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

1. Science & Technology

- Delhi Metro commissions fully driver-less trains on Magenta line (28 Dec 2020)
- L&T prints 700 square feet house in Kanchipuram in Tamil Nadu taking just 10.6 hours of machine time using 3-D Printing technology – an important milestone with a huge potential for India (25 Dec 2020)
- OneWeb launches 36 satellites (of the planned 648 LEO satellites that will offer Internet to rural areas by Dec 2021) (20 Dec 2020)
- ACM India Early Career Researcher Award (funded by Persistent Systems) goes to Dr Saket Saurabh of IMSc (Institute of Mathematical Sciences) (22 Dec 2020)
- Infosys Science Prize 2020 goes to
 - o Dr Hari Balakrishnan of MIT (Engineering & Computer Science)
 - o Dr Prachi Deshpande of CSSS, Kolkata (Humanities)
 - o Dr Rajan Sankaranarayanan of CCMB (Life Sciences)
 - o Dr Sourav Chatterjee of Stanford (Mathematical Sciences)
 - o Dr Arindam Ghosh of IISc (Physical Sciences)
 - o Dr Raj Chetty of Harvard (Social Sciences) (19 Dec 2020)
- Indian American Raja Chari is among the 18 strong team selected by NASA as "potential Men / Women on the Moon in 1924" (18 Dec 2020)
- Britain's MHRA (Medicine & Healthcare Products Regulatory Agency) approves Pfizer's Covid-19 vaccine under emergency use approval (2 Dec 2020); 90-year old Margaret Keenen of UK is the first human being to be administered Covid-19 vaccine (8 Dec)

2. Higher Education

- Union Government hikes its share (11% to 60%) of **Post Metric Scholarships** to nearly 40 Million SC students (23 Dec 2020)
- **JEE** to be conducted four times a year from 2021 (it was just one exam during 1967 to 2017, conducted twice in 2018, 2019 & 2020)
- IIT Kanpur starts Sustainability Engineering Department and a Department on Cognitive Sciences in December 2020
- Indian pharma major CIPLA Chairman Yusuf Hamied creates history; Cambridge University
 names its Chemistry Department after him till 2020; 25 Nobel Laureates are associated with this
 Department has (1 Dec 2020)

3. Policy

- UK EU sign Free Trade agreement as UK makes its BREXIT exit (25 Dec 2020)
- Union Government losses CAIRN case in international litigation; appeals against Vodafone arbitration to Singapore Court (25 Dec 2020)
- Farmers' opposition to Government's new Agricultural Laws disrupt life in Delhi for weeks in December 2020
- Lucknow Municipal Bonds listed on BSE the first City in Uttar Pradesh to do so (2 Dec 2020)

4. Special events and Milestones

- Jammu Kashmir had peaceful Elections for DDC with good participation; results were out on 23
 Dec 2020
- Chennai December Music season goes virtual (15 Dec to 15 Jan)
- Google, Intel, Dell, Citrix form "Cloud Alliance" (18 Dec 2020)

- Mail, YouTube services disrupted on 14 Dec 2020
- HDFC Bank IT outage leads to regulator (RBI) intervention (2 December 2020
- In **US Presidential Elections** held on 3 Nov 2020 the Electoral College seals the win for Joe Biden (16 Dec 2020)
- **Coronavirus Disease** (officially **Covid-19**) in India seems to have slowed down considerably in December, though the Caseload crosses 10 Million in December
 - US plans to administer vaccines to 20 Million Americans by 31 Dec 2020; could complete only 1 Million in the first 3 days
 - o India sets up the National Expert Group on Vaccine Administration (**NEGVAC**) to roll out vaccines; 10 Million health workers are the first priority; Government plans to administer vaccines to 300 Million people; as a pilot project, Government is connecting identified 85,634 cold storage points in 28,947 places in 4 States using innovative technology under Phase 1 of the plan (4 Dec 2020)
 - Moderna gets US FDA approval under emergency authorization approval (20 Dec 2020)
 - US FDA approves Pfizer vaccine (18 Dec); President-Elect Biden takes the vaccine (23 Dec)
 - UK approves Pfizer's vaccine (2 Dec 2020); 90-year old Margaret Keenen of UK is the first human being to be administered Covid-19 vaccine (8 Dec 2020)
 - Covid-19 picture in December 2020

India's positivity rate is down and R-value below 1.0 from 24 Sep 2020 Un-lock 7 starts (2 Dec 2020)

