

Hyderabad ranks among world's top 10 fastest-growing cities, predicts massive GDP surge

Hyderabad: Hyderabad has clinched a spot among the world's top 10 fastest-growing cities in the world. According to a comprehensive report by Knight Frank India, in collaboration with the Confederation of Indian Industry (CII), Hyderabad's staggering GDP growth rate between 2019 and 2035 has propelled it into the global spotlight. The report unveils Hyderabad's remarkable economic trajectory, showcasing a Growth (YoY) percentage of 8.47 per cent. In 2018, Hyderabad's GDP stood at an impressive \$50.6 billion in Constant 2018 prices, a figure projected to soar to a whopping \$201.4 billion by the year 2035.

Ranked fourth in the report, Hyderabad finds itself in the company of Surat, which secured the top position followed by Agra and Bengaluru. The report, titled 'India Real Estate: A Decade From Now 2024,' analyzes the economic and real estate sector potential over the next decade.

The report states that one of the piv-

otal catalysts propelling India's meteoric rise is the advent of Real Estate Investment Trusts (REITs), which have injected vital liquidity into the market, attracting a diverse range of investments from both domestic and international sources. The Indian REITs portfolio showcases Hyderabad's prominence, with entities such as Mindspace Business Parks REIT boasting a substantial 14.1 million square feet of space in the city. Additionally, the Nexus Select Trust Retail REIT Portfolio contributes significantly with 0.8 million square feet. The report also sheds light on other major cities' investment landscapes, highlighting Mumbai's dominant position with a staggering USD 24.9 billion in investments since 2004, closely followed by the National Capital Region (NCR) securing USD 11.7 billion. "The top five positions were further solidified with the inclusion of three key IT hubs and emerging IT centers. Bengaluru, Pune, and Hyderabad collectively attracted USD 20 billion in PE invest-



ments, primarily fueled by the high demand for IT-centric spaces within these urban centers," it stated. According to the report,

since 2004, Hyderabad has amassed a total of USD 4.836 billion in PE investments.

Lok Sabha poll campaign gains heat in Telangana



Hyderabad: With less than a month left for polling on May 13, the Lok Sabha election campaign is gathering steam in Telangana as all three major parties – the Congress, BRS and BJP – have intensified their campaigns. While all the leaders in the State have already hit the campaign trail, several national leaders and neighbouring States are set to descend on Telangana for campaigns over the next four weeks.

The BRS has been way ahead of its

political rivals when it comes to announcing its candidates for the Lok Sabha polls and launching the electioneering. Despite suffering minor setbacks in the form of defections, the party picked up pace and appears to be the front runner in several parliamentary constituencies.

Having conducted parliamentary constituency-wise preparatory meetings with the party cadre soon after the Assembly elections, the party candidates already completed the first round of interaction with their constituents and have only intensified it further as the polling date inches closer. Leader of Opposition and BRS president K Chandrashekhar Rao is leading the attack from the front against both the Congress and the BJP. He has already addressed two public meetings at Karimnagar and Chevella, to be followed by the third one at Sultanpur of erstwhile Medak district on April 16.

He is scheduled to address at least seven more public meetings, besides going on roadshows and holding street corner meetings, meeting farmers, weavers and other sections across the State. The party was quick to grab the voters attention by focusing on the failures of both the Congress and the BJP to address the issues plaguing Telangana.

Besides highlighting the Congress

government's failure to deliver its promises within the assured 100 days, the party is highlighting the State government's inefficiency in handling the water and power crisis in the State. On the other front, the BRS has launched a full throttle attack on the Modi government at the Centre for denying basic support to Telangana's growth and not making any notable contribution for the State's development in the last 10 years.

The BJP too launched its poll campaign across the State, with its candidates reaching out voters at the ground level. The party's campaign strategy has been aggressive with Prime Minister Narendra Modi addressing three public meetings in three months. Initially, the BJP planned over 25 public meetings with national leaders including Modi, Amit Shah and a slew of union Ministers, Chief Ministers from BJP-ruled States and other national leaders. However, with increased trouble in its strongholds, the party is learnt to be focusing on the north Indian States where it can garner more seats. Sources in the party's Telangana unit informed that the national leaders were busy with the campaign activities in States scheduled to go for polling in the first and second phases, and would intensify their campaign here from next week. With no strong leader to campaign on their behalf within Telangana,

the BJP candidates are fighting on their own in most constituencies and largely relying on the Modi factor as well as the party's Hindutva agenda to garner votes. Meanwhile, the Congress has been trailing behind among all, with three of its candidates still pending finalisation in crucial parliamentary constituencies like Karimnagar and Khammam. Though TPCC president and Chief Minister A Revanth Reddy visited Delhi at least a dozen times in the last three months, a final decision is yet to come.

On Sunday, AICC general secretary KC Venugopal chaired party meetings with Revanth Reddy and others to strategise the Lok Sabha campaign. The party held two major public meetings attended by Mallikarjun Kharge and Rahul Gandhi in the last couple of months, and another two public meetings were addressed by Revanth Reddy since the poll schedule was announced. Besides the delay by the AICC leadership in announcing the candidates, the campaign activity has been sluggish in most constituencies barring a few. Making issues worse, internal fights due to selection of candidates who defected from other parties, has had an adverse impact on the overall poll campaign of the party which is largely banking on its recent Assembly victory to garner votes in the Lok Sabha polls as well.

