to hire people for a certain period, not full-time. Similarly, talent management or succession planning, etc are few other instances of part-time roles," says CIEL HR's Mishra.

Organisations are hiring senior talent as gig employees. BCG, says India recruiting chair, Suresh Subudhi, has significantly ramped up its gig hiring in the past couple of years. "We hire a lot of gig employees in training roles where we typically don't need a full-time resource. We also bump up our gig hires in finance during year-end for roles such as expense reconciliation, book closure and record keeping. We hire chartered accountants and cost accountants for these roles."

At Marico, gig hires have become common in senior roles in digital marketing, legal and finance. HUL has launched 'OPEN2U-Gig Work-The HUL Way', through which it supports freelancers with structured compensation, assignments, bonuses and other benefits similar to those of a full-time employee.

So, do flexible and hybrid employment models help organisations conserve costs? The CHROs of most companies prefer being tight-lipped. However, another McKinsey report states that a survey of 278 executives has found that on an average, these executives want to reduce office space by 30%. But, there's a flipside as well. Remote work is likely to put a dent in business travel, with the pandemic ushering in virtual meetings and video-conferencing. While leisure travel and tourism are likely to rebound after the crisis, McKinsey's travel practice estimates that about 20% of business travel, the most lucrative segment for airlines, may not return.

The writing on the wall is quite clear — flexible employment models are here to stay. After the 'Great Resignation' employers across the board are leaning on flexibility to woo their talent to stay on with them. ■

(With inputs from Ajita Shashidhar)

The Gig Economy

- It can service up to **90 million** jobs in India's non-farm economy alone.
- It can transact over **$250 billion** in volume of work; add an incremental **1.25%** to GDP in the long term.
- It could lead to **35 million** skilled and semi-skilled jobs, and **5 million** shared services roles like facility management, accounting etc.
- Construction, manufacturing, retail, transportation and logistics could account for over **70 million** of the potentially 'gigable' jobs, going ahead.

SOURCE: BOSTON CONSULTING GROUP

75%

Of respondents surveyed by McKinsey prefer working in firms which offer hybrid models in the long run

71%

Say they are likely to look for other opportunities if flexibility is not available at their current place of work

Retaining Talent

FIRMS ARE PULLING OUT ALL STOPS TO RETAIN EMPLOYEES AS THEY ENGAGE WITH A YOUNG, INFORMED AND DIGITAL-SAVVY WORKFORCE THAT WANTS MUCH MORE THAN A GOOD COMPENSATION PACKAGE.

By **Asmita Dey**

ROHIT JAIN (name changed) quit his job in March last year just before second Covid-19 wave gripped the country. The techie, part of a team steering product development for a Gurgaon-based tech firm, used to slog the entire day. “There was no work-life balance. There were days when I had lunch at five in the evening. Workload and deadlines were such that I couldn’t even take sick leaves,” he says. “Company policy mandated mental health leave once a month. We could never take it,” says Jain. For a 32-year-old millennial with no family responsibilities, the decision to quit was not difficult. He took a break for three-four months and was, until recently, freelancing for a Mumbai-based tech firm. “I wanted a full-time job initially

A For Attrition

IN INDIA...

5.1 million

Estimated number of people working in IT and tech, according to Nasscom

21%

Attrition rate in 2021, over two-decade high, according to Aon Consulting

19.77%

Attrition rate in IT in Jan-March 2022, according to TeamLease. It was 9.09% for e-commerce and technology start-ups

... AND GLOBALLY

47 million

Number of people who voluntarily quit their jobs in 2021, according to the US Bureau of Labor but freelancing got me decent money. I knew I would find one option or the other. I have already clinched a permanent role," says Jain.

There seems to be no dearth of jobs, at least for tech profiles, thanks to opportunities created by start-ups and rapid digitisation by legacy businesses. The war for tech talent is real and employers are grappling with what Anthony Klotz, a psychologist and professor of business administration at Texas A&M University, has called "The Great Resignation." Numbers back his assertion. An Aon Consulting study found that attrition in India Inc. touched a more than two-decade high of 21% in 2021. Projections for 2022 are equally grim. Randstad India estimates 18-20% attrition rate. An Employment Outlook report by TeamLease says IT sector led with 19.77% attrition in January-March quarter. E-commerce/tech start-ups and BFSI companies are also seeing a huge churn. TeamLease has pegged Q1 CY2022 attrition rate for e-commerce and technology start-ups at 9.09%. Randstad's estimates for IT and e-commerce are above 20%. A LinkedIn India study earlier this year found that top reasons for job change by professionals are poor work-life balance, inadequate pay and career ambitions.

This does not tell the complete story. Mindset of employees has undergone a sea change and they are demanding more than just a big pay cheque. They are looking at what Balasubramanian A., business head, consumer and healthcare at TeamLease, calls "total benefits package" rather than just compensation package. "People are prioritising opportunities, culture. More and more young people are asking about the company's mission. People are enquiring about upskilling, education allowances," says Sanjay Shetty, director, professional search & selection and strategic accounts at Randstad India. Today's workforce is young, mostly GenZ and millennials. Unlike GenX, they are informed, decisive, confident, and not shy about demanding what they think is theirs. This generation has been exposed to a lot of information on internet. Yes, pay is still a very important metric, but they are also considering other propositions that employers bring to the table. Saurabh Govil, president and CHRO at Wipro, says employees want companies to ensure work-life balance, establish collaborative hybrid work environment, enable faster development opportunities and account for mental health and wellness.

Companies, on their part, are going all out to woo such talent. They are making progressive work policies, creating opportunities, introducing newer reward mechanisms and crafting ways to instill a sense of inclusivity amid a hybrid work culture that values employees' opinions.

Factors Driving Attrition

- Poor work-life balance
- Inadequate pay
- Greater career ambitions

SOURCE: LINKEDIN INDIA

What Employers Are Doing To Retain Talent

- Progressive work policies
- Hybrid work culture
- Innovative reward mechanisms
- Frequent promotions
- Inclusivity measures
- Skilling initiatives

- **Wipro** is increasing frequency of promotions for junior employees to quarterly.
- **Infosys'** Skill Tags programme helps employees learn one of the 36 new skills in digital business.
- **Mphasis'** Talent Next platform leverages AI to profile employees and recommends skill sets.
- Start-ups such as **Cred**, **Meesho** and **Khatabook** are offering ESOPs.
- **Razorpay** is broadening insurance to cover same gender and live-in partners.
- **Freecharge** is extending benefits around mediclaim and giving adoption and surrogacy leave to all genders, including LGBTQ.
- **Axis AMC** has opened up vacancies for homemakers.

Learning & Growth

In an era of cutting-edge innovations and technologies, companies are putting a lot of thrust on helping employees add skills and expand opportunities. Mphasis, for instance, has launched a platform called Talent Next which CHRO Srikanth Karra describes as 'Netflix of learning.' Talent Next uses AI to profile employees and recommend newer skill sets, similar to how Netflix recommends content based on users' browsing history. "We have linked a little bit of pay to learning quotient. It's a gamified platform which allows subscribers to earn coins that can be converted into money," says Karra. Mphasis also has a Gig Cloud platform that lists projects the company is working on so that employees who are willing to take up more work can earn additional income. "This is a way of engaging employees. We are trying to design policies around how

> "We focus on holistic value proposition that includes individual learning and financial as well as non-financial rewards."

Richard Lobo, executive VP & head of HR, Infosys

employees can trust us through their career paths," says Karra.

Infosys runs a programme called Skill Tags which covers sizeable talent and provides them scope to learn any one of the 36 new skills in the digital business. It enables employees to enter new areas such as domain and techno-functional consulting, specialist programming, technical architecture and design. "We have a comprehensive plan to transform our talent. We focus on holistic value proposition that includes individual learning, financial as well as non-financial rewards and deep emotional connect with the company," says Richard Lobo, executive vice president and head of HR, Infosys.

Wipro, on its part, is equipping fresh hires with newer digital skills under a programme called Velocity. The idea is to make candidates "client-ready" as early as possible in their careers, says Govil.

The trend is not limited to IT. Even new-age digital, analytics and some legacy firms are focusing on employee learning and growth. Axis Bank-owned digital financial services player Freecharge provides learning on online platforms such as Coursera. It also helps top talent join courses from top Indian universities. AI and analytics firm Fractal has a talent mobility policy which allows employees to apply for internal openings. "People often leave due to lack of growth or work they want to do. We have given employees a lot of freedom and choice. We believe they should be CEOs of their own careers," says chief people officer Rohini Singh.

Similarly, EV start-up MoEVing has implemented a learning hour. Nestle India has The Henri Nestle scholarship that allows employees to learn whatever they want. It has introduced a nine-month blended learning course, Ascent, to support transition to first-time people manager roles. Besides, it has launched NesVidya, a micro-learning performance solution app, to help employees learn new concepts and evaluate their progress.

"Employees are looking for enhanced visibility of career growth. They will stick to a company that charts a clear growth path for them, including continuous learning and skill-building, as they rise through the ranks," says Divyesh Sindhwaad, AVP, sales, Skillsoft India.

ESOP Carrot

Employee stock ownership plans (ESOPs) are also emerging as a tactical tool to attract talent. Meesho has an annual MeeSOP programme that allows every full-time employee to take up to 33% annual CTC as ESOPs. Kunal Shah-led Cred launched an accelerated wealth programme last year that allows team members to take up to 50% annual cash compensation as special grant ESOPs. Khatabook, too, offers ESOPs. "Equity buyback programmes are a good motivator as they make them part of the company's journey and success," says CEO & co-founder Ravish Naresh.

Industry experts say a large number of employees are considering jobs in start-ups. ESOPs are one of the major attractions. "An IT professional with five-six years experience and good performance record can easily bag a mid to senior management role in a young e-commerce firm," says TeamLease's Balasubramanian.

Progressive, Open Work Culture

"If you want to go fast, go alone, if you want to go far, go together." The gen-next takes this African proverb seriously and looks at a company's mission statement, work environment, corporate policies and people culture before signing up. That's why employers are implementing progressive strategies. Due to collective trauma of the pandemic, there is a shift in expectations of workers, who now expect a more empathetic workplace. Prospective employees are evaluating businesses based on flexibility offered and their broader values and contributions, says Sushant Dwivedy, managing director at global talent management firm SHL (India and Philippines). "Only leaders and companies meeting these expectations can win the war for talent," he says.

Ashish Kumar Singh, CHRO at Meesho, believes policies that are forward looking, inclusive and industry leading will set the precedent. "People prefer employers who offer flexibility in choosing work location," says Singh. Meesho has adopted a boundary-less workplace model. It also offers 30-week gender-neutral parental leave and gender reassignment leave (for gender reassignment surgeries).

That's not all. Razorpay has overhauled its insurance policy to cover same-gender and live-in partners. "This resonates with the new generation," says Chitbhanu Nagri, senior vice-president, people operations, Razorpay. Employers are also emphasising transparency in communication. Nagri says they hold sessions to apprise them of the company's performance. "This makes it easier for people to see the impact of their work," says Nagri. During interviews, candidates often show interest in knowing how far serving employees have been able to grow. Roma Bindroo, CHRO at Zepto, says employees know what they want. Start-ups are attracting talent that is raring to see limits of how far it can go and is ready to take risks, says Bindroo. "We conduct town halls, founder meets, leader connects and ask-me-anything sessions," says Bindroo. The start-up has decided to move to five-day work week from May 15 based on employee feedback. "For the same pay, if they get a role that allows them to create more value and impact, satisfies them through growth, it trumps over comfort," says Bindroo.

And building a culture where employees can learn, thrive and grow, where they are appreciated and valued, helps. Priya M. Pillai, head HR, corporate and retail at Titan, says, "We have received calls from employees who have left us asking if they can join back. When I held exit conversations with some employees during last one year, they told me they might come back," says Priya. She says this is a manifestation of the firm's culture of openness. "Our culture, where employees get easy access to leadership, our work environment that nurtures employee talent and widens their horizon, is what they like," says Priya. New generation is looking for a space for its ideas to come alive. The company's premium ethnic apparel business, Taneira, was a product of crowd-sourcing ideas within the organisation.

Diversity & Inclusion

Diversity and inclusion are other areas where employers are sharpening focus. Axis AMC has adopted a diversity, equity and inclusion (DE&I) policy under which it ensures women-specific hiring in sales to counter the notion that they are unsuitable for field roles. The company has also created vacancies for homemakers.

"We are looking at hiring women who have never stepped in the professional world. And homemakers could be from all genders," says Meghna Gupta, head, Human Resources. "New generation employees want fair treatment not just for themselves but for everyone around them. So, DE&I should feature in EVP (employee

> "Employees want firms to ensure work-life balance, enable faster development and account for mental health and wellness."

Saurabh Govil, president and CHRO, Wipro

PHOTOGRAPH BY **NISHANT RATNAKAR**

"Easy access to leadership, environment that nurtures employee talent and widens their horizon, is what they like."

Priya M. Pillai, head HR, corporate and retail, Titan

value proposition)," says Gupta.

Freecharge extends benefits around Mediclaim, adoption and surrogacy leave to all genders, including LGBTQ. Mayank Kapoor, head, Human Resources, says they provide maternity benefits to birthing parents as well as transwomen.

At Nestle India, 20% managers and 54% management and technical trainees are women. In 2021, of the total number of people hired, 43% were women. Women also comprise 21% field force. In its factory in Sanand, Gujarat, 70% workers are women. .

Logistics firm Blue Dart has launched an all-women service centre in Kharghar and another in Andheri where 70% employees are women. "One cause for attrition could be that the industry continues to be viewed as 'male-dominated'. We associate logistics with men lifting heavy shipments, operating machinery. That's where change is needed to be induced," says CHRO Rajendra Ghag.

Innovations Galore

When it comes to keeping employees relaxed, Bengaluru-based D2C home and sleep solutions start-up Wakefit.co takes the cake—it recently announced a 'right to nap' initiative under which employees will be allowed a 30-minute afternoon nap break. "We aim to focus on employee well-being while fostering a culture that encourages self-care," says director & co-founder Chaitanya Ramalingegowda.

Ed-tech firm Emeritus, on the other hand, offers global rotation for high-potential employees, who can work from its offices in Mexico City, Shanghai or U.S.

Fair Play in Pay & Promotions

Salary is not the sole metric but fair compensation is valued. RazorPay's Nagri says compensation numbers in the market are changing frequently. After every 90 days, we feel we need to recalibrate with the market. Rather than inflation, the concern is entry of new players, many of whom are hiring and scaling up aggressively, says Nagri. "There's a lot of work that goes into benchmarking ourselves against the market and ensuring we are competitively positioned," says Nagri.

Khatabook has opted for two appraisal cycles a year which, it believes, allows employees to 'grow faster'. Freecharge's compensation is slightly above market benchmarks for employees in critical roles. Wipro says it will increase frequency of promotions to its junior employees to quarterly.

Talent War

The pandemic has been a headache for companies. The initial few months saw business disruption. But the bigger challenge has been keeping pace with the digital boom. This essentially meant that the IT industry, the hub of tech skills, was inundated with digital transformation projects, necessitating the need to add more employees. Add to it the growing league of start-ups and their quest to build tech-led products and services for consumers and businesses alike and you have what is called a perfect brew for a raging talent war. Not surprisingly, attrition is high in these sectors. Legacy industries like retail and FMCG have also not been spared. "Tech is no more looked at as a business enabler but it is core of business now. Earlier, we would say the tech talent war may be between IBM, Infosys, TCS and Wipro, but today it is industry agnostic," says Titan's Priya.

Ultimately, talent will decide corporate India's winners.

CELEBRATING ARTISTRY

THE FIRST-EVER HELLO! INDIA ART AWARDS BROUGHT TOGETHER THE CRÈME DE LA CRÈME OF THE WORLD OF INDIAN ART TO RAISE A TOAST TO CREATIVE EXPRESSION

Avarna Jain, Editorial Chairperson of HELLO!, with Bose Krishnamachari, who won the award for both Curator of the Year and Exhibition of the Year

Since its inception in India, HELLO! has been an art-sensitive magazine, with an annual issue dedicated to the field. The prolific art legacy that India has inherited is kept alive both by talented artists and patrons, and HELLO! strongly believes there's a need to recognise this realm of creative expression… So we brought to you our first-ever HELLO! India Art Awards!

On this dazzling night held at The Mansion's Oval Room at the Hyatt Regency Delhi, HELLO! honoured every domain of artistic excellence and appreciated the works of both established artists and promising talent. Only the most deserving winners took home awards in categories handpicked by an esteemed jury — so much so that the occasion resonated with the whole of the world of art in India and was lauded by every connoisseur.

HELLO! also paid tribute to the late maestro Satish Gujral with a display of his beautiful sculpture titled 'Eternity - Echoes of Nandi'.

Hosted by the elegant Shivani Wazir Pasrich, the night was a power-packed gathering of creative expression, with the biggest names from the art space in India in attendance, along with the who's who from all fields with a design connect. Also, to enthral our audience, we had an enlightening panel discussion that dove deep into the world of 'Art Beyond the Modernists'.

Among our well-deserving winners were revered patrons like Kiran Nadar, who was our Art Patron of the Year, and Bose Krishnamachari, who took home the Curator of the Year Award as well as our gorgeous trophy for the Exhibition of the Year. Ace designer Sabyasachi Mukherjee was honoured for his 'Sustained Promotion of Arts & Culture', while Krishen Khanna received the Lifetime Achievement Award.

TEXT: SHRADDHA CHOWDHURY

Nitin Bhayana moderates a discussion with eminent panellists Kishore Singh, Senior VP of Exhibitions & Publications at DAG, Jaya Asokan, Director of India Art Fair, and Tasneem Zakaria Mehta, Managing Trustee and Honorary Director at Dr Bhau Daji Lad Mumbai City Museum

HELLO! Editor Ruchika Mehta presents the Artist Book of the Year Award to Indu Antony

Avarna Jain and Kiran Nadar present Sabyasachi Mukherjee with an award recognising his 'Sustained Promotion of Arts & Culture'

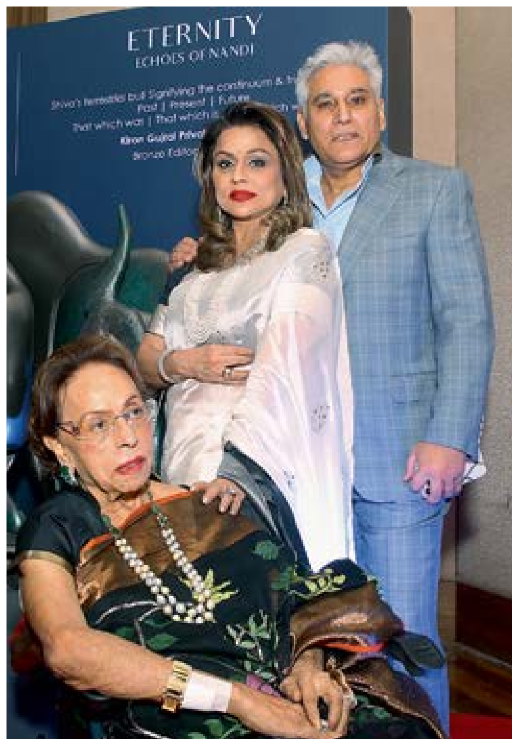
Nandita and Vivek Jain hand over the Collaboration of the Year Award to Tripti Arya and Jagannath Panda for the Barbil Art Project

Tasneem Zakaria Mehta honours Kiran Nadar with the Art Patron of the Year Award

Shalini Passi presents Baaraan Ijlal with the Critical Voice of the Year Award

On display at the HELLO! India Art Awards was this beautiful sculpture by the late Satish Gujral. Titled 'Eternity - Echoes of Nandi', the masterpiece signifies the continuum of time — that which was, that which is and that which will be...

The winners of the first HELLO! India Art Awards: Bose Krishnamachari, Sabyasachi Mukherjee, Kiran Nadar, Baaraan Ijlal, Jagannath Panda, Mandeep Raikhy, Tripti Arya, Radha Mahendru, Priyanshi Saxena, Anne Couillaud, Indu Antony and Divya Singh



Art enthusiasts Raseel Gujral and Navin Ansal with Kiran Gujral

HDFC BANK

HDFC Bank's Mantra: Listen, Adapt, Grow

INDIA'S LARGEST PRIVATE SECTOR BANK HAS ADOPTED AN ALL-INCLUSIVE APPROACH TO GROOM AND NURTURE TALENT.

By **V. Keshavdev**

W

WHEN YOU ARE the best-performing bank in the country, the numbers speak for themselves. With a revenue per employee of ₹1.22 crore and profit per employee of ₹0.26 crore, HDFC Bank is by far the most productive and cost-efficient bank in the country. In comparison, its closest competitor, ICICI Bank, lags at revenue per employee of ₹0.99 crore and profit per employee of ₹0.16 crore. But when a company views its human capital through a business-efficiency lens, the management cannot be oblivious to the lives behind the numbers — the fact that employees are as human as they can get.

Vinay Razdan, chief human resources officer, is cognisant about the challenge. "There is no denying that any high-performing organisation will have a certain kind of internal pressure about achieving business targets and, in my opinion, it's the right pressure to have. But the real question is: How do you determine what is the right pressure?" says Razdan.

The bank has been working on initiatives to blend the right attributes around culture and people. "What we are asking is not ordinary ask from our people, hence, there was a realisation in the organisation some time back for the need to become a listening organisation — listening to our people through formal and informal channels," says Razdan, who joined the bank in 2018.

With over 134,000-plus people spread across 6,300-plus branches, it was imperative to create a homogenous culture despite the heterogeneous nature of work. The bank's culture statement is built on a six-pillar edifice comprising inclusion, integrity, humility, innovation, execution and collaboration. "We've been at it for the past two and a half years, evangelising them through a process which involves about 2,000 people, including all senior leaders," says Razdan.

The listening architecture is four-pronged — listen for organisation sentiment, listen for development, listen for initiatives and listen for concerns.

For instance, to understand the organisational sentiment, an annual employee engagement survey results was cascaded down to all employees with over 20 sessions with the senior leadership team, followed by over 200 virtual sessions covering around 92% of eligible employees. To substantiate and get more information on the quantitative data, the bank also conducted 73 focus group discussions covering 1,400-plus employees. The feedback shared by employees was translated into a bank-level action plan.

To aid development, a mid-year review process is conducted every six months. Besides sharing developmental feedback with team members, concerns of team members are shared

to take corrective actions and ensure an enabling environment for employees to perform.

Even as the bank is building its digital initiatives on the business front, it has partnered with an external agency to create an AI-driven solution for employees to generate and implement surveys to throw up meaningful insights. It has done a pilot of its virtual employee pulse tool for around 10,000 employees and is gearing up for organisation-wide deployment. Besides, focus group discussions are held with a cross section of employees, where the objective is to get structured feedback and insights about what is working well and areas of improvement.

The tool-kit seems to be working.

In a hypercompetitive business, the bank has thus far managed an impressive employee retention rate of 83%. Of its 134,000-plus workforce, 10% is top talent, where the retention rate is 97%, as reported by the bank in the Fortune India-Work Universe survey. "We called out three things that we expect of our leaders — to be nurturing, to be caring and to be collaborative," says Razdan. The Nurture, Care, Collaborate Programme is designed to influence and sensitise over 12,000 people managers within the bank. "They are at a level where a positive shift in their behaviour will have maximum impact on the teams below," believes Razdan.

It's not without reason.

The bank wants to ensure it remains a preferred employer in the future as it looks to ramp up its people strength by 10% in FY23 and 40% by FY27. In FY22, the bank hired a record 21,486 people even as it opened 734 new branches. One such business where it is ramping up its presence is the unsecured segment. "We are opening up 900 new locations, of which 600 would be in Tier-III and IV cities, to boost our unsecured business (personal loans and business loans)," says Arvind Kapil, country head, retail assets.

While the bank builds on the bells and whistles around its employee

83%

HDFC Bank's retention|rate. It has a 134,000-plus workforce

10%

Likely increase in employee strength in FY23. The bank is looking to raise it by 40% by FY27

734

Branches opened by the bank in FY22. It hired a record number of 21,486 people

engagement programme, the focus is also on nurturing the talent pool and, ensuring diversity within its ranks.

Among the several initiatives aimed at nurturing talent, an important one involves role modelling. "We pursued a top-down approach with our MD leading the way. He personally connected with over 150 senior leaders on the need to behave with integrity, be role models, earn the respect of our customers for lifetime by reiterating the 3 Cs — Culture, Conscience and Customers," says Razdan.

Then there is 'The CEO Club', a programme focussed on building next-gen leaders from an impact group of 50–75 leaders identified through a rigorous selection process, who are then put through an intense 24-month journey on building cross-functional knowledge, future banking skill sets, and individual development. "The pool forms a vanguard to the new ways of banking and sends a visible, powerful message across the organisation on our investment on talent," says Razdan.

But like in any big organisation there are some challenges in creating a common HR culture. For instance, since the bank is building its digital capabilities by hiring more tech talent, Razdan points out that it cannot bracket them under a common work code. "Branches have to work six days a week, with alternate Saturdays off. But the techies are used to five days a week, so you can't sort of expect them to come on Saturdays. Recently we had given them the leeway despite knowing that it will create murmurs," says Razdan with a grin.

But the big shift which is in the works is the reverse merger of parent HDFC with the bank.

While the combined entity will have a much bigger employee pool, Razdan does not see that as a challenge since HDFC has been running a single product business which the bank never had. "HDFC is already a very tightly run ship with the best cost-to-income ratios. So, it's not a challenge but an opportunity to get better at our game."

While the merger is still some time away, the bank is getting better at diversity. At present, 21% of employees comprise women and the bank has set a target of achieving a gender diversity ratio of 25% by FY25. This is significant as it calls for an incremental addition of close to 5,000 women each year. Says Smita Bhagat, country head, government and institutional business, "I tell women, always ask about equal opportunities and be assessed on what you can deliver based on your own skill set and competencies."

The bank has also designed a career accelerator programme to augment the pipeline of women leaders at middle-management levels to create a future ready pipeline for women in decision making roles. It has run the first batch in this financial year and already moved 20% of the participants into higher order, decision-making roles.

Those who have quit their jobs are also being nudged to come back. "We are encouraging part-time working, and also taking people on contract. With this flexibility, we should be able to get more and more women contributing and will be able to attract more talent," says Bhagat.

While the bank is redefining HR practices to stay relevant in an ever-evolving landscape, Bhagat believes it's a long road ahead. "In our country, we are changing the way we are bringing up our daughters, but we are not changing as much as bringing up our sons," she says.

While India's complex socio-economic fabric offers no easy answers to a vexed problem, a sensitised people force at the country's largest private bank could well show the way around — beyond just the numbers. ■

> There is no denying that any high-performing organisation will have a certain kind of internal pressure about achieving business targets.
>
> **Vinay Razdan**, CHRO, HDFC Bank

What They Did Right

- Conducts review process every six months to share developmental feedback with team members.
- AI-driven solution for employees to generate and implement surveys that throw up meaningful analytics and insights.
- The bank has set a target of achieving a gender diversity ratio of 25% by FY25. Currently, 21% of employees comprise women.

PHOTOGRAPHS BY NISHIKANT GAMRE

HUL

At HUL, Focus On People To Drive Growth

WITH HYBRID WORK CULTURE BECOMING A WAY OF LIFE, THE FMCG MAJOR IS EXPERIMENTING WITH EMPLOYMENT MODELS.

By **Ajita Shashidhar**

FOR DECADES, INDIA'S largest FMCG firm, the ₹50,333-crore Hindustan Unilever (HUL), has been a sought-after day-one hirer on B-school campuses. What makes the company a preferred employer of the future for generations? The secret lies in constant innovation in policies to keep pace with the times, says Anuradha Razdan, executive director, human resources (HR). "We have always focused on bringing in stunning talent into this business. We believe that having an employer brand that is relevant and grounded in business reality and is in sync with what the talent wants today and tomorrow is important," she adds.

The two years of the pandemic have helped HUL re-examine its talent hiring process to make it more rigorous. With hybrid work culture becoming a way of life, the company is experimenting with employment models which Razdan believes would give it a distinct advantage in terms of attracting talent. Its 'You Work' programme allows employees to take up project-based roles. "They have to work a minimum of six weeks but can do so according to their own schedules. We give them the flexibility to not just tailor their work, but also the security of retirement benefits, medical etc," explains Razdan.

Its other initiative is 'Open To You', a kind of gig model. "We want to bring in quality talent and have access to skills of the future like digital specialists who needn't work for us full time. We have hired someone who is an expert in disability. We have access to high-quality talent and they have flexibility. This helps us attract talent and give people the choices they want," says Razdan.

Embracing Technology

The company was among the first to move its hiring process to digital platforms when the pandemic broke out in 2020. That, says Razdan, helped overcome several unconscious biases, thereby making the selection process more scientific. The company has been using platforms such as LinkedIn not just to strengthen its employer branding, but also to reach out to a wider talent pool, which is not necessarily in the top business school. "We have seen a 30% growth in our LinkedIn followers," claims Razdan.

Technology has also enabled HUL to take early bets on talent even before they have made it to B-schools. The company has evolved a digital algorithm, which empowers it to target the top 1,000 business school aspirants who have taken Common Admission Tests. "We start engaging with them so that we are able to build a relationship," says Razdan.

The company is also looking to tap Indian students who have gone overseas to study. "There has been an exponential rise in Indian students going abroad for higher studies, therefore we are tapping into the top schools and looking at students who are passionate about coming back and making a career in India," adds Razdan.

