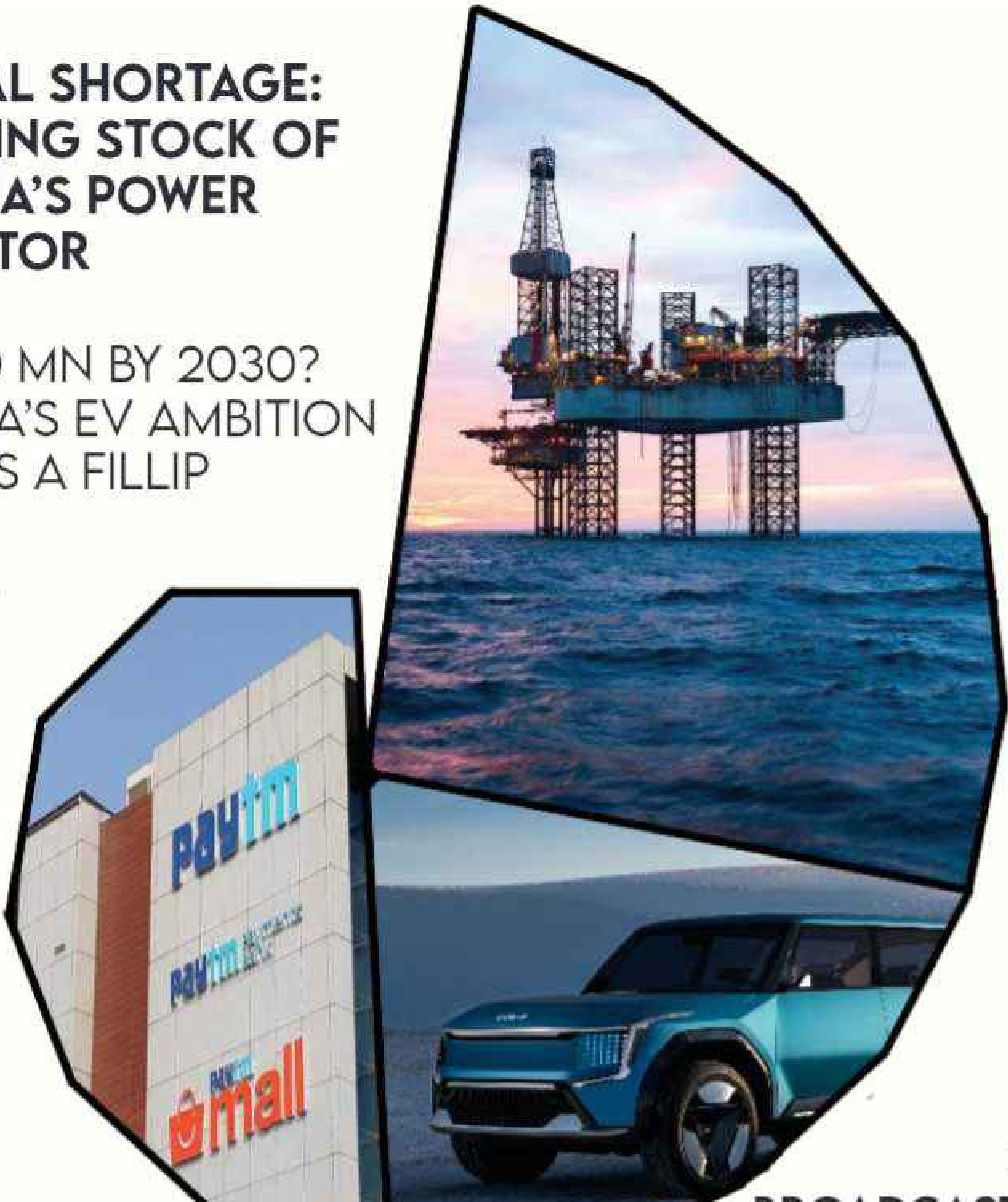
SPECTRUM

An SCMC Chronicle Magazine

Published by the Journalism Batch of 2022 of the Symbiosis Centre of Media and Communication (for internal circulation only)

COAL SHORTAGE: TAKING STOCK OF INDIA'S POWER SECTOR

$150 MN BY 2030? INDIA'S EV AMBITION GETS A FILLIP



IPL & BROADCASTING: DEALS OF GIGANTIC PROPORTIONS

TABLE OF CONTENTS

BLACKOUTS, COAL SHORTAGE: TAKING STOCK OF INDIA'S POWER SECTOR

BY SOMALIKA CHHABRA

The government has recently been prioritising coal deliveries to thermal power plants since power stations have been facing low coal supplies amidst a surge in power demand. The immediate cause for the high demand has been the unprecedented heatwave sweeping across the country.

The situation has worsened due to the country's significant drop in gas-based power generation. Meanwhile, solar panels and wind turbines have become more expensive due to rising global commodity prices.The crisis comes at a time when India is attempting to decrease its dependency on non-renewable energy sources in order to meet its climate goals.

Regional, national and international issues have all played a role in India's ongoing coal shortage and the subsequent "power crisis." Owing to the spike in the price of imported coal, the coastal thermal power plants are currently producing roughly half of their capacity. As a result, there is a gap between power demand and supply. Several states, including Gujarat, Rajasthan, Delhi, Punjab, and Tamil Nadu, have been affected by the coal shortage and are experiencing frequent blackouts.

The increase in power demand due to the extreme heat has left them with no choice but to acquire power at a higher price in order to avoid load shedding. The energy prices on the Indian exchange have reached Rs 12 per unit, the maximum allowed by the electricity regulatory commission. Coal India is also attempting to switch to long-term contract payments for the first time since 2018, claiming that it is required to deal with rising costs.

The Ministry of Environment, Forest and Climate Change has also decided to relax the restrictions for coal mining expansion projects. Twenty-two of the top 37 coal-producing mines have produced more than 100% their capacity, while another 10 mines have generated between 80% and 100%.

Within the same mine lease area, the Environment Ministry has also enabled coal mines to raise their production capacity by 50%. A revised environmental impact assessment (EIA) and public consultation will not be required for the mines.

Coal reserves in India's power plants have decreased by over 17% since April 2022. Previously, international coal prices had begun to hit record highs in 2021 due to increased industrial demand and price variations. The recent invasion of Ukraine by Russia has added to the stress.

70% of India's Electricity Requirement Through Thermal Plants

Thermal power plants supply 70% of India's electricity requirement. To meet the massive demand, the country has both indigenous and imported coal deposits.
After China, India is the world's second-largest coal importer. The country is the third-largest producer and second-largest consumer of electricity globally, with an installed power capacity of 395.07 Gigawatts (GW).In January 2022, India's coal-based power installed capacity was 203.9 GW, projected to reach 330-441 GW by 2040.

The Indian government has also released a roadmap for reaching a renewable energy capacity of 227 GW (including 114 GW of solar power and 67 GW of wind power). It is working on a "rent a roof" scheme to help meet its goal of producing 40 gigawatts (GW) of power from solar rooftops.India's large industrial companies are increasing their investments in domestic solar equipment production. In March 2022, NTPC announced that it would start partial power generation of 10 MW from a 92 MW floating solar energy plant at an NTPC unit at Kayamkulam in Kerala. The NTPC has also announced that it would commence commercial operations of 74.88 MW capacity from its 296 MW Fatehgarh solar project in Rajasthan. In March 2022, Adani Solar and Smart Power India (SPI), a subsidiary of the Rockefeller Foundation, signed a non-financial and non-commercial MoU to promote the usage of solar rooftop panels in rural India.

The country's electricity demand has risen significantly and is likely to rise further in the coming years. A substantial increase in installed generating capacity is required to meet the country's growing power demand.

A coal mine in Jharkhand's Dhanbad. (Photo: Nitin Kirloskar/Wikimedia Commons)

INDIA'S OIL & GAS INDUSTRY COMES WITH COSTS – FINANCIAL & ENVIRONMENTAL

BY YUKTA PATWARDHAN

Being the third-largest consumer of oil in the world, the oil and gas industry is one of the core industries in India. Demand for oil in India in 2021 was calculated to be around 4.76 million barrels per day. OPEC predicts that the country's oil demand will rise to 5.15 million barrels per day by 2022, which is an 8.2% rise.

As the COVID-19 pandemic recedes, and restrictions on mobility and travel are lifted, the oil consumption levels are also expected to increase. According to an IBEF report, Indian oil demand is expected to increase another 50% by 2030. Most of the oil requirements in the country are met through imports; around 85% of the oil needs are met from imports from countries like Iraq, Saudi Arabia, etc. According to data from the Petroleum Planning and Analysis Cell (PPAC), the amount spent by India on imports has doubled from $62.2 billion in FY 2021 to $119 billion during FY 2022. Amidst a global surge in oil prices due to Russia's invasion of Ukraine, India spent $13.7 billion on oil in March alone.

Meanwhile, the country's oil refining capacity stands at 248.9 million metric tonnes per annum as of September 2021, of which around 35% is privately controlled. This makes India Asia's second-largest oil refining country. However, these large numbers also come at a great environmental cost.

Currently, India is looking into switching to alternative sources of fuel to reduce its dependency on oil. According to Nitin Gadkari, the Union Minister for Road Transport and Highways, the government is looking into sustainable alternatives for crude oil. Efforts being made include manufacturing ethanol and other clean fuels, and switching to lithium-ion battery-powered electric vehicles.

Other efforts include a green hydrogen plant commissioned in Assam by Oil India Limited (OIL), which has a capacity of producing 10 kg of hydrogen daily. Green hydrogen is the hydrogen gas produced by using renewable energy such as solar or wind power.

At the COP26 summit last year, Prime Minister Narendra Modi claimed India was aiming for net-zero carbon emissions by 2070. To reach this target, the country will have to take significant steps by declaring a proper plan and ensuring its effective implementation. Unless these efforts are taken, the oil and gas industry will continue to burden the country - both financially and environmentally.


An offshore rig of the Oil and Natural Gas Corporation. (Photo: ONGC Offshore Gallery)

The country's oil refining capacity stands at 248.9 Million metric tonnes per annum as of september 2021, of which around 35% is privately controlled. This makes india asia's second-largest oil refining country.

