What's hot in IT - A Perspective from India November 2020

Science & Technology

• Pune-based, TIFR operated **GMRT (Giant Metre-wave Radio Telescope)** – home-made telescope that is used by Scientists from over 40 countries - gets **IEEE Milestone** recognition for its novel engineering and scientific contributions; it is the third one after JC Bose demonstrated Radio waves in 1895 and CV Raman's demonstration of Raman Effect of 1928 (30 Nov 2020)

• **OneWeb** comes out of bankruptcy (US Chapter 11), announces Sunil Mittal as Chairman, talks of putting 360 low orbit satellites from Dec 2020 to Oct 2021 to provide Internet connectivity to remote areas in India (25 Nov 2020)

• The renowned Agri Research Lab **ICRISAT** allowed to do **Drone experiments** by Civil Aviation Ministry (20 Nov 2020)

• **History was made** when **hyperloop** successfully completed the first human trial; Pune's **Tanmay Manjrekar** is one of the two to travel that saw the vehicle traveling 500 m in 15 seconds and reaching a speed of 172 Km/hr (9 Nov 2020)

• **ISRO** satellite **launch** at 15:11 hours saw India's Earth Observatory Satellite (EOS-01) along with nine international customer satellites (including 4 from The USA) getting launched (7 Nov 2020)

Higher Education

• IIM Admission Test **CAT exam** was held in 430 exam centers in 159 cities with full preparation for protection against Covid-19 (29 Nov 2020)

• **OP Jindal University** completes a framework to become **Institute of Eminence** (1 Nov 2020)

Policy

• **Government of India** announces **Stimulus 3** with **PLI** (Production Linked Incentives) for 10 Sectors of the economy with Rs 1.2 Lakh Crores booster (12 Nov 2020)

• Government of India eases rules for WFH (Work From Home) for IT companies (5 Nov 2020)

• Government of India throws open land sale in Kashmir to any Indian (1 Nov)

Special events and Milestones

• US Presidential Elections were held on 3 Nov 2020; Democratic Party won with Joe Biden as President & Kamala Harris as Vice President; with President Trump refusing to accept the verdict, there is confusion. With Kamala Harris born to an Indian mother, there is an unusual interest in the results of this Election in India

• **Bihar Elections** Phase 1 (26 Oct), Phase 2 (3 Nov) & Phase 3 (10 Nov 2020); NDA forms Government, though it was a neck-to-neck win (16 Nov 2020); Nitish Kumar is the Chief Minister for the 4th term (20 Nov 2020)

- Statue of Unity gets a sea-plane connection from Ahmedabad (1 Nov 2020)
- **Big Basket** reported a potential **data breach** of its 20 Million customer data (9 Nov 2020)

• **RCEP** ((Regional Comprehensive Economic Partnership) free trade agreement got initiated (it accounts for 30% of global trade; it is led by China; India has decided to opt-out of RCEP) (20 Nov 2020)

• **NIVAR** cyclone hits Tamil Nadu; thanks to a better job by Disaster Management team, political support and some luck, no major damage to life & property (25 Nov 2020)

• France saw terrorist attacks on 29 Oct to 3 Nov; Vienna saw violence on 3 Nov 2020

• **Coronavirus Disease** (officially **Covid-19**) in India seems to have slowed down in November; there is some good news on vaccines production and distribution around the corner (30 Nov 2020)

Covid-19 deaths in India cross 130,000 (10 Nov 2020); USA count crosses 250,000 (19 Nov 2020); globally 1.25 Million (8 Nov)

- India's positivity rate is down and R-value below 1.0 from 24 Sep 2020
- o Un-lock 6 starts (23 Nov 2020); Colleges & Schools open partially from 17 Nov 2020
- o On 30 Nov 2020, cases/deaths stood at
 - Global: 62,363,527 and 1,456,687
 - India: 9,431,691 and 137,139
 - USA: 13,082,877 and 263,946
- Death count

<u>India</u> 1st case (Mar 13), crossed 100 (6 Apr), 1,000 (29 Apr), 10,000 (16 Jun), 20,000 (6 Jul), 40,000 (6 Aug), 50,000 (17 Aug) and 100,000 (3 Oct), 125,000 (7 Nov)

<u>USA</u> 1st case (Mar 3), crossed 100 (Mar 18), 1,000 (Mar 28), 5,000 (Apr 4), 10,000 (Apr 8), 50,000 (Apr 29), 100,000 (May 30), and, 200,000 (25 Sep), 250,000 (21 Nov)