Diverse Talent Pool

In an environment where volatility and uncertainty are a way of life, business centricity becomes key. For that, organisations need a talent pool that is equipped to embrace uncertainty. "We have a simple agenda for our people —everything we do should drive the business forward and must be owned and integrated with the business. The focus of our people's agenda can be summed up by saying that it is about employee centricity and business centricity with an eye on the future," says Razdan.

The workforce also needs to mirror its consumers. While 44% of HUL's managerial cadre already comprises women, the target is to take it to 50% within the next few years.

The company also plans to bring in people with disabilities as well as those from the LGBTQ community as part of its initiative called '#Belong'. The target is to ensure that 5% of its workforce by 2025 comprises people with disabilities.

'#Belong' is also about forward-looking policies that encourage diversity. "We would want men to play as much role in household chores as women, so there would be policies around that. We would also come up with eldercare, virtual childcare policies," says Razdan. Its project 'Ahilya' in 2020 trained 500 women as frontline salesforce. "Our goal is to have 5,000 women in frontline salesforce by 2025. We would be hiring 3,000 women within the next three years in factories," says Razdan.

With digitisation being at the heart of businesses today, companies need to upskill their employees so that they don't become redundant. The fast-moving consumer goods (FMCG) major has set itself an ambitious target of upskilling not just its employees but also over a million youth to drive up employability for the country. "Last year we had a virtual learning week where we invested 10,000 hours towards digital learning. Over 3,000 employees have done ecommerce certification programmes," says Razdan.

The company has 10,000 blue-collared workers and by 2025, almost 70% would be skilled, claims Razdan. Hiring the right talent that would impact the growth of the business has never been as important as it is now. At HUL, talent attraction is no longer the business of just the HR function. "Talent attraction is serious business and it is everybody's business. Our leaders are held accountable not only for their businesses, but also for the pipeline of future leaders," says Razdan.

After all, it's about being a part of a winning business.

What They Did Right

- HUL plans to hire people with disabilities and those from the LGBTQ community as part of its initiative called '#Belong'.
- It has set itself a target of upskilling not just its employees but also over a million youth to drive up employability.
- The firm's digital algorithm helps target the top 1,000 B-school aspirants who have taken CAT.

Talent attraction is serious business and it is everybody's business. It is not just the HR function.

Anuradha Razdan, executive director, human resources, HUL

TATA POWER

Aiding Transition Push With Tata Power 2.0

WHEN N. Chandrasekaran took over as chairman of Tata Sons in February 2007, Tata Power Company Ltd (TPCL) was going through a rough patch. In order to change the way the power utility functions and lead its transition to B2B and B2C (it was largely in the business-to-government or B2G mode), Chandrasekaran roped in Praveer Sinha, who was heading Delhi Distribution Ltd., as CEO and MD, Hasit Kaji from TCS as chief digital and information officer, and Himal Tewari from Tata Sons as chief human resources officer. The transformation that began with the new leadership team continued until recently, when Sanjeev Churiwala from Diageo joined as chief financial officer in February.

TPCL is betting on its transformation programme, Tata Power 2.0, which focuses on sustainability, digital and customer-centricity, to become the 'utility of the future' — in short, transform itself into an energy solutions provider. The HR strategy seeks to support the transition in terms of creating in-house designed interventions, along with the senior leadership, as solutions to business problems that have had a high impact, says Tewari. "We will transform into a products and services firm, which will reach consumers directly. We will also give digital interface and tools to empower customers who can produce power," he adds. The company has launched products for rooftop solar, electric vehicle charging and home automation. There is also a big push for building a sizable renewable energy company.

TPCL plans to build a future-ready workforce to achieve these goals. It trains around 400 employees in digital and data analytics every year through in-house functional academies, and runs structured leadership development programmes. Its 'Talent NXT' and 'Entrepreneur in Residence Policy' programmes identify high-potential managers and fast-track their careers. "If someone has a bright idea in any area, they can be part of start-ups within the company, and help in conceptualising and commercialising the idea," says Tewari.

With plans to phase out coal-fired power generation and expand green capacity to 80% by FY30, the firm is looking to future proof the careers of its employees in the thermal power business. Through a programme called 'Daksh', it reskills those employees and redeploys them in new growth businesses.

TPCL is also executing an organisation renewal process through business clusters — generation, transmission and distribution, renewables and new business services —with HR, finance and IT providing support, while being centrally managed. "We are leveraging cross-functional teams to create value for the future. To leverage specialised skills, we are collaborating with academia, tapping in the start-up ecosystem and engaging SMEs," says Tewari.

Over the years, the company has institutionalised several policies and programmes to maintain gender diversity. It mandatorily hires at least 30% women candidates during campus placements. Senior leaders mentor women employees through its Women's Mentoring Programme, while the Returning Mother's Coaching programme focuses on addressing concerns around childcare/support, work-life balance and confidence for new mothers. The company also allows women to choose flexible work timings till the child turns one-year-old.

— Nevin John

What They Did Right

- Talent NXT' and 'Entrepreneur in Residence Policy' programmes identify high-potential managers and fast-track their careers.
- 'Daksh' helps reskill employees in the thermal power business, and redeploys them in new growth businesses.

Himal Tewari, CHRO, Tata Power

PHOTOGRAPH BY **APOORVA SALKADE**

What They Did Right

- Online learning platform Genome helps employees learn 75 industry skills across domains, including data and analytics.
- AI-powered chatbot Amber analyses employee sentiment by talking to them.
- The company allows working moms to choose their own shift timings, work location.

Piyush Mehta, CHRO, Genpact

GENPACT

Enhancing Employee Experience @Genpact

LOTS OF COMPANIES don't succeed over time. What do they fundamentally do wrong? They usually miss the future." These lines by techpreneur Larry Page who co-founded Google along with Sergey Brin is more relevant than ever now. The pandemic has reset norms of conducting businesses, and firms are designing and reinventing strategies to cater to the needs of an evolving workforce.

"The future of work in India is centred on top-notch, digitally led employee experience," says Piyush Mehta, chief human resource officer, Genpact. The IT services management firm is focused on widening the scope of employee growth, adding to their skill sets, respecting their sentiment or being responsive to their feedback. 'Enhancing employee experience' is how it summarises its strategy in a nutshell. "Today's workforce expects employers to build meaningful experiences that are highly personalised, responsive to their needs, and constantly improved. Businesses that devote similar effort, investment, and focus on internal initiatives to improve overall employee experience, are the real heroes of tomorrow. Doing so not only helps the employer increase retention, but also enhances efficiency, and strengthens bottom line," says Mehta. The firm is leveraging technology to give shape to its ideas.

Genpact, says Mehta, harbours a culture of "continuous learning created both from the top down and bottoms up." "A lot of skills I have today may not be relevant two years from now. How do I learn, unlearn and then learn again?." Businesses of the future will need to put greater emphasis on reskilling, upskilling and virtual training, he adds.

"The biggest challenge of work from anywhere is to keep the element of personal touch alive while working remotely," says Mehta. Genpact's AI-powered chatbot, Amber, analyses employee sentiment by talking to them. During Covid, Amber indicated how employees were struggling to cope with the pandemic, enabling the company to intervene and take measures. "We have revenue growth, profit and employee engagement as the three metrics on which my CEO and top 100 people at Genpact will get paid their bonuses," says Mehta.

Thrust on enabling diversity, equity and inclusion (DEI) is another area of focus for the company. "As of last year, women represented 41% of our global workforce, 45% of our board of directors, and 29% of our global management team," says Mehta "We want half of our leaders to be women." The company allows working moms to choose their own shift timings and work location. Besides, the firm prioritises racial diversity. For instance, Black and Latino employees meet monthly with group leaders to discuss the challenges faced by people of colour and identify ways to enable the firm to strengthen the racial equity agenda.

— Asmita Dey

PHOTOGRAPH BY **SANJAY RAWAT**

SAP LABS INDIA

'No Meeting' Time, Pay Transparency At SAP Labs India

A AMONG THE BIGGEST irritants at workplace is the need to attend meetings — sometimes multiple times a day. Often such meetings drag on, resulting in delays in performing the job at hand or even completing projects. It is to bring in a degree of comfort for employees that SAP Labs India started the concept of setting aside a few hours in a week as 'no meeting' time, which has now evolved into Focus Fridays or No Meetings Fridays, a dedicated time for employees to go for learning and development.

While this initiative originated at SAP Labs India, it is being gradually adopted across SAP Labs offices around the world. "The idea is that you focus on your development. If there is a training that you want to have, go ahead and do it. Or read

What They Did Right

- 'No meeting' time for employees for a few hours of the week, to help reduce stress.
- Two-year entrepreneurial sabbatical for employees looking to set up their own start-ups.
- Its Autism@Work programme lowers the bar for such candidates to take them on board.

ONE97 COMMUNICATIONS

For Paytm, The Road Ahead Is 'Flexible'

T THE jury is still out on hybrid workplaces, but Paytm parent One97 Communications believes it can help attract diverse talent across gender and socio-economic backgrounds. "We think this is the new normal," says Vineet Arora, MD and CEO, Paytm General Insurance. Unlike companies that have mandated the number of times a week employees need to come to office, Paytm allows managers to take those decisions along with their teams, depending on the nature of work.

"We have decided to make it a little more empowering for people. It will be more fluid, where managers and team leads can create their own list of people who want to come to office on a particular day, inform the admin teams and make sure the space is available," says Arora. It would mean employees coming to office for seven to eight days a month.

While some teams are following the hybrid model already, others continue to work from home. The company, which has a 10,266-strong workforce and aims to increase it by 15% in FY23, says people in certain roles, who don't need to come to the office at all and would like to work from home, can do so.

Paytm also encourages employees to upskill constantly, especially when it comes to new technologies, and supports them through e-learning programmes or virtual interactive sessions as well as offline opportunities, says

Shweta Mohanty, head, HR, SAP Labs India

something that day when we asked managers not to schedule meetings," says Shweta Mohanty, head, human resources, SAP Labs India.

The other aspect about which employees are constantly seeking answers is: Where do they fit in the company? It is to keep up with the needs of its young employee base that SAP Labs started a pay transparency mechanism. It allows employees in the organisation to know where they are in terms of compensation received vis-a-vis competitors, and pioneers in the field. Employees are encouraged to have constructive conversations with managers. It also provides them the visibility about where they fit in the job fraternity.

"Every role in the organisation belongs to a job family and compensation ranges are different, because so are the skill sets," says Mohanty.

With the world going digital, there is a greater need for people to continuously upgrade skills. To keep up with the times, SAP Labs India has joined hands with IIM-Bangalore to upskill managers in artificial intelligence (AI) under the 'AI for Managers' programme. The idea is to make the knowledge of AI and its components available to managers who aspire to become competent decision makers.

The company has also decided to continue on a work-from-home (WFH) mode till mid 2022. As part of the 'Pledge to Flex' programme, a hybrid mode will come into play from July 1, where employees can decide on working between one to three days in office, depending on when the team is in.

As far as diversity is concerned, women account for 34% of SAP Labs India workforce, and the target is to achieve gender parity — 50% — by mid 2025. The company ensures that while interviewing women candidates there are women in the panel.

"When you see women in leadership positions, it makes a huge difference," says Mohanty. Incidentally, SAP Labs India is headed by Sindhu Gangadharan, senior vice president and MD, who has been with the group for 22 years.

Diversity is not just restricted to getting women on board. It has a programme—Autism@Work —where candidates go through a proper interview process. The bar is lowered for such candidates, but there are well-defined rules.

To keep the entrepreneurial spirit up, the company has also set up the 'Invent' programme to generate ideas from the team. It has a thriving start-up studio within the campus. "It's an accelerator, so we invite start-ups whom we can help with technology," says Mohanty. It also has a two-year entrepreneurial sabbatical for employees who want to have their own start-ups but are worried about failure. ***— Anup Jayaram***

PHOTOGRAPH BY **SANJAY RAWAT**

What They Did Right

- People in certain roles, who don't need to come to office and prefer to work from home, can do so.
- The company intends to hire more people from small towns and diverse socio-economi backgrounds to boost representation.

Arora. Equipping employees with management skills is also another area the company has been focussing on. The stress is on "how to manage things better, understand what other people are able to do, and create a more collaborative environment, which is open to learning fresh ideas from other teams, perspective sharing etc," says Arora.

Women account for 15% of the workforce now and plans are on to increase it to 24% by 2025. The company intends to hire more people from small towns and diverse socio-economic backgrounds to boost representation. It currently has an overall retention rate of 85%, and 93% among top talent. ***— Arnika Thakur***

SRF

SRF Uses Human Touch For Growth

What They Did Right

- SRF redefines its HR strategy every four years for both short and long term.
- It periodically assesses 'resilience and agility' of employees.
- The aim is to assess passion for work, ambitions and work challenges.

STAND WITH EMPLOYEES for their social, emotional, career and financial security." This is the motto of SRF Ltd. It is also the reason for its 'chemistry' with its employees. The chemical maker operates in India, Thailand, South Africa and Hungary. It has a customer footprint in 90-plus countries and employs 6,000 people in India and 1,000 overseas.

Unlike most chemical companies, SRF is a multi-business entity with presence in diverse industrial and specialty intermediates like fluorochemicals, specialty chemicals, packaging films, technical textiles, and coated and laminated fabrics. The company was founded by Dr. Bharat Ram as Shri Ram Fibres (SRF) in 1970. It was predominantly a maker of technical textiles. In 1989, it entered chemicals and started making refrigerants; it was renamed SRF Ltd. in 1990.

Such pivoting is not possible without human resources (HR) policies evolving with business growth plans.

Retention rate among top talent is about 96% and among workforce is about 90%; 20%-plus attrition is common in many segments of the industry.

That is why SRF redefines its HR strategy every four years for both short and long term. It periodically assesses 'emotional intelligence, resilience and agility' of employees through surveys and data analytics tools. The aim is to assess their passion for work, how they find happiness at work, growth ambitions and work-related challenges.

"This year, we are launching a 'diversity, equity and inclusive growth' strategy for all our employees," says Ajay Chowdhury, president and CHRO of SRF. He says 'employee wellness' is based on eight pillars that include location and social, financial, spiritual and emotional well-being. The primary focus is providing employees an environment where they deliver better and learn according to the needs of their job profile.

In FY2022, the over five-decade-old chemical intermediates and specialty products major led by chairman and managing director Ashish Bharat Ram reported 48% increase in revenue to ₹12,434 crore. Consolidated net profit rose

Ajay Chowdhury, president & CHRO, SRF

58% to ₹1,889 crore.

Accelerated growth driven by automation and digitisation can cause insecurity among employees, especially as SRF expands fast with new plants and technology. "No one can predict how technology will evolve and change a business in the long term," says Chowdhury. SRF helps employees re-skill and gain confidence, he says. SRF also rewards employees better than industry standards, he says. "Now, attrition level in chemical industry is high due to fast expansion, but we have been able to retain talent far better than industry levels," he says. Retention rate among top talent is about 96% and among workforce is about 90%; 20%-plus attrition is common in many fast growing segments of the industry.

Another challenge is implementing standard practices in new and acquired facilities. "We have lined up investment of ₹4,500- 5,000 crore in next four-five years," says Kartik Bharat Ram, deputy managing director of SRF. The company is looking to recruit another 600 employees in next seven-eight months, says Chowdhury.

It seems the HR team is getting ready for its next four-year challenge.

— P.B Jayakumar

DISNEY STAR

Empowered Story-Tellers

IN 2018, WHEN The Walt Disney Company announced that it was buying 21st Century Fox for $71.3 billion, there was anxiety in Disney and Star (then part of Fox) teams in India. By the time the merger was completed, Disney Star had parted ways with hundreds of employees. Amita Maheshwari, head, HR (DMED, APAC & India), The Walt Disney Company, says her team did everything to ensure they were fair and generous towards those employees. Till completion of the merger, the erstwhile Star India did not fill vacant positions. "Even if a person was 60-70% ready for a role, we gave him/her an opportunity," says Maheshwari.

Three years later, Maheshwari is satisfied that she has been able to carry forward the culture of employee centricity and empowerment built by the Star India team. With over 35 channels, the ₹10,000-odd crore Disney-Star is by far the largest broadcast network in India (Sony-ZEE will topple it once the merger is complete).

Be it launching high-definition television or India's first OTT service, Hotstar, Star India was known for its bold bets. Rishi Gaind, head, HR, Disney Star, says this was possible because of the strategy of hiring professionals from outside the media industry. "We hire people who can question status quo and push us to the next level."

"We were telling stories to people in the heartland. So, we launched a Creative Interns Programme as part of which we started hiring from places such as Varanasi, Indore, Patna, Nagpur and Pune. We got people who understood cultural nuances of these places," says Gaind.

Disney Star's greatest strength, according to Gaind, is its people-friendly policies. Apart from giving women employees a year-long fully paid maternity leave, the company also offers unlimited leave. Almost 80% workforce moved to hybrid model during Covid-19, which increased productivity. She is especially proud of the bio-bubble for IPL last year. "The 700 employees who didn't go home for three months worked relentlessly as they knew we would take care of their families."

Disney-Star believes happy employees will ensure quality content.

— Ajita Shashidhar

What They Did Right

- Retaining culture of employee centricity and empowerment built by the Star India team.
- Strategy of getting professionals from outside the media industry.
- Strategy of hiring people from smaller towns who understand cultural nuances of those places for better story-telling.

PHOTOGRAPH BY **NISHIKANT GAMRE**

Rishi Gaind, head, HR, Disney Star

CHOLA MS GENERAL INSURANCE

Multiple Biz Aid Career Growth At Chola MS

CHOLA MS GENERAL INSURANCE, part of the 100-year-old Murugapa Group, was one of the earliest private players in general insurance in India. The joint venture between Murugappa Group and Mitsui Sumitomo Insurance Group taps collective wisdom of these two business groups that have stood the test of time. After all, a century-old business legacy can be built only by embracing the present and preparing for the future.

In 2019, the company underwent organisational restructuring to get ready for the future, and in 2020, sharpened its focus on technology. In an industry plagued with high attrition rates, Chola MS strives to induct fresh talent, aid its growth through cross-functional exposure and build a pool of culturally aligned employees.

To retain talent, the company leverages the diversity of the Murugappa Group and its myriad business units to offer non-linear career paths and

Shailen Merchant, head, HR, Chola MS General Insurance

FRACTAL

Flexible Policies Work Wonders For Fractal

AI AND ANALYTICS firm Fractal recently opened an office in Chennai. Two years back, the company, which largely operated out of Mumbai, Gurugram and Bengaluru, had no such plan. In fact, it is also gearing up to start an establishment in Pune. The idea is to realign workspaces to post-pandemic normal after a long period of work from home. "There is wind of change in the industry and organisations like ours are re-evaluating many things," says Rohini Singh, chief people officer at Fractal.

Employers are today grappling with high attrition rates. In India, attrition touched a more than two-decade high of 21% in 2021, according to Aon Consulting. Employers have the tall task of nurturing and retaining talent. The firm, led by Srikanth Velamakanni and Pranay Agarwal, has over 3,700 employees.

Even before Covid-19, the company had an unlimited work from home policy, says Singh. Fractal is now build-

What They Did Right

- Even before Covid-19, the company had an unlimited work from home policy.
- Talent mobility policy allows employees to apply for internal openings and, if selected, resign from current positions.
- Every Tuesday, Fractal conducts town hall sessions addressed by the leadership team. A lot of emphasis is given to employee care.

exposure to multiple businesses and roles. This also helps the company retain talent that can rise to leadership positions.

Concern for employee safety starts from the grassroot, says Shailen Merchant, head, human resources. "The high rates of accidents on Indian roads led us to initiate 'Operation Suraksha', which aims to mitigate safety risks, especially for our salesmen who travel mostly on two-wheelers." During the lockdown, the HR team contacted every employee personally, weekly, to know about their physical and emotional health. Families of deceased employees received insurance and remuneration (equal to salary for 24 months). Frontline workers received special insurance benefits. Besides, the company also allows ex-employees to access their job records, apply for new openings or even refer others, through its alumni portal Chola4ever.

What They Did Right

- Chola MS leverages diversity of Murugappa group to offer non-linear career paths.
- The company inducts fresh talent, aids growth through cross-functional exposure.
- Apart from in-house talent, has tie-ups with IT & various insurance tech companies.
- Employee safety first — during lockdown, HR personally contacted employees weekly.

Innovation is an integral part of the company's story. The general insurance industry typically relies heavily on B2B partnerships to reach consumers. Chola MS, however, decided to reach consumers directly, especially in small towns. While it employs staff in Tier-II, III and IV towns, it also enables customers to communicate with it directly through technology interface.

"It's impossible for an organisation to think about every solution on its own. You do need that outside view, you need to know what's happening, what's that little spark on the horizon that will turn into the sun, that will bring in a large technology differentiator," says Merchant. Thus, apart from nurturing its in-house talent, the company has also entered into partnerships with IT and insurance tech companies. A customer-centric approach, coupled with technology first strategy, has enabled Chola MS deliver many firsts, including live video-streamed assessment of accidental damage to vehicles.

— Rajiv Ranjan Singh

PHOTOGRAPH BY **NISHIKANT GAMRE**

Rohini Singh, chief people officer, Fractal

ing on this. It, for instance, has opened a small office in Chennai which happens to be the native place of many employees. The offices will act as collaboration centres where employees can meet and exchange ideas. "In future, if we see formation of such natural clusters in any city, we will go there," says Singh. She says this will encourage more women participation in the workforce.

Fractal has an organisational mantra: "Employees are and should be CEOs of their own careers." The company has instituted a talent mobility policy which allows employees to apply for internal openings and, if selected, resign from current positions.

Operating revenues for 21-year-old Fractal, which became a unicorn earlier this year, rose to ₹1,295 crore in FY2022, from ₹790.3 crore in FY2021.

Fractal is betting on building an open and nurturing culture to differentiate itself from the pack. Culture is pivotal to the company's growth. Transparency is crucial to the idea of fostering an open work culture. Every Tuesday, it conducts town hall sessions addressed by the leadership team. "People ask all sorts of questions. We share updates very openly," says Singh. A lot of emphasis is given to employee care. Singh claims employees are encouraged to discuss and talk about issues beyond work. "Organisations that have a personality of care and connectedness with employees in a hybrid world are geared to be employers of future," says Singh. The company is also open to hiring people with career breaks in their workforce.

— Asmita Dey

RENTOMOJO

Entrepreneurship Does The Trick For Rentomojo

SAURAB AGNIHOTRI (35) joined Rentomojo as a city manager with three years of experience and went on to become zonal head, regional head and, eventually national head, within just six years. He was chief operating officer when he quit to launch a start-up. "We believe in grooming internal talent. The speed at which people grow here is phenomenal," says Ketan Krishna, people head and chief of staff at Rentomojo. "People take ownership of their work in such an entrepreneurial environment."

Rentomojo offers furnishings, furniture, appliances and even cars, bikes, phones and clothes on rent. "This generation wants to live light. They are value conscious and experiment with things that make life interesting. Our customers and employees identify with what we do," says Krishna.

The company's employee stock options (ESOP) policy is unique. ESOP scheme allows people to retain the vested options forever and they do not have a time-bound expiry. "About 30% of the organisation is covered," says Ketan.

Among other initiatives for employees, Rentomojo has done away with daily attendance tracking. Except for people working at warehouses, it follows the 'work from anywhere' concept. "Apart from laptop and internet access, we ensure our employees working from home have comfortable furniture," says Krishna. Employees do not have to wait for the annual appraisal cycle for salary growth and promotions. "If they take a larger role, we enable them with financial growth, right there," says Krishna. Rentomojo's attrition rate slipped to 11% in FY22 from 35.4% in FY21.

The company hires gig workers too. It currently has around 120 gig workers in various operating roles. The number is expected to go up to 500 in the next two years. "We have hired gig workers even at key managerial positions. We have been open to hiring HR professionals, senior engineers, data analysts and content marketers as well," says Krishna.

On diversity and inclusion, the company has a simple message — It is about seeing people for who they are and not what they are. Rentomojo turned profitable on a monthly basis in October 2021. The brand continues to be profitable month on month for the last two-and-a-half quarters.

— Aprajita Sharma

What They Did Right

- Believes in grooming internal talent and is happy if they move on and build own businesses.
- Doesn't take away ESOPs even after employees leave.
- Has done away with daily attendance tracking.

Ketan Krishna, people head and chief of staff, Rentomojo

PHOTOGRAPH BY SELVAPRAKASH LAKSHMANAN

THE MOST important thing employers will have to do is to articulate a clear purpose for their organisation, according to LEAD School's co-founder and CEO, Sumeet Yashpal Mehta. LEAD is India's first school EdTech unicorn and claims it is improving learning outcomes for 1.6 million students in 4,000 schools across India. "Our focus is solving India's education problem. LEAD goes to affordable schools in Tier-II and Tier-III cities where fee is ₹1,500-3,000 a month and helps them give quality education," says Rohit Thakur, chief human resources officer, LEAD School.

The company's human resource policies revolve around the belief that young employees care about ethics and values and choose employers that are purpose-driven, do meaningful work and are ethical.

"People are seeking meaning from work. They have a point of view on whether the company is operating in an ethical manner or in a mercenary and mechanistic manner. They also have a point of view on whether the work culture is extractive or collaborative. The 'how' of work is becoming as

LEAD SCHOOL

LEADing With A Sense Of Purpose

important as the 'what'," says Mehta, adding that it was a sense of purpose that helped bind LEAD School's 1,900-plus employees during the pandemic.

So, how does the company ensure its purpose is aligned with employees' goals? The company hires people not just on the basis of individual capacity but also independent thinking and alignment with its mission and values, says Mehta.

"Employees are encouraged to frequently visit schools to see what the company is doing. In future, employees will be viewed as enablers of growth and progress, individual progress, social progress and economical progress," says Thakur, adding that while monetary compensation matters, deeper relationships and strong sense of community and purpose-driven work are essential to thrive.

Chaitali Mukherjee, partner and leader, people and organisation, PwC India, says clear sense of purpose and diversity have become a business need. "The talent today is far more purpose-led because there are too many opportunities for them. If an organisation is not doing things which can add purpose, they're not interested in working with it," she says.

LEAD School, in order to retain talent, is considering a flexible work environment for employees. "Being more flexible, more open and not being dogmatic that work has to done from office only are the big shifts (since the pandemic)," says Mehta.

The company, founded by Mehta and co-founder and co-CEO Smita Deorah, says it also wants to hire from Tier-III and Tier-IV towns. Backed by GSV Ventures and WestBridge Capital, it expects its workforce to grow by 30-40% in FY23. The company's academic team has more women while the sales team is skewed towards men. "We have been working to bring more diversity in our leadership team, which is CXOs and VP layer, to make it more gender balanced," he says.

The company says grooming better managers is one of the best investments. "Leadership development is a big part of our training charter," says Thakur, adding that they give special attention to training frontline managers.

— Arnika Thakur

Rohit Thakur
CHRO, LEAD School

PHOTOGRAPH BY **PADMINI B**

What They Did Right

- Leadership development is a big part of the training charter.
- HR policies revolve around the belief that young care about ethics.
- LEAD is considering providing employees a flexible work environment.

Employers Of The Future

A Fortune India-Work Universe Study of Future-Oriented Workplaces

(In alphabetical order)

COMPANY	HR PRACTICES THAT MAKE THEM EMPLOYERS OF THE FUTURE
ADITYA BIRLA CAPITAL	Talent management an integrated part of an employee's life-cycle; key talent deployed into new roles periodically; leadership talent development programmes across functions.
BENNETT, COLEMAN & CO	Learning content focused on futuristic editorial competencies; Behaviourally Anchored Rating System (Bars) for self-assessment of employees; individuals can co-own their learning and thereby growth.
CACTUS COMMUNICATIONS	Moved from office-first to remote-first model; gig workers account for bulk of workforce; evaluates performance every 3-6 months.
CHOLA MS GENERAL INSURANCE	Leverages diversity of the Murugappa group to offer non-linear career paths; cross-functional exposure; employee safety first during Covid
DISNEY STAR	Hires people from smaller towns to address cultural nuances; professionals from outside media industry help in questioning the status-quo, add to the company's strength; culture of employee centricity
FRACTAL	Has had an unlimited work from home policy even earlier; talent mobility policy allows employees to apply for internal openings; leadership addresses town hall every Tuesday.
GENPACT	Online learning platform for industry skills across domains; working moms can choose shift timings, work location; AI-chatbot analyses employee sentiment, allowing the company to address them purposefully.
HDFC BANK	Four-pronged listening architecture — listen for organisation sentiment, development, initiatives and concerns; focus-group discussions with employees; concerns of team members shared for corrective action
HINDUSTAN UNILEVER	Inclusivity is key, plans to hire people with disabilities; gender-balanced salesforce; digital algorithm enables it to tap the top 1,000 B-school aspirants.
JINDAL STAINLESS	Learning programmes focus on 'Learning-Action-Behaviour-Results' model; open feedback culture; engaged In reducing carbon footprint
LEAD SCHOOL	Flexible work environment; diversity in leadership team; leadership development a part of training charter.
MAKEMYTRIP.COM	Opportunities to develop new skills; encourages agility; managers invest in goal setting, training processes.
MPHASIS	Skilling platform to train employees; training programme provides gamified learning quotient to illustrate where employees stand; 'Hybrid-first' work model with work from anywhere as the core.
ONE97 COMMUNICATIONS	Hires people from different backgrounds; teams can decide when to work from home or office; encourages upskilling of employees.
PUBLICIS SAPIENT	Digital learning programmes; hires people from various cultural backgrounds and beyond major cities; trains employees as 'mental-wellbeing ambassadors'.
RENTOMOJO	Employees retain ESOPs even after quitting; no daily attendance; grooms internal talent for big roles.
SAP LABS INDIA	No meetings on Fridays; two-year entrepreneurial sabbatical for employees; pay transparency mechanism
SILA GROUP	'Open door' policy to address employee complaints; hybrid model with 50:50 work from home and office; opportunity to engage in projects apart from regular line of work.
SRF	Redefines HR strategy every 4 years; periodically assesses 'agility' of employees; inclusive, diversive strategy.
TATA POWER	Programmes to train high-potential managers; cross-functional teams; Annual trainings in digital, data analytics.
TATA STEEL	Collaborative ecosystem in place; simplified processes; agile organisation model

(Clockwise from top left): **Anand Kripalu,** MD & CEO,EPL; **Suresh Narayanan,** CMD, Nestle India; **Santrupt Misra,** director, group HR, Aditya Birla Group; **Deep Kalra,** founder and group executive chairman, MakeMyTrip; **Radha Ahluwalia,** general partner, Work Universe; **Rajeev Dubey,** former group president, HR & corporate services, CEO, after-market sector, and member of the group executive board, Mahindra & Mahindra, and **Rajkamal Vempati,** HR head, Axis Bank

PHOTOGRAPH OF ANAND KRIPALU BY **APOORVA SALKADE;** RAJKAMAL VEMPATI BY **PADMINI B;** RADHA AHLUWALIA AND RAJEEV DUBEY BY **SANJAY RAWAT;** SURESH NARAYANAN BY **NARENDRA BISHT**

How We Did It

F**ORTUNE INDIA JOINED** hands with Work Universe — a full-stack fund that provides fuel for start-ups to scale and disrupt work — to identify companies whose human resources practices are well aligned with the future. We started off by jointly creating a questionnaire to get inputs from some of the best companies in the country. Companies were invited to send in their submissions.