IMPORT DEPENDENT, INDIA'S EDIBLE OIL INDUSTRY LOOKS FOR DOMESTIC BOOST

BY YASHVI SHAH

While oilseed production in India has grown by 43% in the five years between 2015-16 and 2020-21, it has not been enough to meet the demand. This has resulted in India becoming the world's number one importer of edible oil.. Due to the significant rise in urban population and massive changes in consumption behaviour, domestic production of vegetable oil has failed to meet the ever-increasing demand.

Late in April 2022, Indonesia effected a ban on the exports of palm oil, disrupting markets globally and leading to fears of further worsening the already-surging global food inflation. India, being the biggest importer of edible oil, was expected to be significantly affected by the move.

Meanwhile, there is also a spike in the price of alternative edible oils such as soybean oil. Russia's invasion of Ukraine has severely affected the sunoil exports, prompting top importers like India to develop schemes to promote the domestic production of edible oil.

According to the Economic Survey, the increase in edible oil prices is primarily due to rising prices all over the world.

India's edible oil imports fell to their lowest level in six years during 2020-21. In terms of value, however, it climbed by 63.5 percent in 2020-21 compared to 2019-20, owing to rising worldwide edible oil costs.

As the populations of emerging nations grow, dietary habits and traditional meal patterns are likely to change toward processed meals heavy in vegetable oil. The Survey also noted that as a result of India's rapid population expansion and subsequent urbanisation, vegetable oil consumption is likely to stay high.

To meet this ever-increasing demand for edible oil in India, the National Mission on Edible Oils - Oil Palm (NMEO-OP) was established in August 2021 to improve domestic production of edible oils by leveraging area expansion and via pricing incentives.

According to the Survey, the Indian government has also been taking steps to improve the production of secondary edible oils to "reduce import dependence".

Every year, India has imported roughly 13 million tonnes of edible oil. Productivity would increase through the adoption of technology, and promotion of processing and value addition

Edible oil on a supermarket shelf (Photo: Wikimedia Commons)

are expected to be part of the plan to resuscitate sunflower output, in order to lessen reliance on imports.

India now generates around 45% of its domestic edible oil use. Other oils that contribute to local production include soya bean (24%) and peanut (7%). Crude palm and soya bean oil are mostly imported from Malaysia, Indonesia, Argentina, and Brazil, accounting for 62% and 21% of total edible oil imports, respectively.

Edible oil imports had been estimated to be valued at roughly Rs 1.5 trillion in 2021-22. Even with all the measures taken by the Indian government to decrease dependency, India's cooking oil imports are expected to grow at a rate of 3.4 % per annum till 2030.

WILL INDIA BECOME A MANUFACTURING HUB FOR SEMICONDUCTORS?

BY VIJAYHARDIK JOSYULA

Over the years, the semiconductor has entered all aspects of our lives. To understand the penetration of these semiconductor integrated chips (ICs), all we need to do is look around – a manufactured car contains over 1000 ICs. Our smartphones have 15-20 ICs embedded in them.This important manufacturing component recently featured in headlines for a shortage in supply. It brought down the manufacturing capacity of automobile companies in India. Similar events happened in different countries across the world.

The COVID-19 pandemic has disrupted global semiconductor supply chains. It has forced countries to promote the manufacturing of semiconductors within their geographical boundaries. The Indian government too came up with a policy under the Aatmanirbhar Bharat Yojana and the 'Make in India' scheme.

Today, East Asia is the largest manufacturer of semiconductor chips in the world and is home to many semiconductor manufacturing factories. These factories are known as 'fabs'.

India's Tryst With Semiconductors: From 1960s to Present

Fairchild, an American semiconductor manufacturer, considered setting up a fab in India in the 1960s. However, the company couldn't enter the Indian market, due to red-tapism.

As the semiconductor technology improved in the late 70s and 80s, India decided to manufacture semiconductor ICs at home. The government set up a wholly state-owned enterprise called Semi-Conductor Laboratory (SCL).

SCL was set up in Mohali, Punjab in 1984. The decision seemed prudent, considering the growing electronics market in Punjab in the 80s. The Indian government invested $40-70 million to make it a success.However, the company soon ran into financial troubles. As funds dried up, the talent working in the company looked for greener pastures. The manufacturing activities came to a halt at SCL after a fire accident in 1989.

Now, the role of SCL is limited to research and development (R&D). It has helped India grow into a hub for semiconductor design. Companies in India design the ICs and the fabs in East Asia manufacture them.

While India's manufacturing ambitions were put to a halt, companies from Taiwan, China, Japan and South Korea became global semiconductor manufacturers.

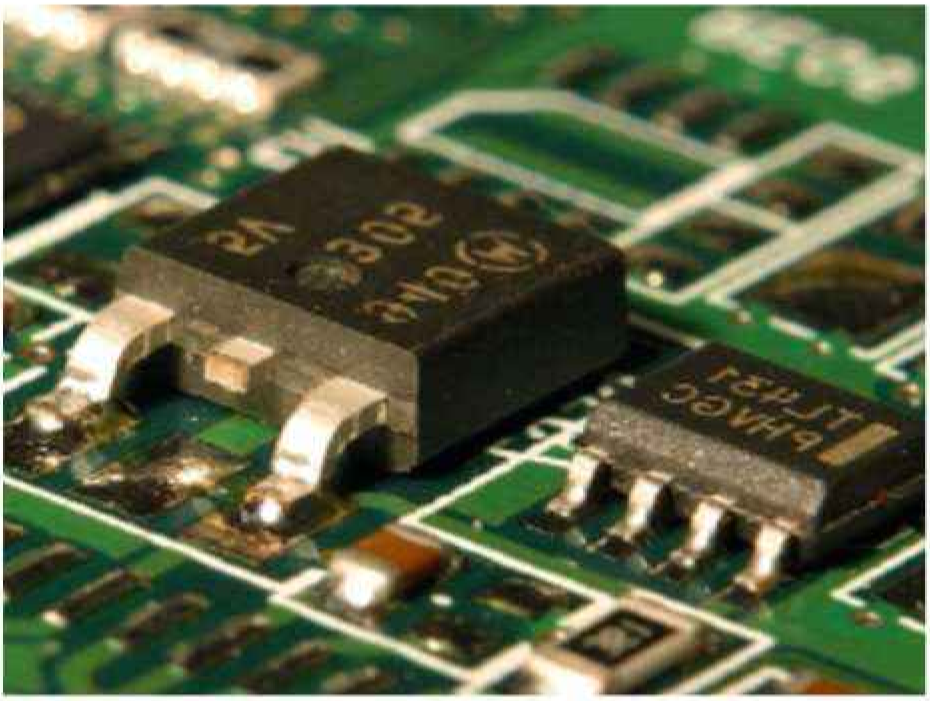
Due to the lack of manufacturing capacity, India imported 100% of its ICs from the countries in the ASEAN and China. In 2020, India imported chips worth $15 billion. Thirty seven percent of these chips were manufactured in China.Successive governments attempted to revive semiconductor manufacturing in the country, but in vain. Companies were invited to manufacture in India and the government considered reducing their stake in SCL. They bore no fruit.

Interested companies, such as Israeli chipmaker Tower Semiconductor, faced bureaucratic hurdles. After seven years of trying to enter the Indian market, the company asked for Prime Minister Narendra Modi's intervention to fast-track the proposal for chip manufacturing.

At the same time, the Indian automobile industry was suffering from a shortage of semiconductors. To ensure manufacturing in India does not suffer from disruption of global supply chains, the government approved a $10 billion (Rs 76,000 crore) Production Linked Incentive (PLI) scheme to attract semiconductor manufacturers.

Post the announcement of the scheme, the government received proposals worth $20.5 billion from five companies, including Tower Semiconductor, Foxconn, and TSMC. However, the fabs are yet to take off.

India is once again poised to become a manufacturing hub for semiconductors, with companies lining up. The success, however, will be measured by the actual manufacturing capacity developed in India in the near future.



Semiconductors recently featured in headlines for shortage in supply.
(Photo: Jon Sullivan/Wikimedia Commons)

INDIA'S AVIATION INDUSTRY: RECOVERY IN SIGHT, BUT STILL A LONG WAY TO GO

BY SHIRIN PAJNOO

The Indian aviation industry faced a heightened crisis during the COVID-19 pandemic and is now in the nascent stages of recovery.In December 2021, Minister of State for Civil Aviation,VK Singh, said that airlines and airports lost Rs 19,564 crore and Rs 5,116 crore respectively, in 2020-21, with over 7,900 people losing their jobs.

Capacity Curbs and Fare Caps

Fare caps and capacity curbs were introduced when flights resumed on 25 May 2020. Fare caps mean having a lower and upper limit on ticket fares. These were introduced in order to protect the financially weaker airlines and to ensure that the customers were not overcharged.

A lower flight capacity limit allowed smaller airlines like SpiceJet and GoAir to introduce more flights. Contrarily, it might affect the demand for big carriers. But now that the demand is back, it is necessary for the government to lift these regulations as they are barriers to growth. If all airlines have a price ceiling, there will be zero competition. This has significantly disrupted the growth of the sector.

Meanwhile, after months of restrictions on domestic flights capacity amidst the pandemic, the curbs were completely removed and restored to 100% in October last year. Earlier in 2021, the flight capacity was 72.5%, before being increased to 85% in September. It came as a relief for the industry when the government announced in September 2021 that the fare caps would be applicable only 15 days a month, and the airlines would be allowed to charge without any limit from the 16th day onwards.

Budget and Government Support

Ahead of the Budget, the government announced a price hike on Aviation Turbine Fuel (ATF) by 8.5% and the price went up to as high as Rs. 86,038.16 per kilolitre (kl).

The Union Budget 2022-23 has sanctioned Rs 10,667 crores for the Civil Aviation Ministry, out of which Rs 600 crore is to go towards reinvigorating the regional connectivity scheme, Ude Desh ka Aam Nagrik (UDAN). Meanwhile, AIAHL, a company handling Air India's debt, has been allocated Rs 9,259.9 crore.While many lauded the Budget for its blueprint regarding infrastructure,disappointment still remained high. The aviation sector was expecting waivers in excise duty on fuel, tax concessions on various imports, reduction in interest rates for the working capital provided to airlines and monetary support, among other things.