Reclaiming the storied legacy of the Arabian Sea

Post-Independence, India has been unfair to the sea that laps against our western shoreline. We forget that the Arabian Sea has long been a fertile bridge for the exchange of ideas, stories, commerce, and culture. Khazanas of knowledge have flowed through its waters and lasting friendships have been forged. More than any Indian Prime Minister (PM) before him, Narendra Modi recognises the injustice of this neglect. His upcoming visit to Abu Dhabi will be his seventh — six more than any predecessor. Before his first trip in 2015, no Indian PM had set foot in the Emirates for over three decades. While numbers are often inconsequential, sometimes they do matter. As the B-school adage goes: If you can't count it, it doesn't count. Seven prime ministerial visits paint a picture. It signifies a change in the relationship, growing appreciation of each other's importance. What India and the United Arab Emirates (UAE) have built is a special affinity. It reflects a new reality, one where the India-UAE bond is no longer voluntary but mandatory, not a choice but an instinct. PM Modi and Sheikh Mohamed bin Zayed Al Nahyan have undertaken a systematic overhaul: We are now mutually indispensable.

The very texture of this relationship is different. PM Modi is travelling to inaugurate the first Hindu temple in the UAE, an exemplar of Abu Dhabi's promotion of a more pluralistic society. At the same time, he is attending the World Government Summit, a platform for deliberating innovation to deal with emerging governance challenges. In tandem, these act as a synecdoche for the larger relationship: The two nations are partnering with each other while celebrating who they are. They seek to be part of each other's change while not seeking to change the other. India has friendly relations with many nations, and yet such friendships often come with prescriptive clauses of what India can or cannot do; of what India should or should not be. A large part of why the India-UAE relationship is special is because it is descriptive, not prescriptive.

Embedded deeply in the India-UAE bond is a celebration of each other for what we are — plural yet singular. Plural because of our diversity of cultures and customs, and the heterogeneity inherent in our nations. Singular because we have navigated uncharted territory, and plotted an unmapped path for ourselves. In their own unique ways, both countries are exceptions in the region and in today's times. The UAE has created a lush economy in the middle of an arid desert. India's specific development challenges have no parallels, with individual states the size of entire nations. For both of our countries, there have been no models to follow, no moulds to fit into. This is the foundation of our mutual respect. It will continue to be the bedrock of our relationship as we transform incomes, update infrastructure, and move from an analogue



to a digital world. Diaspora lies at the centre of our relationship. More than 60,000 Indians have signed up to attend the PM's address at the Zayed Sports City Stadium. However, statistics of this sort do not do true justice to the real story of the Indian diaspora in the UAE. The fact is Indians today share the top floor of skyscrapers in Abu Dhabi and Dubai. Positions that by default went to Europeans and Americans today see a large proliferation of Indians, whether in finance, energy, or infrastructure. They are being recognised as valued advisors, creative talents, and financial wizards, rubbing shoulders with Emiratis in building a 21st-century nation and contributing to the future of the UAE. This cohort of Emiratis and Indians is working to make the UAE a global hub for our century, even as they make India a global economic powerhouse for the benefit of the country, the region, and humankind at large.

As China rose, a small clique of cities benefitted: Hong Kong, Singapore, London, and New York. India's journey, from four trillion dollars to 30, will see the world benefit. Abu Dhabi and Dubai will hold a privileged position in this odyssey. Even as India benefits, so will the global ambitions of the UAE. Moving forward, the UAE will be the new Gateway to India. It will be a talent hub, connecting Indian opportunities and Indian talent with the rest of the world. It will be a trade hub, with goods — and energy — that flow from and to India passing through it. It will be a finance hub, where it will be able to source at scale the capital required to satiate India's growing appetite.

PM Modi and Sheikh Mohamed bin Zayed are putting in place the building blocks for a prosperous Arabian Sea com-

munity. They are restoring the sea to the storied position it held in antiquity, refreshing it and bringing it into the 21st century. This community will offer people-centric, development-first, growth-led solutions for

Africa, Europe, and the Indo-Pacific. The space between the Gulf and the subcontinent will reclaim its role as the wellspring of inclusive globalisation in this century, just as it was millennia ago.

Instagram to introduce AI-assisted Messaging feature

New Delhi: Meta-owned Instagram is reportedly working on the functionality to allow users to write messages with the help of artificial intelligence (AI). App researcher Alessandro Paluzzi shared a screenshot that shows an option to "write with AI" when messaging another user. Instagram is working on the ability to write a message with AI," Paluzzi wrote on X. It will probably "paraphrase your message in different styles, similar to how Google's Magic Compose works," he added. Meta is slowly introducing new experiences with a new class of generative AI features that expand and strengthen the ways people connect with each other. Meta AI is an assistant you can chat with 1-on-1 or message in group chats. It can make recommendations in a pinch, make you laugh when you need a good joke, settle a debate in a group chat and generally be there to answer questions or teach you something new. "We are rolling out AIs in the US only for now. To interact with Meta AI, start a new message and select 'Create an AI chat' on our messaging platforms, or type '@MetaAI' in a



group chat," according to the company. The Meta AI assistant is coming to WhatsApp, Messenger, and Instagram, along with dozens of AI characters based on celebrities like MrBeast and Charli D'Amelio. Some of Meta AI characters are played by recognisable public figures, including Tom Brady as Bru, a wisecracking sports debater; MrBeast as Zach, a big brother who will roast you; and Naomi Osaka as Tamika, an anime-obsessed cosplay expert. "Reels in Meta AI can help you decide on places to visit based on video reviews, learn a new dance with tutorial videos or give you some inspiration for that project you're working on," according to the company.