We received over 80 submissions from companies such as Hindustan Unilever, HDFC Bank, Genpact, Tata Power and SAP Labs. Many new age firms and start-ups —Paytm, Rentomojo, LEAD School — also sent their submissions.

Based on the submission, the Work Universe team met HR leaders of these companies that were future oriented in work practices to identify the nuances of their outstanding work practices. A Board comprising of leading names in the HR world guided the identification of companies whose practices truly stand out for their future-readiness. The Board of the Employers of the Future vetted the study and its findings. It comprised of: Anand Kripalu, MD and global CEO, EPL; Deep Kalra, founder and group executive chairman, MakeMyTrip; Radha Ahluwalia, general partner, Work Universe; Rajeev Dubey, former group president, HR & corporate services, CEO, after-market sector, and member of the group executive board, Mahindra & Mahindra; Rajkamal Vempati, HR head, Axis Bank; Santrupt Misra, director, group HR, Aditya Birla Group; Suresh Narayanan, CMD, Nestle India.

The study finds that most respondents across sectors are looking to expand their workforce over the next five years. One key transition as companies move to the future workplace is the larger role played by gig workers. Over the next couple of years, gig workers are slated to take on more significant roles, even in companies where their presence has so far been negligible.

India's Green Future, Built On Hydrogen

India's biggest businesses are tapping green hydrogen as a future fuel. Can they overcome the viability challenge?

By **P.B. Jayakumar** / Illustration by **Amit Sharma**

H_2 In Numbers

90 MT
Global hydrogen demand in 2020

6.6.7 MT
India's current hydrogen production

23 MT
India's estimated hydrogen demand by 2050

15-20 GW
Projected green hydrogen installed capacity by 2030

$4-5 billion
Estimated investment required in electrolysers for 15-20 GW

320
Green hydrogen production demonstration projects worldwide

THE LATEST BUZZWORD in the world of global energy aspirations sounds like the title of a blockbuster Sci-Fi movie — Green H2 -1-1-1 ($1 for 1 kg of green hydrogen in 1 decade). The buzzword may be new but the science behind it was dreamt up way back in the 19th century. "Water will one day be employed as fuel, that hydrogen and oxygen which constitute it, used singly or together, will furnish an inexhaustible source of heat and light, of an intensity of which coal is not capable," Jules Verne wrote in his 1875 novel, *The Mysterious Island*.

Hydrogen, nature's lightest and most abundant element, can be used as energy after being taken out from coal (brown hydrogen), natural gas (grey hydrogen), renewable energy (green hydrogen) and water (blue hydrogen). Technologies for doing so have been around for decades but are yet to become commercially viable as output is less than the energy used to produce the gas. But this is set to change with governments and companies making hydrogen an important part of their carbon neutrality goals.

The ball was set rolling by Prime Minister Narendra Modi when he unveiled the 25-year roadmap for hydrogen development in his address on India's 75th Independence Day and announced the National Hydrogen Mission to meet the larger goal of self-reliance in energy production by the 100th Independence Day in 2047. "The thing that is going to help India with a quantum leap in terms of climate is green hydrogen. We have to make India a global hub for green hydrogen production and export," he said.

Some years ago, government had launched a similar mission for solar power under which India is chasing 500 gigawatt (GW) capacity by 2030 and has achieved much success —100 GW, from less than 30 GW six years ago. Will hydrogen see a similar take-off? It will, but with time. "Hydrogen will drive economies not now but in near future. Today's electrolysers (used to separate hydrogen from water using cathode, anode and membrane) consume 40-50 units of electricity to split water and generate 30-35 units. Energy consumed is more than energy produced," says M.V.S Seshagiri Rao, joint MD & group CFO of JSW Group.

Why Hydrogen?

For energy-starved India, which is aiming for carbon neutrality by 2070, the path to energy security goes through a mix of oil, coal, blended fuels, natural gas, renewables and electricity. At present India's $3.12 trillion economy needs 1,650 billion units (BU) of power, made from nearly 400 GW of capacity. Of this, green electricity is only 17%. When the economy touches $5-7 trillion in the next decade, it will need at least 3,000-4,000 GW. Further, at current rate, the energy import bill will triple by 2040. The only way out of these massive challenges is tapping as many green and locally available energy sources as possible.

New Delhi-based climate and energy research firm, Council for Energy, Environment and Water Research (CEEWR) has estimated that net zero emissions by 2070 will require 5,630 GW solar capacity, 99% reduction in coal use between 2040 and 2060 and 90% fall in crude oil consumption between 2050 and 2070. By that time, green hydrogen should meet 19% of industry's needs, it says. CEEWR's Centre for Energy Finance says India requires $10 trillion (₹750 lakh crore) energy investments, including $8.4 trillion for augmenting renewable capabilities. Another $1.5 trillion will be required for creating a green hydrogen ecosystem in the industrial sector, it says.

The Energy and Resources Institute (TERI) estimates 23 MT hydrogen demand by 2050. India's current output is 6.7 MT, produced mostly from natural gas through steam-methane reforming process (methane reacts with steam under pressure in presence of a catalyst to produce hydrogen, carbon monoxide and a small amount of carbon dioxide). The biggest consumers of this hydrogen are refineries, chemical companies and fertiliser plants.

However, the game changer will be green hydrogen, as other ways of generating this new-age fuel are not 100% carbon neutral. "Green hydrogen accounts for just 0.1% global hydrogen production. However, declining cost of renewable electricity (70% cost of producing hydrogen) and electrolysis technology indicates it could be the

0.1%

Share of green hydrogen in total hydrogen production globally.

19%

Energy demand that green hydrogen should meet by 2070, according to a study.

Corporate H_2 Forays

Reliance Industries
- ₹60,000-crore plan to make solar photovoltaic modules, advanced energy storage batteries, electrolysers and fuel cells.
- One of its four planned giga factories will make hydrogen electrolysers.
- Has teamed up with Danish climate change technology company Stiesdal A/S to develop and manufacture hydrogen electrolysers.

JSW Group
- JSW Future Energy, a 100% subsidiary of JSW Energy Ltd., is working with Australian Fortescue Future Industries to produce green hydrogen and utilise it for making green steel, hydrogen mobility, green ammonia and other industrial applications.

Indian Railways
- Indian Railways Organization for Alternate Fuels is building a hydrogen fuel cell-based hybrid power train for the Kalka-Shimla narrow gauge section.

Tata Steel
- Is implementing technology to make steel from green hydrogen at its Netherlands facility.

Bharat Petroleum Corp (BPCL)
- To set up a 20-MW electrolyser at Bina refinery in Madhya Pradesh.
- Trying to use hydrogen as transportation fuel.
- Has tied up with Bhabha Atomic Research Centre to scale up alkaline electrolyser technology for producing green hydrogen.

Adani group
- Gautam Adani has announced a plan to become the world's largest green hydrogen manufacturer.
- The group plans to spend 80% capital expenditure in green businesses and plans $70 billion investments by 2030, at least half of it in hydrogen.

Hindustan Petroleum Corp (HPCL)
- Setting up a 370-MT pilot plant at its Vizag refinery for producing green hydrogen.
- As a pilot, set up a green hydrogen plant to run an R&D centre a year ago.

GAIL (India) Ltd
- GAIL (India) will build one of India's largest proton exchange membrane (PEM) electrolyser at Guna in MP to produce green hydrogen by the end of 2023.

Indian Oil Corp (IOC)
- Plans to convert some of the grey hydrogen it produces to blue hydrogen.
- To set up green hydrogen plants in Mathura (40 MWH) and Panipat (15 MWH).
- Plans to run buses from Gujarat refinery to Statue of Unity in February. Tata Motors is making 15 hydrogen fuel cell buses for IOC.
- Has teamed up with L&T and ReNew to set up hydrogen plants.

Oil India Ltd (OIL)
- Plans to set up a 100-KW green hydrogen plant at its pumping station in Jorhat district of Assam.

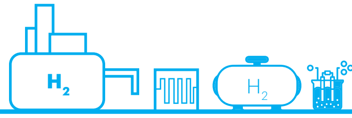
NTPC Ltd
- To set up a pilot project on hydrogen blending with natural gas in city gas distribution network in India.
- Setting up a green hydrogen fuelling station at Leh; will operate five fuel cell-powered vehicles.
- Setting up a standalone fuel cell-based micro-grid with hydrogen production using electrolyser at NTPC Simhadri (Andhra Pradesh), to be executed by Bloom Energy India, Bengaluru.

Larsen & Toubro & ReNew Power
- L&T has entered into an MoU with ReNew Power to develop, own, execute & operate green hydrogen projects in India.
- L&T has signed an MoU with Norway's HydrogenPro to set up a JV in the country for GW-scale manufacturing of alkaline water electrolysers.

Ohmium International
- The US-headquartered firm, which manufactures electrolysers in Bengaluru, shipped its first proton exchange membrane electrolysers to the U.S. Plans to increase capacity from 500 MW to two GW per annum.

ACME Solar
- The comoany plans to set up 7 GW of renewable power and green ammonia production facilities worth $6 billion in Tamil Nadu.

Greenco
- The Hyderabad-based cleantech firm has teamed up with Belgian alkaline electrolyser maker John Cockerill to make electrolysers in India.



Ongoing Research

New ways to make hydrogen
Efforts are on to split water and produce hydrogen with the help of certain photosynthetic microbes and enzymes. Another area of research involves using sunlight to split water into hydrogen and oxygen. Researchers are also using fermentation technology to convert biomass and sugar-rich feedstock that can be directly fermented to produce hydrogen, ethanol and high-value chemicals. Another set of researchers is trying to make hydrogen by gasifying biomass resources like agricultural waste.

CCUS
Since use of low-carbon hydrogen in refining is not economically viable yet, refiners are using Carbon Capture, Utilisation and Storage (CCUS) technologies to lower their carbon footprint. In this, carbon monoxide and carbon dioxide formed during the 'coal to hydrogen process' are stored in an environmentally sustainable manner.

Better fuel cells
A fuel cell consists of an electrolyte sandwiched between two electrodes for splitting water and making energy. Research is on to improve advanced fuel cell types like polymer electrolyte membrane, alkaline membrane and direct methanol fuel cells. The aim is to reduce cost and size, apart from improving efficiency and durability, of cells.

Improved storage systems
Research is on for making storage materials and components compact and lightweight. Studies are also on to improve efficiency and durability of storage systems to reduce costs and use hydrogen as a replacement for petroleum products in mobility solutions.

next best investment in the world of clean energy," says J. P. Gupta, chairman, Expert Appraisal Committee (Industry-II), Ministry of Environment, Forest & Climate Change.

Pashupathy Gopalan, an investor in Ohmium, India's first integrated green hydrogen electrolyser gigafactory in Bangalore, says production of 20 MT green hydrogen (at $1 per kg) will be a $20-25 billion opportunity. India can produce green hydrogen from 15-20 GW installed capacity by 2030. For that, it will need to invest $4-5 billion in electrolysers, according to the India Hydrogen Alliance (IH2A), a grouping of industry stakeholders.

"Inclusion of hydrogen as an energy carrier in future energy portfolio presents a unique opportunity to address emerging energy vectors, including power to gas, power to power, power to mobility and even vehicle to grid applications," Dharmendra Pradhan, former Union minister for petroleum and natural gas & steel said at a seminar. "We are working on a pilot on blue hydrogen, hydrogen CNG and green hydrogen. We are blending hydrogen with compressed natural gas for use as transportation fuel and industrial input in refineries," he said. The government is planning to blend 15% green hydrogen with piped natural gas for domestic, commercial and industrial consumption.

In order to meet these goals, Union Budget 2021 earmarked ₹800 crore for pilot projects, infrastructure, research and development, regulations and public outreach. The Ministry of New and Renewable Energy is also working on a policy document for the national hydrogen energy mission.

Corporate India has got the drift and is working overtime to tap the opportunity at hand.

Corporate Interest

Mukesh Ambani, chairman, Reliance Industries Ltd (RIL), is anticipating a New Green Revolution. "India can set an even more aggressive target of achieving under $1 per kg within a decade. This will make India the first country to achieve $1 per 1 kg in one decade – the 1-1-1 target for green hydrogen," he said at the International Climate Summit 2021.

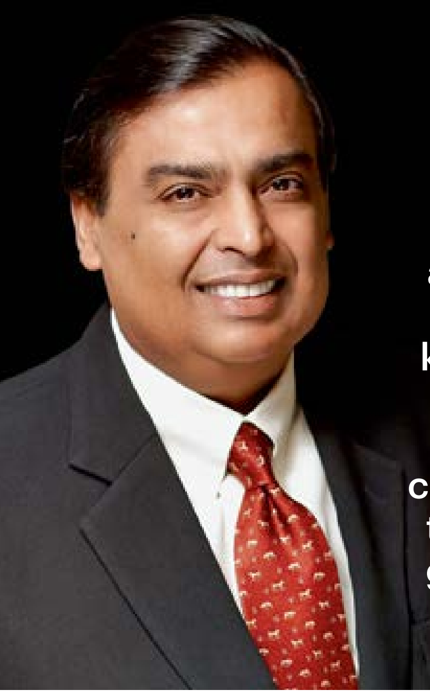
RIL has kicked off its green initiatives with a slew of deals in recent months and plans for setting up four giga factories in Jamnagar at an investment of ₹60,000 crore for making solar photovoltaic modules, advanced energy storage batteries, electrolysers and fuel cells. RIL's new renewable subsidiary, Reliance New Energy Solar, has partnered with Danish climate change technology company Stiesdal A/S to develop and manufacture hydrogen electrolysers at one of these four factories. It has also invested $50 million in US-based energy storage company Ambri, besides acquiring Norwegian solar equipment maker REC Solar Holdings AS and a 40% stake in renewable project specialist Sterling & Wilson Solar. Bernstein Research analysts estimate that RIL is building a clean energy business worth $36 billion but say it will have to master more fuel cell technologies to tap opportunities in hydrogen. "It is too early to comment as we are working out the detailed plans," says an RIL spokesperson.

Gautam Adani plans to build the world's largest renewable energy company with 45 GW capacity by 2030.

Industry and experts say building a policy-driven ecosystem is a must for a green hydrogen revolution.

He is also aiming to become the largest hydrogen producer in the world. The group plans to spend 80% capital expenditure in green businesses, including $20 billion in renewables, green component manufacturing and enabling infrastructure, over the next decade. The group's large capabilities in energy (both fossil and renewable), transmission & distribution infrastructure and logistics can make it a big green hydrogen player.

India's oil marketing companies (OMCs) are also in the game. The leader, Indian Oil Corporation (IOC), is working on plans to convert a part of the grey hydrogen it produces to blue hydrogen. "Our Mathura refinery will be turned into a green hydrogen-powered refinery," says S.M. Vaidya, chairman and managing director, IOC. The company has floated an expression of interest (EoI) for setting up green hydrogen plants in Mathura and



"India can set an even more aggressive target of under $1 per kg (hydrogen) in a decade. This will make it the first country to achieve the 1-1-1 target for green hydrogen."

Mukesh Ambani, chairman, Reliance Industries

Gautam Adani, chairman, Adani group, plans to build the world's largest renewable energy company. He is also aiming to become the world's largest hydrogen producer.

> "Hydrogen will drive economies not now but in near future. Energy consumed is more than energy produced."
>
> **M.V.S Seshagiri Rao**
> joint MD & group CFO, JSW Group

Panipat refineries. Mathura is envisaged as the largest plant in India with 40 Mega Watt Hour (MWH) capacity. The plant in Panipat will have a capacity of 15 MWH. The company has also tied up with L&T and ReNew to set up hydrogen plants. "We also intend to run blue hydrogen buses from Gujarat refinery to Statue of Unity," says Vaidya. IOC has asked Tata Motors to build 15 hydrogen-based fuel cell buses for the purpose.

Other state-run fuel companies are not far behind. Bharat Petroleum Corporation Ltd. (BPCL) will soon float a tender for a 20 MW electrolyser at its Bina refinery in Madhya Pradesh for building India's largest green hydrogen plant. "We will scale up after seeing the results. We are also exploring use of green hydrogen as a transportation fuel. Indian refineries are the first in the world to adopt green hydrogen," says Arun Kumar Singh, CMD, BPCL. Hindustan Petroleum Corporation (HPCL), is setting up a 370 MT green hydrogen plant at Vizag refinery. "It is just to get a hang of it. We had set up a green hydrogen plant a year ago to run our R&D centre. We are also researching on next-generation battery technologies," says M.K. Surana, CMD of HPCL.

15%

Share of green hydrogen in piped natural gas that government is planning to mandate.

₹60K

CRORE

RIL's planned investments in green energy proejcts.

While GAIL (India) will build one of India's largest proton exchange membrane (PEM) electrolyser at Guna in Madhya Pradesh to produce green hydrogen by the end of 2023, India's largest integrated power generator, NTPC Ltd, has floated an EoI for a pilot on blending hydrogen with natural gas in city gas distribution networks. Its renewable energy subsidiary, NTPC REL, is setting up a green hydrogen fuelling station at Leh where it plans to begin with five fuel cell vehicles. The station will be powered by a 1.25 MW solar plant at Leh.

Even solar power players are looking at the opportunity. On December 2, renewable energy company ReNew Power and engineering conglomerate Larsen & Toubro (L&T) entered into a memorandum of understanding to develop, own, execute and operate green hydrogen projects. "This will allow both to pool knowledge, expertise and resources to take advantage of this transition," says ReNew chairman & CEO Sumant Sinha. "We are already looking at some interesting opportunities in the Indian market for green hydrogen by developing end-to-end competitive solutions for the industry. ReNew brings its renewable energy development expertise to the table which, combined with our expertise in EPC, will contribute to sustainable and eco-friendly profitable growth," says Subramanian Sarma, whole-time director & senior executive vice president (energy), L&T. The infrastructure major has also signed an MoU with Norway's HydrogenPro to set up a joint venture in India for gigawatt-scale manufacturing of alkaline water electrolysers.

Seshagiri Rao says JSW Energy and JSW Steel's R&D teams are also working on cutting-edge hydrogen technologies. "JSW Future Energy is working with Australian Fortescue Future Industries for production of green hydrogen and utilising it for mobility, making green steel, green ammonia, and other industrial applications," he says.

Even the railways are interested. The Indian Railways Organization For Alternate Fuels has invited bids to develop a hydrogen fuel cell-based hybrid power train for retrofitting the 700 HP diesel-hydraulic locomotives running on the Kalka-Shimla narrow gauge section.

The initiatives have piqued the interest of global technology providers too. Hyderabad-based cleantech firm Greenco teamed up with Belgian alkaline electrolyser maker John Cockerill to make electrolysers in India. Before that, Ohmium International had shipped its first proton exchange membrane electrolysers to the US. "We are a 100% Indian company. Our factory now has a capacity to produce about 500 MW of electrolysis equipment per annum. This is eventually planned to be expanded to two GW per annum," says Pashupathy Gopalan.

Once these companies manage to develop their capabilities, it's clear that green hydrogen will change the country's energy consumption patterns, especially in industries where hydrogen is a key input even today.

Refining & Industry

Global hydrogen demand was 90 MT in 2020. More than 70 MT was used as pure hydrogen. The rest was mixed with gases containing carbon. Almost all of this demand came from oil refining and industrial sectors, mainly for production of ammonia and methane. Hydrogen produced from fossil fuels for these applications results in close to 900 MT CO2 emissions per year, according to IEA data.

Oil refiners are largest consumers (40 MT). The gas they use is usually produced onsite by either steam methane reforming, separated from by-product gases through petrochemical processes or sourced externally as merchant hydrogen. Since use of low-carbon hydrogen in refining is not economically viable yet, refiners are trying to move to carbon capture, utilisation and storage (CCUS) technologies to lower carbon footprint. In this process, carbon monoxide and carbon dioxide formed during the 'coal to hydrogen' process are trapped and stored in an environmentally sustainable manner. Estimates say use of low-carbon hydrogen in refining rose from 250 KT in 2019 to more than 300 KT in 2020, and based on the current pipeline of projects, 1.2-1.4 MT low-carbon hydrogen is likely to be used in refining by 2030.

Industry demand for hydrogen was 51 MT in 2020, with chemical production consuming 46 MT, mainly to make ammonia and methanol, while the remaining five MT was consumed mainly for making steel. Only 0.03% hydrogen used in industry has low carbon content.

New CCUS-equipped projects can supply only one-three MT electrolytic projects for low-carbon hydrogen demand by 2030. In order to meet net zero emission goals by 2050, the industrial sector has to use at least 21 MT low-carbon hydrogen. Similarly, total hydrogen demand in traditional applications (ammonia and methanol production) will reach 54 MT by 2030, and to meet sustainability goals, at least nine MT has to come from low carbon hydrogen technologies. However, projects in the pipeline will be able to supply only up to 3.1 MT low-carbon hydrogen by 2030.

The steel industry, which accounts for 0.7% of the world's economic output but contributes 7% to global emissions, is facing its unique set of challenges. In iron and steel production, hydrogen demand is expected to triple to 18 MT by 2030, but commercial scale 100% hydrogen-based direct reduced iron (DRI) technologies are still at an experimental stage (iron reduction through hydrogen needs a lot of heat; DRI plants can generate such

The Challenges

Electrolysers (which separate hydrogen from water using cathode, anode and membrane) consume 40-50 units electricity but generate only 30-35 units.

Hydrogen is highly inflammable and has to be transported in cryogenic tankers.

Cost of one-kg hydrogen has to fall from \$3-6.5 per kg to less than \$2 per kg for it to become viable.

Cost of new plants, and shuttering old ones, will be a major barrier to change.

A policy-driven ecosystem and development of lower-cost membranes will be key to the hydrogen revolution.

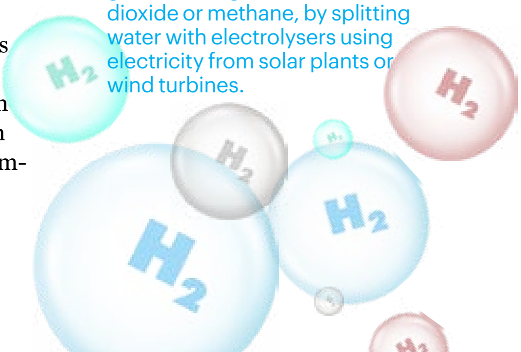
H2 in Colours

Grey Hydrogen
Produced using fossil fuels such as natural gas and accounts for roughly 95% of hydrogen produced globally.

Brown hydrogen
Brown hydrogen (made from brown coal) and black hydrogen (made from black coal) are produced via gasification; used in many industries that convert carbon-rich materials into hydrogen & carbon dioxide.

Blue hydrogen
Most hydrogen is produced by steam reforming of methane in natural gas (grey hydrogen), with high carbon dioxide emissions. Using carbon capture and storage technologies, these emissions can be reduced to make blue hydrogen with low emissions.

Green hydrogen
Hydrogen produced by a process that does not emit any greenhouse gases such as carbon dioxide or methane, by splitting water with electrolysers using electricity from solar plants or wind turbines.



heat due to presence of carbon monoxide in synthesis gas being produced from the coal gasification process).

Tata Steel is among the few steel makers attempting to master technology to make steel from green hydrogen. The project is being implemented at its Netherlands facility. A Roland Berger study says Tata Steel's aim of making green steel before 2030 is possible provided it gets policy support. Hans Dan Ven Berg, chairman of Tata Steel Netherlands, says the company has already started implementing technologies for making green steel. "Our preference would be to start using hydrogen immediately. We are doing a lot of preparatory work," he said in a recent announcement.

"We are watching how hydrogen technologies are evolving. Once possible, we can retrofit existing equipment with hydrogen injection instead of coal injection into blast furnaces to make green steel," says JSW's Seshagiri Rao. JSW Steel is already trying to reduce carbon emissions from 2.5 tonnes to 1.8-1.95 tonnes per tonne of steel.

"Viable green steel production could be more than a decade away even though several of the world's major steelmakers are developing plans to meet carbon-neutral goals," says JSW Group chairman Sajjan Jindal. "While prices of renewable electricity and green hydrogen are falling fast, the cost of setting up new plants—and shuttering old ones—will be a major barrier to change," he said while addressing a Bengal Chamber of Commerce audience.

A TERI report, *Towards a Low Carbon Steel Sector*, authored by Will Hall, Thomas Spencer and Sachin Kumar, is more hopeful. It expects that more radical decarbonisation technologies will be commercially available by 2040s. "Of particular interest is the hydrogen route, which involves substitution of coal or natural gas as a reducing agent with hydrogen. If hydrogen is produced from emission-free electricity, total iron and steel emissions can be reduced by 94%," they say.

Building an Ecosystem

Industry and experts say building a policy-driven ecosystem is a must for a green hydrogen revolution. This includes setting up of electrolysation units and storage tanks close to manufacturing locations, building cryogenic tanks and incentives such as PLI scheme for electrolysers. IH2A says there is an opportunity to create a National Electrolyser Manufacturing Mission, aligned with existing FAME II scheme, and create three-four large electrolyser manufacturing companies. It has recommended a PLI scheme for hydrogen-related domestic manufacturing similar to the one for solar power and EVs, tax and policy incentives, state offtake guarantees similar to that for renewable energy, new natural gas pipelines to accommodate hydrogen blending and incentives for large consortia hydrogen projects.

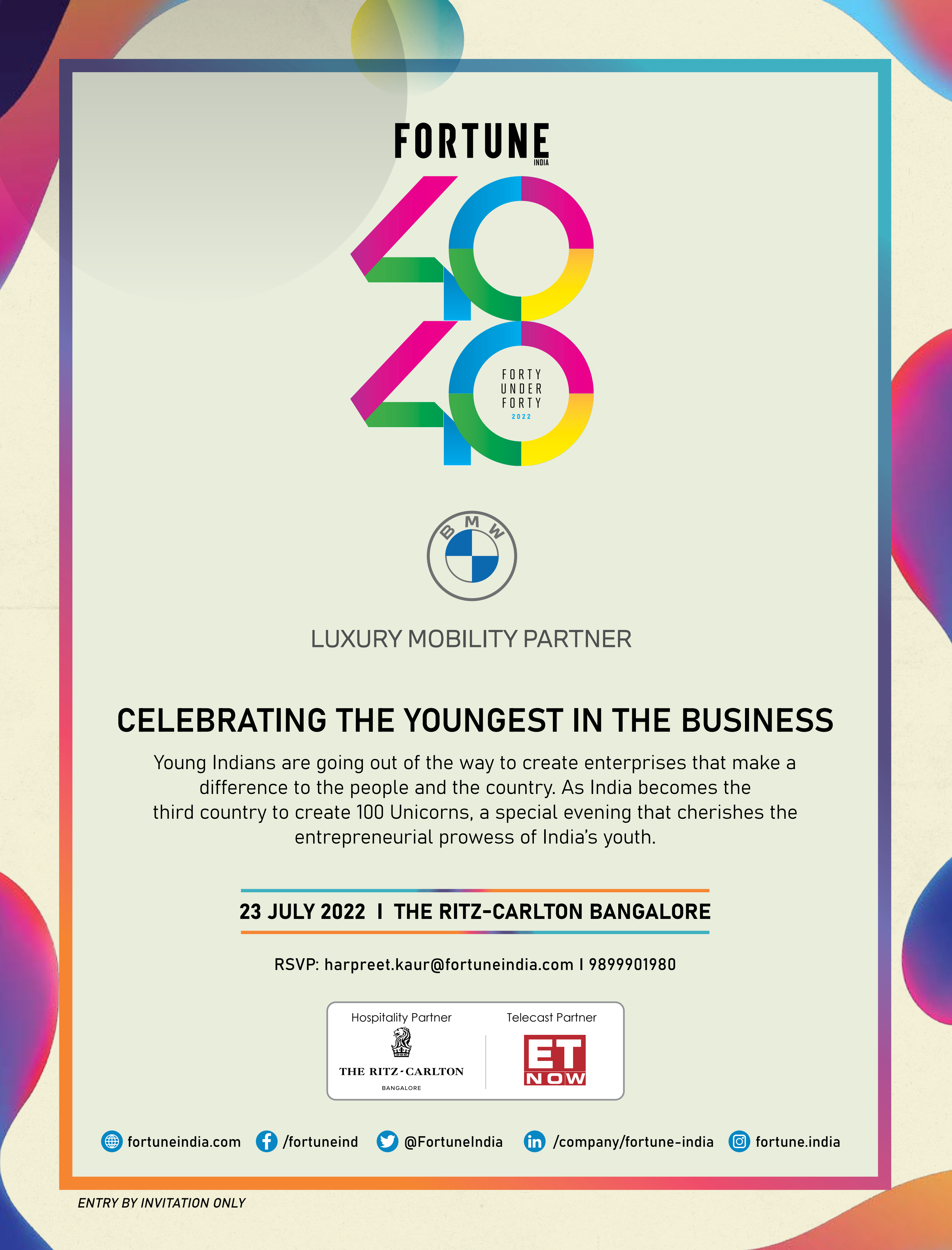
Costs, after all, are the biggest concern. For instance, the proton exchange membrane, which is the most stable, doubles the cost of an electrolyser. To reduce costs and increase manufacturing in India, development of alternative membranes should be prioritised. At present, annual coal cess collections of about ₹24,000 crore are being used to support projects to improve India's renewable energy output. This should be extended to hydrogen technology development, says Gupta, while batting for inclusion of fuel-cell EVs in FAME II. "Incentivised dollar-denominated loans for projects, concessional T&D lines and schemes like PLI can bring down project costs," says Gopalan. "There is also a huge amount of research going on to increase capacity of electrolysers for scaling up production. That will happen soon," says Seshagiri Rao.