Post-budget, IndiGo's CEO Ronojoy Dutta mentioned, "We were expecting tax concession for the aviation industry in the forms of a cut in ATF excise duty and allocation of concessional finance to airlines to help us come out of the pandemic."
Even though the sector has received more allocation than the previous year, there are no measures that will provide immediate relief to the reeling sector.

Recovery in Sight

According to Directorate General of Civil Aviation (DGCA) data, 2021 saw 8.38 crore domestic passengers. ICRA data mentions that India's domestic air passenger traffic has grown to 84 million in FY22, although it is still 40% lower than pre-pandemic levels.

Rising oil prices, coupled with the uncertainty of COVID-19, have undermined the aviation industry significantly. Currently, with travel restrictions more or less lifted and international flights having started operations after two years, recovery seems to be in sight for the industry. However, there is still a long way to go.

The Indian aviation industry faced a heightened crisis during the COVID-19 pandemic
(Photo: Vistara Airlines/ Instagram)

TOURISM & HOSPITALITY INDUSTRY IN RECOVERY MODE AFTER COVID-19

BY RUPASHREE RAVI

The Indian tourism and hospitality industry is in strong recovery mode due to a rise in demand and the easing of travel restrictions across the globe. The industry had struggled for two years due to COVID-induced restrictions. However, as scheduled international commercial flights resumed and travel picked up among domestic tourists, the industry saw a growth in flight bookings, even heading towards the pre-COVID levels of 4 lakh daily departures.

As the summer holiday season approached, there was a 50% increase in advance bookings of air tickets. The industry also witnessed a 20-30% jump in forward bookings for international travel for the next two months. Some of the most popular international destinations were Maldives, Dubai, Thailand, and the United States. For domestic travel, states like Himachal Pradesh, Goa, and Rajasthan were the preferred destinations for tourists.

There are nearly 64,000 departures on over 300 flights from the country abroad every day, which indicates recovery for international travel. The passenger count for domestic departures is hovering around the 3.5 lakh mark per day, according to data from the Ministry of Civil Aviation.

Moreover, hotel room tariffs across the country have been heavily discounted, proving to be an incentive for domestic passengers. This is because all types of travel, including business trips, vacations and social events, are in demand currently.

The recovery, however, has been accompanied by a sharp jump in airfare rates. Rise in jet fuel prices and inflation in the transport and eeeeeeeewwcommunication sector are creating roadblocks for the industry. However, it is still the fastest growing industry in the country, contributing to 6.8% of the country's total GDP and creating 39 million jobs.

However, the industry still faces workforce issues pertaining to gender inequality that need to be addressed. The hospitality industry has a noticeable trend of giving preference to men for senior positions and keeping women in junior positions, who often have to face prejudice and discrimination in many forms.

Hiring more women in leadership roles, providing mentoring opportunities for them, and working to remove prejudices are important steps that the industry needs to take. Having diversity and inclusivity in the workplace is essential. This will be a catalyst to achieve further growth of the industry.

Hotels in India are expecting a rise in bookings and revenue generation as international flights have restarted (Photo: Aravind Sivaraj/Wikimedia Commons)

> According to the Federation of Hotel and Restaurant Associations of India (FHRAI), hotels witnessed over 80 percent of room bookings at holiday destinations

INDIA'S AUTO INDUSTRY: POST COVID SLUMP, FUTURE LOOKS PROMISING

BY ADARSH TRIPATHI

The last couple of years have been particularly interesting for the automobile sector in India, as the industry witnessed multiple changes in production and investment. The coronavirus pandemic caused an unprecedented disruption in the growth of the industry, and while the overall sales numbers were impacted, the projections for the future are indeed promising.

The star of the sector was most definitely the two-wheeler segment. With a mammoth 81.2% of the market share, the two-wheeler segment is easily the biggest one in the sector and has continued that way through the pandemic. Despite the severe decline in sales in FY20 and FY21, the 2-wheeler segment is projected to grow by nearly 10%, according to the ratings agency Crisil. The strength shown by the segment through a crisis that adversely impacted the whole industry is encouraging for manufacturers, as is the influx of electric vehicles and the impending electric boom the market is predicted to experience in the coming years. The entry of Mahindra & Mahindra into the segment was an event of note, with the Indian automobile giant's subsidiary Classic Legends re-introducing the legendary Jawa and Yezdi labels in India, 25 years after they stopped manufacturing due to financial constraints.

The other segment that has seen an upward trend has been the commercial vehicle segment. While the second quarter has been less than optimal for two years in a row, the third quarter in 2020 saw the segment record a historic recovery by 314% according to statistics provided by the Autobei Consulting Group. Tata Motors maintained their dominance in the segment with 42.3% of the market share. Mahindra & Mahindra maintained second spot with 27.47% while Maruti Suzuki failed to meet expectations with just 5.2% of the market.

The incoming electric revolution has everyone on the edge of their seats. Automobile manufacturers have already begun adding crossover hybrids and electric versions of available models, such as Tata Tigor Ziptron. Higher end companies have also started introducing their electric fleets in the country, with the likes of Porsche, Audi and BMW introducing multiple electric variants of their cars. This is consistent with the development of the electric infrastructure in the country, with the government at both state and national level signing deals with private companies to develop the infrastructure in the country. Schemes such as Faster Adoption and Manufacturing of Hybrid and EV scheme phases I and II, colloquially referred to as FAME, introduced by the Central Government of India seek to subsidize the manufacturing of hybrid and electric vehicles. States ad territories like Tamil Nadu and Delhi have also signed deals, with Tamil Nadu most significantly signing a Memorandum of Understanding with Ampere Electric, announcing an investment of Rs 700 crores over the next 10 years.

KIA Motors (below) and Tata Motors are leading the electric vehicle (EV) revolution in India. (Photo: Tata Motors/KIA)

$150 MN BY 2030? INDIA'S EV AMBITION GETS A FILLIP

BY PURNIMA PRIYADARSINI

Looking at the developments of the past few years, it's safe to say that the future for automobiles is 100% electric. And India is all geared up to make the transition with its ambitious goals, including constructing the world's longest EV highway by the end of 2022 under the newly formed Atal Harit Vidyut Rashtriya Mahamarg (AHVRM) project. Numerous automobile manufacturers in India have announced plans to ramp up their focus on electric vehicles in the coming years. According to a report by consulting firm RBSA, the Indian EV market is expected to be worth $150 million by 2030, after growing at a compounded annual rate of 90%.

The story of electric vehicles in India goes back to 1996 when Scooter's India Pvt Ltd came up with the three-wheeler electric vehicle named VIKRAM SAFA.. Today, aligned with its climate goals, the government has taken an initiative toward building an Electric Vehicles Policy Framework. The Union government's flagship scheme for promoting EVs, Faster Adoption and Manufacturing of Electric vehicles (FAME), is currently in its second phase with a total budget of Rs 10,000 crore. The government has also permitted PSUs to offer land to private organisations to set up charging stations with floor prices of Rs1/kWh. To give an impetus to the EV ecosystem in India, Finance Minister Nirmala Sitharaman put forth a battery swapping policy to support manufacturers in the recent Budget. With the hike in fuel prices and greater awareness regarding clean energy, around 11 Indian states have launched initiatives to promote the adoption of EVs. Data shows that among Indian states, Uttar Pradesh tops the list with 2,55,770 registered EVs, followed by Delhi with 1,25,347, Bihar with 58,104, Karnataka with 72,544, and Maharashtra with 52,506 registrations.

But there are some obstacles along the way of India's EV transition. Elon Musk's Tesla has been tussling with the government as its plan to enter the market is currently on hold due to high import taxes on EVs. Moreover, recent headlines about EVs exploding have led to safety concerns among people. In the past month, there have been six such cases. Currently, a team of independent experts has been assigned by NITI Ayog to investigate these incidents. Union Minister Nitin Gadkari had announced that strict action would be taken against EV companies if they are found to have been negligent in terms of following safety protocols.

While the footprint of EVs in India's automobile industry grows steadily, there's still much work to be done in terms of establishing a robust network of charging stations and improving upon government policies to make the transition more seamless.

Hero Electric's Optima Plus e-bike. (Photo: Viswaprabha/Wikimedia Commons)

Electric Buses in Bangalore. (Photo: Ramesh NG/Wikipedia Commons)

TRACING INDIA'S JOURNEY TO BECOMING AN IT BEHEMOTH

BY ATHARVA AGASHE

After India's liberalisation, its IT sector witnessed a boom in the 1990s. As of 2020, the Indian IT industry contributed 8% to the country's GDP. The story of the rise of IT companies in India began when Tata Consultancy Services (TCS) started its business in 1967. HCL Technologies (1976), Infosys (1981), Wipro (1981), and Tech Mahindra (1986) soon followed and are among the top IT companies in the world.

IT companies have outperformed every other sector in the capital markets giving outright returns to their investors. TCS has the second largest market capitalisation in India, right behind Reliance Industries.

The Indian IT industry comprises information technology services, consulting, and outsourcing. Statistics show that India is the largest exporter of IT and offers the cheapest labour globally. This is the reason why various multinational companies prefer Indian firms for accessing IT services, consulting and outsourcing. Another industry where India is a global leader is the Business Process Management (BPM) industry.

According to an Indian Brand Equity Foundation (IBEF) report of February 2022, TCS, Wipro and Infosys were expected to provide around 1.05 lakh job opportunities in the previous financial year.

The report also cited Gartner projections regarding IT spending in the country, estimating it to be $101.8 billion in 2022.

Meanwhile, the Indian IT-BPM industry also has the highest employee attrition rate. The reason for this is better salaries offered by competitor IT or consultation-based companies.

Bangalore, Chennai, Pune, Delhi, Hyderabad and Kolkata are some of the major IT hubs in the country and play a huge role in handling foreign clients and solution-based projects.

As per the IBEF report cited above, "the computer software and hardware sector in India attracted cumulative foreign direct investment (FDI) inflows worth $81.31 billion between April 2000 and December 2021."

On the other hand, this year's Budget allocated a whopping Rs 88,567.57 crore ($11.58 billion) to the IT and telecom sector.

IT companies have outperformed every other sector in the capital markets.
(Photo: Amrith Anandan/Wikimedia Commons)

As of 2020, the Indian IT industry contributed 8% to the country's GDP. A whopping Rs 88,567.57 crore was allocated to the IT and telecom sectors in the Union Budget 2022.