Daimler India Commercial Vehicles set to foray into Battery Electric; announces strategy for long-term readiness for decarbonizing transportation solutions



Forays into battery electric market with the all-electric, Next-Generation eCanter

Forays into battery electric market with the all-electric, Next-Generation eCanter. India market launch of the all-electric eCanter in the next 6 to 12 months. Sets long term readiness strategy for CO2-neutral propulsion in future products. Diesel ICE and CO2-neutral propulsion will co-exist for the foreseeable future. National, April 2023 – Daimler India Commercial Vehicles (DICV), the wholly-owned subsidiary of Daimler Truck AG (“Daimler Truck”) announced its foray into the Indian battery electric market with the all-electric, Next-Generation eCanter. The market launch of the all-electric eCanter in India demonstrates the company’s first step towards its larger vision to decarbonize its entire product portfolio in the long term. The all-electric eCanter, which marks DICV’s foray into India’s light-duty truck segment, will be launched in the market within the next 6 to 12 months.

From a global perspective, Daimler Truck is fully committed to the Paris Climate Protection Agreement. The pioneer of modern transportation wants to make CO2-neutral transport a worldwide success and contribute to combating of climate change. With a clear vision to decarbonize the transportation industry and reduce resource consumption, Daimler Truck is striving for its new trucks and buses to be CO2-neutral in Europe, Japan and USA by 2039, and globally by 2050. DICV is working on the readiness of a CO2-neutral product portfolio in line with Daimler Truck’s global decarbonization vision and the overall target for India as soon as possible following the aforementioned core markets.

Mr. Satyakam Arya, Managing Director & CEO, Daimler India Commercial Vehicles said, “All our efforts are being put into achieving robust readiness for our future products that will feature CO2-neutral

propulsion technologies in the long term. The launch of the all-electric eCanter in India, within the next 6 to 12 months, is the first step in our long-term strategy to decarbonize our entire product portfolio. However, the reality is that diesel ICE and CO2-neutral propulsion technologies will continue to co-exist in the Indian market for the foreseeable future. A long-term plan like ours hinges on many complex external factors, some of which are, the availability of a charging and refuelling infrastructure, the availability of green energy, cost parity and wide-scale customer acceptance. Therefore, our initial focus with the eCanter is to achieve product and service excellence, along with customer acceptance. Over the next two decades we will have a firm footing with decarbonized transportation solutions and will be making progress towards becoming a leader in sustainable transportation in India.”

DICV has a keen eye on the how the Indian market shapes up over the years. The company’s CO2-neutral propulsion technology roadmap is being prepared in line with Daimler Truck’s global technology strategy with battery electric and hydrogen-based drive technologies. DICV has already developed a BharatBenz hydrogen fuel cell concept coach in alliance with a large Indian conglomerate. In the future, DICV will introduce trucks across different utility segments that will serve long haul, mining, construction, POL, dumper, RMC and so forth for various freight and terrain requirements. “LNG, if used at all, will be an interim, tactical solution for long haul transportation. We will primarily commit to battery-electric and hydrogen-based propulsion technologies across our future product portfolio, in a phased manner. One thing is for sure that we will be ready with the right vehicles when the market is,” said Mr. Arya.

MG Motor India to expand nationwide sales and service network; strengthens foothold in tier 3 and tier 4 cities

MG (Morris Garages), a British automobile brand with a 100-year-old legacy, has announced its network expansion plans in Tier 3 and Tier 4 cities and rural market across India. With the goal of enhancing accessibility and bringing the brand closer to customers, the company is set to establish 100 new touchpoints by the end of the year. Each of these dealerships will offer the latest MG models on display, digital configurators, and aftersales support, ensuring a seamless and immersive experience for customers.

Commenting on the launch, Satinder Singh Bajwa, Chief Commercial Officer, MG Motor India Pvt. Ltd., said, "We are thrilled to transition into MG 2.0, the next phase of our journey in India. As we evolve with the market, it is essential for us to extend the brand's network to new territories, ensuring seamless sales and aftersales support. We are working towards introducing 100 new MG dealerships this year, tailored particularly for rural and Tier 3 and Tier 4 cities. We are excited to come closer to our customers in these new territories and providing them with the opportunity to choose and drive their favourite MG car with peace of mind. This initiative reflects our unwavering commitment to enhancing accessibility and delivering outstanding experiences to our valued customers." MG Motor India is committed to developing advanced and futuristic products with a huge focus on offering the exceptional sales and aftersales services to its customers. With more than 380 touchpoints in 170 cities, we have established a robust footprint in the country. We currently have 85% market presence in India, with MG service centres strategically located within a 15-kilometer radius, ensuring quick assistance within just 30 minutes. As part of MG 2.0, the brand will stay focussed on strengthening its R&D, expanding manufacturing footprint through extensive localisation, and increasing its annual production capacity from the current 1,00,000 plus to up to 3,00,000 vehicles. From sales & aftersales perspective, the brand aims to attain 100% nationwide coverage and plans to have 520 touchpoints in 270 cities by end of FY2024.

About MG Motor India

Founded in the UK in 1924, Morris Garages vehicles were world-famous for their sports cars, roadsters, and cabriolet series. MG vehicles were much sought after by celebrities, including British Prime Ministers and even the British Royal Family, for their styling, elegance, and spirited performance. The MG Car Club, set up in 1930 at Abingdon in the UK, has thousands of loyal fans, making it one of the world's largest clubs for a car brand. MG has evolved into a modern, futuristic, and innovative brand over the last 100 years. MG Motor India's state-of-the-art manufacturing facility in Halol, Gujarat, has an annual production capacity of 1,00,000 plus vehicles and 6,000 direct and indirect employees. Driven by its vision of CASE (Connected, Autonomous, Shared, and Electric) mobility, the innovative automaker has augmented across-the-board 'experiences' within the automobile segment to



day. It has introduced several 'firsts' in India, including India's first Internet SUV – MG Hector, India's first Pure Electric Internet

SUV – MG ZS EV, India's first Autonomous (Level 1) Premium SUV – MG Gloster, the Astor- India's first SUV with personal AI

assistant and Autonomous (Level 2) technology, and MG Comet – The Smart Electric Vehicle.