Once these efforts bear fruit, industry will be well on its way to herald a green hydrogen revolution.

"This (tie-up with L&T) will allow both to pool knowledge, expertise and resources to take advantage of this transition"

Sumant Sinha,
Chairman & CEO, ReNew Power

PHOTOGRAPH BY **SANJAY RAWAT**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Why ESG Is No Alpha Strategy

Sustainability investing isn't yet fetching higher returns for investors. Here's why.

By **V. Keshavdev**

LARRY FINK, CEO of the world's biggest investment manager with more than $10 trillion in assets, BlackRock, describes it as the "greatest investment opportunity of our lifetime," But Tariq Fancy, who spearheaded sustainable investing at BlackRock before quitting in 2019, went public with his angst about why he felt ESG (environment, social and governance) investing was nothing but just a fad. "It was creating a dangerous placebo that was delaying government action, it was misleading the public, especially in North America," Fancy tells *Fortune India*.

ESG investing is generally accepted as a holistic way of investing that ensures economic progress is entwined with positive environment and social outcomes. Yet, ESG remains a big black box around which the Street and rating agencies have made their own rulebook. From FY23 onwards, the Securities and Exchange Board of India has mandated the top 1,000 companies by market cap to include Business Responsibility and Sustainability Report or BRSR in their


₹2000

annual reports.

"ESG is just a newer version of what was defined as sustainability," says Chaitanya Kalia, partner and national leader, climate change & sustainability services, EY India. "The Brundtland Commission coined the term — people planet and profit — and down the line, profit got changed to governance as investor focus increased."

That's showing and how.

Sustainable investing is gaining ground globally. CY21 was a record year with an estimated $120 billion flowing into sustainable investments, more than double the $51 billion seen in CY20. In fact, over CY18-CY20, these investments surged 10-fold. According to Sanjai Bhagat, Provost Professor of Finance at the University of Colorado, most investors across the globe are interested in clean environment, healthy communities, and good employment conditions. Back home, nine mutual fund schemes collectively manage over ₹11,000 crore in assets, with most funds having been launched a year back, except for SBI Magnum Equity Fund, which was renamed as an ESG fund in 2018 (See: *As good as it gets*).

For starters, Nilesh Shah, MD, Kotak AMC, believes India Inc has come a long way in terms of governance. "In the 2000s, a company such as HFCL would have been present in just about every other scheme, but today you won't find such names in MF portfolios," says Shah, a former fund manager who now heads the country's sixth-largest fund house.

But in an emerging economy where governance is still evolving, how can E and S not be subjective? For instance, Shah mentions an instance when during a due diligence visit to a production unit, the company's CFO took him to a tea stall that employed a small boy. The CFO told Shah, "If the kid is seen in the vicinity of my factory, ESG-focussed investors and clients will raise a red flag and blacklist my firm."

For Shah, the observation was striking as to what constitutes "social" in the West has a different connotation back home. "Child labour is socially unacceptable in the West, but in Indian context, the grim reality is that small children supplement incomes for their families instead of going to school. I might end up depriving a kid of his existence if I were to blindly apply the ESG rules without contextualising them to suit Indian conditions," he says.

While there is a difference of opinion about what constitutes ECG, investors are already asking India Inc questions, though most of it is environment related. For instance, according to CDPs 2021 non-disclosure campaign, 12 foreign investors managing $3 trillion in assets, including Amundi Asset Management ($1,630 billion), HSBC Asset Management ($478 billion) and Aviva Investors ($448 billion), are urging 39 Indian firms, including RIL, Asian Paints, Bajaj Auto, HDFC and ICICI Bank, to disclose their environmental impacts. CDP is a not-for-profit that runs the global disclosure system for different stakeholders.

According to CDP, 88 investor-requested companies from India have disclosed an aggregated climate related risk of `3.28 lakh crore. While India Inc's climate-related risk is substantially huge, it also shows that firms are cognisant about the environmental risk that their businesses are being exposed to and are being pro-active about addressing it. Investors may have a very limited role in this case.

For instance, Bhagat in a research paper titled 'Rule of law and purpose of the corporation,' showed that managers trying to maximise long-term shareholder value will of their own accord prioritise employee, customer, community, and environmental interests. For example, around 69% of the 100 largest US corporations made drastic changes to their employee work schedules to safeguard employee health during the pandemic, 64% made significant changes to accommodate customer concerns about health safety and logistical convenience and 62% increased the size and scope of

As good as it gets

ESG funds have not yet caught the fancy of Indian investors

	RETURNS IN %			
Scheme Name	**YTD**	**Since Launch**	**Launch Date**	**AUM (₹ Cr)**
Quant ESG Equity Fund - Regular Plan	-1.63	52.66	06-11-2020	75
Mirae Asset ESG Sector Leaders ETF	-7.67	15.10	17-11-2020	164
Quantum India ESG Equity Fund - Regular Plan	-11.03	16.27	12-07-2019	59
Kotak ESG Opportunities Fund - Regular Plan	-11.43	6.28	11-12-2020	1,527
SBI Magnum Equity ESG Fund	-11.69	14.74	01-01-1991	4,272
ICICI Prudential ESG Fund	-11.71	13.44	09-10-2020	1,440
Invesco India ESG Equity Fund - Regular Plan	-14.18	12.47	18-03-2021	778
Axis ESG Equity Fund - Regular Plan	-18.19	14.97	12-02-2020	1,838
Aditya Birla Sun Life ESG Fund - Regular Plan	-18.56	8.80	24-12-2020	1,013

RETURNS AS ON MAY 10, 2022; AUM AND HOLDINGS AS ON APRIL 30, 2022; SOURCE: VALUE RESEARCH their contributions to communities. "These activities are clearly consistent with stakeholder priorities. Given the voluntary nature of these activities, managers must consider them consistent with the interest of long-term shareholders," says Bhagat.

Not surprising that a study done by CFA Society India and CFA Institute on Indian ESG funds reveals divergence across funds when it comes to investment approaches, scoring methodology and outcomes. Shah believes the reason for this is that ESG integration practices are still evolving in the country. "ESG is not a unidimensional concept but a multidimensional one. On the governance front we are more capable, while on the environment and social aspects we will keep evolving. We can't blindly copy the developed markets and need to contextualise ESG for Indian standards. We need to learn from global practices, fast-track some of them, modify the others and implement what is relevant to our markets," feels Shah.

While globally and in India, companies will be forthcoming about their climate conscious efforts and will also link a part of the top management's compensation to milestones being met under the Science Based Targets initiative — which defines best practices in emissions reduction and net-zero targets — it is still not clear whether the efforts will fetch better returns for investors. For instance, the Nifty ESG 100 sector leader is down 9% year till date (May 10) compared with 8% for the Nifty 100. One of the prime reasons that ESG focused and non-ESG focused indices returns mirror each other is because the top 10 stocks across both the indices are the same. For instance, the ESG indices have Reliance, HDFC Bank, Infosys, HDFC, TCS, HUL, Bajaj Finance and Airtel as stocks with the highest weightages, which is no different from the Sensex or the Nifty. In essence, investors really don't have pure-play ESG stocks to play around with in India. Not surprising that the nine ESG schemes, too, are down an average 12% year till date (May 10) (See: *All in the family*).

Dhirendra Kumar, founder of Value Research, feels that instead of worrying about ESG, investors would be better off following the time-tested principles

All in the family

Returns of the ESG 100 and benchmark indices are not significantly different given the common index constituents

	RETURNS IN %		HOLDING IN %		SCORECARD	
	YTD	**1 Yr**	**FII**	**MF**	**ESG Rating**	**Risk**
Bharti Airtel	4.10	28.05	19.36	11.68	26.7	Medium
Reliance Industries	2.95	28.47	23.49	5.03	31.4	High
Kotak Mahindra Bank	-1.50	-0.67	40.86	9.26	27.2	Medium
Hindustan Unilever	-7.66	-10.38	13.66	3.64	26.1	Medium
Tata Consultancy Services	-9.93	9.32	14.15	3.22	14.4	Low
HDFC Bank	-11.75	-5.55	29.01	13.26	36.9	High
Larsen & Toubro	-16.38	15.27	22.13	17.44	34.3	High
Housing Development Finance Corporation	-16.50	-13.04	69.19	11.06	19.1	Low
Bajaj Finance	-17.88	7.84	21.41	8.08	19.5	Low
Infosys	-18.20	15.93	33.3	13.49	15.4	Low
S&P BSE 100 ESG Index	-7.20	10.06	-	-	-	-
Nifty 100	-7.88	8.71	-	-	-	-
Nifty ESG 100 Sector Leader Index	-8.83	6.93	-	-	-	-
NIFTY100 ESG	-10.13	9.26	-	-	-	-
NIFTY100 Enhanced ESG	-10.82	8.78	-	-	-	-

MARKET DATA AS ON MAY 10, 2022; HOLDINGS AS OF MARCH 2022; SOURCE: NSE, MORNINGSTAR SUSTAINLYTICS, CAPITALINE;

of buying fundamentally good stocks rather than of falling for themes. "At the end of the day, mutual fund is also a consumer product and needs a story spun around it — just like it was all infra in the past," says Kumar.

Unlike in the West, where investors are still okay to live with lower returns, in India where inflation is a big concern, investors won't fancy making peace with lower returns. According to the CFA Institute's survey, 60% of Indian investors (sample of 200 retail and 75 institutional investors) cited higher risk-adjusted returns as the primary reason for investing in ESG funds! It is double that of the global sample of 29%, with only 30% citing personal values or a positive impact as the reason for investing in ESG funds.

Kalia points out that to assume that a company with an ESG rating will deliver higher returns is a challenge. "Measuring non-financial parameters such as ESG is difficult since it is intangible, and if an investor expects that the highest-rated ESG company will do well in a falling market, the answer is no."

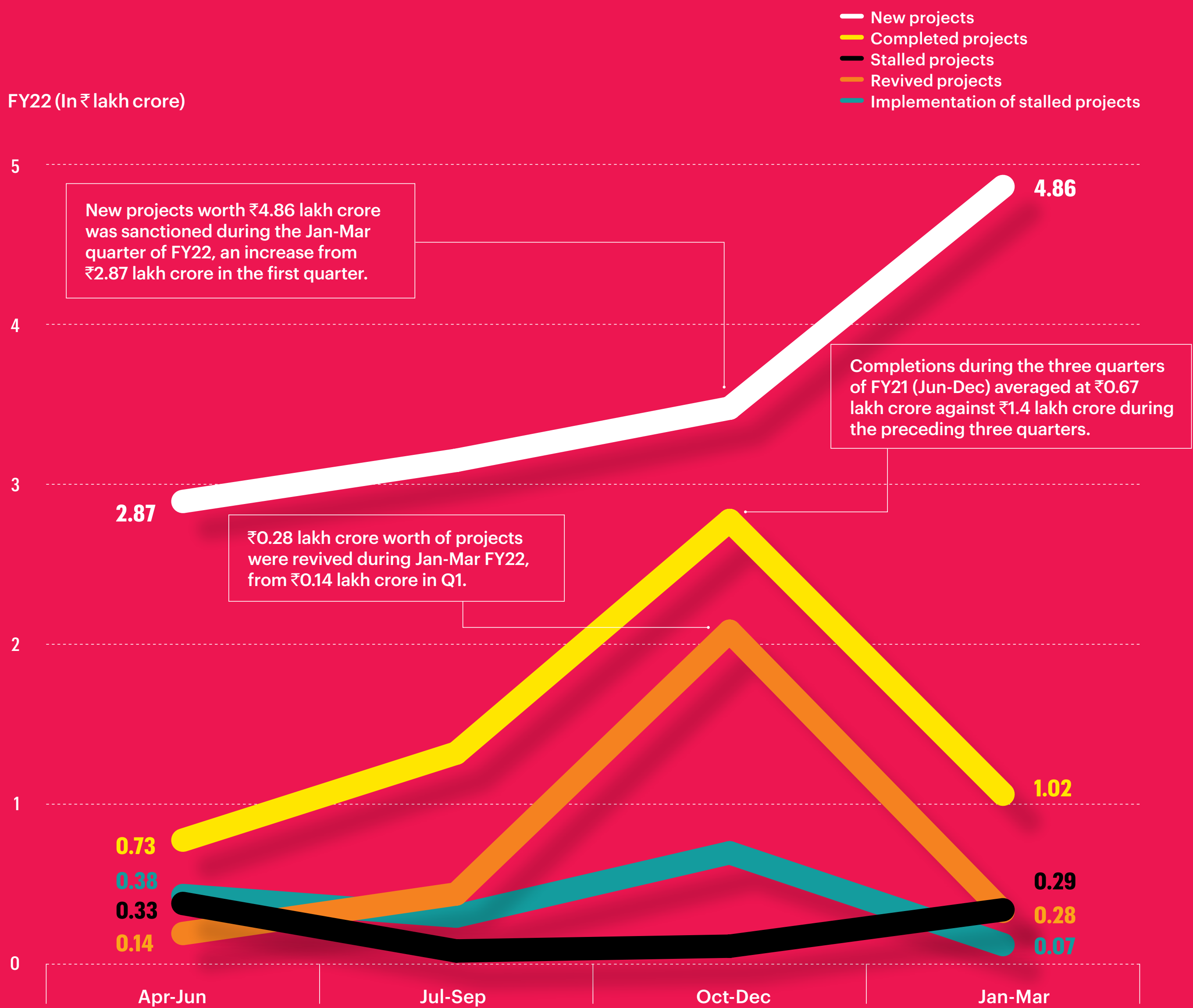
There is a reason for the minimal difference. "You are not seeing a significant return differential as even non-ESG stocks are moving in the same direction," says Shah. Citing an analogy, he says, "I don't need to rear a criminal in my family so that others can appreciate my 'saint' son or daughter." In other words, a fund manager doesn't need to invest in non-ESG stocks to show that ESG works.

But the current market meltdown is putting ESG funds through a pincer not just back home as globally, too, carbon-intensive energy and defence stocks have done well owing to the Russia-Ukraine conflict, compared with technology and financial stocks. While the benchmark and IT indices fell between 1% and 14% from February 24 to May 25, energy, utility and power stocks rose between 12% and 17%. Now, can investors be blind to the changing geo-political reality where energy self-sufficiency of economies would mean that conventional fossil energy firms will remain in vogue even as renewable players come of age?

Fancy's belief is that financial investors cannot force the change and that it has to come from the government. "We've seen time and time again that relying on Wall Street and big business to "self-regulate" is a recipe for disaster...That has to be a systematic solution and can only come from government leadership," mentions Fancy in an interview.

Fancy's observations are not misplaced as for all the concerns around sustainability, investors will be finally focused on returns. With regards to businesses, Kumar feels they don't need investors to tell them what to do. "Look at the country's biggest thermal power generation company, NTPC. Today, it also holds the biggest portfolio of renewables. So, businesses change when the time is conducive."

While there is no denying that ESG is here to stay, it is not a strategy that will fetch higher returns. Instead, investors should use it as a guiding framework for constructing a long-term portfolio. ■



BACK WITH A BANG

PUMPING OF PUBLIC AND PRIVATE SECTOR investments is beginning to show up in the spate of completed projects which cumulatively jumped to ₹5.78 lakh crore in the four quarters of FY22 compared with ₹3.2 lakh crore in FY21. According to the CMIE, a big jump of ₹2.75 lakh crore in project completions was witnessed in the quarter ended December 2021. Completions during the quarter were the highest compared with levels achieved in any of the past six quarters. — **V. Keshavdev**

INFOGRAPHIC BY **VIKAS VERMA**

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DRIVERS THAT DETERMINE SUCCESS OF INDUSTRIES

ANAND LOUIE
Director, International Research Institute for Manufacturing

The mighty manufacturing sector is probably the biggest driver of socio-economic prosperity the world over. It has been true for many generations now, that a country's success on a global platform is defined by its manufacturing sector. It is also true that the recent volatility in the geo-political climate and the resultant impact on the socio-economic culture has adversely impacted the manufacturing sector too. Now, more than ever, the companies need actionable advice and growth-oriented thought-leadership. And therefore, global consulting companies, such as International Research Institute for Manufacturing (IRIM), are important to their clients and also valued by them. IRIM has been partner to the manufacturing industry for nearly a decade now.

The last 15 years have seen some monumental changes in the world's economic order including the latest COVID-19 pandemic and the resultant breakdown of global supply chains which has impacted the stability of world economies. Amongst these steep challenges India, driven by its domestic demand and supply capabilitie has managed to stay the course. This has been possible because of the visionary industry leaders of the Indian manufacturing sector, who have not only dared to stay ahead of the curve, but have also sailed their companies deftly through some very difficult times. They have been the trendsetters that have driven the techno-commercial transformation of the manufacturing sector in India.

Mr Anand Louie, Director, IRIM, India shares, "We identify ideological trendsetters and over the years the three indicators that have emerged which drive a successful company are - building capacity ahead of demand, consumer/customer focus, and structured and sustained implementation of improvement initiatives. All these three factors are enabled through advanced manufacturing technologies and digitalisation of business processes. Our primary mission is to engage stalwarts from the group of elite companies and recognise them as trendsetters of what Indian manufacturing should be. In this process we hope to inspire the larger Indian industry towards positive transformation.

"At IRIM, we try to affect change in the growth trajectory of a company by encouraging them to take measured and calculated risks and invest pragmatically in future projects by predicting the industry mega-trends 5-10 years ahead of time. We believe and profess that all businesses should be on an everlasting drive towards better customer experience, so consumer/ customer focus is a priority, besides how technology and digitalization can enable and transform the processes in all these three aspects across industry sectors."

This is for the first time that we thought of having this collection of thoughts, ideas and examples for readers to understand what made these companies as successful as they are today. The idea is to inspire more companies to learn from their fraternities' shared wisdom and rise to make India a favoured manufacturing destination. IRIM also enables innovative companies that may already be market leaders in their sector, to look beyond challenges of their local ecosystem."

"At IRIM, we try to affect change in the growth trajectory of a company by encouraging them to take measured and calculated risks and invest pragmatically in future projects by predicting the industry mega-trends 5-10 years ahead of time. We believe and profess that all businesses should be on an everlasting drive towards better customer experience, so consumer/customer focus is a priority, besides how technology and digitalization can enable and transform the processes in all these three aspects across industry sectors," adds Louie.

The IRIM Director advises, "Manufacturing companies should plan their growth in a way that their suppliers, vendors and other stakeholder grow with them. We believe that profitable companies or companies having a big vision for their future should go for IRIM's unique, tailor-made evaluation or value chain mapping to understand the drivers of their growth. They should, also, strive to understand the impediments to their growth and remove them. We consider growth and success as a planned venture, and not isolated events in the company's lifecycle. Also, the industries must accept the reality that costs are going to escalate, and unstable policy decisions will be a major hindrance in their growth. For companies who aspire to be big and successful, we would advise them to start considering that the cost of not doing anything could mean extinction."

Summing up, Louie says, "We take this opportunity to thank every participating company and the people behind them in making this issue possible. We hope it will serve as inspiration and encouragement for the featured organizations."

BRINGING EFFICIENCY TO CONTINUOUS IMPROVEMENT

Mark Twain said, "Continuous improvement is better than delayed perfection."

We, consultants and researchers, often seek answers to why only a handful of companies evolve with time and grow at a steady pace, while most of the others appear to lose perspective. We are often told that the fault lies in the inherited flaws in the culture of these failed organizations.

While it may be true for a small subset of the failing companies, in my opinion it is the inability of the organizations to make a clear distinction between what is important and what is urgent and the management's ineptitude to effectively act upon them.

SAIPRASAD RODE
Senior Consultant, International Research Institute for Manufacturing

Need for Sustainable Changes

With experience, the manufacturing fraternity has learnt that it is not just leadership initiatives that can bring tangible change. Visionary leadership, coupled with effective and incremental improvements brought along by combined efforts of various stakeholders, makes organizations future ready. As collaborative work cultures start bearing fruit, industry participants are acknowledging that continuous improvement is the driving force behind their all-round development. To put it simply, continuous improvement is not about making a few sporadic mega changes to the business or its operations, but to continuously make many small incremental yet sustainable changes.

Implementation: A Challenge

Continuous improvement has now become the driving force in the manufacturing sector and across verticals through programs like 'Kaizen', 'Quality Circle', '6-sigma projects', etc.

With the body of knowledge available in today's world, almost all the matured manufacturing organizations have instituted programs to drive ongoing advancement in their factories. Implementing these changes requires extensive efforts at all levels. It not only involves elaborate planning, building systems and training people, but also making sure that the current workforce is comfortable with the ever-evolving factory and its culture. Despite investing the resources, and the time, not all factories are able to effectively implement and generate the desired results.

As simple it is to understand the continuous improvement system, it is equally difficult to implement one successfully. It involves designing systems, educating people and addressing gaps in technical, functional and behavioral competencies. Apart from performing their operational tasks, it requires the workforce to identify opportunities for improvement.

Although the intent and drive may be present amongst the workforce, it is their capacity, in terms of time and involvement that may become a limiting factor. Small projects, if viewed in isolation, may have only a minimal impact on the everyday lives of people involved, but they would invariably take a lot of creative and administrative effort along with management time.

Today, all the efforts of managers are concentrated on completing complicated documentation, non-standardized workflows, waiting time between different stage gates and loss of information between different tools and systems. These inefficient systems lead to a slow absorption of continuous improvement as an organizational culture.

Building a Platform of Greater Efficacy

To sustain and reap long term benefits of continuous improvement ideology, it is critical to convert such high effort - low reward programs into being more efficient and effective. This generates a need to develop platforms where with minimal administrative efforts and optimized workforce time organizations can drive initiatives and make more time available for developmental work.

With the extensive integration and maturation in a workplace, no function can work in a silo anymore. For a production initiative to bear fruits, it must be supported by Quality Assurance, Engineering, Procurement, Safety and Human Resources and other. This system should be able to effectively collaborate with the various stakeholders throughout the value chain.

Developing platforms for idea management would thus, objectively reduce the chaos in managing the improvement initiatives in the organizations.

Digitalization: a Catalyst for Continuous Improvement

With the Industry 4.0 initiative, the manufacturing sector has seen success with digitalization across sectors. In stride, digitalization is being touted as the catalyst for the gathering momentum for continuous improvement, by bringing in greater efficiency in data management, workflow optimization, comprehensive project evaluation and stakeholder alignment. As the initiative matures, knowledge sharing and horizontal deployment will accelerate the growth journey.

With the coming of age of the digital world, the manufacturing fraternity has seen some drastic positive changes in the constraints in effective management of improvement initiatives.

In this fast-paced world, which is growing at an unimaginable speed every day, the one resource that cannot be underestimated is Time. The Management's effort should be to continuously steer the organization towards prioritizing and aligning efforts to important initiatives; and checking off what is not important with relative efficiency so that they don't become urgent. ■

ADITYA BIRLA FASHION AND RETAIL LTD

ABFRL is part of a leading Indian conglomerate, the Aditya Birla Group. With revenue of Rs. 8,788 cr., spanning retail space of 8.1 million sq. ft. (as on March 31, 2020), it is India's first billion-dollar pure-play fashion powerhouse with an elegant bouquet of leading fashion brands and retail formats. Mr Vishak Kumar serves as the CEO-Madura Fashion and Lifestyle Business and Whole-time Director at ABFRL

■ **A lot is spoken about the skill gap in our country; however, most organizations now find potential opportunities for improvement in employee welfare and development. How does your organization prepare its future workforce?**

► It is an important area for the Indian Manufacturing Industry. The productivity for our industry has been relatively lower than international standards. Our attempt at ABFRL has been to create a systematic approach towards training and development for our employees. Our key focus to strengthen employee development has been in these areas:

- Fast-track training methodology: Previously, we used to take about three months to train a fresh operator in our factories; with various improvements, we have been able to reduce this to 15 days. We also have clear career paths, enabling employee growth and development.
- "Systematic trainer development process": By introducing strong "Train the Trainer" programs, we have dedicated and focused trainers to train new employees and multi-skilling our existing employees.
- Campus hiring: Recruiting fresh engineers and training them in all areas of manufacturing management; enables us to create a healthy blend of Experience and Youth. This also enables us to accelerate Technology adoption.
- Employee empowerment: Every employee in our factories is a part of an L1 team with 10-12 employees and a leader. They meet and review their performance daily and try to solve issues related to their team performance and take necessary action for continuous improvement. The teams' monthly performances are monitored and displayed, and the best performing teams are rewarded. Awareness and training programs are conducted for the teams for Kaizen, 5S and problem-solving tools.

VISHAK KUMAR
CEO – Madura Fashion and Lifestyle Business and Whole-time Director – ABFRL

■ **What are key trends that would dominate the manufacturing sector in the upcoming decade?**

To make India a successful manufacturing destination in the coming years, we need to focus on the below:

- Talent management and cost control: Clear focus in developing talent is a top priority; raising productivity levels to manage costs better will also be a key imperative.
- Technology adoption: Drive digital processes in manufacturing; use of Data Analytics, Automation and Robotics to drive productivity and quality.
- Strategic investments in new product categories: Constant analysis of market demands and consumer trends.
- ESG: This will need to be a key driver for our industry. At ABFRL, this is already a major focus area and we have made significant investments in sustainable initiatives such as solar power, zero discharge and zero waste to landfill along with circularity. As part of the Aditya Birla Group, we are further driving multiple initiatives towards Corporate Social Responsibility. ■

CNH INDUSTRIAL INDIA PVT LTD

New Holland Agriculture began its operations in India in 1998 with the launch of its first 70 HP tractor in the Indian market. Since then, it has tasted unequaled success with more than 600,000 tractors sold in numerous applications across India and abroad. The company currently offers a technologically superior range of 35 HP to 120 HP tractors in India. It is the first company in India to offer the most appropriate and advanced range of mechanization solutions to Indian farmers for enhancing crop productivity and profitability. Mr. Narinder Mittal is Vice President - Industrial Operations Asia Pacific Region.

NARINDER MITTAL
Vice President - Industrial Operations Asia Pacific & ANZ

Much is spoken about the skill gap in our country; however, most organizations now find potential opportunities for improvement in employee welfare and development. How does your organization prepare its future workforce?

In CNH Industrial we have just passed through a spin off, and the organization is now realigned in two major segments– On Road and Off Road, considering the diversity of our products in these two categories. CNH Industrial "New Holland Agriculture is a part of CNH Off Road business and recently our leadership team has shared a way forward considering the milestones of 2025 and 2030. Organizational workforce plays an important role in realization of the milestones laid by the organization because ultimately the employees are the ones through whom any organization delivers its commitment.

Industry 4.0 / Digitalization / Robotics / Automation are the some of the well-known methodologies being used in the current scenario and these are really the way forward where we need to nurture our future workforce. To have a long relationship with the employees, employee welfare and development are necessities; but, without grooming the competencies of future workforce it is highly difficult to meet the competitive challenges. Hence, becoming cost effective would be a major challenge in the upcoming future and without mechanization / digitalization the turnaround results can't be achieved.

What have been the key learnings from surviving manufacturing operations through a global pandemic?

Last year 2021 (in Q4 End), CNH Greater Noida plant achieved a great milestone of the 50,000th tractor in 2021. Despite 2021 being one of the toughest years in the history of Indian Manufacturing, CNHi Greater Noida plant managed to achieve this milestone. There was a situation in India due to COVID pandemic when the various companies were closing their plants, reducing their operational workforce and even many top companies were badly hit financially too. Our plant also experienced different challenges in supply chain due to uncertainty caused by COVID and material availability.

Specifically, Q2 2021 (April to June) was a major challenging period when COVID was at its peak in India. We were also facing very tough challenges during this period, but CNHi India management strongly formulated a strategy on how to sustain manufacturing operations and extensively supported Noida plant manufacturing operations. Extended efforts from each of the department and function helped us in achieving this great milestone.