<u>Global</u> 1st case (Jan 11), crossed 100 (Jan 28), 1,000 (Feb 11), 10,000 (Mar 20), 50,000 (Apr 3), 100,000 (Apr 12), 500,000 (30 Jun), and, 1 Million (29 Sep), 1.25 Million (8 Nov)

• UK reimposes Lockdown in Nov 2020

<u>Markets</u>

- India's stock market index **Sensex** touches 44,000 for the first time (18 Nov 2020)
- Billionaire Jack Ma's **Ant's** \$ 35 Billion **IPO** stopped by the Chinese Government (5 Nov 2020)
- Manipal Hospitals buys Columbia Asia with 18 Hospitals across India (12 Nov 2020)
- **AMD** buys **Xilinx** for \$ 35 Billion and **Marvell** buys **Inphi** for \$ 10 Billion, indicating heavy consolidation in the semiconductor industry (1 Nov 2020); **Apple** launching its own **M1** processor-based MacBook, **Intel's** dominance in processors is likely to take a beating

Products

• Apple launches MacBook Pro, MacBook Air and Mac Mini with ARM-based Apple Silicon (M1 Chip using 5-nm technology with 16 Billion transistors) replacing Intel processors (10 Nov 2020)

- With NPCI nod, WhatsApp Payment starts in India (5 Nov 2020)
- Micromax re-enters mobile handsets markets with IN brand (3 Nov 2020)

Indian IT Companies

- Mphasis patents Autocode.Al (23 Nov 20200)
- **TCS** buys **Pramerica** Ireland (an arm of **Prudential**) with 1,400 staff in Ireland getting absorbed into TCS (12 Nov 2020)
- Wipro acquires SaaS solution provider Encore Theme Tech for Rs 95 Crores (1 Nov 2020)

MNC Companies in India

• Amazon to invest Rs 20,000 Cr in Telangana Data Centre (Nov 2020)

Startup scene

• App-based Bus Service provider **CityFlow** raises \$ 8 Million in Series A funding (25 Nov 2020)

Online Education major upGrad buys exam preparation start-up GATE Academy (25 Nov 2011)

- Used car dealer CARS24 becomes a Unicorn (23 Nov 2020)
- Mphasis buys UK-based data engineering firm Datalytyx (23 Nov 2020)

• **Prem Kumar** founded **Snapbizz** talks of taking **300,000 Kirana Stores online** in a year (from its current 3,000 stores per month customer acquisition) with ICICI / HDFC Bank funding (Nov 2020)

• Kabeer Biswas founded **DUNZO** delivers 2 million packets a month with an average delivery time of 23 minutes (Nov 2020)

• Reliance acquires Urban Ladder for Rs 182 Crores (15 Nov 2020)

<u>People</u>

• Dr. FC Kohli, the first CEO of India's largest software services company TCS is no more (28 Nov 2020)

• Israel PM meets Saudi Prince (23 Nov 2020)

• US presidential election on 3 Nov 2020; Joe Biden as President and Chennai-born Kamala Harris as Vice President get elected though President Trump refuses to accept his defeat

• US Secretary of State Pompeo visits India and signs defence deals (1 Nov 2020)

Interesting Applications / Apps

• AAROGYA SETU App code open sourced (21 Nov 2020)

• **FASTag** takes off in a big way; with 20 Million vehicles with **FASTag** and accounting for Rs 75 Cr toll collection every day ((Nov 2020)

• **Amazon** e-commerce touches 99.3% of the PIN codes in India, indicating widespread use by consumers across the length and breadth of India (Nov 2020)

Interesting numbers

- India's **e-com sales** during **festival season** in Oct-Nov is up from Rs 35,000 Cr last year to Rs 58,000 Cr in year 2020
- Sensex crosses 44,000 for the first time ever (18 Nov 2020)
- Xiaomi sells 13 Million devices in festival season (8% higher than last year sales) (Nov 2020)
- Maruti sold 200,000 cars online over 2 years (Nov 2020)
- **Electronics** items and Smart Phones see **30% rise** in sales during Diwali season; Chocolates and food items see a steady rise too (Nov 2020)
- GST collection goes past Rs 1 Lakh Crores indicating economic revival

• Foreign exchange reserves touched a new high of \$ 575 Billion (29 Nov 2020); March to November 2020 saw an increase of more than \$ 100 Billion!

Professor Sowmyanarayanan **Sadagopan** (<u>ss@iiitb.ac.in</u>) is the Director of IIIT-Bangalore. These are his personal views. He has been writing on "**What's hot in IT**" with an Indian perspective continuously from 1997; Times of India, Financial Express and IT Magazine carried the monthly (and yearly columns) till 2016; IEEE India has been carrying the quarterly columns since 2017