100 UNICORNS, 3RD LARGEST ECOSYSTEM: TRACING INDIA'S STARTUP JOURNEY

BY MAYURA GHATE

India has risen to become the third largest ecosystem for startups globally. The startup story of India can be traced back to 2008, when the global recession led businesses to reallocate their resources.

Three years after the recession, the first Indian startup turned into a unicorn. A startup turns into a 'unicorn' once it attains a valuation of $1 billion. InMobi, an ad tech startup based in Bengaluru, was founded in 2007 by Naveen Tewari, Mohit Saxena, Amit Gupta, and Abhay Singhal. It turned into a unicorn in 2011, with the company raising $200 million from Sequoia Capital. Since becoming a unicorn, the company has turned profitable.

After InMobi, the next startup, which was founded in 2007, and became a unicorn in 2012, was Flipkart. In the last ten years, the company has reached a valuation of $37 billion.

In 2016, by launching the Startup India programme, the Government of India encouraged young entrepreneurs to develop something innovative and create new startups. In 2016, Hike and MakeMyTrip were the two startup companies that turned into unicorns by raising funds of $175 million and $180 million, respectively.

A unique and sustainable startup called ReNew Power turned into Unicorn in 2017. Through a rights issue, ReNew Power raised $300 million. In 2018, startups from a wide variety of sectors, including EdTech, travel tech, financial technology, e-commerce, food delivery, etc, became unicorns. Today many of the companies that turned into unicorns in 2018 are receiving a lot of investors for their funding. At the same time, the accessibility of these companies to the consumers have also made them more popular.

In April 2021, the Startup India Seed Fund Scheme launched by the Government of India promised financial support to early-stage startups. In 2021, Meesho became India's first social commerce unicorn.

On 16th January 2022, the Government of India announced a National Startup Day. The Centre has even launched a 59-minute loan platform that enables easy access to credit from the Ministry of Micro, Small, and Medium Enterprises (MSME). The Small Industries Development Bank of India (SIDBI) has also started offering long-term loans for up to five years online. On 2nd May, 2022, Bengaluru-based Neobank Open became the 100th unicorn in India by raising $50 million.

The Indian startup ecosystem is witnessing new additions as funding deals increase (Photo: Sanjay Rawat)

In 2022, India got its first 'Unicorn Couple' in startup founders Ruchi Kalra and Ashish Mohapatra. This entrepreneurial husband-wife duo has two unicorn startups - OfBusiness and Oxyzo Financial Services. OfBusiness turned into a unicorn in April 2021, while Oxyzo Financial Services got the same status in March 2022. By controlling two unicorns, this husband-wife duo has become an inspiration for people entering the startup ecosystem.

DIGITAL PAYMENTS TO BE ON GROWTH PATH; BUT HURDLES REMAIN

BY ABHISHEK ANAND

With the stepping down of Ashneer Grover, the co-founder and managing director of Bharat Pe, the digital payments industry in India has become the centre of attention. The company witnessed a significant decline in its shares and sparked discussions about the functioning of the industry.

Madhuri Grover and her husband were stripped of all the titles in the company. They were accused of fraud, and of spending the company's resources to live lavishly. Ashneer Grover also recently took a jab over the Q1 earnings of the company and criticised the top leadership. According to the company, it has grown four times in terms of its overall revenue as compared to last year.

A Reuters report dated 10 May said the company would be overhauling its governance framework, with the board also recommending action against employees and vendors who indulged in malpractices.

Paytm IPO Saga

If a tree falls in a forest and there is no one to hear it, does it make a sound? This is a saying that we all have grown up with. In this situation, the answer does not matter because there was an audience to witness the fall – the world saw Paytm deliver an IPO failure.

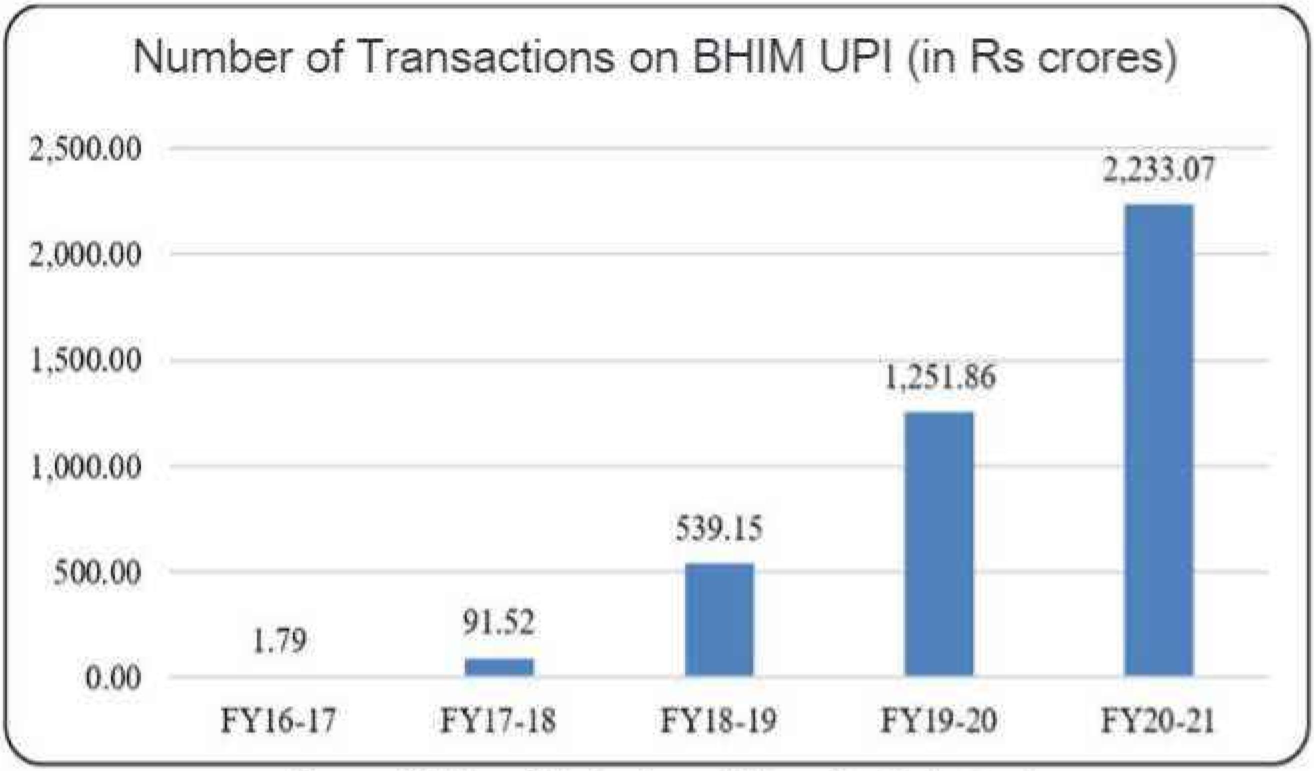
The biggest Indian IPO had a size of Rs 18,300 crore. However, it got listed on the stock market with a discount of 9% on its offer price, which plummeted the shares to the lower circuit. The share price was Rs. 1,560 when it closed, 27.4% below the price offered by the fintech company.

Experts have said that poor guidance and expensive valuation resulted in this poor show.

Government Policies: An Incentive for the Industry?

The Ministry of Electronics and Information Technology set up DigiDhan, with a goal to promote digital payments with the target of 2,500 crore transactions through UPI, debit cards, and other online payment methods. Prime Minister Narendra Modi has been an ambassador for the digital payments ecosystem and has emphasised its significance time and again.

Transactions have grown exponentially and since 2020, the industry has seen favourable gov-



(Source: Ministry of Electronics and Information Technology)

ernment policies. To encourage this, the Reserve Bank of India (RBI) has allowed payments up to Rs. 5,000 without two-step authentication by giving an e-mandate.

Meanwhile, the Ministry of Road Transport & Highways has made FASTags mandatory for all vehicles, failing which the toll tax has to be paid in double, which gives further impetus to the use of digital payments.

In the 2022-23 fiscal year, the Union government introduced the Central Bank Digital Currency (CBDC), to provide the Indian economy with a digital boost. The Digital Rupee will be based on blockchain and other technologies, coming under the guidance of RBI.

This move has also sparked concerns. Sveriges Riksbank, the central bank of Sweden, has said that having a non-interest paying digital rupee would limit the monetary policy and restrict the economy. In India, the laws on cryptocurrency have also been a topic of discussion.

All in all, the digital payments industry, with the government's backing, seems to only be heading towards greater growth.

However, the enduring importance of physical currency – as shown in the aftermath of the 2016 demonetisation move – along with the threat of fraudulent transactions will continue to function as obstacles in the way of a seamless transition.

RISE OF EDTECH GIANTS : EDUCATION CATALYST OR INHIBITOR?

BY PRANJAL NANGARE

The onset of the COVID-19 pandemic precipitated the move of the education sector into the online domain. As the whole world was getting used to restrictions and unpredictability, e-learning became the need of the hour. The period saw exponential growth of companies involved in education technology, which were to soon turn into EdTech giants.

According to Statista, the present market valuation of the Indian EdTech industry is $2.8 billion. With the establishment of Massive Open Online Courses (MOOCs) and distant learning, companies like Byjus have become household names. EdTech companies have converted the field of education into a full-fledged industry.

Since the onset of the pandemic, India has seen extensive funds flowing into this sector, which was previously considered as an industry without lucrative returns. Today we have five EdTech unicorn companies in the country – upGrad, Vedantu, Byjus, Unacademy and Emeritus.

However, with the rise of these EdTech giants, the education sector has emphasised on the valuation of these companies, rather than the quality of education. Little is being talked about actual learning outcomes, consumer satisfaction, and the impact that these courses have on students.