The shift to remote and hybrid working driven by the pandemic presents companies' opportunity to accelerate building inclusive cultures. With its benefits of increased flexibility, remote working can facilitate the retention of women and other colleagues, as well as those who have been impacted severely during this pandemic. It thus widens access to a pool of diverse talent that may not have been available earlier. Hence, in a nutshell, for a longer perspective of organization growth diversity and a hybrid model of working can play a vital role to turnaround the future of Indian Industry specifically.

What impact do third-party evaluations such as the one conducted by IRIM have on the evolution of your organization and business growth?

We consider these as opportunities of improvement. Sometimes we need not to be "best", rather, "Being Better" is also a good option. Having done a thorough evaluation through IRIM, we are already on the set objectives and we look for a future interaction very soon. ■

GHCL LTD

A well-diversified company with ascertained footprints in chemicals and textile businesses GHCL Limited is rooted in a sustainable growth outlook defined by the core values of the four pillars of the 'GHCL Way'. Mr. Ravi S Jalan has served as Managing Director, GHCL Ltd. since 2006.

RAVI S JALAN
Managing Director

In a growth-driven economy like India what comes first – Building Capacity or Generating Demand?

► For India to become a $5 trillion economy by 2025, building capacity is critical. As a nation, we must focus on infrastructure development and improvement of the business environment. Capacity building for me means focusing on digitisation, adoption of environment friendly policies, infrastructure, and most importantly create a skilled workforce. Building capacity is ultimately the way to deliver transformational results and create a multiplier effect in the economy. It leads to job creation and employment which in turn puts more purchasing power in the hands of people, which will ultimately create demand for goods and services and growth in the economy.

So if you are aware of the demand cycle, then you might as well start building capacity before the lack of availability of your product makes your brand unreliable. Especially because building capacity to fulfil enhanced demand especially in the manufacturing sector takes time and resources.

What would you say are the key learnings from surviving manufacturing operations through a global pandemic?

► From the merits of agility to the importance of values, upskilling and digitisation, the pandemic has taught the manufacturing industry some very vital lessons on how to navigate the VUCA environment. Some of our learnings are as follows:

- I believe that agile organisations are dynamic, stable, innovative and constantly evolving through their learnings. They are more resilient, more result oriented and are able to ensure long term value creation for their stakeholders.
- The pandemic brought with it many uncertainties and exposed organisations to the inevitability of change. We realised the importance of being adaptable and nimble, of understanding our core competencies and ensuring them to generate the desired value for our stakeholders. We transformed quickly, adapted new technologies and ways of doing business. We increased our focus on modular expansion, debottlenecking, creating a diversified product basket and backward integration of raw material supplies. We also benefited from our focus on product market expansion and value added products. Going forward, we are certain that our investments in the renewable energy portfolio and modernisation and expansion of the businesses will give us better leverage.
- The pandemic acted as a catalyst for digitisation and transformation in lifestyle, work patterns, and business strategies. With everyone forced to work from home, technology proved to be one of the most reliable and responsive assets during the pandemic. As lockdowns were eased, we began to realise that in order to be more resilient to future exigencies we needed to increase efficiency in processes. This led to adoption of smarter manufacturing processes powered by digitisation, automation, Artificial Intelligence (AI) and Internet of Things (IoT). Colleagues were quick to adapt to a fast-changing environment, gaining new knowledge and upskilling supported by digitalization. The pandemic also made us realise the importance of GHCL as a "Learning Organization" for sustainable profitable growth and competitive advantage with focus on developing people and creating a future ready organization. Our idea is to create an organisation which is capable of self-reflection, and of utilising new knowledge to provide a sustainable competitive edge in the present business environment.
- We realised the importance of the human touch and keeping our teams motivated. As an organisation, we recognised that it was our "invisible assets" such as customer centricity, trust, connect, corporate culture, and values that ensured long-term survival and competitive success. Our connection with our people, the ability to inspire trust and a sense of community helped us adapt and navigate the pandemic better. ■

GRASIM INDUSTRIES LTD

Grasim Industries Limited, is a flagship company of the global conglomerate Aditya Birla Group. Having started out as a textiles manufacturer in India, it has evolved into a leading diversified player with leadership presence across many sectors. Mr. H K Agarwal is Managing Director of Grasim Industries Limited, Business Director - Pulp & Fibre Business and Director of Aditya Birla Management Corp. Pvt Ltd.

H K AGARWAL

In a growth-driven economy like India what comes first – Building Capacity or Generating Demand?

▶ Generating demand and catalysing consumption and growth is as important as building capacity for a growth-driven economy. India is at an inflexion point, and global trends such as digitization and automation and the whiplash effects of supply chains are creating new opportunities. Our chairman, Kumar Mangalam Birla, recently predicted a decade of Capex Mahotsav. He said that a generation of entrepreneurs are taking advantage of economic reforms as profound as those in 1991. Investors are excited about the growth prospects in core and sunrise sectors. The word sunrise sector applies to both conventional sectors like textiles, cement, steel, power and auto and emerging areas like digital and renewables.

At Grasim, we were amongst the first to invest in a greenfield and brownfield projects for viscose/ chemical expansion and foray into the decorative paints industry. Today, we have built capacities in viscose fibre and generated demand by innovating the fibre through circularity, branding and awareness.

What advice do you have for your industry peers in building a Leadership Team that is receptive to change in operational environments?

▶ The global pandemic has brought in many challenges to businesses and CEOs. With disruptions to business-as-usual and disintegrated workforce, CEOs had to fine-tune their strategies. Grasim has evolved over a period of 75 years, but what remains unchanged is the resilience of our people. Even in uncertain times, our employees with their strong value system of speed, commitment, integrity, passion and seamlessness, are our pillars of strength. The pandemic has taught us to be more empathetic, set clear priorities and communicate effectively. I have also empowered our teams to make decisions amid uncertainty and lead from the front.

My mantra to my team is to have a "CAN DO" and "WIN TOGETHER" attitude.

What impact do third-party evaluations such as the one conducted by IRIM have on the evolution of your organization and business growth?

▶ Third-party evaluations are an independent assessment of an organisation's strategy along with their capability. They work as a guiding star and help companies make informed decisions. Organisations can re-think and pivot their models depending on the assessment—it could be geographical expansion, reach or flexibility required for businesses. ■

HINDUSTAN COCA-COLA BEVERAGES PVT LTD

Hindustan Coca-Cola Beverages Pvt. Ltd (HCCB) offers soft drinks, juices, and bottled water products. Today it is one of India's leading FMGC companies. Mr Kamlesh Sharma is the spokesperson and Chief Public Affairs and Communications Officer, HCCB

■ Is the Indian market receptive to products developed from advanced concepts of Food Science to cater to a health-conscious and excitement-seeking Gen-Z?

The Indian food processing and beverage manufacturing process is amongst the most advanced in the world. High quality, safe, hygienic, and great tasting beverages always find traction with consumers. HCCB for example was able to bottle its sparkling beverages in the world's lightest PET bottle (which we call ASSP – Affordable Small Sparkling Package). It took us a considerable amount of research and investment to bring this package and its content to life, but its acceptance has been near universal and even dramatic. The ASSP weighs less than 10 grams, and took nearly two years to create. Proprietary Coca-Cola computer simulation methods were used to design the package using one-third less plastic than a standard plastic bottle in India (wt 15.5 gm) and an incredibly thin barrier layer was added to the bottle walls to prevent carbonation from escaping. When combined, these two advances extend product shelf life by a remarkable five months or more. This innovative technology has also reduced the plastic usage. Similarly, Minute Maid Pulpy Orange, which is the only juice brand where the consumer gets the experience of real fruit pulp in the beverage is a unique innovation by HCCB and it is now India's largest selling packaged juice drink.

KAMLESH SHARMA
Chief Public Affairs and Communication Officer

■ If you must identify key learnings from surviving manufacturing operations through a global pandemic, what would they be?

- Continued and relentless focus on safety, hygiene and CoVID protocols. There can be no slip-up, not even for a minute.
- The pandemic has highlighted and even fast tracked the adoption of machine learning, automation, and robotics. HCCB has now built two factories, one each in Sananda, Gujarat and Raninagar, near Siliguri, West Bengal which are fully digital.
- The need for multi-skilling of line operators and supervisors because in a pandemic situation, no one is guaranteed the attendance of all the required staff, at the same time and at the same place. So, when the operators are multi skilled, they can fill in for the absentee.

■ How are expectations of stakeholders, such as investors, employees, customers, community, regulators, evolving in India? And what impact do you see in your business?

Consumers and stakeholders expect no less than what is available elsewhere in the world. And rightly so! Indian manufacturing and Indian products have found their rightful place on the global map. Today, the machines, the technology and the interventions that are being made in India are setting benchmarks. Imagine that a home grown, quintessentially Indian soft drink brand – Thums Up – is now the first Indian beverage brand to join The Coca-Cola Company's suite of billion dollar brands (in sales value). It is a tribute to India's R&D, its manufacturing prowess, and the choices that the discerning India consumer makes. Similarly, like in the previous example where India leads the way in making the world's lightest PET bottle for sparkling drinks, speaks volumes of our capability. ■

ADANI WILMAR LTD

Adani Wilmar Limited (AWL) is a joint venture incorporated between Adani Group- the leaders in private infrastructure and Wilmar International Limited - Singapore, Asia's leading Agri business group. The Adani Group is India's fastest-growing diversified portfolio of businesses and food FMCG companies in India.

Mr. Angshu Mallick, CEO & MD, shares at length his views on how important it is to have advanced and competitive manufacturing facilities for business growth. "India" he says, "is growing at a rapid pace and so does the demand of its citizens for quality products. They are not afraid to spend but do not purchase unhygienic and adulterated products. At Adani Wilmar, we understand this and meet the growing demand with our unmatched infrastructure, world class manufacturing units, robust machinery, and uncompromised quality standards. We are proud to have fully automated units spread across the country. These units follow the highest standards of safety and quality and passes through the AIB audit."

With AWL operating as a consumer-driven business he elaborates on what key learnings the company came away with from the Pandemic that has disrupted Global Supply Chains. That it was a year of challenges as the pandemic had an adverse impact across businesses, he feels that even the FMCG sector had been no exception. "The key challenges faced by us and the industry overall were impact on production due to manpower shortage, disruption in supply chain and distribution logistics, shortage of packaging materials, etc., " he says. He is also of the opinion that the first lesson from this was to not take anything for granted as any event like the Coronavirus pandemic can derail any, or all the plans one may have made. "It has taught us that having a Plan B, or something that we can fall back upon in case of any unseen incident, is important. The year has taught us the importance of human resources.

ANGSHU MALLICK
CEO & Managing Director

We were able to run our facilities only because of our workers and have observed resilience of employees during the trying times," he says. ■

BALMER LAWRIE & COMPANY LTD

Balmer Lawrie & Company Ltd. operates in multiple business areas as a manufacturer and service provider.

ADIKA RATNA SEKHAR
Chairman & Managing Director

Sharing his thoughts on what would be the key trends that would dominate the manufacturing sector in the coming decade, Mr Adika Ratna Sekhar, CMD, Balmer Lawrie, feels we will observe increasing collaboration between humans and smart systems. "There's no denying the fact that Industry 5.0 is already here. Some might say we are on the threshold. No matter whichever school of thought we subscribe to, we have to continue to embrace change, focus on strategic investment and leverage technology to stay ahead of competition, he says." He is of the firm belief that sustainability in business encompassing ESG parameters will be critical as businesses cannot operate in silos any more. Also, protecting the interests of all stakeholders will be key. Though workplace safety has always been a priority for manufacturers, it will assume greater significance in the light of the pandemic, Mr Sekhar opines.

Furthermore, as he sees it, innovation and technology would drive business growth. Internet of Things (IoT) will continue to be the 'big thing'. IoT will enable manufacturers to make informed, strategic decisions using real-time data thus, enhancing efficiency, improving safety, product quality and innovation, cost reduction, waste reduction, etc. The next decade will see enhanced design thinking in product development. "We have to allow customers to customise what they want. Manufacturers will have to explore new processes and procedures that use assistive technology such as Virtual Reality and Augmented Reality. 3D printing will make production faster and cheaper. The manufacturing sector will see creation of high value jobs," he elaborates.

Sharing his views on the impact of third party evaluations such as the one conducted by IRIM, on the evolution of the organization and business growth, Mr Sekhar feels that third party evaluation facilitates critical assessment of the company's manufacturing competitiveness by experts and benchmark with the best in the domain. "It allows us to analyse our capabilities, competitive strategy and evaluate accomplishment of business objectives. We are guided to factor in all ESG parameters in our manufacturing processes, which enable sustainable business growth," he concludes. ■

ITC LTD

One of India's foremost private sector companies and a diversified conglomerate with businesses spanning Fast Moving Consumer Goods, Hotels, Paperboards and Packaging, Agri Business and Information Technology, ITC is the country's leading FMCG marketer. Mr B Sumant is Executive Director, ITC Limited

■ What are the key trends that would dominate the manufacturing sector in the upcoming decade?

► The manufacturing sector is undergoing a paradigm shift and the industry is ushering in the next era of technology transformation. The upcoming decade will be shaped by rapid technology-led disruptions which would very easily adaptable, more efficient and sustainable.

Smart Manufacturing: We will continue to leverage the benefits of Industrial Internet of Things (IIoT), where interconnected devices are used in smart manufacturing sector to collect data, which can then be used to enhance the manufacturing process consistency, product quality and making the supply chain more efficient.

Artificial Intelligence (AI) & Machine Learning (ML): Artificial Intelligence in supply chains is helping deliver the powerful optimization capabilities required for more accurate capacity planning, improved productivity, high quality, lower costs, and greater output, all while fostering safer working conditions. If applied correctly through supply chain management (SCM) work tools, ML could revolutionize the agility and optimization of supply chain decision-making.

Sustainability: This is going to be a defining trend in the manufacturing sector over the next decade. Actions around enhancing renewable energy, improving energy and water efficiencies, GHG emission reduction and moving towards net-zero, resource optimisation and waste reduction, water-security for all stakeholders, optimisation in packaging and leveraging new technologies in every node will be critical levers in manufacturing going forward.

Talent Management: If manufacturers are to retain valuable workplace skills and institutional knowledge, they will have to create a systematic way to ensure a smooth handoff from one generation to another.

Digital Twins: Digital Twins technology has the potential to revolutionize the product development

SUMANT BHARGAVAN
Executive Director

process as the entire product life cycle can be simulated right from development of concepts to the delivery across nodes of supply chain. The technology can be also effectively leveraged for process optimisation.

Automation: Automation can bring many advantages to manufacturers, including higher productivity, greater accuracy, and lower costs. This can be further aided by multiple technologies like rapid spectroscopy-based testing, Computer Vision based product evaluation systems and Integrated IOT devices with machine to machine communication and interfacing capabilities.

■ Is the Indian market receptive to products developed from advanced concepts of Food Science to cater to a health-conscious and excitement-seeking Gen-Z?

► Today, India's discerning consumers recognise the importance of mental and physical health for their holistic wellbeing. They are seeking out health and wellness products that don't compromise on taste.

This has paved the way for many exciting product categories like the Plant Based meat alternates, Millets, Protein rich foods, foods good for Immunity & Gut health, Frozen Foods etc. The emerging trends of "Sustainable Nutrition", "Back To Roots", "Tech To Table" and "Augmented Food Experiences" have significant potential in the coming times.

ITC, with the help of cutting-edge R&D capabilities resident in its Life Sciences and Technology Centre in Bengaluru launched a slew of products to address some of these emerging needs including B Natural Plus Immunity Juices with the benefit of immunity and fibre and Sunfeast Protein Shakes in association with Amway, ITC Nature's Super Foods with millets and ragi varieties, Jelimals Immunoz – Vitamin C and Zinc fortified jelly for kids, Aashirvaad Svasti milk fortified with Vitamin A, among others.

■ When it comes to successful manufacturing organizations like yours, what are more effective-quantum leaps of progress or continual improvement?

► ITC's Integrated Consumer Goods Manufacturing & Logistics (ICMLs) facilities are an integral part of the Company's business models and are aimed at providing long term sustainable competitive advantage to the vibrant portfolio of FMCG businesses. ■

JINDAL STAINLESS LTD.

Founded in 1970, Jindal Stainless Ltd. is the largest stainless steel manufacturing company in India and ranks among the top 10 stainless steel manufacturers in the world. Mr Abhyuday Jindal is Managing Director Jindal Stainless Ltd.

ABHYUDAY JINDAL
Managing Director

In a growth-driven economy like India what comes first – Building Capacity or Generating Demand?

► In a growing economy like India, where both obvious and latent demand are steadily increasing, capacities are traditionally built in anticipation of demand. This phenomenon is currently playing out across sectors like renewable energy, electrical vehicles and steel sector, where big capex have been announced by major players in anticipation of growth, leading to demand generation.

Let's look at any area of growth where India has made considerable progress. Whether it's infrastructure, healthcare, manufacturing, financial markets, or even human capital...the growth has come from capacities which were built way before their demand became obvious. The reverse is also true. Areas where we find ourselves lagging behind, such as logistics, are those where capacities are still inadequate.

As a representative of the Indian stainless steel industry, I've been fortunate to be a part of the economy that built proactive capacities well before time. In the early 90s, stainless steel demand in India was about 2.5 lakh tonnes. From then, to an annual production of over 30 lakh tonnes, of which nearly half is produced by us, we've worked with the vision of creating self-reliance for stainless steel in India.

What responsibility as a market leader do you think an organization holds in creating product trends that drive growth and evolution of the industry?

► I believe it is incumbent upon market leaders to define trends; the industry simply follows suit. Customers can easily describe a problem they're having – in this case, wanting to get somewhere faster – but not the best solution.

Both product and service trends require a first-mover, a player who can afford to take big risks in order to change the status quo. Founded with mission of Making India Aatmanirbhar in stainless steel, Jindal Stainless has been a flagbearer of innovation in the industry.

In the past, we pioneered development of Cr-Mn grade of stainless steel, which revolutionized growth opportunities for not just stainless steel but also allied sectors. Our state of art Specialty Product Division (SPD) produces Blade Steel & Precision Strips for global customers. We also manufacture Coin Blanks for Indian as well as global Mints. These facilities have enabled us to move Indian industry up the value chain.

Way ahead of its time, nearly two decades ago, we pioneered India's first lifestyle stainless steel brand, Arttdinox. The intent was to marry aesthetics with functionality in stainless steel tableware, home décor, modular kitchens and much more. Since inception, we've been proactive in creating an ecosystem that facilitates adoption of this metal. We train fabricators and welders in material handling, we run an academic course on stainless steel in 11 eminent engineering, architecture and design colleges, and we operate stainless steel showcase vans across the country so people can see the vast potential of this metal.

Indian Railways is witness to innovation in stainless steel. From railway wagons and coaches to infrastructure, we have worked with government and railways for decades to modernize trends in commuter safety and hygiene. In a turf traditionally dominated by steel and aluminium, we launched India's first branded hot rolled stainless steel chequered sheet- Jindal Infinity.

We also launched a first of its kind co-branding program, Jindal Saathi, in 2019 with the aim to combat counterfeiting in stainless steel. This not only assured supply of authentic product to customers, but also set precedence for industry collaboration and MSME recognition.

Examples are galore where we have created new trends in the stainless steel industry. In my view, as the industry leader, it is our responsibility. In today's time, there's no such thing as a status quo. If one is not advancing, one is retreating. ■

LEVERAGE SUPPLY CHAIN FOR SIGNIFICANT BUSINESS GROWTH

Several studies suggest that businesses lose about 20% of their revenue on account of the unavailability products at the right time in the right place. To best the ever increasing competition and come out on top, getting the right product to the right place at the right time to the customer is the key. A responsive and flexible supply chain is crucial to achieve this objective.

A changing market scenario

There are several challenges in managing the supply chain to subordinate to the true goal of reaching customers at a reasonable cost. And in the post COVID pandemic world, supply chains have become even more complex. To achieve the single and ultimate objective of making the product available to customers within the limits of their tolerance, and there is also a need to manage suppliers in distant geographies with a wide network of production and distribution.

Top to Bottom Interface

If we are dealing with products that are sold as Make-To-Stock, the supply chain needs to ensure that products are always available at points of sale nearest to the customers. On the other hand for products that are Make-To-Order, the entire supply chain ecosystem needs to ensure that products are delivered with the minimum lead time possible. All of these additional specifications result in the creation of a vast management layer within the company from

DEEPANKAR SHREE GYAN
Co-Founder & CEO
Flowsmart Solutions Pvt Ltd

Top to Bottom, with several functions interacting with each other. Hence, managing this structure becomes paramount in order to achieve the ultimate objective.

Achilles' Heel of the Ecosystem

The outcome of multiple surveys within different layers of management is that managing such a complex structure is becoming an Achilles' Heel. This results in the employees stretching themselves to a degree that adds a constant stress to the ecosystem. There are inter-departmental conflicts and a lot of management time goes in resolving those. Most managers feel a lack of control and this feeling is, often, exacerbated as we go up the management structure.

Flowsmart Solutions

Through its unique product and services, FlowSmart, helps the organization analyse and understand the root cause of supply chain problems using the fundamental principles of TOC & LEAN. It then helps design an efficient system which gives the top management a visibility of key indicators and to others a system to align their tasks towards creating availability at a controlled working capital. Flowsmart also designs the levers for the top management through which it can effectively control the system e.g. – System-based indicators which directly reveal the level of availability/potential loss, indicators leading to On- time performance, indicators for when and where to add capacity.

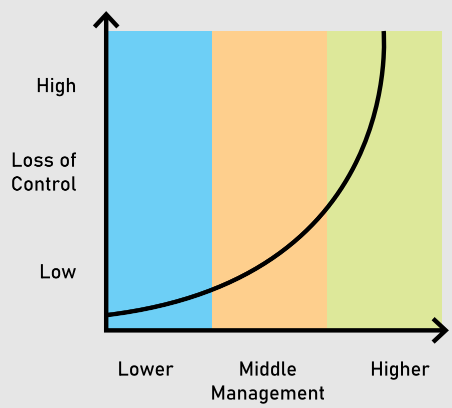
Synchronised Action Agenda

Ultimately, the organizations that are able to subordinate to the business objective of availability at a controlled working capital by aligning the everyday activities of the entire chain will be able to control a better market share in the foreseeable future. This requires a system designed to synchronize the actions of the entire chain, from Suppliers to Operations to Distribution, and a concerted effort from the stakeholders to change their way of working accordingly. ■

This is best explained by the diagram below–

The time and resources spent in managing the system and conflict resolution is constantly rising and high-level executives are often short of time and capacity to dedicate to future strategic initiatives. This chaos is reflected in the Supply chain, which then manifests itself in the following ways:

- Sales loss reported despite the system inventory being high.
- Complaints from Sales & Marketing of lead time to supply, despite the system having adequate capacity.
- Production loss due to RM unavailability, despite inventory and supplier delivery ratings being high.
- Delays in implementation of projects of strategic importance despite periodic reviews.
- And, when top management tries to understand the reasons for delays, they often get inundated with inter-departmental conflicts and infighting, resulting in further chaos.



SARTORIUS STEDIM INDIA PVT LTD

Sartorius Stedim Biotech is a leading international partner of the biopharmaceutical industry. Mr. Anthony Prakash, Managing Director – Sartorius Stedim India Pvt Ltd reveals how the company has established itself as a preferred choice for catering to the global clients over past 5 years. Sartorius Stedim India, he says, adopted the concept of "Made by Sartorius" in order to cater to its global clientele. The strategy focused on striving for continuous improvement in areas including Quality and Bio Process competence. This resulted in creation of Centres of Excellence across the different manufacturing sites of Sartorius worldwide. The company ensured that the entire supply chain became world class in manufacturing. A high level of quality was established by creating common state of the art quality standards, internal audits and regular exchange of Engineers across the different manufacturing sites.

He shares how Sartorius played a major role in supporting the fight against the Coronavirus pandemic and help patients in need of critical medication. Sartorius, he says, has worked with over 80% of the vaccine producers to enable faster delivery. During the pandemic, the firm quickly managed the increased demand by working together with IRIM in enhancing its processes and making them leaner and unlock higher capacity by reducing waste in the manufacturing processes.

As seen by him a key challenge has been in training the existing work force on the quality and delivery commitments. With the organisation growing it was also challenging to onboard new talent and inculcate the quality and delivery focus of the organisation

According to him the future holds growth opportunities for Sartorius in India. The company will be gearing up to meet the demand in the Indian and Asian market out of its manufacturing facility in Bangalore as well. The focus will be to constantly build capacities to meet the demand. Significant investments are being seen it will focus on shortening lead times using lean and TPM techniques. The focus also will be on using Critical Chain using CCPM (Critical Chain Project Management) techniques to increase output and ensure faster deliveries to the customer. ■

ANTHONY PRAKASH
Managing Director

VST TILLERS TRACTORS LTD

VST Tillers Tractors Ltd. is the largest manufacturer of Power Tillers 4WD Compact Tractors in India and is one of the fastest growing player in the Farm Mechanization segment. Mr. Antony Cherukara, CEO, shares how the company, as a market leader in this segment, sees its transformational journey ahead for the organization. "We have been able to achieve the success because of the strong product line that cater to the customer requirements in a holistic manner. Going ahead we intend to accelerate growth by being agile and fast in developing more products for the domestic and global markets as well as establishing Partnerships & JVs to expand our Horizon. We have also built strong capabilities inhouse to cater to the requirements of global players," he says.

Speaking about the key areas in which the role of building processes will help drive this transformational journey, he points out to the strong processes built by them towards three fundamental areas – Supply Chain Efficiency, Developing Fast Product Capabilities & Providing Customer Value. With the help of a thought process like TOC and tools like Flowsmart, he shares how the firm has been able to align its supply chain in a way that it allows it to operate at a Lower Inventory and still ensure superior availability of Raw Materials and Finished Products. This has been underpinned by the usage of new age digitization tools to ensure seamless integration of Product Development and Customer service with current operations.

In his view the key future areas of focus for the organization are embedded in the company's Pathway to Vision document which allows it to successfully implement the future strategy and establish tangible actions. This is enabled by Leadership & Culture transformation for Clarity of Direction & Transparency in the organization. This, he says, will allow the company to focus on its three critical areas, which are - becoming a Powerful Distribution House for Rural segment, Use of futuristic Technology in Products and Digitization of the processes for sustenance. ■

ANTONY CHERUKARA
CEO

JSW STEEL COATED PRODUCTS LTD

JSWSCPL is India's largest manufacturer and exporter of colour-coated steel products, and a wholly owned subsidiary of JSW Steel. Mr Sharad Mahendra, is CEO - JSWSCPL

■ In a growth-driven economy like India what comes first – Building Capacity or Generating Demand?

► The Indian growth story has largely been consumption-driven over the last three decades since economic liberalization, marking the emergence of a new Indian economy that transitioned from a supply-constrained to a demand-constrained one. India is the world's sixth largest economy and is slated to grow at fast clip in the coming decade with an ambitious target of becoming a $5 trillion economy by 2025.

The consumption story in India has multiple drivers. Firstly, there is emerging evidence of a revival in income growth. Rising income and expansion of the middle-income segment is likely to fuel future consumption growth. Secondly, India has a highly diverse population which has multiple requirements and needs. Further, with the rural-urban gap diminishing, consumption could get a further boost. Endorsing this is the fact that urbanization is increasing at a strong pace and India's urbanization rate is expected to improve to 40% by 2030. And finally, technology advancements are connecting people and businesses in multiple ways and enabling better information discovery and seamless transactions.

■ When it comes to successful manufacturing organizations like yours, what are more effective-quantum leaps of progress or continual improvement?

► After liberalization steel production in India grew from a level of 14 MnT to 120 MnT presently; the demand also expanded from a level of 15

SHARAD MAHENDRA
Chief Executive Officer

MnT to 105 MnT. Though the demand contracted at the time of pandemic it is likely to expand to achieve the target of 300 MnT capacity by 2030 & 500 MnT by 2047.

JSW Steel Ltd remains the core contributory to the Indian steel capacity. Our started from a 1.6 MnT capacity in the post liberalized era to the current 27 MnT, making the company the largest steel maker in India. During the journey JSW steel supplemented the vast variety of its steel products in the country's infrastructure development and manufacturing growth, and even now continues to be a major contributor as the Government has planned a massive investment of Rs 111 Lakh crore in infrastructure which is in the pipeline, as well as government focused schemes such as PM Gat Shakti, PMAY, Bharatmala Projects, Sagaramala Projects DFC & UDAN where there is requirement of around 150-200 million tons of steel. JSW steel is likely to add up capacity up to 42 MnT by 2030 and will contribute in excess of 20 percent of this ongoing infrastructure development program.

In line with the government's agenda for a massive investment in infrastructure development JSW has strategically acquired plants on the eastern part of the country to have presence in the eastern India with the aim of addressing the envisaged demand from the eastern region.

JSW has developed its product range according to the customer needs, particularly for the automotive and appliances sector; a large number of products have been approved by the major auto manufacturers and appliance manufacturer as well in the country.

JSW Steel has also helped in formulating the various policy issues along with Government of India and Ministry of Steel on matters such as quality control order, implementing AD/CVD duty, PLI Schemes; it has also been instrumental in FTA's signed with various countries like Japan, Korea, ASEAN, UAE & Australia.

JSW Steel is a front runner in developing sustainable steel in the country by reducing Co2 emission, reducing water usage and ensuring energy efficiency by adopting various technologies in house or with technological collaboration. JSW Steel was the first in the country to adopt corex technology that reduces the dependence on coking coal for which there is a lack in India and for which many companies are totally dependent on imports. JSW Steel continues to progress steadily and also invest in capacity building to supplement the rising demand in the country. ■

KALYANI STEELS LTD (KSL)

Kalyani Steels Limited (KSL) is one of the most modern integrated steel manufacturing units producing the best quality speciality steel long products, while ensuring employee safety and reducing impact on environment.