Sri Rama Navami celebrated at Nagul Meera dargah in Kothagudem

Kothagudem: Both Hindus and Muslims celebrated Sri Rama Navami on a grand note at Hazarath Nagul Meera Moulachan Dargah Shareef at Satyanarayanapuram of Yellandu mandal in Kothagudem district on Wednesday.

Large numbers of devotees of both the religions attended the annual ceremony with utmost devotion at the Dargah Shareef, where Sri Rama Navami and Lord Rama Pattabhishekam celebrated for the past one decade, setting a perfect example of religious harmony. Hindu priests assisted by the local Muslims conduct the ceremony similar to the event that takes place at Sri Seetha Ramachandra Swamy Temple, Bhadrachalam in the district. The beautifully decorated dargah came alive with vedic chants during the ceremony. The dargah committee, comprising both Muslims and Hindus,



Climate change is causing marine 'coldwaves' too, killing wildlife

Surface temperatures can plummet rapidly — by 10°C or more over a day or two. When these conditions persist for several days or weeks, the area experiences a "coldwave", which is the opposite of more familiar marine heatwaves. When a "killer coldwave" manifested along South Africa's southeast coast in March 2021, it killed hundreds of animals across at least 81 species. More worrying still was the fact these deaths included vulnerable manta rays and even specimens of notoriously robust migratory bull sharks. In southern Africa, bull sharks, whale sharks and manta rays have previously washed up dead following such sudden cold events, especially over the past 15 years.

As we report in Nature Climate Change, the conditions that can drive these killer coldwaves have grown increasingly common over the past four decades. Ironically, strengthening winds and currents as a result of climate change can also make these deadly localised coldwaves more likely in places such as the east coasts of South Africa and Australia, potentially putting even highly mobile species such as sharks in harm's way.

What's going on?

Certain wind and current conditions can cause the sea surface to cool, rather than warm. This happens when winds and currents force coastal waters to move offshore, which are then replaced from below by cold water from the deep ocean. This process is known as upwelling. In some places, such as California on the US west coast, upwelling happens regularly along hundreds of kilometres of coastline. But localised upwelling can occur seasonally on a smaller scale, too, often at the edges of bays on the east coasts of continents due to interactions of wind, current and coastline. Previous research had shown climate change induced changes in global wind and current patterns. So we investigated the potential consequences at particular locations, by analysing long-term wind and temperature data along the south-eastern coast of South Africa and the Australian east coast. This revealed an increasing trend in the number of annual upwelling events over the past 40 years. We also found an increase in the intensity of such upwelling events and the extent to which temperatures dropped on the first day of each event — in other words, how severe and sudden these cold snaps were. Mass deaths warrant investigation.

During the extreme upwelling event along the southeast coast of South Africa in March 2021, at least 260 animals from 81 species died. These included tropical fish, sharks and rays. To investigate the ramifications for marine fauna, we took a closer look at bull sharks. We tagged sharks with tracking devices that also record depth and temperature. Bull sharks are a highly migratory, tropical species that only tend to travel to upwelling regions during the warmer months. With the onset of winter, they migrate back to warm, tropical waters. Being mobile, they should have been able to avoid the local, cold temperatures. So why were bull sharks among the dead in this extreme upwelling event?



When running and hiding isn't enough

Bull sharks survive environmental conditions that would kill most other marine life. For example, they're often found several hundred kilometres up rivers, where other marine life would not venture. Our shark tracking data from both South Africa and Australia showed bull sharks actively avoid areas of upwelling during their seasonal migrations up and down the coast, even when upwelling isn't too intense. Some sharks take shelter in warm, shallow bays until the water warms again. Others stick close to the surface where the water is warmest, and swim as fast as they can to get out of the upwelling. But if marine coldwaves continue to become more sudden and intense, fleeing or hiding may no longer be enough even for these tough beasts. For example, in the event in South Africa that caused the death of manta rays and bull sharks water temperatures dropped from 21°C to 11.8°C in under 24 hours while the overall event lasted seven days. This sudden, severe drop paired with the long duration made this event particularly deadly. If future events will continue to become more severe, mass deaths of marine life could become a more common sight — especially along the world's mid-latitude east coasts. Still learning how climate change will play out

Overall, our oceans are warming. The ranges of tropical and subtropical species are extending towards the poles. But along some major current systems, sudden short-term cooling can make life difficult for these climate migrants, or even kill them. Especially if events like the one in South Africa become more common. Tropical migrants would increasingly be living on the edge of what they are comfortable with in these areas. Our work emphasises that climate impacts can be unexpected or even

counterintuitive. Even the most resilient life forms can be vulnerable to its effects. While we do see an overall warming, changes in weather and current patterns can cause extreme cold events as well. This really shows the complexity of climate change, as tropical species would expand into higher-latitude areas as overall warming continues, which then places them at risk

of exposure to sudden extreme cold events. In this way, species such as bull sharks and whale sharks may very well be running the gauntlet on their seasonal migrations. The need to limit our impacts on the planet by reducing greenhouse-gas emissions has never been more urgent, nor has been the need for research into what our future might hold. The Conversation

Asus's new dual-screen laptop 'Zenbook DUO' now available in India

New Delhi: Taiwanese tech giant Asus on Tuesday said that its newly launched dual-screen laptop 'Zenbook DUO' is now available in India. Starting at Rs 1,59,990, the Zenbook DUO is now available for purchase on the e-commerce platforms, Amazon and Flipkart.