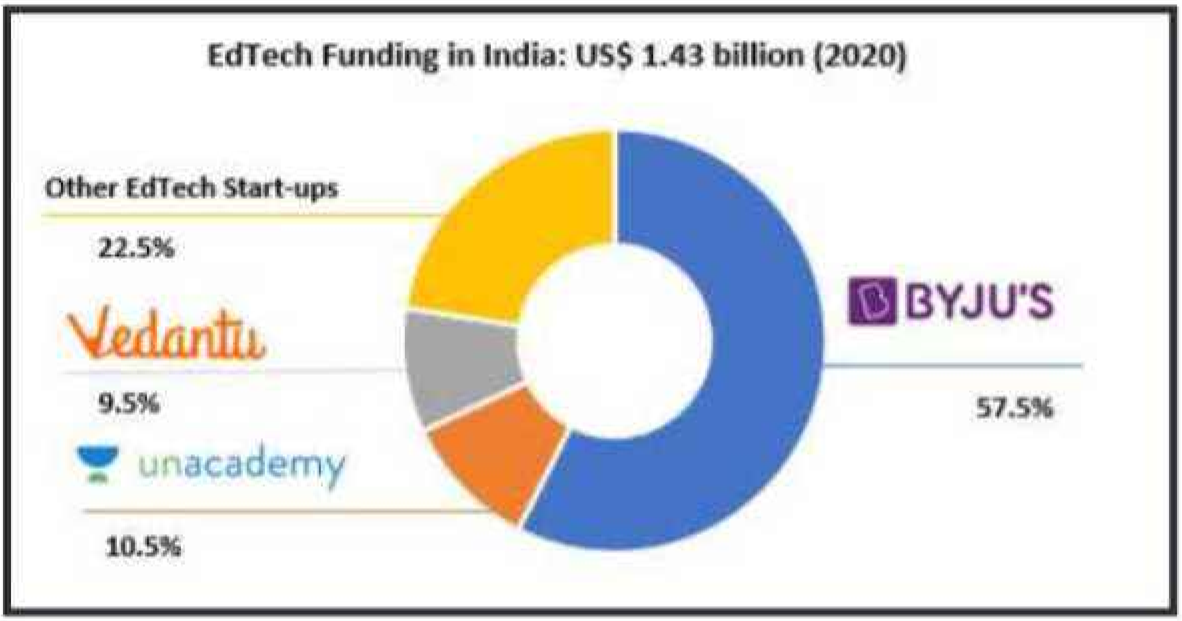
These companies are willing to pour money into advertising to lure customers and have high customer acquisition costs. The firms play on the psychology of Indian parents, who are lured through fancy advertisements, unique sales practices, discounts and even the option to pay through EMIs. The EdTech giants use tactics to convince parents that their children would remain average students if they do not have access to the premium courses or one-to-one online tutoring offered by them. They are not replacing the education offered by schools, but adding an economic burden on parents who are told that their child will be missing out if they don't enroll.

Such Edtech giants not only target school children but also students of colleges and universities, or those preparing for competitive examinations, promising them perfect scores through the packages they offer.

In a country like India, where education for so long has been more inclined towards affordability and accessibility, how long will it be before the government cracks down on the disproportionate gains of these EdTech giants?

Nevertheless, the EdTech sector is still flourishing, with more and more entrants each day wanting a share in an industry that is expected to grow leaps and bounds over the next decade. Whether these tech-based platforms would show sustained growth or there would be a burst in the bubble, only time will tell.

Companies like Byjus have become household names (Photo: Garcia Arnel /Wikimedia Commons)



Funding for EdTech Giants in India (Source: Indian Brand Equity Foundation)

ATMANIRBHARTA IN INDIA'S DEFENCE POLICY: HOW VIABLE IS IT?

BY PRISHITA DAS

Despite numerous attempts to equalise the playing field, India's military-industrial complex has remained firmly anchored with the Department of Defence Production, with the private sector having been seen as suppliers rather than partners.

Despite suggestions and a roadmap by the Kalam Committee in 1993 to enhance India's Self Reliance Index to 70% by 2005, with the Defence Research and Development Organisation (DRDO) having the monopoly on design and development, India's Self Reliance Index has remained stuck at 30% of the total imports.

In this context, Prime Minister Narendra Modi's Atmanirbhar (self-reliance) programme has given indigenous defence players in the country a new light of hope. The Finance Minister altered the regulations of importation in the General Financial Rules previously, reserving all commodities up to Rs 200 crores for domestic production.

Moreover, 68% of the capital procurement budget had been reserved for the domestic industry by the Defence Ministry for FY23. Moreover, 25% of the Domestic Procurement/ Acquisition Budget was reserved for the domestic private sector for the same period.

Through a special purpose vehicle (SPV), the private sector will be involved in the design and production of military platforms and equipment. There will also be the establishment of an independent nodal umbrella agency for certification requirements.

However, examining the practicality of the new policies, we can see a push to manufacture defence equipment under the 'Make in India' scheme, and to improve design and development capability has been impeded by inadequate design capability in weapons, sensors, and propulsion systems. The DRDO has not been able to produce credible indigenous alternatives to imported carbon fibres, Active Electronically Scanned Radars or Stealth capabilities.

GE Aviation provides the engine that propels Light Combat Aircraft (LCA). The same is true for the manufacture of main battle tanks (MBTs). In light of these considerations, it was decided to collaborate with well-known international design firms to improve military equipment. MR SAM (surface-to-air missile), a pinnacle of collaboration with Israel, has been one such outcome of a successful engagement. India also entered into a joint venture with a Russian company to produce the BrahMos cruise missiles, and signed a deal with Russia to build a fifth-generation stealth aircraft.

In terms of defence manufacturing, Atmanirbharta is a good policy. Allowing commercial companies and universities to work with the DRDO is an excellent concept. India's R&D budget is a pitiful 0.7% of GDP, compared to most developing countries' 3%. The financial provision made for DRDO in the fiscal year is just 6% of the total defence expenditure (Rs 9,674 crore). It is significantly less than the 10% suggested by a Parliamentary Standing Committee.

The Finance Ministry does not fully realise that without global collaboration, the private sector and the research field would be unable to design major platforms and weapon systems. Instead of just changing procurement policies and allocating funds to the industry and the research sector from DRDO's budgetary allocation, joint ventures and R&D should also become templates for defence manufacturing.

Indian Prime Minister Narendra Modi Launches Make in India (Photo: PMO/Wikimedia Commons)

Su-30 MKI Firing Brahmos Missile (Photo: PMO/Wikimedia Commons)

ON GROWTH PATH, STEEL INDUSTRY RAISES ENVIRONMENT CONCERNS

BY AARYA HARESH TRIVEDI

The iron and steel industry is a key industry in India. According to a March 2022 Indian Brand Equity Foundation (IBEF) report, India was the second-largest crude steel producer globally as of October 2021. The report further estimated India to produce 120 million tonnes (MT) of crude steel during the fiscal year ending March 31, 2022, which would be about 18% greater than the previous fiscal year's output.

The availability of raw materials like iron ore along with cheap labour have been cited as factors that have fuelled the rise of the Indian steel industry. In terms of Foreign Direct Investment (FDI), government data shows inflows worth $16.1 billion in the metallurgical industries from April 2000 to December 2021.

In the coming years, the Indian steel sector is expected to grow significantly. However, in the fight to decrease carbon emissions and tackle global warming, India's steel sector faces its greatest challenge – a large carbon footprint due to the scarcity of scrap and natural gas. As a result, the steel industry is reliant on iron ore and coal as feedstocks. The industry is highly emissions-intensive, accounting for over a third of all direct industrial CO_2 emissions.

However, in February, Steel Minister Ram Chandra Prasad Singh said that the Indian steel industry had significantly cut its energy usage and carbon emissions over the years, with its average CO_2 emission intensity decreasing from roughly 3.1 tonne/tonne of crude steel (T/TCS) in 2005 to around 2.6 T/TCS by 2020.

The Indian economy has grown as steel consumption has increased. However, India's per capita steel consumption, which was at 74.7 kg in 2019-20, is modest when compared to the world's per capita steel usage of 230 kg in 2020. When comparing rural and urban India, the disparity is even more pronounced, with steel usage per capita at 21.5 kg in rural areas and 176 kg in urban areas in 2020-21.

With the per capita steel consumption expected to grow in the coming years, the country's policymakers must also make decisions that reduce carbon emissions from the sector.

After the Prime Minister's announcement of the net-zero emissions objective at COP26, the Steel Association of India (SAI) published a list of policy enablers that would help boost green steel in the country.

Availability of raw material, and cheap labour has fuelled the unprecedented rise of the steel industry in India. (Photo: Freepik)

Key trends in per capita consumption and finished steel exports (Source: Indian Brand Equity Foundation)

INDIA'S E-COMMERCE BOOM SHOWS NO SIGNS OF ABATING

BY AADHYA VENKATESH

The e-commerce industry in India has witnessed a boom since the onset of the COVID-19 pandemic. With no way to visit stores to buy the items that were required, people slowly started turning to the alternatives that were available. Due to this, the e-commerce market in India grew massively. Necessitating the use of technology for shopping, seasoned online shoppers were urged to buy more, along with millions of others entering the space for the first time ever.

Looking ahead, the e-commerce market in India is expected to grow to an unprecedented $188 billion by 2025, from a mere $46.2 billion in 2020. A handsome 21.5% growth is anticipated for the e-commerce industry in the country in 2022.

Despite the reopening of physical stores after two years of the pandemic, the growth of the e-commerce industry doesn't seem to be slowing. This is because the past two years have enabled shoppers to purchase at their own ease online, making the shopping experience a lot more convenient. Purchases are made from the comfort of their homes and can easily be returned or exchanged, if found unsuitable. The world of e-commerce also provides a multitude of options, which is something traditional methods of in-store shopping are unable to replicate.

Digital shopping has now become a lifestyle of people in India. Services from companies like BigBasket, Myntra, Amazon, etc. have seen a rise in the two pandemic-ridden years. Apart from the pandemic, other reasons that led to the growth in the e-commerce industry are the increase in smartphone and internet penetration within the country. Driven by the 'Digital India' initiative, the cumulative number of internet subscribers in India was 830 million in 2021.