KSL caters to all the major alloy steel market segments like Automotive, Bearing, Defence, Aerospace, Railways, Energy, Seamless tube, Primary Aluminum smelting, Oil & Gas and mining etc. Dedicated towards supplying globally accepted quality products while maintaining highest service level, KSL is a preferred supplier to major OEMs across globe.

Under the leadership of Mr. R K Goyal as the Managing Director (MD) of the company, KSL has emerged as the most profitable engineering steel, debt free company having surplus free cash. KSL has received Secondary Steel Sector Award 2018, Emerging Steel Company of the Year 2017 award and Silver Certificate of Merit 2017.

■ If you must identify key learnings from surviving manufacturing operations through a global pandemic, what would they be?

► Indeed, global pandemic has affected our lives in many ways. And as it is said, never let any pandemic go in vain. There are quite a few important learnings through sailing the pandemic. Let me explain to you some of the learnings which we could identify.

Employee health and well being has always been at the centre of our organization and the pandemic just enhanced our focus on the same. I would say it is the most important learning on how to safeguard our employees from such black swan events and survive and continue our operations. So maintaining public and private hygiene, health and safety is core of our entire operations.

Second learning is virtual connectivity. The pandemic has taught us virtual communication is the need of the hour and future of the business operations. It has imbibed into us that non-contact method is also a path in surviving the operations.

Third, we could say, train our workforce to be able to take cross-functional areas. For e.g., only certain people are available at a particular point of time so they have to attend to almost everything so that we get output from our factory. So, even the production people did the maintenance job, some of the maintenance people did the purchasing job and vice versa.

Fourth is team building. I cannot emphasise more on this. At the end of a day, what matters is how we as a team are performing on ground. Hence, team building and team bonding exercises are critical for our survival.

■ Do you think India has adequate Research and Development infrastructure, technology, and engineering service providers to build world class downstream steel products? What more can be done?

► I would say India has enough potential for R&D, developing cutting-edge technologies, building futuristic infrastructure and all of these is supported by talented work age population. We are one of the favourite destinations of the world for start-up investments. India has created 88 unicorns so far and many more are in the process to be one. That is why I say there is great amount of potential in the country both in terms of talent and will power.

However, what we currently need is the amalgamations of all these potentials to have focused approach on developing some of the very niche and globally accepted products.

Secondly, let's talk from the steel industry perspective. For e.g., there are many steel grades which are imported by India and we can definitely develop these grades to manufacture them in India. However, currently we are lagging behind in cost competitiveness with respect to our global competitors. Currently, as per Niti Aayog report, steel manufacturers face cost disabilities to the extent of USD80-100 per metric ton due to power, logistics and financing costs etc.

So we need coordinated approach between government, private players, suppliers, customers and all other stakeholders so as to remove these disabilities. Improve our processes through adoption of modern technology, improve our product quality so that it is acceptable at global level, train our workforce to make them employable at all levels. ■

R K GOYAL
Managing Director

KRBL LTD

As India's first integrated rice company, KRBL Limited today operates primarily in the realm of manufacturing and marketing of rice products. Mr. Anil Kumar Mittal is the founder Chairman & Managing Director on the board of KRBL Limited

For an Agro-Product industry like yours, what do you foresee to be the top trends that that will impact your sector?

► What will immensely impact the Agro-Product industry will be – Technology, Sustainability, and Consumer Behaviour. The role of digitization and technology in the field of data, particularly in manufacturing, distribution, and consumer trends, and the structural trends of health, convenience, and value for money are changing the scenario for us every now and then. If I talk about invention and sustainability specifically in the field of Basmati, then definitely we would need to talk about creating smarter Basmati varieties that will change the ball game altogether. KRBL is working with agricultural scientists to create smarter Basmati varieties that'd require less water and can withstand pests and diseases. Such disease-resistant crops are healthier since they require little or nothing at all.

KRBL is also investing in developing machines that are more efficient and working on developing better milling techniques. Customers and the way they think with time have also evolved with us. Globally the customer wants to know where the product is coming from. Traceability is another thing agro-industry is becoming more cautious of. KRBL uses an app called SmartFarm, which is used to record which fields, each batch of rice is coming from. They have tied up with companies that have satellite coverage to monitor Basmati crops. At crucial stages of crop development, the company suggests interventions for farmers that results in a better crop.

These efforts mean that Basmati is equipped to meet the challenges of the 21st Century. Newer variants are robust enough for the changing global environment. Deployment of smart technology helps in meeting the demand of the more conscious, discerning consumer.

How are stakeholder expectations evolving in India and what impact do you see in your business?

► To build the spirit of partnership with our different stakeholders we've always gone an extra mile. Through co-operation and the living promise of a shared future, we co-create and optimize the abilities of our stakeholders – farmers, suppliers, dealers, distributors, and our employees. At each point of the value chain, with each stakeholder, we consistently build KRBL.

ANIL KUMAR MITTAL
Chairman & Managing Director

Our employees expect ethical work practices, safety, and motivating work opportunities and our farmers seek support from us in terms of technology and resources. By looking after the land and our growing farmer community and using resources wisely and by effectively blending our farmer's traditional knowledge with the technologies of today, we are trying to find a path to regenerate the environment and help our farmer community grow.

Customers expect us not to compromise on quality hence, their health. It's why we are working to accelerate the transition toward these healthy diets by encouraging better eating habits, adapting our product portfolio, and expanding our presence in the healthy food segment.

Investors expect operational transparency. We take a long-term approach to investment and are committed to increasing shareholders' value through sound commercial and responsible business decisions that deliver steady growth in earnings and dividends.

In your opinion how important is having advanced and competitive manufacturing facilities for business growth? What prerequisites would one ensure while developing one?

► The global manufacturing sector has undergone a tumultuous decade. Still, manufacturing remains critically important to both the developing and the advanced world. It continues to provide a pathway from subsistence agriculture to rising incomes and living standards hence is extremely important. In today's advanced economies, manufacturing promotes innovation, productivity, and trade more than growth and employment. Our extensive and high-quality state-of-the-art manufacturing capabilities are at the heart of what we do. We have one of the largest rice processing plants in the world, it helps us supply across our global markets. ■

CENTURY TEXTILES AND INDUSTRIES LTD (CTIL)

Birla Century is a Division of Century Textiles and Industries Limited (CTIL). CTIL was established in Mumbai in 1897. Birla Century is a leading textile manufacturing plant of India having the best machinery and cutting-edge technology to manufacture a wide range of premium textiles — from Bottom Weights & Suiting to Finer fabrics and Bed-Linen. This is the first fabric manufacturing company of India which received STeP certification from OEKO-TEX – Hohenstein Institute of Germany for sustainable manufacturing in 2016 while it received LEED - Gold v4 in 2017 as the first textile company of country.

Mr. R.K. Dalmia, President & Whole-time Director, while sharing his views on whether India has adequate technology and engineering service providers for developing and managing advanced manufacturing facilities, says:

"The textile industry in India is one of the oldest industries and considered as handicraft industry, has become now a highly sophisticated, scientific, and engineering activity of new types of fibres and technologies. Presently, textile industry is witnessing the uses of different latest technologies in its various stages of manufacturing from fibre production to fashion industry, e.g., technical textiles, Increased use of continuous processing, electronically equipped machines, web-based supply chain assurance, 3-D printing, artificial intelligence & digitalisation, adoption of business sustainability drive... etc confirm that sufficient support of technologies are there in every field of textile manufacturing"

R. K. DALMIA

Mr. Dalmia is, however, of the opinion that India needs to reduce dependence on other countries for certain machinery set up, Specific technologies and raw material availability. "We need to adopt new ways to sustain and thrive to present ourselves as global manufacturing hub. This is being executed through Make In India, Aatmanirbhar Bharat, Vocal for Local, indigenous innovations & technological endeavours, "he says.

Speaking of what key trends would dominate the manufacturing sector in the upcoming decade, he points out that over the last couple of years stakeholders have been keen to understand the company portfolio through ESG lens. Customers, for example, are now leaning towards buying sustainable products and investors are also more focused on ESG programs while investing in any company.

Industry 4.0 is serving as key driving force for textile industry towards improved usage of technology which will enhance product quality apart from improved productivity, lesser production time loss and boost safe working conditions. Technology adoption will be one of the key factors after ESG in upcoming decade.

Brands, he says, are focusing on sustainable supply chain. Entrepreneurship in India is unveiling its strength after recent government initiatives and Indian industries are presenting globally their uniqueness with more and more responsible and transparent supply chain. ■

BOROSIL INDIA

Borosil is India's leading glassware brand since 1962. Synonymous with heatproof glassware, it is the market leader for consumer glassware in India. Borosil is now evolving from a single product and single brand organization to a multi-product, multi brand, multi-channel and international consumer centric organization.

Managing Director, Mr Shreevar Kheruka, while sharing his views on perceived skill gap in India, he points out to the diverse sets of operations of Borosil group. These range from manufacturing to sales/marketing to R&D or B2B and B2C or from modern trade to e-commerce or from traditional finance and accounts to M&A etc. Hence, the competencies needed for Borosil are very diverse he says. To handle a high growth that is planned across the Borosil group, the firm is alive to the cause of reinforcing its workforce so that it is future-ready and can grow sustainably.

"We have developed an organogram considering the growth in the near future that helps us understand the requirements in terms of manning as well as skill sets," says Mr Kheruka.

Furthermore, Borosil's belief in the concept of Home-Grown Management is directing its focus on the existing talent to give them the best possible opportunities for learning and development.. Employees are also encouraged to identify their own training needs and pursue the relevant courses.

According to Mr Kheruka, some of the key learnings Borosil has acquired after having survived manufacturing operations through the pandemic, include:

- Ensuring well-being of employees- Physical and mental health
- Building a level of trust across the stakeholders
- Adoption of technology to improve the efficiencies and faster response
- Creating a hybrid work model
- Upskilling, cross-skilling, and professional development

"While these are some of the aspects that we learnt for the survival of our manufacturing operations, fundamentally what we have learnt is to be more humane and more resilient," Mr Kheruka says.

SHREEVAR KHERUKA
Managing Director

"A performance oriented culture with empowerment across the team eventually leads to a synchonisation with the company's vision and deliverables," he says in conclusion. ■

LARSEN & TOUBRO LTD

Larsen & Toubro is an Indian multinational engaged in engineering, procurement and construction projects, manufacturing, defence and services. L&T Defence is the largest private sector Defence firm in the country. Mr. J D Patil is a Whole-time Director and Senior Executive Vice President for L&T's Defence Business & New Age Smart Technology businesses and Member of the Board-L&T.

■ **Does India have adequate R&D infrastructure, technology, and engineering service providers to build world class downstream steel products?**

► Today, India has the strongest technical, scientific and engineering manpower and the infrastructure for R&D among developing nations. Economic liberalization and adoption of globalization, fostered innovation in the economy with technological dynamism in Indian Industry that compelled the Private Sector to develop indigenous competence by investing much more in R&D than they did earlier.

Today we have success stories galore; to name a few, Software / IT enabled Services Industry, Automotive, Pharmaceutical & Construction Industry, in which India is emerging as one of the global leaders. However, the manufacturing sector lagged in comparison to global average mainly by not capitalising on electronics manufacturing and chip manufacturing, although much of these are designed in India in R&D centres owned by global majors in the domain.

In the past few years India has been galloping in these domains having adopted Make-in-India followed by the vision of Atmanirbhar Bharat. Firmly rooted in these, India is now fast emerging as a global leader in Product & Technology Development and Engineering Services, driven by policies promoting increased spending on tech innovation and advanced industrial production. Today, India is one of the largest exporters of Product Engineering R&D Services in the world at a CAGR of 12% and becoming a product engineering hub; the Industry 4.0 manufacturing ecosystem is also poised to grow at an unprecedented rate.

Achieving Leadership in a world-class manufacturing ecosystem requires systemic emphasis to enable manufacturing competitiveness, promote higher resource allocation, structural changes in education aligned to enhancing practical and industrial exposure, promotion of technological entrepreneurship and shaping societal attitudes and values towards knowledge. Many industries including Larsen & Toubro have, over the years, continuously improved the manufacturing processes, quality and reliability of their products and are already exporting a multitude of steel equipment to all parts of the globe.

J D PATIL
Whole-time Director and
Sr. EVP, L&T's Defence & New Age
Smart Technology Businesses

■ **Much is spoken about the skill gap in our country; however, most organizations now find potential opportunities for improvement in employee welfare and development. How does your organization prepare its future workforce?**

► Organisations remain focussed on talent development to on-board and retain required skills, to attain best productivity. Government is also laying great emphasis to revolutionize our education system and also address future skill gaps, however, this would only deliver results in the longer run. The Government has institutionalised 'Skill India' through sectoral skill building councils including promoting corporate CSR initiatives for Skill training.

The Fourth Industrial Revolution (Ind 4.0), has brought in rapid integration of technological disruptions and digital transformation. These disruptions have compelled many businesses to ensure that their workforce is future ready.

Organisations are actively investing in employee welfare, training and development essential for the enterprise sustenance and growth. Filling the company's skill gaps through the upskilling and reskilling of employees has become a differentiator between thriving or barely surviving through any change. Today, organizations are continually supporting a culture of constant development to overcome challenges that may arise from rapidly changing environment. At Larsen & Toubro, we follow a very unique strategy in order to meet future skill requirements and make our workforce future ready. We hire fresh recruits straight from educational institutions where they undergo basic education and invest in their growth and learning as also build a unique culture of continuous learning. The organisation's ethos to stay ahead of technology curve and lead market innovations to maintain market leadership across businesses thrive on culture of continuous learning and ability to try newer ways. Recognising talent, celebrating performance achievements, and promoting employees to top management positions from within has always remained a priority at L&T. ■

GLENMARK PHARMACEUTICALS LTD

Glenmark Pharmaceuticals Ltd. is an innovation-driven global pharmaceutical company with a presence across Specialty, Generics and OTC businesses. Globally, Glenmark focuses on the following key therapy areas: respiratory, dermatology and oncology. The company has 10 world class manufacturing facilities spread across 4 continents and operations in over 80 countries.

Speaking about whether India has adequate technology and engineering service providers for developing and managing advanced manufacturing facilities Mr Glenn Saldahna, CMD, Glenmark Pharmaceuticals Ltd, feels that the country has adequate technology and engineering service providers for developing and managing advanced manufacturing facilities. Many of these service providers are indigenous, whereas, some are from overseas and have their presence in India in order to provide support to the Indian Industries. "This, together with the help of an enabling ecosystem, progressive government policies, and engagement of multiple industry stakeholders, is in the process of making India an innovation hub with world-class production facilities," he says.

Sharing his views on the impact of third-party evaluations such as the one conducted by IRIM on the evolution of the organization and business growth, he believes that "Third-party evaluations are a shot in the arm as they play a dual role in not only understanding the areas of improvement in our manufacturing technologies but also the current trends in the manufacturing sector." That said, he also believes that the Industry's third-party collaboration for infrastructure enhancement, incubation centres and industry-driven centres of excellence have enhanced the talent pool and identified projects which can be efficiently translated from the lab to the market. "Based on these assessments, we have been working towards making our manufacturing operations highly efficient and the best-in-class driven by automation, digitalization, and productivity improvement across the entire value chain. This also helps us in driving growth and remaining cost-competitive while providing world class products," he sums up. ■.

GLENN SALDANHA
Chairman & Managing Director

L&T VALVES

A wholly owned subsidiary of Larsen & Toubro, L&T Valves is a leader in flow-control solutions for the global energy sector.

Sharing his views on whether Building Capacity or Generating Demand comes first in a growth-driven economy like India, Mr S Kalyanaraman, Chief Executive and Director of L&T Valves, points out how manufacturing capacity utilisation has been hovering around 70% since the pandemic. He believes there is an urgent need to revitalise the manufacturing sector which contributes around 15% to India's GDP. "Creating a sustainable demand using innovative strategies should be the top priority at the moment," he opines.

L&T Valves adopts a multi-prong strategy of market expansion and product extension, supported by new product development and manufacturing excellence he points out. "We made inroads into the Americas, enhanced our cryogenic portfolio for LNG valves and our on-time delivery performance is at an industry-leading 85%. Our Aftermarket initiative taps into the deferred demand for maintenance, repairs and overhauls and is a major success," he elaborates.

S KALYANARAMAN
Chief Executive and Director

L&T Valves, he shares, is celebrating its diamond jubilee and its heritage as well as its future are in focus. "We believe a sustainable future is an inclusive future. We not only invest in technologies of the future we also inspire development in the communities around us through CSR programmes," he says. Also, to ensure that the demand is sustainable, there is an urgent need to address the working capital requirements of the MSME sector, he adds.

Speaking about the key trends that would dominate the manufacturing sector in the next decade Mr Kalyanaraman says that exports will not be just an option, but an imperative for survival and growth. "I think it is high time the Indian manufacturing sector followed the footsteps of the IT and ITES sectors and tapped the huge market for engineered solutions. The segment offers good margins and business-friendly commercial terms – and the current geo-political situation augurs well for India," he says. He points out that 50% of L&T Valves revenue comes from overseas markets, and product differentiation, customer service and ESG compliance are factors that have helped them in the international arena. ■

LUPIN LTD

Lupin is an innovation-led transnational pharmaceutical company headquartered in Mumbai, India. The Company develops and commercializes a wide range of branded and generic formulations, biotechnology products, and APIs in over 100 markets in the U.S., India, South Africa, and across the Asia Pacific (APAC), Latin America (LATAM), Europe, and Middle-East regions. The Company enjoys a leadership position in the cardiovascular, anti-diabetic, and respiratory segments and has a significant presence in the anti-infective, gastro-intestinal (GI), central nervous system (CNS), and women's health areas.

■ In your opinion how important is having Advanced and competitive manufacturing facilities for business growth?

► Our position as a fully integrated pharmaceutical company is built on the backbone of world-class manufacturing facilities, leading-edge research and technology, Integrated Intermediate/API and Formulation operations, high cost efficiency, global scale operations and a globally nimble supply chain. These building blocks help us meet the most pressing demands in healthcare.

Manufacturing high-quality medicines for the world: Our manufacturing facilities continue to be our greatest assets. Our manufacturing philosophy is strategic yet simple: we drive continuous improvement and innovation to manufacture affordable and high-quality drugs, enhancing healthcare in over 100 countries, while ensuring the safety and health of our employees. With a global footprint of 15 manufacturing sites spread across India, the United States, Brazil, and Mexico, our manufacturing operations are at the core of our business, helping us realize our purpose to be an innovation-led, pharmaceutical major.

Keen eye on cost optimization and competency index of manufacturing: Cost reduction in the generic industry is imperative given the constant price erosion. In today's constantly evolving pharma industry landscape, our focus continues towards strengthening our manufacturing competencies to improve efficiency and productivity while adhering to the highest standards of quality. This enables us to continue delivering affordable and superior quality products worldwide. In addition, strategic investments to increase automation has reduced incidences of defects and helped us maintain a competitive edge in manufacturing.

Digital embedded in manufacturing: Organizations can leverage digital tools to increase productivity and lower costs across the entire value chain. It is imperative to ideate and implement an elaborate digital road map straddling manufacturing, quality, supply chain, and R&D as this will help in developing new value propositions to boost effectiveness and efficiency across the organization. Digital innovation and technologies need to be embraced for the development of deeper channel partners and customer insights. This can usher in an era of continuous monitoring of returns from both capital and revenue expenditure. Organizations must also strive for excellence in the areas of Risk Management, Safety, and Sustainability at their manufacturing sites.

RAJENDRA CHUNODKAR
President – Manufacturing Operations

■ What advice do you have for your industry peers in building a Leadership Team that is receptive to change in operational environments?

► **People are at the heart of our purpose:** People are central to an organization's growth and success. People policies, processes, systems, and technology should be benchmarked with the best across industries to provide employees with an inclusive and diverse working environment. All of this contributes toward delivering a superior employee experience. Through such efforts, organizations can strive to attract, nurture, and retain talent, which in turn contributes toward creating value for their stakeholders.

Programs such as ADAPT, Inspire, Quality First, Six Sigma, Elite and Ignite conducted at our manufacturing and research sites ensure that we are aligned with and implementing the current best practices in manufacturing operations. In addition, programs like the Lupin Senior Leadership Development Program aim to enhance the managerial capabilities for mid-level managers through psychometric assessments and profiling tools and Action Learning Projects, among others.

COVID-19 has dramatically changed the way we work and reset priorities for almost all employees. Organizations and managers must both be willing to adapt to changing times to ensure employee satisfaction and in turn employee productivity. Across markets, the workforce has also become multigenerational. Effective multigenerational management must be engraved into the firm's culture and policies.

■ What impact do third-party evaluations such as the one conducted by IRIM have on the evolution of your organization and business growth?

There are multiple dimensions to define a company's stature in a competitive manufacturing environment. Operational effectiveness is at the top of the priority list. The Manufacturing Competitiveness Index (MCI) is a scale to define a company's ability to leverage manufacturing toward better market performance. This rating is achieved through a structured assessment of the manufacturing facility.

We strive for excellence in our manufacturing operations and we deploy the highest standards of Risk Management, Safety, and Sustainability at our sites. Certifications received after an independent and rigorous audit by an external third party are a validation of our efforts. We are very humbled to be receiving this award. ■

MAHINDRA & MAHINDRA LTD

HEMANT SIKKA
President - Farm Equipment Sector

A lot is spoken about the skill gap in our country; however, most organizations now find potential opportunities for improvement in employee welfare and development. How does your organization prepare its future workforce?

► Skill Development is an industrial responsiblity that prepares workforce, moulding them for industrial requirements, while supporting their employability.

Powered by our brand purpose of Transform Farming & Enrich Lives, we at Mahindra FES (Farm Equipment Sector) ensure that our employees are fully equipped through a holistic development plan, allowing them to understand their priorities, while rediscovering and better understanding their potential, to align their behaviours and be better prepared at the highest level consistently, under the most challenging conditions in pursuit of valued goals.

Through this we at Mahindra FES provide our workforce with two types of trainings

1) Skilled based functional training, which makes our workforce capable of delivering on their responsibilities & perform their duties on the shop floor

2) Behavioural training, which orients our workforce to adapt to an industrial environment, also build a positive framework for an employees' future and career growth.

On the functional side, we start with basic dexterity training, which teaches employees to work in the right way, through ergonomic & fatigue free training. An on-the-job training method, which is specific to core functional areas, to develop a 7QC (Quality Control) mindset.

On the behavioural side, we focus on creating a positive mindset towards industry and society at large focusing mainly on personal development, through a 'Mindset Transformation' program called **'Nayi Soch - Naya Drishtikon'.** The program entails a constructive approach towards resolving issues, to create a highly productive workplace. The programs construct involves modules related to market situations, customer expectations, competition scenario and how workmen can positively contribute towards constant improvement, cost reduction and skill development.

We have also initiated a higher education program in partnership with engineering institutes at Rudrapur, Nagpur, and Zaheerabad with a course duration of 2 years for permanent workmen. This is with an objective of creating a future ready workforce. This year we have covered 60 workmen under this program, who upon completion will receive a Diploma Certificate in Operations.

As we aspire to greater levels of diversity and inclusion, we at **Mahindra FES have also undertaken the Mahindra Groups Diversity Council & Structured Hiring Programs**. We are committed to attracting and recruiting gender diverse talent through positive communication and deeper engagement channels. We have also instituted a Structured Returnees Program to enable women who have taken career breaks to re-join the workforce. The hydraulic cell at our Nagpur facility is completely operated by a team of women.

When it comes to successful manufacturing organizations like yours, what are more effective – quantum leaps of progress or continual improvement.

► We at Mahindra FES believe in **continuous improvement of manufacturing processes, with Kaizen** as part of our culture.

We are the first tractor company in the world to win the 'TPM Advanced Special Award' at a business level, with our TPM journey enabling us to develop robust systems over the years.

Our focus on Digitization is providing tangible benefits, which directly helps our customers, with our supply chain connected right from ordering of raw material, to delivering tractors to our customers. Our **in-house developed Manufacturing Execution Systems (MES)** acts as an enabler to schedule and manage a variety of models and parts on common lines.

Further to this our philosophy is to improve manufacturing capacities. We believe capacity in hand helps us deliver customer requirements at the right time, while also giving our supply chain function the agility and flexibility to fulfill ever changing demand trends, managing variety, inventory and throughput time, for special products as the Indian tractor market evolves, and as we cater to newer global markets and requirements. This has also proved to be a big step in managing customer expectations around customization.

As an organization we have always believed in collective wisdom of all our employees, to create significant change. Schemes like Akraman, Mahindra Innovation Awards etc. ensures participation from all our employees for continual improvement at Mahindra Farm Equipment Sector. ■

MANKIND PHARMA LTD

Delhi-based Mankind Pharma Limited is India's 4th largest pharmaceutical company, whose operations cover industrial sectors in the domain of pharmaceuticals, medical research and laboratories. COO Arjun Juneja has helped to transform the firm from being a family-led set up to a professionally run company.

■ If you must identify key learnings from surviving manufacturing operations through a global pandemic, what would they be?

▶ The Indian Pharmaceutical industry may have historically been seen as being slow to respond to changing times and enjoying margins in business. However, during the pandemic, pharmaceutical operations leaders have rallied to enable the supply of key medicines across borders, manage workforce safety, and handle developing government restrictions all while preparing for new vaccines and key therapies. Most big pharma companies, including Mankind, have put crisis-response command centres (Digital Supply chain Control Towers) in place to appropriately manage and bring stability to an otherwise unstable time. In Mankind, we have an intense focus on Risk Management across supply chain and networks. We are further accelerating initiatives that will bring more agility, as workforces become more remote and distributed—and transparency through greater deployment of digital and analytics tools and automation. We have developed an in-house technical talent pool to troubleshoot equipment failures, as external expertise was limited during the pandemic. Most importantly, we have re-engineered our business processes during the peak Covid period and built risk mitigation and contingency strategies around it. We are also migrating quickly on descriptive business statics to prescriptive solutions across demand and supply planning with real-time visibility to act faster. Above all Mankind was thriving on growth trajectory even during pandemic because of our all efforts to transform from a linear to a circular transparent supply chain.

ARJUN JUNEJA
Chief Operating Officer

■ Much has been spoken about the skill gap in our country; however, most organizations now find potential opportunities for improvement in employee welfare and development. How does your organization prepare its future workforce?

▶ There was always an imbalance between talent supply and demand in Indian pharmaceutical businesses. COVID-19 has changed not only how people work but also how they shop and eat, as well as basic patterns of movement and travel. The pandemic is setting up what could be lasting employment-landscape shifts that could require the large-scale reskilling of new workers. Businesses are required to re-engineer and redesign their Learning & Development polices and efforts by bringing more flexibility on various modes of learning. Mankind Pharma has piloted on augmented reality based training solutions on manufacturing operations and field force.

We have redesigned our talent strategy that develops employees' critical digital and cognitive capabilities, their social and emotional skills, and their adaptability and resilience. Mankind has a continuous approach towards employee Learning and Welfare. Fostering such an environment and mind-set not only builds skills but also strengthens creativity and innovation among the employees.

■ What role does product innovation play in the growth strategy of your organization?

▶ Pharma is one sector where product innovation has a dramatic impact on the health and wellness of both millions of people and the bottom lines of companies that provide it. Mankind Pharma believes in progressive innovation for the benefit of patients and healthcare system. Since last year, we have launched Drug Master File (DMF) grade Active Pharmaceutical Ingredients (API) for various marketed products, which is an innovative, futuristic approach to provide the best in class quality to the patients. Several drugs are in various stages of drug development at our R & D centre for diverse disorders. Mankind also realized the feat of becoming the first Indian company to launch Dydrogesterone for various progesterone deficiency disorders in females.

Our growth strategy is intended to match the pace of product innovation that patients want and investors expect an approach which many other industry partners struggle to both define and execute. ■

CENTURY RAYON

(Under the Management & Operation of Grasim Industries Ltd)

Mr Om Prakash Chitlange, CEO, Century Rayon, while sharing his views on the success of manufacturing organizations believes that the continual improvement and quantum leaps of progress – both complement each other for a successful manufacturing organization. The continuous improvement, he says, keeps up the operational efficiencies and helps in remaining cost effective and is also very important in terms of keeping the team agile, always in sync with customer needs and global benchmarks. Citing some examples he shares how they had upgraded coning machines, IT-enabled operations, processes like Kaizen, suggestion schemes, etc. enhancing safety and sustainability measures as continuous improvement initiatives. "Catering to customer expectation is another area where continual improvement is the norm. Areas like new product development in line with global benchmarks and application development in tandem with ever-changing fashion demand are a regular feature. This creates the foundation stone for Quantum Leaps of progress, where the

OM PRAKASH CHITLANGE
CEO

focus is futuristic and to remain ahead of time by absorbing newer technologies and giving a breakthrough direction to the business," he says.

Elaborating further he says this is achieved through the culture of innovation that allows a business to reap the first mover advantages in new market penetration, patented technologies etc. "Such quantum leaps in our business came through diversifying to CSY and SSY technologies, phase wise expansions, Working on Lyocell technology for future as a sustainable technology," he points out.