On 27 Dec 2020, cases/deaths stood at

Global: 78 Mililon and 1.7 Million

India 10 Million and 147,000

• USA: 18 Million and 320,000

- Death count
 - <u>India</u> 1st case (13 Mar), crossed 100 (6 Apr), 1,000 (29 Apr), 10,000 (16 Jun), 50,000 (17 Aug) and 100,000 (3 Oct), 125,000 (7 Nov), 147,000 (24 Dec)
 - <u>USA</u> 1st case (3 Mar), crossed 100 (18 Mar), 1,000 (28 Mar), 10,000 (8 Apr), 50,000 (25 Apr), 100,000 (29 May), and, 200,000 (25 Sep), 300,000 (16 Dec)
 - Global 1St case (11 Jan), crossed 100 (28 Jan), 1,000 (11 Feb), 10,000 (20 Mar), 50,000 (3 Apr), 100,000 (12 Apr), 500,000 (30 Jun), and, 1 Million (29 Sep), 1.5 Million (3 Dec)

5. Markets

- Sensex touches 47,000 (18 Dec 2020)
- Google acquires Neverware, New York City based software company with its tool CloudReady that converts old Windows PC into Chromebooks (16 Dec 2020)
- IRCTC IPO over-subscribed (12 Dec 2020)
- SaaS-based CRM software company Salesforce acquires Slack in a mega deal (\$ 27.7 Billion) (2 Dec 2020)

6. **Products**

ICICI Bank rolls out iMobile Pay that works across Banks (9 Dec 2020)

7. Indian IT Companies

- **L&T** prints 700 square feet house in Kanchipuram in Tamil Nadu taking just 10 hours of machine time using **3-D Printing technology** an important milestone with a huge potential for India (25 Dec 2020)
- Infosys bags the largest ever mega IT services order of \$ 3.2 Billion over 8 years from Daimler for (23 Dec 2020)

Wipro bags IT services order of \$ 700 Million over 5 years from German retailer Metro (23 Dec 2020)

8. MNC Companies in India

- E & Y to hire 9,000 techies in India in 2021 to boost its digital capabilities (24 Dec 2020)
- Google launched Machine Learning Utilities for Research in Indian Languages (MURIL) to help the R & D ecosystem in Indian languages (16 Dec 2020)
- Fiat Chrysler setting up \$ 150 Million digital hub in Hyderabad (15 Dec 2020)
- Nokia plant in Chennai outskirts starts manufacturing 5G Telecom gear in India (4 Dec 2020)

9. Startup scene

- DailyHunt gets Unicorn status with Google funding (21 Dec 2020)
- Zomato gets \$ 600 Million infusion (18 Dec 2020)
- Online education start-up upGrad acquires Rekrut (15 Dec 2020)
- [24]7.ai hires 3,500 in India in 2020
- Aman Gupta founded boAT (India's wearables company) became the 5th in the world in this
 emerging market After Apple, Xiaomi, Huawei and Samsung (and tied with Fitbit), as per IDC
 Report (2 Dec 2020)

10. People

- Prime Minister Modi (along with Japanese & Australian Prime Ministers) conferred "Legion of Merit" by US President Trump (21 Dec 2020)
- IIT-Kanpur Alum Dr Aravind Krishna, current IBM CEO elected as IBM Chairman (16 Dec 2020)
- Noted Indian Scientist Dr Roddam Narasimha of "Flosolver fame" passed away (14 Dec 2020)
- US President-elect Biden and Vice-President elect Harris are TIME Magazine's Person of the year 2020 (10 Dec 2020)
- Indian pharma major CIPLA Chairman Yusuf Hamied creates history; Cambridge University names its Chemistry Department after him till 2020; 25 Nobel Laureates are associated with this Department has (1 Dec 2020)

11. Telecom / Infrastructure

- 4G spectrum auction cleared by Union Cabinet (16 Dec 2020)
- Foundation stone laid for the New Parliament Building (10 Dec 2020)
- BSNL Sylo launch satellite-based IoT detection service (8 Dec 2020)
- Union Cabinet approves Project WANI to set up one million public W-Fi hotspots be Dec 31, 2021

12. Interesting Applications / Apps

- FASTag to be mandatory for toll collection on NHAI highways rom 1 Jan 2021
- Dept of Post launches Dak Pay App (15 Dec)
- RTGS goes 24/7 from 15 Dec 2020
- HDFC Bank's IT outages lead to regulator (RBI) intervention (3 Dec 2020)

13. **Interesting numbers**

- FASTag collects Rs 80 Cr in a day involving 5 Million transactions (25 Dec 2020)
- GST collection goes past Rs 1 Lakh Crores indicating economic revival
- Foreign exchange reserves touched a new high of \$ 581 Billion (27 Dec 2020); March to November 2020 saw an increase of more than \$ 100 Billion! It was \$ 457 Billion in Jan 2020

Professor Sowmyanarayanan Sadagopan (ss@iiitb.ac.in) 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