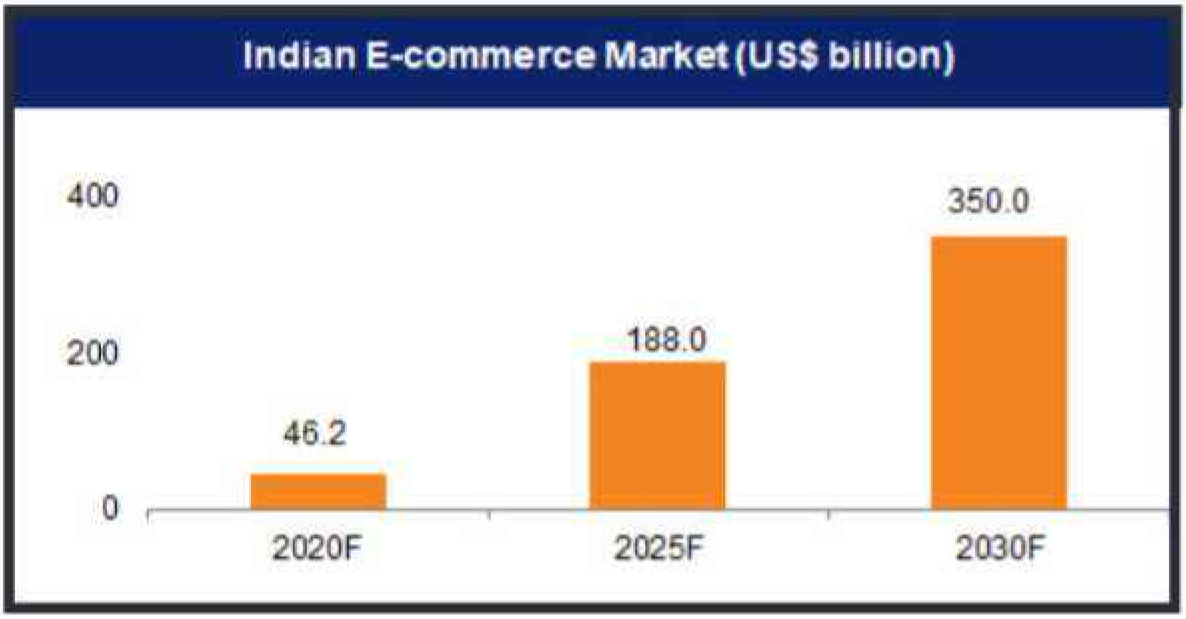
Flipkart and its subsidiaries like Myntra hold 60% of the Gross Merchandise Value (GMV) during festival season shopping, consolidating their place in the e-commerce market. Amazon, on the other hand, has focused on its outreach to local shops like 'kiranas' in the country, allowing shoppers to get the goods they want, at affordable prices and with quick delivery times.

All e-commerce platforms are doing their best to ensure that they are one step ahead of their competitors. They have also significantly contributed to the growth of the Micro, Small & Medium Enterprises (MSMEs) sector in the country, making a wide range of products available on a single platform. Tier-II cities in the country have turned ouwt to be the driving force

Indian E- Commerce markets witnessed growth during COVID-19 (Photo: Myntra.com)

behind the growth of the e-commerce industry. Many of these companies are relentlessly investing to make the shopping experience more seamless for their consumers.

All in all, the e-commerce industry in India is witnessing a steady boom, with the driving forces being aspects like digital literacy, convenience, choice and investment. While the economy at large was throttled by the pandemic, a new era of shopping also took hold during this phase that now only seems to be growing.



Expected growth in Inidan E-commerce market (Source: Indian Brand Equity Foundation)

INDIA'S TEXTILE SECTOR REMAINS ROBUST WITH EXPORTS, FDI

BY SOPHIA NAVAGAONKAR

The textile industry has been an important part of the Indian economy through the course of history. Today, the country has become one of the largest producers of textiles globally.

The Indian textile industry can produce products of a wide variety, suitable for different market segments. The industry is a diverse one, encompassing hand-woven textiles on one side and sophisticated textile mills on the other. Hosiery and knitting form the largest component of the textile sector.

The country is the largest producer of jute and cotton globally, and is second when it comes to production of silk. Moreover, 95% of the world's hand-woven fabric is produced in India. According to FDI Finance, India is the world's second-largest producer of personal protective equipment (PPE), ahead of the manufacturing powerhorse China, with more than 600 companies recognised as manufacturers.

At present, the textile industry contributes 5% of the country's GDP and 12% of its export earnings.

Between April-December 2021, textile and apparel exports were at $29.8 billion, implying a robust growth of 41% over the same period the year before, according to the government. Though exports were hit hard in 2020 due to the pandemic and the consequent lockdowns across the globe, they bounced back in soon.

For FY22, the government's target for exports of textiles and apparel was an impressive $44 billion.The Indian textile industry constitutes about 6% of the global market. It provides direct employment to 45 million people, making it the second-largest employer in the country, the first being agriculture. The sector is expected to be worth more than $209 billion by 2029.

During the period April 2000-December 2021, FDI in the textile sector of India had touched $3.74 billion. The sector saw a spurt in FDI in the last five years, with Japan, Mauritius, Italy and Belgium being the highest contributors.

For improving manufacturing capacity and boosting exports, the Government of India has introduced the Production-Linked Incentive (PLI) Scheme in the textile sector with an approved outlay of Rs 10,683 crores for a period of five years. The Government has had other initiatives for the sector as well, like the PM-MITRA scheme which will set up seven mega textile parks, with the total outlay being Rs. 4,445 crore.

Textile manufacturing in Meerut, India. (Photo: Ravi Dwivedi/Wikimedia Commons)

Indian textile fashion industry workers. (Photo: Fabrics for Freedom/Wikimedia Commons)

INDIAN FASHION INDUSTRY CATCHES UP TO THE NFT TREND

BY NANDITA SINGH RATTAN

The Lakme Fashion Week 2021 witnessed the successful debut of the Indian fashion industry in the world of non-fungible tokens (NFTs), with Manish Malhotra's first fashion NFT on an Indian crypto exchange platform, WazirX. This collaboration came following the growing craze around NFTs in recent months. Manish Malhotra's timely debut has paved the way for other designers to jump on the bandwagon of capitalising on what seems to be a paradigm shift from the Web 2.0 world to the decentralised world of Web 3.0. This transition can be a total game-changer for the internet and its users. The Indian fashion industry seems to agree too, which is why designers like Raghavendra Rathore, Anamika Khanna, and Pankaj & Nidhi can be seen following suit, dropping their designer collections as NFTs.

What are NFTs?

Non-fungible tokens (NFTs) are essentially non-replaceable tokens of ownership of an item. NFTs are traded for the transfer of ownership of an item from one person to another through blockchain technology. Any item can be represented digitally, including online-only assets such as digital artwork and music, as well as real-world assets like real estate.

The emergence of a decentralised internet is one of the selling points of NFTs. This is the inherent nature of transactions hosted by blockchain technology – publicly-monitored transactions as opposed to a centralised exchange. This enables peer-to-peer transactions in an attempt to democratise the art world without relying on a centralised authority..

The Future of NFTs in the Indian Fashion Industry

Who doesn't like an extra revenue stream? The collaboration in 2021 between FDCI X Lakme Fashion Week and WazirX is India's first foray into digital assets, paving the way for the integration of IT advancements and fashion through blockchain technology. It serves as an additional source of income and also encourages artisans by offering access to marketplaces like WazirX where they can sell their work as NFTs for a handsome amount.

While some feel optimistic about the development, there are others who remain critical about the risks involved in making such sizable investments.

In India, NFTs are gaining momentum despite the latching ambiguity. Although digital artists exploring NFTs and Web3 may not strictly be fashion designers, they may help level the playing field as more and more artists take interest in dabbling in this fresh space. It is the earning potential of NFTs that has sparked interest, with everyone vying for space.

Coming to consumer behaviour in the Indian fashion industry, there is still a lack of adequate understanding of this domain, particularly among the older generation. While the younger generations are more digitally aware, they do not have the same purchasing power as the older generations, which is why a lot of fashion proprietors are seen waiting for the market to mature in India before entering it.

Artwork of the black dress worn by Kareena Kapoor Khan in 2019 is included among the five NFTs. (Photo: Twitter/@WazirXNFT)

> The collaboration in 2021 between FDCI X Lakme Fashion Week and WazirX is India's first foray into digital assets, paving the way for the integration of IT advancements and fashion through blockchain technology.

A BUMPY ROAD - THE JOURNEY OF INDIA'S HEALTHCARE SECTOR

BY KRISHNA BAROT

"The greatest wealth is health" – Virgil (Roman Poet)

We have all heard this quote at least once in our lifetimes – health is wealth. A healthy body is essential for any task, be it physically or mentally exerting. However, in India, home to approximately 1.4 billion citizens – healthcare remains far from being accessible.

Healthcare is defined as "the organised provision of medical care to individuals or a community." An integral aspect of society, the healthcare industry of a country ensures that its populations remain healthy against disease and death.

But with a huge population, the healthcare industry in India has often struggled to sustain itself and its resources. These issues increased in prominence during the COVID-19 pandemic – is India's healthcare system a sustainable one?

An independent study conducted by The Centre for Disease Dynamics, Economics & Policy (CDDEP) and Princeton University revealed that as of April 2020, there were approximately 25,778 public hospitals and 43,487 private hospitals in India. India had 0.5 public hospital beds per 1,000 people – an alarmingly low number in comparison to global standards.

These figures hit the country hard during the second wave of COVID-19, as people struggled to find beds for treatment. The worst-affected state, Maharashtra, saw a scramble for beds and oxygen, as did the national capital Delhi. In April 2021, Maharashtra's Health Minister, Rajesh Tope, had declared that Mumbai hospitals had used up all but 3% of intensive care beds – an indicator of how the country's health infrastructure buckled under the weight of the pandemic.

As the COVID-19 waves wane and India returns to some semblance of normalcy, there is increased focus on the healthcare industry.

On February 1, 2022, Finance Minister Nirmala Sitharaman rolled out the annual Budget, in which the Ministry of Health and Family Welfare was allocated Rs. 86,200.65 crore. While this number seems vast, critics have pointed out that it is just 0.23% higher than the 2021 Budget allocation, which was Rs. 86,000.65 crores.
the allocation's highest chunk was directed towards the National Health Mission, responsible for improving the healthcare systems in rural and urban areas. Mansukh L Mandaviya, the

current Union Health Minister, lauded the Budget, stating that healthcare is gradually becoming more accessible to the general public.

According to India Brand Equity Foundation (IBEF), India's healthcare infrastructure is estimated to touch $349.1 billion by FY22. This includes the rise of medical colleges, doctors and nurses, and more facilities that will spread across both the urban and rural parts of the country.