"With its revolutionary dual-screen OLED displays, detachable Bluetooth keyboard, and versatile kickstand, the Zenbook DUO redefines the boundaries of productivity and creativity," Arnold Su, VP, Consumer and Gaming PC, System Business Group, Asus India, said in a statement.

The Zenbook DUO features dual 14-inch FHD+ OLED touch screens with a 16:10 aspect ratio. It offers a 0.2ms response time and 60Hz refresh rate. According to the company, it comes with a sleek all-metal design, weighing just 1.35 kg (1.65kg with a keyboard) and measures 14.6 mm thin. Moreover, the device comes powered by up to Intel Core Ultra 9 Processor 185H, with Intel Arc iGPU and Intel AI Boost NPU for users to get exceptional performance.

The Zenbook DUO features an ex-



Starting at Rs 1,59,990, the Zenbook DUO is now available for purchase on the e-commerce platforms, Amazon and Flipkart.

haustive port selection, including 2 x Thunderbolt 4 USB Type-C ports, USB 3.2 Gen 1 (Type-A), HDMI 2.1, and a 3.5mm combo audio jack, providing versatile connectivity options. In addition, the company mentioned that the laptop comes equipped with a range of intuitive software features designed to enhance user experience.

Sleep apnea prevalent in patients at risk of heart failure from cancer therapy

San Francisco, Feb 10 (IANS) Sleep apnea is prevalent among cardio-oncology patients who are at higher risk of congestive heart failure following cancer therapy, a new study has said. Sleep apnea is a breathing disorder that occurs while sleeping and is classified as either obstructive (OSA) or central (CSA). Both can be treated to reduce symptoms and enhance cardiovascular health. According to the study presented at the American College of Cardiology (ACC), among heart failure patients in the general population, OSA maintains a 48-52 per cent prevalence and is associated with heightened cardiovascular mortality and morbidity rates.

To conduct the study, the researchers used a sleep apnea questionnaire to evaluate the prevalence of the disorder among 296 general cardiology patients and 218 cardio-oncology patients. Data was collected on traditional risk factors,

STOP-BANG (Snoring, Tiredness, Observed apnea, Pressure - elevated blood pressure, BMI, Age, Neck, Gender) scores, and history of sleep for both groups. In the general cardiology group, the occurrence of sleep apnea was 54 per cent, while in the cardio-oncology group, it was 39 per cent.

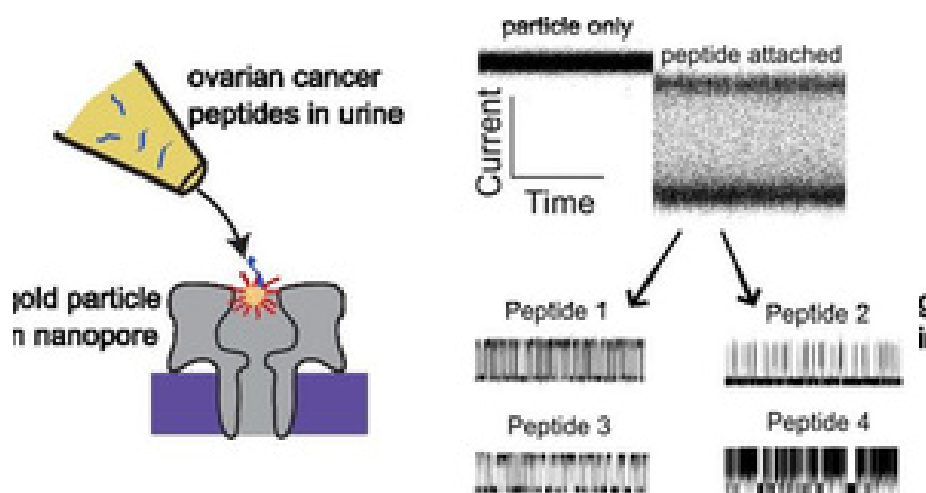
The prevalence of sleep apnea in the general cardiology group was found to be comparable to the rates reported in patients with heart failure with reduced ejection fraction or heart failure with preserved ejection fraction. "Identifying these individuals may allow early intervention in a risk factor clearly associated with heart failure now recognised to affect cancer therapy and survivorship," said Mini K. Das, MD, medical director of the cardio-oncology programme at the US-based Baptist Health in Louisville and the study's primary author. A questionnaire for sleep apnea



utilising the STOP-BANG score revealed that individuals who have not been treated for sleep apnea as well as those at increased risk of sleep apnea have abnormal left ventricular strain, a common echo parameter associated with adverse CV events. "Sleep apnea should be incorpo-

rated into current risk algorithms and a larger study is needed to evaluate the impact of sleep apnea in this high-risk population," Das said. Disclaimer: This story has not been edited by the Sakshi Post team and is auto-generated from syndicated feed.

New method may detect early ovarian cancer from urine test



New York, Feb 10 (IANS) Ovarian cancer is hard to diagnose in its early stages because it has vague symptoms, such as constipation, bloating, and back pain. Moreover, there are no routine screens for ovarian cancer like there are with other cancers, such as breast or colon cancer. New research by Joseph Reiner and colleagues at Virginia Commonwealth University in the US shows promise for a urine-based test for ovarian cancer. Previous research showed that there are thousands of small molecules, called peptides, in the urine of people with ovarian cancer.