Speaking about the impact on stakeholders about India's ever-evolving growth, directs attention to how what took a decade to change 50 years back, now gets altered in maybe 10 months. Be it geo-political perspectives, ideologies, business scenario, customer behaviour and preferences, technology, all aspects are ever evolving. "All products, service and solution providers are in a constant attempt to cater to this shifting population and demand and be ahead in the race. This manifests itself as multiple options for the stakeholders. India is no exception – the expectation of investors, employees, customers, community and regulators all growing. Innovation with speed and Agility are thus becoming increasingly important. In particular, for the fashion yarn business, this is most observed, by virtue of being in an industry known for fast paced changes," he says. ■

INDOFIL INDUSTRIES LTD

Established as a manufacturing and marketing company for Agrochemicals and Specialty Chemicals, Indofil Industries Ltd is one of the world's leading Mancozeb producers and provides millions of farmers worldwide with crop solutions to enhance yield productivity and crop health.

The Chief Operating Officer Mr. Narendra Rane, one of the key architects in building Indofil's footprint not only in India but globally as well, speaks about his key learnings regarding survival of manufacturing operations through a global pandemic. In his view: "Irrespective of how the pandemic unfolded, it was crucial for us to understand that the value chain should be sustainable both ways—upstream and downstream—to deliver to the need of the hour. This essentially boils down to getting the basics right—keeping people safe and healthy, operating the plants efficiently (which includes a detailed plan to ensure availability of raw materials and packaging materials), and managing multi-vendor logistics, along with a strong cash-focus."

Furthermore, he feels that belonging to the essential commodity segment meant having the highest level of adaptability engrained within the company. "And adaptability is surely a no-winner

NARENDRA RANE
Chief Operating Officer

without agility, "he aptly says.

Another learning, he elaborates, was to engage deeply and regularly with the company's internal as well as external customers. "We followed our People-First philosophy. Concocting creative methods such as digital engagements with the suppliers, work force and debunking customer apprehensions with never-seen-before solutions that made us emerge out of this situation with remarkable outcomes," he says.

Elucidating further on these issues he says, "While we are at an interesting phase of progression in chemical manufacturing with overall production as well as exports trending upward despite the challenges that the pandemic brought, we have worked hard to de-risk supplies considering the massive disruptions that happened in China."

His advice for the industry peers, regarding building a Leadership team which is receptive to change in operational environments, is that the next decade thrives clearly on sustainability for the chemical companies. From a more long-term perspective, the Leadership teams need to stay agile yet aspirational in plans; this he feels may be a game-changer mantra for the industry. "We foresee a huge first-mover advantage in this aspect," he concludes. ■

PAGE INDUSTRIES LTD

Page Industries is the exclusive licensee of JOCKEY International Inc. (USA) for manufacture, distribution and marketing of the JOCKEY® brand in India, Sri Lanka, Bangladesh, Nepal, Oman, Qatar, Maldives, Bhutan and UAE. Page Industries is also the exclusive licensee of Speedo International Ltd. for the manufacture, marketing and distribution of the Speedo brand in India. VS Ganesh is the CEO and Executive Director at Page Industries, with which he has been associated for around seven years.

As a market leader, what responsibility do you think an organization holds in creating product trends that drive the growth and evolution of the industry?

► All market leaders have the responsibility to further the industry in all aspects–product, policies, infrastructure, culture, sustainability, etc. Unless you do that, you may not remain a market leader for long. Every market leader finds themselves in a position of looking forward in order to stay ahead rather than behind or by the side at competition.

Being a brand that operates in the essential apparel space, we see and lead product trends a little differently. For us, product trends stem from the consumer and his or her needs. Understanding the consumer and addressing his or her needs helps us lead trends in our products. As an organization, we constantly strive towards this through consumer immersion, design, research, development and technology. Across the globe, we enjoy long-term relationships with partners that work closely with us in this area.

V S GANESH
CEO and Executive Director

Much is spoken about the skill gap in our country; however, most organizations now find potential opportunities for improvement in employee welfare and development. How does your organization prepare its future workforce?

► As an organisation, employee welfare has been at the heart of what we do right since our inception. From basic amenities like food, safety, hygiene and sanitation, we've come a long way to include life skills, crèche facilities, and mental and physical health as part of the overall employee development initiatives. Today, while employee welfare and development is a given at Page we strive to better ourselves to ensure the best quality of life for employees at all levels.

When it comes to skill building, training, learning and development, we take a systemic approach to address capabilities at all levels–organisational, functional (departmental) and individual. This includes formal training in association with the best technical institutes in the country, on-the-job training and multi-skilling, through job rotations and transfers, and leadership mentoring and coaching through internal and external experts. We recruit and induct trainees every year across management, engineering, sales and retail, finance and HR to provide for a healthy talent pool within the organisation. Our focused approach towards succession planning across all levels of the organization keeps us future ready.

What are the key trends that would dominate the manufacturing sector in the coming decade?

► The manufacturing sector has seen a significant evolution in the past decade with specific challenges post-pandemic preparing us to be a lot more proactive and agile. For a labour intensive manufacturing sector such as ours, we believe the next decade will be defined by our ability to be self-sustainable. This will include strategic partnerships with key associates across the supply chain, process automation through technology in critical functions, embracing and furthering ESG, and training and skill building across the manufacturing ecosystem. ■

PARLE PRODUCTS PVT LTD

Parle has been a household name in India for over 90 years, and one of India's leading companies manufacturing biscuits, confectioneries, savory snacks and popular brands like Parle G. The company has a 50% market share and has global footprint in 150 countries. As fourth generation businessman, Arup Chauhan, Managing Director (MD) of Parle Products Pvt Ltd, continues to passionately steward the family-owned business as an MNC and a global leader.

■ Is the Indian market receptive to products developed from advanced concepts of food science to cater to a health-conscious and excitement-seeking Gen-Z?

Today, Indians, a majority of them, are growing health conscious. If I talk about the current trend, given the lifestyle, and the lifestyle diseases, more Indians are choosing to seek healthier options. Of course there are tradeoffs involved in terms of taste and health. But to our mind if you can balance that, if you can give a good tasty product which is also healthy, consumers would not mind lapping it up.

We have started seeing an early trend of consumers moving towards low sugar, sugar free, or lower fat, less fat or sodium kind of products almost about 3-4 years back. Of late we also started seeing a trend of products which are either vegan or gluten free. Health, more than ever before, is becoming a key priority as far as food is concerned.

■ In your opinion, for business growth, how important is having an advanced and competitive manufacturing facility?

Very important. If we are talking about a higher level of incremental innovation or disruptive innovation the only thing that can do that is technology. Because of the low level of technology that is being used for most food categories, we see a lot of players coming in with growth of a particular category and commoditization of multiple brands and products happening. So unless you don't come up with varieties which have technology involved in it, which can create some kind of an entry barrier for smaller players, regional players it would be difficult for any big company to compete.

■ For an agro-product industry like yours, what do you foresee to be the top trends that might highly impact your sector?

One of them is using active ingredients in products to take care of your health issues. So if you are a diabetic, you will have a product which will help you in overcoming it or controlling it. While you might be consuming it as a snack or a food but it actually is kind of a medicine you are taking and taking care of your ailment. Clean labels - consumers want to know what's going in to their product or their brand which they are consuming. They would not like to see complex ingredients, they would like to see very basic, not highly processed, close to nature kind of things going in to it. The third trend is consuming local produce in terms of local variety. We saw a big trend in the West of super foods. In India also we are seeing that trend. In India it has been modified. The consumers are moving towards our very one jowar, bajra, ragi which we had almost forgotten.

■ How are stakeholders (such as investors, employees, customers, community, regulators) expectations evolving in India? And what impact do you see in your business?

Stakeholders' expectations have not changed. While consumers as stakeholders, expect you to be transparent, honest in terms of what you are offering them, offering them at the right price, right quality, with the right ingredients, they also expect you to do something beyond that in terms of what's your purpose or is it just a commercial thing you are into. Especially the Gen Z is very keen on knowing if they buy a particular brand, what does it stand for. When I talk about the purpose-led marketing or purpose-driven brands, the buck doesn't stop there. When you stand for a particular purpose or a philosophy, you have to walk the talk, you have to be seen acting accordingly. ■

PRINCE PIPES AND FITTINGS LTD

Prince Pipes and Fittings Ltd is one of India's largest integrated piping solutions and multi polymer manufacturers. Mr Parag Chheda is the Joint Managing Director

PARAG CHHEDA
Joint Managing Director

As a market leader what responsibility do you think an organization holds in creating product trends that drive the growth and evolution of the industry?

► The journey of Prince Pipes over the last 35 years has been the most exciting having started from being a modest manufacturing unit to becoming one of India's largest integrated piping solutions and multi-polymer manufacturers with seven strategically located facilities across India. Along with the growth of Prince Pipes, the evolution of the industry too continues to be significant, even as there's substantial potential to be tapped, and a lot that needs to be done keeping customer value and the larger ecosystem in mind. Some key product trends we believe that will dominate industry growth are: Focus on sustainability and wellness; Quality of pipes and fittings with the growing desire to own a house; Ease of installation and maintenance in built environments; Innovation, keeping customer value at the core; Battle to own relationships, and Digitalization, particularly across the manufacturing and marketing value chain.

What advice do you have for your industry peers in building a Leadership team that is receptive to change in operational environments?

► That change is the only constant – remains undisputed. Over the past two years, Prince Pipes has been able to navigate the environment well and we reported robust organisational and financial performance amidst the pandemic situation. I personally believe that our good old beliefs and guiding principles in building Trust, Resilience, Agility and a Passion to Excel – all oriented towards higher value creation and applied in the new current context – will continue to steer leadership teams and bring greater adaptability to any change.

In the coming years, what transformation do you foresee to be in the manufacturing of Building Materials in India? Also, what roles would organizations such as yours will play in this?

► CRISIL Research forecasts that the Indian pipes and fittings industry is expected to reach Rs.500-550 billion by FY 24, growing at a CAGR of 12-14%. This speaks for the industry potential and the transformation it is set to undergo with higher growth. More facts speak about the work that needs to be done: 600 million Indians face high to extreme stress over water, 75% of households do not have drinking water on premises and other issues of access to piped water and water contamination – all this needs to be addressed.

The government has already set the ball rolling through various schemes like the Har Ghar Nal Se Jal initiative. Several areas in the realm of manufacturing are witnessing great transformation in the building materials industry, which is also being implemented by Prince Pipes. From procurement of raw materials, to ensuring sustainable manufacturing facilities, rainwater harvesting, and until distribution, all resources are used with the aim of building greater efficiencies, better quality as well as valuing our larger communities and the environment. As a responsible manufacturer we are also in the process of taking steps towards better life cycle environmental impacts of plastic pipes.

Over three decades, Prince Pipes has built deep knowledge and competitive advantage of handling multiple polymers, transitioning beyond PVC pipes. Today, our journey has evolved into a larger mission of creating innovations in Plumbing, Irrigation, Storage, and Sewerage Technologies to meet India's growing Water Management needs. ■

LUMINOUS POWER TECHNOLOGIES PVT LTD

Luminous Power Technologies is a powerful brand offering a wide range of innovative products in the power backup, home electrical and residential solar space that covers Inverters Batteries, Solar solutions to home electrical's offerings such as Fans, Modular Switches and LED lighting.

Mr Vipul Sabharwal, Managing Director, Luminous Power Technologies sharing his viewpoint on what impact third-party evaluations such as the one conducted by IRIM have on the evolution of the organization and business growth says: "The Luminous growth trajectory is a manifestation of its manufacturing excellence drive...embracing industry best practices for continual business growth. Third-party evaluation by competent organizations like IRIM entails faith on the organization's excellence drive and corroborates sustainable competitiveness in the domestic, as well as the international arena. We are thankful to IRIM for providing competitive benchmarking on business excellence across different industries, leaders in their respective fields, and providing insight for strengthening our manufacturing excellence drive to next level."

Commenting on the importance of having advanced and competitive manufacturing facilities for business growth he opines that: "In today's 'vuca' world manufacturing competitiveness is a must for any company's sustainable business growth. Successful supply chains are more agile, digitized, well versed with artificial intelligence and machine learning for capturing exact customer's need. Products are continuously upgraded to install more customer confidence as well as relevance in application. Smart manufacturing facilities must deploy low cost automation for better productivity and defect free products, keeping ahead of competition. Luminous is deploying industry 4.0 in its manufacturing facilities to make it smart and more responsive to meet ever-changing customer demand." ■

VIPUL SABHARWAL
Managing Director

NUVOCO VISTAS CORP LTD

Nuvoco Vistas Corp. Ltd., is the fifth-largest cement group in India and the leading cement player in East India, in terms of capacity, with a consolidated capacity of 23.8 MMTPA.

Managing Director of Nuvoco, Mr. Jayakumar Krishnaswamy who is responsible for Nuvoco Vistas Corp. Ltd and its wholly-owned subsidiary NU Vista Ltd, while speaking about what comes first–Building Capacity or Generating Demand, in relation to a growth-driven economy like India, observes that the resurgence of COVID-19 pandemic has put India at a crossroads.

"The repercussions are visible across the economy and have laid a widening gap affecting the growth," he says. Expanding further on this he believes that in the pyramid of growth, the end consumer holds impetus. "The most important thing is the understanding that you need both parameters–building capacity and generating demand that eventually leads to growth. Remedial measures for reviving the Indian economy should be focused on policies aimed at demand factors," he elucidates.

While the government focuses on boosting the private sector ecosystem, Mr Krishnaswamy feels it is also important to understand that lower and middle-income groups drive consumption. "Hence, to operate in a growth drive economy, ensuring that the income reaches the hands of the lower and middle incomes groups will lead to consumption-driven growth. This in turn will boost capacity building and demand generation," he says.

JAYAKUMAR KRISHNASWAMY
Managing Director

While commenting on how important it is on having advanced and competitive manufacturing facilities for business growth, he shares: "We define advanced manufacturing technologies as a set of highly flexible, data-enabled, cost-efficient and sustainable manufacturing processes. These tools offer a wide range of benefits that, collectively, could redefine the economics of manufacturing competitiveness in several industries."

He is also of the opinion that advanced manufacturing technologies too can boost innovation, by allowing manufacturers to create new product portfolios using advanced systems and new-age production techniques. They also enable manufacturers to produce customized high-quality goods to meet customers' specifications and standards. These processes could be a foundation for a sustainable ecosystem as they often consume lesser resources thus enabling overall business growth. ■

STL

Helming the affairs at STL, Ankit Agarwal, Managing Director is set to make the company the most customer-driven tech leader in the world and position it at the heart of 5G innovation. An industry-leading integrator of digital networks, providing All-in 5G solutions, STL has capabilities across, optical networking, wireless connectivity , software, and services, placing it among the top 5G RAN vendors by Gartner. STL partners with servic providers globally in achieving a green and sustainable digital future in alignment with UN SDG goals. The company has strong presence in India, Italy, UK, US, and Brazil.

Does India have adequate technology and engineering service providers for developing and managing advanced manufacturing facilities?

► Manufacturing has emerged as one of India's fastest-growing industries and has the potential to contribute to the global economy of more than US$ 500 billion by 2030. The country is gearing itself for the arrival of Industry 4.0, which will be fuelled by cutting-edge technology like the Internet of Things, AI, and robotics. It is heartening to see that over 40% of the world's Global In-house Centers (GICs) are in India and the country is the 7th largest patent filing office in the world as per WIPO.

However, talent is going to play a crucial role here. When we consider our resource pool, it is critical to remember that, while we produce several million high-quality engineers each year, they are not all engaged in high-tech production. If they are placed in the right places, it will result in higher quality products and increased efficiencies. That's the whole thought process and it's tied to how we can get a head start on things like Industry 4.0.

What are key trends that would dominate the manufacturing sector in the upcoming decade?

► I'd begin with the very first level. It stems from a mindset and attitude that India and Indian corporates can compete on a global scale and sell high-quality goods. The fact that you believe in yourself is significant. That is the conviction that we have instilled throughout STL and the Vedanta Group.

The second thing is, if you look at global benchmarks, we find 5-10 percent of revenue spent on R&D in our industry, whereas in India, it is often less than 1-2 percent. That is also something that revolves a little bit around the idea of whether you truly want to develop world-class products, compete on technology, or compete on price. Yes, being cost-competitive is crucial, but

ANKIT AGARWAL
Managing Director

solving our clients' pain points with innovation and technology is far more vital. That, I believe, is a critical shift, and IP is intertwined with it.

To date, most manufacturing in India has focused on overcoming scale-up problems by simply adding more people to the equation. There are numerous advantages to adopting automation and big data analytics to solve for large-scale manufacturing implementation and scaling up. Training and skill development are also becoming increasingly important. It's a fantastic chance for us to reposition Indian manufacturing quality while also showcasing our own unique flair.

Thirdly, in terms of skill development and training, I believe that much more collaboration is required between industries and schools, because those skillsets, particularly in these new-age fields of big data analytics using python or LOOP or other data linked platforms, have become extremely important to create efficiencies and operations. Diversifying the workforce to make businesses more resilient to labor shortages and tackle future challenges is also key. Through several initiatives such as Digital India, Make in India, and Skill India, the Government is also promoting radical digitalization to foster economic inclusion and social transformation.

In a growth-driven economy like India what comes first – Building Capacity or Generating Demand?

► I believe it is critical to approach the business from the perspective of what are the long-term customer problems that we are trying to solve and how can we do it better than everyone else. However, you must link it very closely to the skillsets you bring to the table, and from the manufacturing side it cannot simply be based on having some cost arbitrage.

You must keep innovating and be very closely linked to your customers. Customer experience is starting to become the most important element of growth, and on the back of that, you can scale up your capacities, because if you work on building that reputation, instead of chasing customers, customers will chase you.

At STL we are actively building our own IP and have over 700 patents that protect innovative technologies and drive the company's offerings across the globe including to Europe, US, and India.

We have established four state-of-the-art innovation centres that have enhanced the company's capabilities in providing solutions across the network stack to support 5G rollouts. These include the Optical Fibre Center of Excellence in Aurangabad, Cable Design Lab in Silvassa, Center of Smarter Networks in Gurgaon and STL Lab Cloud in Ahmedabad. These innovation centres are manned by hundreds of engineers from disciplines such as photonics, material science, radio network and software among others.

In India all our manufacturing sites are zero waste to landfill. We are the first globally to achieve this by certification from Intertek. We have taken some very aggressive targets on being net zero by 2030. ■

BHARAT ALUMINIUM COMPANY LTD (BALCO)

BALCO was the first Public Sector Undertaking (PSU) in India. The strategic acquisition of BALCO in 2001 by Sterlite Industry, a Vedanta Group company, led to a turnaround of an unprecedented scale and BALCO became one of India's greatest privatisation success stories.

ABHIJIT PATI
CEO & Whole-Time Director

Sharing his thoughts on whether Building Capacity or Generating Demand comes first in a growth-driven economy like India, Mr Abhijit Pati Chief Executive Officer & Whole Time Director, Balco, says that while India has emerged as the fastest-growing major economy in the world, it is expected to be one of the top three economic powers in the world over the next 10-15 years, backed by its robust democracy and strong partnerships. "Therefore, we need to re-examine, reinvent, re-imagine and re-double our efforts to build capacity. Having said that, requisite measures are the need of the hour for generating demand, as aluminium is the metal of the future and the country's per capita aluminium consumption is a meagre 2.2 kg against the world average of up to 25 kg," he says. BALCO, Mr Pati points out is dedicated to exploring this enormous scope of the 'Metal of Future' to enhance the aluminium usage in India.

While commenting on what a successful manufacturing organization like BALCO finds more effective- quantum leaps of progress or continual improvement, he shares that: "One of the strong foundational values of BALCO is that of excellence and we are committed to pursuing the path of excellence in all our operational manoeuvres. With the strong purpose of giving back to society and creating value for all our stakeholders, we endeavour to build a world-class organization, driven by our emphasis on best-in-class HSE and sustainability paradigm, People practices, top-quartile performance, digitalization, robust governance, and compliance."

Furthermore, he adds, to realize this vision, continual improvement is essential to institutionalize and define global best practices in the present age of fast-changing technologies and techniques. It is the process of continual improvement that brings forth the lacunas and fosters quantum leaps of the progress of any organization.■

TITAN COMPANY LTD - EYECARE DIVISION

TITAN EYE+ is the third major venture of consumer business by Titan Company Limited.

Sharing his views on the importance of having advanced and competitive manufacturing facilities for business growth Subrata Kumar Bhadra, Chief Manufacturing Officer, Eyecare Division of Titan, opines that to achieve this one has to understand the company's purposes and values. Companies, he says, have to be sure of what products or services they are offering to their customer community. The next step, according to him, is how the company values get reflected by their way of offering the product or services. Companies need to constantly work for innovation. They also need to provide differentiation from the offerings of competitors in terms of value for money, as also in the as the uniqueness of the products or services. Manufacturing facilities, he says, also have to be aligned with that front-end requirement for a sustainable business.

Putting the spotlight on what responsibility an organization has as a market leader in creating product trends that drive growth and evolution of the industry, Mr. Bhadra says: "As a market leader one has to connect with their customers on a long term basis and understand their latent needs. It is nothing but co-creation with their customers and brings ultimate evolution to their products or services within a stipulated time frame."

Speaking about some of the key learnings from surviving manufacturing operations through a global pandemic, he points out to how fast the pandemic swept from one end to another end of the globe, not once but multiple times, and how it was a time for everyone to retrospect and realign priorities as a way forward. "Maintaining healthy community living is the priority now. We should engage ourselves in reducing, reusing, and recycles of our daily wastes. We all have to work for sustainable business and environment so that our future generation can have a comfortable living," says Mr Bhadra. ■

SUBRATA KUMAR BHADRA
Chief Manufacturing Officer

SUBROS LTD

Established in 1985 Subros Limited is a joint venture between the Suri Group, Denso Corporation Japan, and Suzuki Motor Corporation Japan. The company is engaged in the design and manufacturing of thermal products across a wide range of segments. Ms. Shradha Suri Marwah serves as the Chairperson & Managing Director of Subros Ltd.

■ When it comes to successful manufacturing organizations like yours, what is more effective- quantum leaps of progress or continual improvement?

► It was twenty years ago that Subros began its own lean journey, a path that not only improved manufacturing processes but also shifted the entire culture of the company. Subros is committed to continuous improvement. We believe, "perfection is a never ending journey." In this pursuit, Subros consistently strives to improve products, services, systems, and processes. We do this by utilising technological advancement in the most efficient way to make products of the highest standard.

Change is an evident internal phenomenon at Subros. The pursuit for change powered by a self-driven spirit to improve overall business processes is our goal. The result of these improvements has enabled Subros to unearth its full potential on the path to becoming a reputed, world-class manufacturer.

There are many best-in-class manufacturing practises e.g. Monuzukri, TL Round, MSSe, and QA network. These are proven business models which help an organisation improve employee motivation while participating in company transformation. Our continuous connect with our workforce through top down as well as, bottom up, communication has created an open culture in the company for transparency.

As part of our corporate philosophy, customer-centricity is the key focus of the organisation. This enables us to appreciate customer requirements and act on that understanding by creating an ecosystem to make, in parallel, the best decisions for the customer and the company. Customer-centricity done right results in our customers trusting they will not only get what they want, but also what they need from our company. These experiences build a trust that helps retain customers for the long haul.

SHRADHA SURI MARWAH
Chairperson & Managing Director

■ If you were to identify key learnings from surviving manufacturing operations through a global pandemic, what would they be?

► As the COVID-19 pandemic unravelled across the globe, manufacturing organisations faced significant operational challenges. The most critical focus for us was to keep employees safe in an environment where repeated outbreaks were a persistent threat. To achieve this, Subros has deployed a comprehensive set of policies and guidelines, standard operating procedures, and tools that help keep employees safe. Building workforce confidence through an effective, two-way communication that responds to employees' concerns through flexible adaptation is primary for our work environment.

Manage risks to ensure business continuity is another core focus area. The ability to anticipate potential changes and model the way the plant should react well ahead of the fluctuations helps enable rapid, fact-based actions.

The coronavirus crisis has dramatically increased risk for every business, with many experiencing shocks in both supply and demand. This was further permeated by volatility in input costs and logistics. Manufacturing plants like ours are the epicentre of that uncertainty. Their continued operation through the crisis and beyond depends largely on the organisation's ability to navigate the wider risks.

We learnt that for the longer term, the organisation's response to COVID-19 should accelerate the digital transformation that is already under way in many manufacturing environments. For teams working remotely or under physical-distancing guidelines, real-time data collection and advanced-analytics technologies can provide a more detailed, accurate, and up-to-date picture of plant operations.

Cash management was most important lesson learned during this crisis. We need to be agile and flexible as per the situation and align to ensure business continuity. Austerity measures and prudent financial management are some of the learnings we have also imbibed. ■

TATA STEEL LTD – GLOBAL WIRES INDIA

A division of Tata Steel Ltd, Global Wires India (GWI) is one of the largest steel wire manufacturers in the world

In your organizational strategy of having a competitive basket of products, how pivotal are international markets and its expectations?

▶ The long term strategy of Global Wires India is to have a strong presence in the Automotive and Infrastructure segments, with a wide variety of product offerings in both domestic as well as international markets.

- In the Automotive segment, we have two key sub-segments
  - o Tyres: Currently we offer Tyre Bead Wire for Structural integrity in Radial Tyres; this offering is in line with international standards and customer expectations, which have a global presence.
  - o Automotive Suspension Spring: We offer various Spring Wires which are used by 2-wheelers, passenger cars and commercial vehicles. All these are used in the domestic market and are exported as well. Hence, Spring Wire requirements are also in line with international specs and requirements
- In the Infrastructure segment we offer LRPC Wires – Low Relaxation Pre-Stressed Concrete Wires, which are extensively used for high span architecture. 15% of the volume is exported to various countries in the Middle East. The quality, specification and the service expectation are of extreme importance to serve the international market.

ANURAG PANDEY
Executive In-charge

Do you think India has adequate R&D infrastructure, technology, and engineering service providers to build world class downstream steel products? What more can be done?

▶ For many years, R&D for steel industry in India has been focused upon upstream processes like steelmaking, casting and rolling. With the expected increase in India's finished steel consumption, from the current level of 100 million tons to 230 million tons by 2030-2031, the drive towards offering more value-added products is on the rise. This shift in momentum would demand focusing on downstream process pertaining to specific large-scale consumption sectors (e.g. automobiles) and other sectors of value chain where steel goods get distributed through the retail network for developing more efficient applications.

The steel industry as a whole is affected by the cyclicity in the business and it is important to develop more application of steel in a variety of user industries to reduce this impact. Exploring various applications, where steel could be an alternative, and at the same time ensuring the end customer needs are being met, would be imperative in future. Some high potential ideas could be:

- Developing steels of high strength to weight ratio for infrastructure and consumer durables
- Material and design focus for urban utility
- Steel composites which can replace plastics etc. ■

TATA CONSUMER PRODUCTS LTD

A fast-moving consumer goods company operating in the food and beverages industry, Tata Consumer Products is a part of the Tata Group. Mr. Sukhjeet Singh Malhotra is the Sr. Vice President- Head, Product Supply Organisation

SUKHJEET SINGH MALHOTRA
Sr. Vice President - Head, Product Supply Organisation

What have been the key learnings from surviving manufacturing operations through a global pandemic?

▶ Tata Consumer Products was formed with the vision to become a formidable player in the FMCG industry. This transformation journey began during the pandemic. Despite the challenges posed, we were able to make good progress and build a strong foundation for future growth.

Running Manufacturing Operations efficiently is key to ensuring we deliver our business goals effectively and deliver quality products to our consumers. While the pandemic was certainly a tough phase and posed several new challenges, it was also an opportunity to think innovatively and work together as a team to emerge stronger.

Agility came to the forefront leading us to adopt decentralization of authority, enabling decision making based on the locally prevailing environment. As part of our ethos of doing good we continued to contribute to the local community. Self-driven initiatives came to the forefront and most of our production sites were back in production within 48hrs of the declaration of the Lock-down. The Collaborative approach of the local Government authorities, Vendors, Partners, Employees and Associates was a game changer for us during the entire period. At a time, when we were driving operations remotely, due to travel restrictions, a majority of our Units achieved record levels of production demonstrating commitment of our on ground teams.

Partnering with existing and new vendors, utilizing their capacity and capability for alternatives in packaging materials was executed effectively. Our management teams on ground leveraged their support to ensure that they also commenced operations in their respective plants, thereby maintaining the continuity of our inward Supply chain.

We were empathetic in our approach and were able to reassure and help the workforce through welfare activities, vaccination drives and facilitating a safe working environment for all employees and associates across locations. All this was possible due to the fact our Unit Managers were leading from the front and were working alongside the deployed workforce.

For upskilling and keeping up with the changed circumstances and business scenarios, a specially curated e-learning platform was deployed which was very well received and used by employees across the organization.

The pandemic brought to the forefront the importance of Digitalization and Automation. Numerous projects were fast tracked for implementation to make sure we were future ready in all aspects.

A robust Risk Mapping and Business Continuity Plan also helped us steer through temporary disruptions by activating predefined backup plans wherever necessary.

The most important aspect of driving business continuity and growth through the pandemic was employees, partners and stakeholders' engagement, an outcome of long-term strategic initiatives of doing business in an ethical and sustainable manner, caring for our workforce and the communities we work for.

To efficiently serve the customers over a larger landscape like India, what are key differentiating factors towards building resilient supply chains?

▶ High customer focus, agility towards the changing market requirement, business network, building and sustaining relationships across the network, driving efficiency in cost and process, focus on quality, reducing lead times, vendor partnering, caring for our employees and workforce, protecting the environment we work and live in, elimination of waste and cost optimization, focus on digitization/ automation and having a robust risk mapping and business continuity plan are the fundamentals that help in building a resilient supply chain.