A report by NITI Aayog revealed that as of 2019, the government had spent approximately 1.13% of GDP on healthcare services – an extremely inadequate figure in comparison to other countries. The report also highlighted several challenges plaguing the healthcare sector – from the fragmentation of healthcare services and gaps between the rich and poor to less manpower than required for the population.

While many pressing problems continue to affect the Indian healthcare industry, Budget increments and schemes such as the Ayushman Bharat Yojana are indications of change – no matter how slow that may be to effect change on the ground and improve India's health indicators.

At the end of the day, India is booming with several opportunities related to the healthcare industry. From revisiting Ayurveda, medical tourism, telemedicine and even pharmaceuticals, the country has a long way to go.

Makeshift COVID ward at Safdarjung Hospital (Photo: Mansukh Mandaviya/Twitter)

GENERICS: AN UPCOMING FORCE IN INDIA'S PHARMACEUTICAL INDUSTRY

BY HANNAH SARASU JOHN

The production of generic medicines was key in providing affordable medication to large sections of the population in India during the peak of the COVID-19 pandemic. The generic medicines industry has become an important driver of the Indian pharmaceutical industry's current growth, and has brought domestic pharma companies to the forefront.

The pandemic was an unprecedented global health crisis which underlined the importance of access to healthcare. The increase in production of COVID-related generic medicines proved to be helpful for large sections of the population, owing to the relatively lower prices and the ease of access. Moreover, the production of generic medicines in India has also got a fillip from the increased demand in exports from a significant number of entities in developed countries.

India has become a key player in the global pharmaceutical industry, with the advantages stemming from low-cost R&D, cheap manufacturing and a skilled workforce to produce a large quantity of drugs for its massive domestic market as well as the global one. The production of these generic medicines is aided by various factors, which include low-cost utilities, affordable equipment and cheap labour.

The pharmaceutical industry in India is also fragmented, comprising over 10,000 companies. In India, generic drug companies have a diversified market and are only growing in terms of market share because of the expiration of patents of drug production. According to the Indian Drug Manufacturing Association, the last few years have seen a growth of the market as well as a rise in international importance largely due to generics and their affordability. The industry currently ranks 13th globally in terms of the value of medications and third globally in terms of volume of generic medications it produces. The domestic pharma market as a whole has grown annually at a compounded rate of 4.5%, increasing from $18 billion in 2017 to $21 billion in 2021.

In the fiscal year of 2021, with the increase in the demand of generic COVID medication and COVID-related drugs, the exports grew by more than 18%. As one of the largest providers of generic medicines in the world, the country exported to many countries (including Japan, the UK and US) – contributing to nearly 40% of the US' demand for generics.

As recently in 2022, during the rise in infections due to the Omicron-variant, India became the largest hub for COVID-related anti-viral general drug production.

Minister Ananth Kumar (standing center) at the inauguration of the Generic Production - Modernized Tablet Section of Indian Drugs & Pharmaceuticals Limited in Haryana (Photo: Wikimedia Commons)

This was announced by Union Health Minister Mansukh Mandaviya after the Drugs Controller General of India (DCGI) granted emergency use authorisation to numerous pharmaceutical companies in India for the manufacture of generic versions of the molnupiravir drug. The projection for the growth of the domestic pharmaceutical industry stands at 11% over the next two years, driven by the opportunities the generic drugs sector holds.

Finpecia is one of the leading generics produced in the Indian pharmaceutical industry as a substitute for Propecia produced by Merck. (Photo: Wikimedia Commons)

INDIA'S PACKAGING INDUSTRY IS GROWING - BUT AT WHAT COST?

BY SHRUTI MENON

There's one industry that occupies a significant place in the Indian economy, but it's not associated with a product or service we usually think of buying. However, it is still a part of the many transactions we make, be it during a grocery store run, or while ordering a cup of coffee at a cafe. This is the packaging industry.

With its ubiquitous presence in our lives, we are surrounded at all times by products that have been packaged in some way or the other. And with the COVID-19 pandemic leading to greater usage of disposable medical equipment as well as increased online shopping of all types of consumer goods, the use of packaging has only increased. While this bodes well for the industry, it may not be so for the environment. Packaging is primarily derived from synthetic materials such as plastic and styrofoam, while cartons are made out of paper, which relies on wood and the processing of trees.

India's paper and packaging industry is the 5th largest sector in the Indian economy, meaning that it's an industry with great potential. According to the Plastindia Foundation, the estimated annual plastic consumption is 16.5 million tonnes, of which half the items are single-use plastics, most commonly used in packaging.

India's current situation when it comes to packaging, relatively speaking, might not be as bad as other countries from an environmental standpoint. The current consumption of polymers in India is 9.7 kg per capita, compared to the global average of 28 kg. While this is something that industry-focused outlets point out to be India's untapped potential, it is also a good thing that India's consumption of synthetics is on the lower side, boding well for the environment.

The country is also attempting to take a more eco-friendly approach, by implementing a ban on single-use plastics in three phases, starting from July 2022. However, it will be a long time before the plastics that come under this ban catch up to most packaging materials, as only small plastic bags and other small items are part of the ban under Phase 1. As a compromise, the Environment Ministry is pushing for the use of Extended Producer Responsibility, which will allow plastic items that are not under this ban to be recycled and reused by their producer, thus returning plastics to their source.

The packaging industry in India right now seems to signal economic growth and job creation. However, while the country has elaborate plans for the reduction of plastic packaging, it has a poor track record in terms of implementation and ensuring that systems are in place to effect these changes, as seen with the lukewarm response to Plastic Waste (Management & Handling) Rules, 2011.

It remains to be seen as to how the industry will change once the plastics ban rolls into place – is the industry on the cusp of a massive change, or will the new rules go unnoticed and un-implemented by those favouring stability of the packaging industry and continuation of past practices?

The goal is for packaging to fulfil these four parameters and not add to the global waste burden. (Photo: Unsplash)

> India's current situation when it comes to packaging, relatively speaking, might not be as bad as other countries from an environmental standpoint. The current consumption of polymers in India is 9.7 kg per capita, compared to the global average of 28 kg.

INDIA'S DAIRY INDUSTRY: FROM DEFICIENCY TO SURPLUS

BY AKSHAT BHATNAGAR

Dairy has been a part of Indian cuisine and culture for a very long time; its history goes back thousands of years. Today, India is the world's largest producer of dairy products, all thanks to the White Revolution from the 1970s. Operation Flood, popularly known as the White Revolution, included a series of measures taken by the Indian government to make the country self-reliant in terms of dairy production.

The project also aimed to decrease the price of milk in the country and simultaneously increase the income of the rural population. This was achieved by introducing an extensive cattle rearing development program that helped livestock owners initiate new and improved methods of animal husbandry.

Since the country's Independence and the implementation of Operation Flood, the Indian dairy industry has seen a stable growth of milk and dairy production. This resulted in the volume increasing from just 17 million tonnes in 1951 to around 209 million tonnes in 2021. This tenfold increase in production allowed the country to stop importing and start exporting milk and dairy products.

As of today, India has become the world's largest producer of dairy products and is responsible for more than 23% of the milk that is produced globally. It also has the highest number of milk producing livestock in the world.

Fifty percent of the world's buffaloes and more than 20% of the world's cattle are in India. The dairy industry is growing at a rate of 6.2% per year.

The Government of India and the Department of Animal Husbandry and Dairying recently announced a Rs 161 billion infrastructure development programme for the industry.

Currently valued at Rs 13,174 billion, it is predicted that the dairy industry will reach more than Rs 30,000 billion by the end of this decade.

With the Indian dairy industry growing rapidly in the past few decades, a significant proportion of the rural population depend on it for their daily income. The demand for dairy products has also been robust across the country, with the industry having become a fundamental part in the socio-economic development of the country.

India has become the world's largest producer of dairy products and is responsible for more than 23% of the milk that is produced. (Photo: ILRI/Mann)

A milk collection centre in Odisha (Photo: ILRI/Jules Mateo)

IPL & BROADCASTING RIGHTS: DEALS OF GIGANTIC PROPORTIONS

BY: SAYANTA SENGUPTA

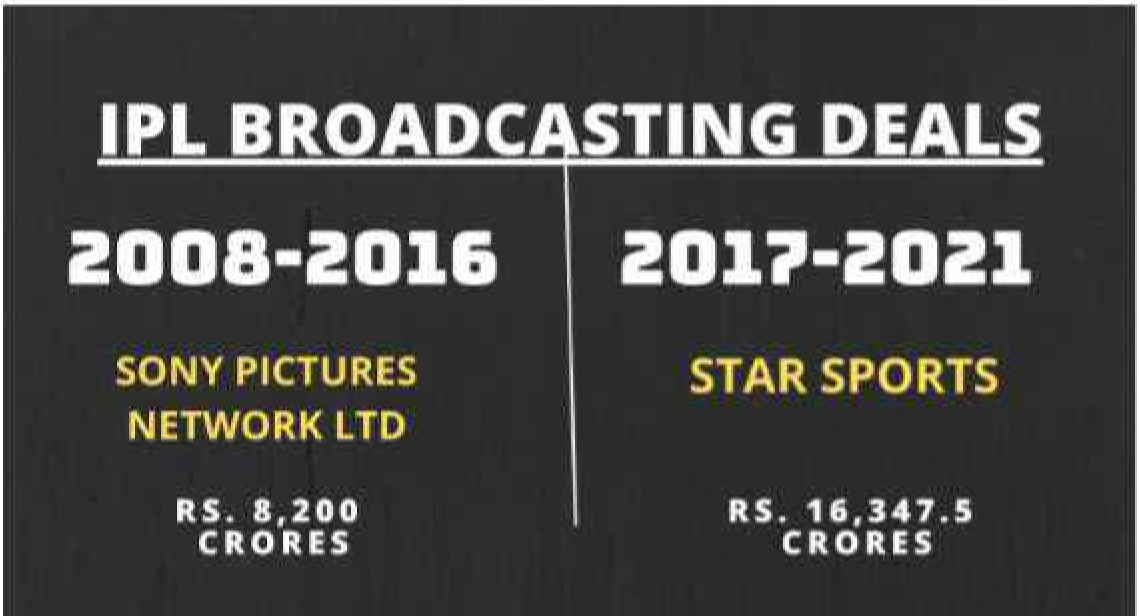
The Indian Premier League (IPL) has changed the face of Indian cricket and the lens through which the global audience looks at Indian cricket and the Board of Control for Cricket in India (BCCI), which is the apex body for Indian cricket. The brand value of IPL keeps increasing every single year. Its role in providing an impetus to the Indian economy cannot be underestimated. The endorsement deals, the sponsors, match tickets, and a myriad of other things contribute to the humongous brand value of IPL. But the broadcasting rights have always been the biggest assets of IPL.