While it is possible to detect those molecules using certain well-established techniques, those techniques aren't straightforward or cost effective. Reiner

sought a new approach to more easily detect those peptides. He turned to nanopore sensing, which has the potential to simultaneously detect multiple peptides.

The basic idea of nanopore sensing involves passing molecules through a tiny pore, or nanopore, and measuring the changes in electrical current or other properties as the molecules move through. To harness the nanopore technology to detect various peptides, Reiner used gold nanoparticles that can partially block the pore. Peptides, like those in the urine of people with ovarian cancer, will then "stick to the gold particle and basically dance around and show us a unique current signature," Reiner explained. The method is capable of simultaneously identifying multiple peptides, and in their study they iden-

tified and analyzed 13 peptides, including those derived from LRG-1, a biomarker found in the urine of ovarian cancer patients. Of those 13 peptides, Reiner said, "we now know what those signatures look like, and how they might be able to be used for this detection scheme. It's like a fingerprint that basically tells us what the peptide is." "Clinical data shows a 50-75 per cent improvement in 5-year survival when cancers are detected at their earliest stages. This is true across numerous cancer types," Reiner noted. Their ultimate goal

is to develop a test that, combined with other information like CA-125 blood tests, transvaginal ultrasound, and family history, could improve early-stage ovarian cancer detection accuracy in the future. Ovarian cancer has only a 35 per cent overall survival rate.

A more straightforward screening process could improve early diagnosis and lead to a better survival rate. Disclaimer: This story has not been edited by the Sakshi Post team and is auto-generated from syndicated feed.

Underprescribed ORS can save half a million children's lives annually: Study

New Delhi: Oral Rehydration Salts (ORS) – a cheap and effective treatment for diarrhoea — can save lives of half a million children every year, according to a study. A whopping 500,000 children under five die from diarrhoea globally. India accounts for the most cases of child diarrhoea of any country in the world. It is also a leading cause of child death in India. ORS, which comes in a small packet and dissolves in water, is a lifesaving and inexpensive treatment for diarrhoeal disease, yet few prescribe it. To understand the reason behind this underprescribing of ORS, researchers at the University of Southern California (USC) conducted a survey of about 2,000 health care providers in over

200 towns in Bihar and Karnataka. The findings, published in the journal Science, reveal that 50 per cent children with diarrhoea in India do not receive ORS. It is due to provider misperceptions that patients do not want ORS. It plays the biggest role in underprescribing of ORS. Health care providers' perception that patients do not want ORS accounted for roughly 42 per cent of under-prescribing, while stock outs and financial incentives explained only 6 per cent and 5 per cent, respectively. "Even when children seek care from a health care provider for their diarrhoea, as most do, they often do not receive ORS, which costs only a few cents and has been recommended by the World Health Organisation for decades," said Neeraj Sood.

Regulating India's online gaming industry

As we know, market failures manifesting in various forms such as monopolies, externalities, and information asymmetries not only diminish economic value but also erode societal well-being, which results in decline in the trust of users. It is precisely in these cases that government regulatory intervention becomes vital. The measure of adequacy in this context hinges on a simple criterion — the benefits of government intervention must surpass its potential costs. The benefits include safeguarding public interest and trust. Online services have become central to how most of us live our lives. With a staggering 692 million Internet users, India has the world's second-largest Internet user base and ranks eighth globally in terms of time spent on mobile apps. The average daily mobile app usage has surged to 4.9 hours, a 32% increase since 2019. Notably, a significant 82% of usage is dedicated to media and entertainment with social media accounting for roughly half of this engagement. While this trend has generated significant benefits to people, it has also created new concerns. For instance, the Internet has been inundated with AI-generated deep fake videos of celebrities. These technologically advanced simulations have blurred the lines between what's real and what's not. Market failure in online services has taken new characteristics and complexities due to the intricate interplay of data and algorithms.

The government is responding to these challenges by proposing new forms of digital regulation. Within this landscape, an important sector is online gaming where market failure is becoming evident and yet there is no adequate regulation. The online gaming industry in India is predominantly a home-grown start-up ecosystem growing at 27% CAGR. It is widely estimated that AI and online gaming can add up to \$300 billion to India's GDP by 2026-27. But with great leaps come inherent pitfalls. Similar to other forms of digital media, the meteoric rise of online gaming has brought with it an array of concerns such as addiction, mental illness, suicides, financial frauds, privacy and data security concerns. Money laundering and national security concerns are other realities. The situation is further exacerbated by the growth of illegal offshore gambling and betting markets wherein the volume of digital transactions provides fertile ground for financial malpractices. In July 2023, the Parliamentary Standing Committee on Finance, of which I am a member, identified four major trends in cybercrime. Notably, one includes the use of international online betting sites for purposes such as money laundering.

These issues are symptomatic of a larger problem of market failure, arising primarily out of insufficient regulation. Consider, for instance, the safety and financial ramifications of illegal offshore betting and

gambling markets. No mechanism exists for individuals to differentiate between legitimate gaming platforms and illegal gambling/betting sites. In addition, in the absence of a specialised regulatory authority, enforcement is lacking. As a result, the number of illegal operators is multiplying by the day. The illegal offshore gambling and betting market receives \$100 billion per annum in deposits from India and has registered a growth rate of 20% in the past three years. Besides causing user harm, the clandestine and untraceable operations of these platforms are causing substantial losses to the exchequer. Estimates indicate that India lost \$45 billion per annum in taxation due to operations of illegal offshore markets. These challenges call for an urgent need for robust regulation of the online gaming industry. Some State governments attempt to ban online gaming. However, the inherent cross-border nature of the Internet makes enforcing such a ban almost impossible, leading to the unintended consequence of legitimate, regulated platforms being replaced by unregulated and potentially harmful ones. In this context, the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 marked a commendable step towards oversight. However, the delayed notification of Self-Regulatory Bodies has stalled the progress. To protect 373 million gamers in India, who are potentially at risk, it is imperative that



the sector is strictly regulated.