We also believe that the following are the key factors towards building a resilient supply chain:

→ **Customer Focus.**
→ **Developing Capability.**
→ **Optimizing Cash, Cost & Quality.**
→ **OH&S along with Sustainability.**
→ **Digital Integration**

MICRO LABS LTD

Micro Labs Limited is a multi-faceted healthcare organization with a proficient marketing team, state-of-the-art manufacturing facilities, and R&D centres on par with international standards.

PRAKASH MUDDA
President

Mr Prakash Mudda, President, Corporate Projects & Operations, Micro Lab Ltd, reflecting on the key learnings from surviving manufacturing operations through a global pandemic shares how "Lockdowns, social distancing, movement restrictions were tackled with utmost diligence especially for team workers in the essential category at all the manufacturing sites," he says. Furthermore, what was a great blessing for its operation is that online digital tools of communication allowed connecting with other departments working remotely like RA, QA facilitating flow of information and ongoing activities without any hurdles.

Elaborating further, he shares how the role of digitization was maximised during this phase and utilised to its best and full capacity, not only in the manufacturing arena but also the inter and intra departments within the organisation. The aim was to provide the much needed quality medicines during pandemic to the patients within the stipulated timelines at a fast pace and also to support the ongoing medicines for lifestyle diseases to patient with co-morbidities. This was achieved through the hybrid mode of engaging various teams as needed and on time.

"The faith and belief in our teams is the best tool and fuel that allows us to attain the uncommon results which were the backbone of our success during the pandemic. The key learning from the pandemic situation was social consciences taught to us by our founder Shri G.C. Surana, that 'the health of society is as important as individual health and we should work with empathy to serve the society', which again proved to be the key to success in pharmaceutical business and the quick adoption of digital technology to improve operational efficiency in terms of cost, timelines and compliance," he says.

Sharing his viewpoint on how third party evaluations such as the one conducted by IRIM on the evolution of Micro Lab and its business growth, Mr Mudda says: " It brings recognition to the strength and motivates further the stakeholders and team to excel beyond the expectations." ■

MUNITIONS INDIA LTD (MIL)

A Defence Public Sector Enterprise under Ministry of Defence, Government of India, MIL has 12 manufacturing units spread across five states and is the biggest manufacturer and market leader in Production, Testing, and Marketing of comprehensive range of ammunition and explosives for the Army, Navy, Air Force and Para Military Forces in India

Mr Ravi Kant Chairman & Managing Director of Munitions India Ltd speaking about the key trends that would dominate the manufacturing sector in the upcoming decades shares that: "In the field of manufacturing industries like Arms and Ammunition the market is governed by the Geo Political Scenario and the customer needs drive the Technological Trends. This creates both limitations as well as opportunities for manufacturing sector. A better understanding of one's own strength and strategic partnerships between the manufacturers at global level would result in optimization of resources and cost effective solutions to the customer."

Elaborating further he feels that managing talent needs to be viewed in the perspective planning of the organization. He says, employees should be equipped with the right tools, which should enable them to maximize their potential. The continual improvement in the organization can only be achieved by enhancement of scope and opportunities for the development of human resources.

Manufacturing Industries will have to focus primarily on continuously improving the quality which will help in establishing a responsive brand in the global market, he says,

Furthermore, he says, Industry 4.0 is forcing manufacturing industries to rethink their digital journey. Failures in critical machinery are always a challenge for manufacturing industries as it leads to downtime and loss of productivity. With IoT, there is an entire new area of predictive maintenance that manufacturing industries can tap and reduce the failure, during manufacturing process.

Amongst the key learnings from surviving manufacturing operations through a global pandemic, he shares how the manufacturing industry faced lot of challenges and how it

RAVI KANT
Chairman & Managing Director

prompted many manufacturers to change / modify the supply chain and logistics by diversifying / sourcing by adapting and establishing new networks of local supplier base. Automation, IoT & Industry 4.0, he believes, can help businesses of all sizes anticipate and respond more effectively to adapt to new realities. ■

TATA MOTORS LTD

Part of the USD 109 billion Tata Group, Tata Motors Limited, a USD 34 billion organization, is a leading global automobile manufacturer of cars, utility vehicles, pick-ups, trucks and buses, offering extensive range of integrated, smart and e-mobility solutions. Tata Motors is India's market leader in commercial vehicles and amongst the top three in the passenger vehicles market. Girish Wagh is the Executive Director, Tata Motors Ltd. and a member of the Executive Committee.

A lot is spoken about the skill gap in our country; however, most organisations now find potential opportunities for improvement in employee welfare and development. How does your organisation prepare its future workforce?

► The automotive industry is undergoing a rapid change, be it in terms of emission norms, CESS (Connected, Electric, Safe, Shared) capabilities or customer preferences. It is imperative to adapt the capabilities and capacities of the organisation's workforce in order to keep pace with the changing market landscape. This includes continuous evolving of HR strategy, both in the way we recruit and in the way we develop the workforce, at large. At Tata Motors Commercial Vehicles Business Unit, we have identified core competencies of today and required skillsets of tomorrow, in line with changing landscape. We have thus embarked on development journeys for our workforce and created curriculums with certification programs. Tata Motors has robust processes for learning and development needs, throughout the employees' lifecycle, which are aimed to create a high-performance culture and improve employee experience and engagement. Tata Motors has also entered into long-term partnerships with various educational institutions, which help us in upskilling our workforce in a periodic manner. Our focus has been in two broad categories in terms of employee development:

1. Building awareness of the future and ongoing disruptions
2. Building capabilities around the new-age skills to enable our employees to drive organizational change

We will continue to put in significant efforts on employee development and welfare.

What advice do you have for your industry peers in building a Leadership Team that is receptive to change in operational environments?

► In the post-pandemic world, with multiple disruptions, the traditional priorities are changing; agility and flexibility in operations have emerged as top strategic priorities. Therefore, being receptive to the dynamic environment is a question of existence, rather than a choice. Every organization needs to build capabilities to form leadership teams that can help it thrive in a rapidly changing landscape.

> *Tata Motors has robust processes for learning and development needs, throughout the employees' lifecycle, which are aimed to create a high-performance culture and improve employee experience and engagement. Tata Motors has also entered into long-term partnerships with various educational institutions, which help us in upskilling our workforce in a periodic manner.*

To build this capability, one of the ways could be to embrace the below three approaches:

1. Communicate the context consistently; it enables appreciation and sensitivity
2. Co-create the solutions and make leaders part of the solution; it enables commitment
3. Eliminate the fear of failure, which will enable leaders to take risks; it enables risk-taking ability.

GIRISH WAGH
Executive Director

When it comes to successful manufacturing organizations like yours, what are more effective- quantum leaps of progress or continual improvement?

► Organisations, today, need to continue to focus on the here and now and future. The competitive scenario demands focus on both incremental as well as breakthrough improvements, to stay ahead in the marketplace. Hence our focus has been on both continuous improvement and quantum leaps. In our pursuit of manufacturing excellence, we at Tata Motors, have adopted Total Quality Management principles, wherein we use Plan-Do-Check-Act cycles for quantum leaps of progress and Standardize-Do-Check-Act with Daily Work Management for continual progress. The amalgamation of both approaches ensures that the improvements are in sync with the pace of the aspirations of the organisation, and they are sustained and holistically deployed. ■

UFLEX LTD

The UFlex Group has interests in end-to-end flexible packaging solutions including Pouches, Tube & Bag for packaging, Bi-axially Oriented Packaging Films, Chemicals, Packaging and Converting Machines, Rotogravure Printing Cylinders, Aseptic Liquid Packaging and Holography. UFlex is India's largest flexible packaging company and a global leader in polymer sciences. Mr. Ashok Chaturvedi is a visionary first generation entrepreneur and founder CMD of the UFlex Group.

What advice do you have for your industry peers in building Leadership Teams that are receptive to change in operational environments?

► The world over, enterprises display a wide degree of deviation in their operational environment, evidenced by conventional ways of command-and-control. Today, we live in a world in which any organization's offerings and performance is a reflection of its leadership style.

In my opinion, leadership is the key that helps organizations navigate through operational challenges to attain excellence, which in turn streamlines its activities to paint the bigger picture in the long run.

As a high-performing enterprise, UFlex imbibes a culture of inclusive engagement in a collaborative leadership style. We work towards building a culture by first identifying the spill-offs that may seem negligible but have a direct impact on the overall performance. Once we list the loose ends, we collaborate to form high targets which we divide into smaller goals and engage cross-functional teams that can best meet the defined objectives and plan its seamless execution in a monitored set-up.

Operational excellence must not be confused with trimming of resources; rather, management teams should consider amplifying them to improve and achieve more. And to achieve that, clarity of thought, coupled with a thorough SWOT analysis, lends a big hand for not only clear understanding, but also assigning a sense of ownership of the tasks to which the workforce is assigned.

When it comes to successful manufacturing organizations like yours, what are more effective–quantum leaps of progress or continual improvement?

► At UFlex, continual improvement is guided by our two-way approach that guides us to learn from outside and adapt that learning into our systems. In our quest to strive for excellence, we ensure understanding of the pain points of our customers, which we consider as the first step in our view of value-addition.

Our effective strategy is a result of our focus to divide larger goals into bite-sized multiple goals, deploy small cross-functional teams that help augment productivity via identified technical upgradation, and also by enhancing plant speed and capability to achieve higher productivity. It is due to this approach that UFlex has emerged as the Gold Medalist in the National Awards for Manufacturing Competitiveness (NAMC) 2021, which is organized by the International Research Institute for Manufacturing (IRIM). IRIM's survey evaluated UFlex' facility and strategic approach on 10 parameters that zeroed in on customer focus, production strategy, data analysis, learning and involvement of personnel. UFlex has also qualified meritoriously with an average score of 87.2. ■

ASHOK CHATURVEDI
Founder & CMD

DIAGEO INDIA

Diageo India is the country's leading beverage alcohol company and a subsidiary of global leader Diageo PLC. The company manufactures, sells and distributes an outstanding portfolio of premium brands such as Johnnie Walker, Black Dog, Black & White, VAT 69, Antiquity, Signature, Royal Challenge, McDowell's No1, Smirnoff and Captain Morgan. Headquartered in Bengaluru, our wide footprint is supported by a committed team of over 3300 employees, 49 manufacturing facilities across states and union territories in India, a strong distribution network and a state-of-the-art Technical Centre. Ms. Hina Nagarajan is the Managing Director and Chief Executive Officer of Diageo India, and a member of Diageo's global Executive Committee.

■ **For a consumer-driven business like yours, what are the key learnings from a Pandemic that has disrupted Global Supply Chains?**

► CPG companies have witnessed huge disruptions in their supply chain including massive demand shifts, volatile supply, logistics delays, and limited visibility on E2E supply chain as an outcome of COVID-19.

During the pandemic, demand has shifted from one channel to another based on COVID regulations and consumer purchasing behaviour. In our industry, we saw a big consumption shift to in-home, and a purchase shift from on-trade to off-trade. To deal with this shift, we moved to an agile supply chain – shutting and opening manufacturing locations in a matter of few days, ensuring exceptional levels of health and safety for our workers and repurposing human resources where they were most needed. Throughout the pandemic Diageo India's priority was to support our customers and their businesses. Our teams collectively focused on how to maximize each day and ensure the supply chain is aligned to this objective.

The pandemic has dialled up the need for more digitization to sense demand more accurately, plan resources in a more agile manner and manage inventory in a robust manner. This is why we have embarked on our Supply Transformation 2.0 journey so that we can not only retain all the agility we have built but can progress it further. Also, while productivity and everyday efficiency is embedded in our DNA, the disruptions in Supply Chain and consequent inflation have reinforced the need to drive even more efficiency through our Value Chain and effectiveness of our spends. We have invested in a number of tools like Catalyst for our Marketing Spend to help us do this.

HINA NAGARAJAN
Managing Director & CEO

■ **When it comes to successful manufacturing organizations like yours, what are more effective - quantum leaps of progress or continual improvement?**

► For a consumer-driven organisation to be successful, it is very important to be flexible in adapting changes in market dynamics and consumer behaviour. We have seen unprecedented changes in consumer behaviour and purchasing habits during the COVID-19 outbreak. The pandemic has reshaped the industry real-time, rapidly accelerating long-term underlying trends in the space. To thrive in this changing landscape, organisations must continuously evolve their business models in an agile manner to support competitive differentiators and define technologies needed to support consumer-centric processes and become more insight-led and responsive. This can be done by being an early adopter to new strategies and technologies to fulfil the changing consumer dynamics and adjusting to the 'new normal'.

We must have an appetite for risk to take quantum leaps of progress by rethinking network strategies, footprint and partnership models, etc. to create a more resilient and flexible E2E value chain and reinvigorating factory-of-the-future efforts in our manufacturing facilities. However, only bringing in big changes will not help the organisation succeed in the long run, as change also has to be embedded, sustained and ready for the next evolution. Thus, continuous improvement is critical in bringing that cultural shift, sustaining the success and retaining agility for the next change. ■

SUZLON ENERGY LTD

The Suzlon Group is one of the leading renewable energy solutions providers in the world with a presence in 17 countries. Mr. Vinod Tanti, Chief Operating Officer, has been associated with Suzlon from its inception and has handled diverse portfolios, largely on a Conceive - Design - Build - Operate and Transfer model.

VINOD TANTI
Chief Operating Officer

Speaking about the key trends that will mark the manufacturing sector in the coming decade Mr Vinod Tanti observes that trends will be largely driven by technology advancement, digitization and innovation, where one would witness advanced technology such as augmented reality and virtual reality being used in every sphere of life. Bringing new innovative products / solutions into the market on a regular basis will be the key to survival. "Companies need to invest heavily in technology to offer better quality product at a lower cost to consumers to stay competitive and have an edge in the market place," he says.

An area of growing concern in the light of upcoming geo-political tension will be supply chain disruption. Every manufacturing organization, he believes, needs to address advanced management tools, adequate data and information management, operations monitoring on real time basis, innovative ways for transportation / delivery, continuous search for alternate material and sources. Enhanced performance to save time and energy, and subsequently meet the demand with continuous output, will result in growth for all.

ESG aspects too are now crucial to companies, their investors and other stakeholders. Social well-being of people and a healthier eco-system have become some of the major responsibilities that companies should address. An ESG strategy will be an imperative to prevent regulatory or reputational risks and also enhance market position. Norms under ESG will become non-negotiable and essential enablers for manufacturing, he says.

Talent Management is going to be another key focus area. Mr Vinod Tanti opines that retention of employees will be a key challenge to manufacturing sectors as an outcome of global players entering the Indian market and offering great opportunities to talented employees.

Commenting on the key learnings from surviving manufacturing operations through a global pandemic Mr Tanti shares: " We should build an agile and responsive organization with good HR practices to address the needs of employees in speedily and effectively, which in turn will enhance trust among employees to support each other in challenging times." ■

RELIANCE POWER LTD

Reliance Power Limited is a part of the Reliance Group, one of India's largest business houses. Its energy sector companies include Reliance Infrastructure and Reliance Power. Mr. K Raja Gopal is Director of Reliance Power Ltd

■ How are stakeholder expectations evolving in India? And what impact do you see in your business?

The primary requirement of any stakeholder is affordable and reliable access to electricity, which is the key element for the growth of any sector. Having achieved sufficient capacity building, stakeholders are now looking towards the transition to green energy, which is being encouraged by Govt through various PLI schemes.

The power sector is now in a decade of transition and transformation. Pursuing net-zero emissions and deep decarbonization are key targets for the mid-21st century which will require necessary support from all stakeholders via., enabling policy framework, global capital, private-sector transformation, regulatory certainty, necessary infrastructure, skilled manpower, etc.,

K RAJAGOPAL
Director

We are working towards bringing efficiencies in our thermal and renewable portfolio apart from working towards debt reduction and compliance with revised emission norms. Nevertheless, thermal generation will continue to play a pivotal role in the power sector supporting renewable generation while meeting the required demand of consumers.

■ Does India have adequate technology and engineering service providers for developing and managing advanced manufacturing facilities?

We have adequate technology and engineering service providers across major sectors. However, MSMEs, the key players in the manufacturing domain with a contribution of over 45% towards manufacturing output and exports are not well equipped with emerging technologies. Pandemic has mandated, rather forced many users to adopt new/emerging technologies, and very soon our country will enhance/upgrade its capabilities.

In a growth-driven economy like India what comes first – Building Capacity or Generating Demand.

Building capacity would be required for achieving the target GDP. However, both building capacity and generating demand are interdependent, as building capacity would increase the number of new opportunities (including MSMEs, employment, etc) which in turn shall develop purchasing power leading to the creation of new demand and capacity addition to meet the enhanced requirement. ■

WELSPUN CORP LTD

The flagship company of the Welspun Group, Welspun Corp Ltd., is among the largest welded line pipe manufacturing companies in the world. Mr. Vipul Mathur is the MD & CEO of Welspun Corp Ltd.

■ Does export to global markets continue to be a focus area in your growth plans? What effect do the disruptions caused by the pandemic have on the same?

► WCL's manufacturing network, spread across multiple international geographies, has helped us in taking massive strides and positioning ourselves optimally for an imminent market recovery. Short- term growth prospects in India, the Middle East, and Southeast Asian markets are lucrative, while other markets like the US are expected to make an adequate recovery in the medium term. WCL remains perfectly poised for a thriving future while setting new benchmarks of excellence.

The pandemic waves have brought on a sense of responsibility among organizations and employees alike to urgently action sustainable practices and build a future-proof world. Welspun Group's collective aim is to increase the use of renewable energy, promote zero waste in landfills, and water neutrality.

VIPUL MATHUR, Managing Director & CEO

■ In a growth-driven economy like India what comes first – Building Capacity or Generating Demand?

► Capacity building is integral to capitalizing on the growth that will be fuelled by repressed consumer demand and ensuring that it remains on an upward trajectory in the long run, while demand generation is essential to the much-needed economic revitalization after a tough couple of years. This is an opportunity we have been targeting at WCL over the last two decades to build a future-ready organization, giving an impetus to expand our presence across India through our facilities located in Anjar, Dahej, Bhopal, and Mandya.

We have a goal to build on our market leadership and product distinction by developing capabilities that reflect manufacturing and operational excellence, customer-centrism, financial prudence, and innovation. Our recent entry into the DI Pipes segment is basis the anticipation of a huge demand increase in support of the government's belief in drinking water initiatives, namely, Nal Se Jal.

Our foray into the TMT bars segment saw fruition owing to the GOI's infrastructure development plan, through which we are now gearing up to expand our company portfolio in both B2B and B2C domains. WSSL's products like Stainless Steel tubes and pipes are used in critical applications across sectors including Energy, Defence, Nuclear Power, Aerospace, Oil & Gas, Petrochemicals, Food, Fertilizers, Pharma, and Desalination, among others. These products have a high demand potential on account of the thrust on localization in India to support local businesses and meet the government's Atmanirbhar Bharat dream.

■ How important is having advanced and competitive manufacturing facilities for business growth? What are prerequisites one should ensure while developing one?

► WCL is among the largest welded line pipe manufacturing companies globally. Keeping up with our promise to deliver impeccable quality, our state-of-the-art facilities for DI Pipes, TMT, and other businesses will continue to follow our philosophy of building top-notch products.

Advanced manufacturing facilities are imperative to growth because they form the basis of everything from quality assurance, economies of scale, and inventory management, working along with production efficiency, throughput, and waste minimization. These factors don't merely impact your business processes and supply lines, but also your cost, pricing, and bottom line. Change can only be made if it becomes a part of the organizational DNA through adequate management support, which includes automation and increased efficiency in the age of Industry 4.0. Developing a competitive and advanced manufacturing facility is a complicated activity, hence requires a nuanced approach depending on wide-ranging variables, including constant upskilling of our workforce to better utilize their competencies. ■

HINDUSTAN ZINC LTD

A Vedanta Group Company, Hindustan Zinc Ltd. is one of the world's largest and India's only integrated producer of Zinc-Lead and Silver. Mr. Arun Misra is the CEO and Whole Time Director Hindustan Zinc Ltd.

ARUN MISRA
CEO and Whole Time Director

■ In a growth-driven economy like India what comes first – Building Capacity or Generating Demand?

► You build capacities to generate demand. If we focus only on generating demand then, as per the law of demand and supply, it would eventually lead to inflation. The strategy works more wisely if we can anticipate the future trends that will lead to demand and then build up the inventory. It is a beneficial offering optimized cost, better quality and efficient production.

■ What are the key trends that would dominate the manufacturing sector in the coming decade?

► The manufacturing industry is the backbone of any nation's GDP, and for India, it always had the potential of becoming an engine for economic growth and job creation. However, for us, it took COVID-19 to realize that the manufacturing industry can revive the economy making India self-sufficient by utilizing its strong industrial network, plenty of natural resources and dynamic workforce.

While creating endless opportunities that this industry offers leading to socio-economic development, it is imperative to also strive for running operations sustainably. It is generally seen that companies which are more committed to environmental, social and governance (ESG) continue to outperform and deliver better results. In India, the sector is gradually adopting lean and green practices to make a positive impact.

Furthermore, the sector is undergoing a paradigm shift with strong focus on sustainable practices with technological transformation and innovation. With automation, several companies are reducing costs, limiting waste generation and minimizing climate impact. Also, through artificial intelligence, machine learning and augmented reality, the industries are enhancing their accuracy, precision and safety of the processes. Leveraging renewable energy is also one of the best ways to run more sustainable operations. It requires one time investment, is environment friendly and contributes to a 'Green' economy. ■

SHREE CEMENTS LTD

The world of Shree Cement is one without boundaries – changing and challenging every day. They make cement and through it, they touch the lives of millions of people every day. From the house you live in, the roads you drive on, to the bridges you cross, they strive to deliver unparalleled quality through their customized products and value-added solutions.

Mr. P.N. Chhangani, Whole Time Director of Shree Cements Ltd, is of the opinion that technology & digitization will shape the manufacturing of building materials in India in the coming years. This, he says, will be evident in all spheres—be it in resource & energy consumption, predictive maintenance, product optimization, supply-chain, customer connectivity, etc.

As Mr. Chhangani sees it, technologies such as big data and predictive analysis, sensors and IoT, robotic process atomization, artificial intelligence/ machine learning, etc. have great potential and can go a long way in improving quality, cutting costs, enhancing safety, reducing risks and boosting profits.

Elaborating further, he speaks of how Shree Cement has taken a giant step by opting for the Plant Data Management System from Denmark's FL Smidth, for getting critical real-time and historical

P. N. CHHANGANI

information at hand to make smarter decisions.

Sustained usages, in cement production of natural resources such as limestone, coal, gypsum, etc, he says, have necessitated their conservation to prolong the availability of these resources for future generations. Given that this is an energy-intensive industry, he feels, there is vast scope for adopting renewable sources for meeting electric energy requirements. Many initiatives, such as mixing of low-grade limestone, additives such as marble slurry, installation of waste-heat recovery power plants and renewable energy plants based on wind and solar, etc., have already been taken by the industry, he says.

As shared by Mr. Chhangani, in the world's cement industry, excepting China, Shree Cement has the largest capacity of a waste-heat recovery-based power plant. The company is also aggressively increasing its renewable energy portfolio from the existing 263 MW to 371 MW by setting up wind and solar power plants with an aggregate capacity of 108 MW.

As foreseen by Mr. Chhangani, the key trends in the manufacturing sector in the coming decade will include:

- **Focus on Carbon Neutrality and ESG factors** driven by climate change
- **Skilled labour availability** driven by growing digitization and automation
- **Supply Chain Issues** driven by the global shortage of materials and high energy costs. ■

ZYDUS WELLNESS LTD

As the Chief Executive Officer and Whole Time Director at Zydus Wellness Limited, Tarun Arora has been instrumental in turnaround and scale up of the company performance by accelerating the topline and bottom-line growth on back of innovations, route to market transformation, laying the foundation for international business and building high performing leadership team. An industry veteran with over 26 years of experience, he has also successfully completed integration of Kraft Heinz India business with Zydus Wellness post one of the largest cash deals in the Indian FMCG industry during his seven years in the company, a key player in consumer health and personal care with iconic brands like Sugar Free, Glucon D, Complan, Nycil, Nutralite and Everyuth.

■ **Is the Indian Market receptive to products developed from advanced concepts of Food Science to cater a health conscious and excitement seeking Gen-Z.**

▶ Consumers today are ready to experiment things which are cutting edge, which are superior both in terms of formulations, recipes and therefore the future of science and skill, the art of food is really percolating across the day-to-day food consumption that we see. The new age consumers are absolutely receptive to changes which we see. Some of the older people also, they are really seeking out things which will help them keep up with the changing standards of living.

■ **If you must identify key learnings from surviving manufacturing operations through a global pandemic, what would they be?**

▶ The focus on people's team, health, well being became very important It is not just about your team, your customers, it's the entire ecosystem, the communities that associate with you. It is not about a thousand people which are employed with my organisation but another 4000-8000 who depend upon us for their livelihood. The number is actually even larger if I look at the 25,000 farmers who provide milk to our Aligarh plant everyday. As an organisation as Indian industry I am sure as Zydus Wellness our focus on ensuring you think through the whole value chain, look at your ecosystem and the well being of the entire system is very important and ensuring that we are doing the right things for them. Important that you have your business continuity thinking in place. There are times your plants can be shut down. We had four weeks of shut down of one of our plants and how quickly

TARUN ARORA
Chief Executive Officer and
Whole Time Director

we responded. It tested us on agility but also important that you prepare for the future in a distributor manufacturing when your business continuity is extremely crucial and you prepare for the worst. Of course you prepare for the worst but you are ready to absorb the upsides too in the midst we also saw in some point of time when the essentials we had to provide, agility gets tested and therefore an agile organisation, speed are going to the biggest differentiators in the future world because there is going to be a certain kind of volatility, a certain amount of uncertainty which will always remain. Some of those learnings we have really absorbed in our way of working.

What impact does third party evaluations such as the one conducted by IRIM have on the evolution of your organization and business growth.

For Zydus Wellness, we have been associated with IRIM for fair amount of time. . The way we see them is they come in to do the assessments, they share the gaps with the teams. They become beyond the assessors and become partners in guiding us on what are the improvements and processes and ways of working. They are testing for agility. Their valuation is 360 and they look at all the aspects of manufacturing and the business relevance of that and also help us strengthen our processes around it. They played a very important role in the development journey of my manufacturing operations. ■

REALIZE THE FULL POTENTIAL OF INDUSTRY 4.0 WITH PRIVATE 5G

Alepo President Derrick guides Alepo's product strategy, client relations, marketing, and global partnerships. He's passionately invested in customer success and continues to lead the company's digital transformation projects.

DERRICK GROSS
President

Industry 4.0 (4IR) and its rapidly maturing technologies have created a wealth of opportunities across all sectors. One of the keys to unlocking the full potential of 4IR is private 5G technology. With a private 5G network, industries can implement ultrafast connectivity, ultra-reliable networks, and end-to-end automation. Once implemented, we will witness drastic transformations in the way businesses operate.

Deploying 4IR use cases over private 5G provides an entirely dedicated, high-speed, and standalone network. It helps enterprises support innovative enterprise use cases like human-robot collaboration, digital performance management of connected devices, smart factory floors, drone monitoring, and more.

Private 5G's enhanced security measures help counter the threats faced by modern networks. By allocating specific network slices for different operations, businesses can optimize resource utilization for more efficient operations. They will be also able to leverage data and alter their business strategy in real-time.

What industries will be the first movers?

► Manufacturing is already taking the lead.

Most companies already operate on private networks like WiFi and LTE and manufacturing has some of the highest value use cases, making them first to adopt 5G. Transitioning legacy networks to 5G enables them to support the latency, reliability, and connectivity demands of business-critical activities. With private 5G, manufacturers can support advanced technologies like I-IoT, AI, robotics, autonomous vehicles, and more. The results will include improved flexibility, lower production costs, fewer production line delays, streamlined supply chain management, safer factory floors, and infrastructure that's easy to build, configure, and maintain.

The automotive industry is next in line.

5G capabilities enable an ecosystem of highly reliable connectivity that is crucial for autonomous vehicles. With fully autonomous vehicles, we'll be able to connect cars to each other, pedestrians and cyclists, and traffic infrastructure – all of which will communicate in real-time. We can almost entirely eliminate road accidents, reduce traffic jams by enabling vehicles to safely drive in high-density platoons, enable route mapping, boost vehicular performance by ensuring energy optimization, and much more. That means safer roads, significantly lower costs for vehicle owners, and an overall improvement in quality of life.

Edge core architecture will enable mobile network operators to support 5G connected vehicles. It ensures low latency, helping maintain vehicular and pedestrian safety even at high speeds. At Alepo, as we continue to run 5G trials, I'm excited for what this will mean for cellular vehicle-to-everything (C-V2X) technology. No doubt, it will transform the way we travel.

Energy and utilities will be able to overcome existing challenges.

Private 5G-IR4 deployments will be a game-changer for the sector. By combining ML, AI, and data analytics, they will be able to counter issues rooted in outdated infrastructure. Utilities will be able to leverage data to gain more control over energy storage, distribution, and more. They will be able to implement smart energy management, smart metering, smart grid, and predictive maintenance. Overall, this will help them lower OPEX, become more agile, and drive ROI. They'll also boost customer experience by introducing a host of advanced use cases like smart street lighting.

In time, we'll also see sectors like healthcare, entertainment, retail, and several others adopt the technology.

Alepo has been an early mover in enabling 5G technology around the world. Our forecast is that over the next few years, a lot of small and medium enterprises will likely acquire private 5G networks through mobile network operators, whose domain expertise will ensure reliable and competitively priced infrastructure.

Want to learn how Alepo's private 5G solutions can help unlock the full potential of your industry offering? Email market-development@alepo.com to begin charting your roadmap. ■