From Doordarshan being the sole broadcaster of Indian cricket in the 1990s, to Star Sports, Sony Sports, and now Reliance Industries and Amazon engaging in a tug of war for IPL rights – broadcasting of cricket in India has come a long way. There was a time when the BCCI had to pay money to the broadcasters to feature Indian cricket. And now billions of money get poured in by broadcasters from all over the globe to bag a deal with the BCCI. The humongous amounts of advertising revenues generated during IPL matches make the broadcasting companies flock towards striking lucrative deals with the apex body of Indian cricket. During the commencement of Indian cricket's biggest extravaganza in 2008, BCCI had signed an agreement with Sony Pictures Network India for nine years. The agreement for the broadcasting rights was signed for a whopping Rs. 8,200 crores. The amount seemed to be quite staggering back then, but over the years, the amounts have only surged by massive margins.

The primary reason why the broadcasting rights have become costlier with every passing year is that the BCCI has displayed good business acumen in its decision-making. Strategic time-outs have been included twice in a single T20 match (one in every innings) so that the advertisement time is increased to garner more revenue. The director in the Production Control Room (PCR) instructs the camerapersons to occasionally zoom into the sponsorship banners and posters, with the heightened exposure on television bringing in more sponsors, which in turn amounts to more money for the BCCI.

In 2017, Star India expressed interest in buying the media rights of IPL. They were ready to shell out big bucks for the lucrative deal, ultimately bagging the broadcasting rights of IPL for a mind-boggling amount of Rs. 16,347.5 crores. This exponential increase in the money involved changed the dynamics of Indian cricket once again. It is significant to note that the deal was for five years only and not nine. Star India went over and above 13 other bidders in the process.

Rs. 16,347.5 crores! A deal of epic proportions signed between Star India and BCCI for the IPL media rights for five years (Photo: Somalika Chhabra)



The IPL broadcasting revenues have increasesd substantially for the BCCI over the past 5 years.

CUTTHROAT COMPETITION, PRICING, CONTENT: INDIA'S OTT WAR HEATS UP

BY KEERTHANA UNNI

Television technology has seen a slew of changes ever since it came into being in the 1920s. What started as a rare and extravagant piece of technology has now found its way into the homes of millions across the globe. The most recent disruption is the rise of Over-The-Top (OTT) platforms. There is a thin line of difference between OTT platforms and television. With the widespread use of OTT platforms, the future of traditional television is in question.

With the onset of the pandemic, people were in search of entertainment that was not time-bound. That was when the OTT industry saw its chance to grow and took the necessary steps. Netflix saw an increase in its Indian consumer base from 2.4 million to 4.4 million in 2019 and Disney+Hotstar's subscriber base increased threefold from 8 million at the start of 2020 to 25 million by year-end.

The main reason for its popularity was the fact that it made sports available along with entertainment programming. For example, the live coverage of the Indian Premier League increased its viewership, while the pricing of its annual packages was kept attractive.

As of today, Disney+Hostar has the largest market share at 41% in the Indian online video-on-demand (VoD) subscription sector. Eros Now follows closely at 24%. Amazon Prime Video and Netflix have 9% and 7% of the market share, respectively.

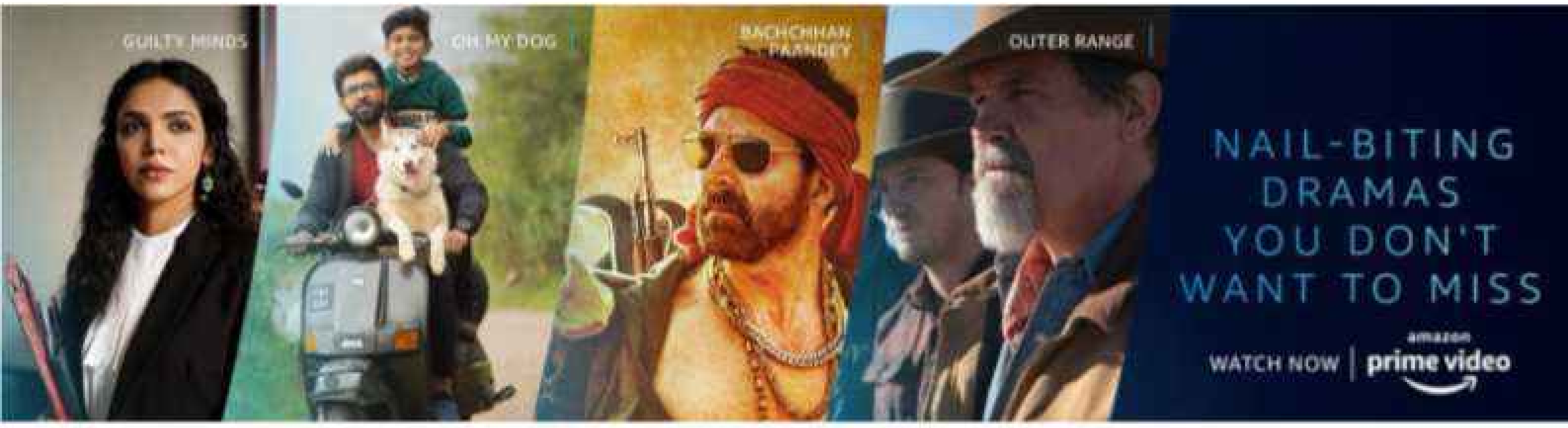
Facilitated by good internet and advanced payment systems, India has seen 51% growth in subscription-based video-on-demand services. International platforms that have come into the Indian market have offered their subscription plans at affordable prices. The pricing plans in India for such platforms are cheaper when compared to their counterparts in other markets.

However, as the industry grows, challenges too await. Globally, amidst tight competition, Netflix recently saw a loss of over 2 lakh of its customers within three months. Among the reasons given for the losses was their withdrawal from Russia, in the wake of its invasion of Ukraine. This resulted in the company's stocks dropping 26%, incurring losses up to $40 billion in the stock market. The company released statements that indicated that it would be looking at more losses as the year progresses.

For India too, the company has a tall order to fill, as it would need to emphasise on India-focused programming and keep its subscription plans affordable as the competition heats up.

A variety of OTT platforms are available for online streaming in India (Photo: Wikimedia Commons)

With every major entertainment company releasing a video content platform of their own, the competition only keeps increasing. Other than the cluttering of the industry, challenges that are common in this area include an unclear understanding of the audience and a lack of investment in the company's research and development team, which then leads to poor user experience.



Amazon Prime Video has 9% of the market share in India (Source: Prime Video/Twitter)

IS THE INDIE MUSIC INDUSTRY FINALLY CATCHING UP WITH THE BOLLYWOOD GOLIATH?

BY RISHAB SENGUPTA

Over the last couple of years, we have seen a significant change in the Indian music industry. The streaming age has transformed the culture of music consumption and appreciation globally. India has followed the trends of the West in some regards, and the advent of the COVID-19 pandemic has helped independent music artists gain relevance and popularity.

Overseas, "Independent music" is categorised as music that is produced and published by an artist independently, without the backing of a record label. In India, however, the idea of independent music is more vast, encompassing all non-film music. Though devotional music and ghazals also fall under this umbrella, they are generally not regarded as independent music as they enjoy major mainstream success and popularity. The lack of a record label-dominant music industry has led to India becoming a unique environment for artists who want to make a career outside of Bollywood and other film music.

Over the last few years, there seem to have been some significant changes in the Indian music scene. For starters, the pandemic brought the almighty Bollywood music production machine to its knees. Few industries were hit harder by the lockdowns of 2020 than the film industry. Bollywood, which had for two years prior to the pandemic, already been seeing lower content output and a decline in revenues, came to a grinding halt. A 2021 report by the Indian Music Industry (IMI) stated that the Bollywood-dominated Indian music industry had been in steady decline for a few years, facing an annual loss of over Rs 2,000 crores in the years leading up to the pandemic. This created a void in the market for new music in India. The Indian population, which on average listens to 19 hours of music per week (as compared to the worldwide average of 18 hours per week), needed something to quell their thirst. Enter the indie music industry. Taking advantage of the Bollywood hiatus, independent artists from around the country began to adapt to the changing digital landscape. With live gigs and concerts being virtually non-existent, independent artists began to use other media to their advantage, connecting with fans through social media, and popularising their music on streaming platforms like JioSaavn and Spotify. Though royalties from music streaming platforms don't contribute much in terms of income for artists, they have given independent artists a much wider reach than what they would have otherwise. Social media and streaming services allow artists to get their music out on an equal footing with the multimillion-dollar Bollywood marketing industry. The top ten indie artists on Spotify India have over 15 million monthly listeners. With the pandemic, the audience for internet-savvy indie musicians has also seen an increase. Another factor worth mentioning is the musical-open mindedness of the current generation.

Indie sensation Prateek Kuhad, whose music has found success not only domestically but also overseas (Photo: Wikimedia Commons)

Demographic data from Spotify has shown that Indian millennials and Gen Z youth show less inclination towards Bollywood and film music, preferring to experiment and find their own preferences. The popularity of K-Pop among Indians is a testament to this. This gives homegrown indie musicians and bands the chance to connect with a massive audience. Notably, Prateek Kuhad was the first Indian indie artist to break into international audiences with his 2018 single cold/mess, with former US president Barack Obama naming it as one of his favourite songs.

Printer and Publisher: Dr Sreeram Gopalkrishnan (Director, SCMC)
Consultant Editor: Prof. Amitabh Dasgupta (Head, Journalism Dept, SCMC)
Editor: Prof. Kabir Upmanyu (Faculty, Journalism Dept, SCMC)
Editorial Team: Journalism Batch of Year 2022, SCMC

SYMBIOSIS CENTRE FOR MEDIA AND COMMUNICATION