The global perspectiveThe U.K. has a centralised government regulator. In order to track the efficiency of measures undertaken, this body publishes quarterly the effects of regulation in the sector. The recent reports have shown that since 2017, operators who fell afoul of player protection requirements have been subjected to significant multi-million-pound fines. This strict enforcement, coupled with targeted efforts aimed at harm reduction during 2018-22, has led to a decline in both disordered gaming and medium-to-low risk gaming behaviour. An unregulated market may not deliver the greatest benefit to so-

ciety overall. According to the International Monetary Fund, a combination of high taxes and a weak, discretionary approach to regulatory enforcement creates the most fertile ground for the proliferation of a shadow economy — an environment in which the Indian online gaming industry is operating. Therefore, establishing a strict regulatory framework is an urgent need, not just for protecting our digital nagriks and national interests, but also to ensure responsible growth of the online gaming sector. Amar Patnaik is a Member of Parliament, Rajya Sabha, from Odisha, and an advocate by profession now. He is a former CAG bureaucrat. Views are personal.

Why has South Africa dragged Israel to the ICJ? | Explained

The story so far: The two-day proceedings before the International Court of Justice (ICJ) at The Hague between South Africa and Israel attracted global attention. South Africa had in late December moved the ICJ, invoking the Convention on the Prevention and Punishment of the Crime of Genocide, 1948, against Israel, accusing it of committing genocide during its ongoing military campaign in Gaza. This is the second instance in recent years of two countries not directly locked in a dispute locking horns over allegations of genocide before the ICJ. In 2019, the Gambia had approached the ICJ against Myanmar for its alleged genocide against the Rohingya community. South Africa has sought the indication of provisional measures to stop the genocide while Israel has rebutted the allegation that it had any genocidal intent in its response to the October 7 terrorist

attack by Hamas. What gives ICJ jurisdiction? The ICJ is the principal judicial organ of the United Nations. The statute that created it makes it clear that only states may be parties in cases before the Court. Both South Africa and Israel are signatories to the Genocide Convention of 1948, which has now been invoked by South Africa. Provisional measures are interim rulings of the ICJ aimed at preventing either party from doing irreparable harm to the main case. Proceedings instituted before the ICJ usually take years for disposal. In this instance, in its 84-page filing, South Africa has sought a series of measures including the immediate suspension of Israel's military operations in Gaza and to desist from the commission of any act within the scope of the Convention against the Palestinian people. A request for provisional measures in this case will not in-

volve a determination on whether a genocide has taken place, but it is enough for South Africa to demonstrate an intent to commit genocide. What is the Genocide Convention? The Genocide Convention, 1948, was the first human rights treaty to be adopted by the UN General Assembly. It primarily arose from a commitment to 'never again' allow mass killing of people such as the Holocaust. South Africa's case is based upon Article II which says genocide means acts such as killing members of a national, racial, ethnic or religious group; causing serious bodily and mental harm to the members of the group; and deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part. It has also accused Israel of causing hunger, dehydration, and starvation in Gaza by impeding sufficient humanitarian assistance,

The deepening embrace between tennis and technology

When Roger Federer whipped that forehand crosscourt on championship point against his greatest rival Rafael Nadal in the 2017 Australian Open final, he could not celebrate immediately because Nadal had appealed for a Hawk-Eye review. Hawk-Eye is the computer vision system that visually tracks the trajectory of the ball and displays a profile of its most likely path. It is so ubiquitous in tennis today that an average fan cannot remember a time without it.

In fact, the final three points of that momentous final all had Hawk-Eye interventions. There was as much technology as tennis. The storied rivalry between Federer and Nadal had had its share of cliff-hanger matches, and now the entire world was waiting for Hawk-Eye to declare the champion. Machines loaded with simulation software would decide the winner and the humans would have to wait. The famous words of the television commentator Robert Koenig at that juncture were, "Fate now in the hands of the Hawk-Eye." Hawk-Eye called the ball in, and then Federer had a delayed celebration. If John McEnroe had been Federer's opponent that day, he might have yelled, "You cannot be serious" at the machine. Laws of sports fandom work on a different plane and it wouldn't be a surprise to find Nadal supporters doubting that decision even to this day. But the bottom line was that technology was trusted to arrive at a better conclusion than humans and there had to be an acceptance of the same, even if grudgingly. The use of ball-tracking technology to decide line calls is now ubiquitous in tennis.

The use of technology in tennis has evolved over time. Firms like IBM have been associated with prestigious events like Wimbledon and the US Open for over three decades. By the 1990s, with the advent of improved racquet technology, tennis became a 'power sport' with the likes of Pete Sampras and Andre Agassi leading the way. When the average speed of the first serve was over 100 mph, the job of a line umpire was not easy. Routine squabbles between players and referees meant something had to be done by the tennis federations and that led to the initial forays of technological support into the sport.

In recent times, it took a non-fiction book titled *Moneyball: The Art of Winning an Unfair Game* by Michael Lewis in 2003, along with the adapted version as a Hollywood movie, to show how statistical data can play a significant role in the success of a sports team (the Oakland Athletics team in the 2002 season of the Major League Baseball). In tennis, the Bengaluru-headquartered IT behemoth Infosys is the technology partner of the ATP Tour. Over the years, over 150 million digital fans have interacted with Infosys Match Centre, including 3000 players and coaches for Artificial Intelligence (AI) driven coaching solutions. "The Infosys Tennis platform

uses dimensions such as player rankings, length of rallies, crowd noise levels, and distance between the ball and the player to provide each point with an AI score," Sumit Virmani, Global Chief Marketing Officer, Infosys, told *The Hindu*. "This helps the media rank the best shots of the day. For players and coaches, the platform studies tennis matches and suggests areas of strength and ones to improve." Data the new oil

In other words, when a tennis match goes live, every shot is now a data point, whether it is a winner or an error. As fans enjoy the match, a parallel analytics game begins at the back end. Thousands of these data points are fed into data servers and become a treasure for statisticians to analyse and match trends to the granular level of "who will win the next point? What strategy will the player adopt?" Fuelled by the worldwide penetration of smartphones, the speed, scale, and impact of technology in recent times have witnessed a significant surge. Integrating analytics into sports has also transformed how athletes train and compete, and how coaches strategise. "The three key aspects where athletes and coaches can benefit greatly are performance optimisation, injury prevention and tactical adjustment," said Soudeep Deb, Assistant Professor, Decision Sciences Area at the Indian Institute of Management, Bangalore. "In the first aspect, analytics provides detailed insights into an athlete's performance metrics, including speed, agility, strength, and endurance. "Regarding injury prevention, monitoring biomechanical data and tracking workload through analytics has become a common practice. The final, arguably the most critical need of analytics is preparing strategies or making tactical adjustments for specific matches," Prof. Deb added.

Shifting sands Access to data and the adoption of technology by players and coaches were rare in the earlier decade. A player's talent was the be-all and end-all and Harsh Mankad, a former Indian Davis Cup player, recalled a traditional method he used during his playing days on the ATP Tour.

"I started professional tennis in 2002, and I played till 2010, and at that point, there wasn't much analytics," he said. "We weren't getting much data either before or after the match. Certain individuals had started putting up cameras behind the courts and recording. Some parents, travelling coaches would hook up a camera stand and record the matches. So, I would say that was the early stage of getting the video data." Prof. Deb felt that tennis lagging behind other sports in embracing technology and data is because of three main reasons. "It is possibly connected to the individualistic nature of the sport," he said. "Traditionally, the players' skill, intuition, and on-court decision-making have been thought to be the key behind their success. This is in stark contrast to team sports like



Netflix registered its third-consecutive quarter of accelerating subscriber growth in the final three months of 2023, closing out a comeback year that included a crackdown on viewers freeloading on the video-streaming service and a smattering of price hikes.

football or baseball, where statistical analysis is more readily applicable to collective strategies.

"Tennis coaching has also traditionally been built on personal relationships between coaches and players, relying heavily on observation, experience, and hands-on guidance. The integration of analytics requires a shift in coaching methodologies. "The final point is that tennis historically lacked comprehensive and standardised data collection. While basic statistics like aces and unforced errors have long been tracked, the depth and granularity of data were limited. "It is also imperative to point out that smaller budgets and resource constraints in tennis compared to major team sports might have limited the investment in analytics infrastructure. Teams and organisations may prioritise other aspects of player development over the acquisition and implementation of advanced analytics technologies," added Prof. Deb. However, similar to how technology moved from enterprise level to personal computing, a pattern is being observed in tennis as well. An elite tennis player now travels with an entourage of scientific experts – fitness trainers, nutritionists, psychologists, analysts and doctors. The coach's job is to gather all data dimensions of a player and distil the information into specific actions required to win the next match or tournament. With large datasets now made available, the analysis process is in-depth.

The human element One could have all the gadgets and tools but what about the human mind? Players burst into anger, break racquets and argue endlessly with referees. What effect do these have on player performances? There are times when emotions are self-directed to channel their motivation to uplift performance. A television commentator once remarked, "Andy Murray speaks to himself more than commentators do with their microphones."

And at times these are cues for the

opponents to note. Most recently, World No.1 Novak Djokovic told CBS News' 60 Minutes interview that he even observes how his opponent is breathing so that he can strategise. Surely, that cannot be quantified! "It is well documented that when the energy level is low, the player wants to finish the point faster," said Mankad. "Contrary to their behaviour in the training sessions, I've seen top players rushing through the points when their energy levels dip or due to external situations like a bad line call or the crowd rooting for their opponent. "The coach's observation of such situations is paramount to the athlete's development since this is beyond statistics and data analysis," added Mankad.

Way ahead What all of this suggests is that technology is a tool that aids in better decision-making by humans. In the world of tennis, the plethora of products and services available are consumed by athletes, coaches, fans and administrators as means to arrive at finer conclusions. "When you consider the tennis ecosystem, Infosys has launched over 30 innovations converging the power of AI, cloud, metaverse, mixed reality, and other new-age tech," said Virmani. "MatchBeats, Second Screen, and Courtvision 3D are innovative solutions that ingest data from sources like the chair umpire's tablet, the high-definition cameras deployed by Hawk-Eye, and the speed gun deployed on the court. Then, within a few milliseconds, they produce easy-to-understand visual output for fans," Virmani added. In today's world, a day without technology is unimaginable. But as the oft-repeated mantra goes, "AI will not replace humans, but humans with AI will replace humans without AI." "Advancements in technology, increased data availability and the success stories of analytics in other sports have prompted a growing recognition of the value analytics can bring," said Prof. Deb. "As the sport evolves, analytics integration will likely become more commonplace."