### What's hot in IT - A Perspective from India

Sep 2020

### **Science & Technology**

- **Human trials of Covid-19 vaccine from Oxford** was halted and re-started after 6-day pause in mid-September, demonstrating the risk involved in fast-paced vaccine development
- Rafael fighter Jet formally inducted into Indian Airforce (10 Sep 2020)
- **GPT-3** (Open Al's powerful language generator program) writes "A robot wrote this entire article. Are you scared yet, Human?" in **Guardian** newspaper (8 Sep 2020)
- **DRDO** successfully tests **Hypersonic technology** vehicle that could move at 6 times the speed of sound (7 Sep 2020)

### **Higher Education**

- **JEE (Advanced)** for admission to IIT's held successfully by IITD-led Committee on **Sep 27, 2020**; with more than 1,50,000 candidates taking the exam there was record **96% attendance**; the exam had provisioned 3,40,000 online computer nodes in 222 cities and 1,001 exam centers across the length and breadth of the country and confirming to full safety (social distancing and sanitization norms) (thanks to **TCS**) to protect against Covid-19); there was opposition and even public interest litigation in Supreme Court earlier
- Parliament gives Institute of National Importance status to IIIT's in Surat, Bhopal, Bhagalpur, Agartala and Raichur set up in PPP mode (23 Sep 2020)
- National Law School, Bangalore NLSUI decides to go for independent Entrance Exam (other than National Level CLAT); Supreme Court intervenes and NLSUI had to go with CLAT (21 Sep 2020)
- JEE (Mains) Examination for admission to technical courses (proctored online mode) held during 1-6
   Sep 2020, after Supreme Court refused stay; 6.35 Lakh students appeared for the exam in 660 centers spread across 232 Cities (out of 8.41 Lakhs students registered); results were declared on 11 Sep 2020; 24 candidates had 100 score
- NEET Exam for admission to Medical courses (paper-based) was held on 13 Sep 2020; there was 85% attendance
- American Express sets up Analytics Lab at IITM (3 Sep 2020)

### **Policy**

- International **arbitration** case of Rs 22,000 Cr claim of **retrospective tax** amount against **Vodafone** goes against Indian government (26 Sep 2020)
- Election Commission of India announces dates for Bihar Election; polling on Oct 28, Nov 3 & Nov 7; results on 10 Nov 2020 (26 Sep 2020)
- Indian Parliament meets in spite of Covid-19 with sufficient preparation for touch-free operations and
  maintaining social distance; Union Government passes liberal Labour Laws to help manufacturing and
  frees farmers to sell their produce beyond government channels to help Agriculture; however, the
  Policies are not well received with several political parties going against (25 Sep 2020)
- Karnataka Government announces a new IT Policy to create 6 million jobs by 2025 with focus on Tier
   II and Tier III towns (3 Sep 2020)
- Places of Worship open on 1 Sep 2020; Metro services start from 7 Sep 2020

# **Special events and Milestones**

- Amidst all the gloom IPL takes off (25 Sep 2020)
- China snooping on 10,000 influential Indians makes headline news in September (14 Sep 2020)
- India & China enter into 5-point truce on border tension (12 Sep 2020)
- RIL is the first Indian company to cross market capitalization of \$ 200 Billion (10 Sep 2020)

- Coronavirus Disease (officially Covid-19) continues to cause havoc throughout September and the
  global death toll nearing 1 Million (30 Sep); Oxford University trial gets halted for 6 days and then
  resumed in mid-Sep; final nod for vaccine production expected soon; companies like Serum Institute in
  Pune India gearing up for production; countries are preparing logistics for distribution; ICMR sets up
  Vaccine Portal on 28 Sep 2020
  - o India's Vice President Venkaiah Naidu tests Covid-19 positive (29 Sep 2020)
  - India's positivity rate is down to 7.4% and R-value below 1.0; total case decreasing for nearly 10 days (30 Sep 2020); has the third largest number of deaths (next only to USA and Brazil); however, India has lowest rate per million population
  - Un-lock 4 ends (25 Sep 2020)
  - o On 30 Sep 2020, cases/deaths stood at
    - Global: Near 30 Million and nearing 1 Million
    - India: More than 6 Million and near 100,000
    - USA: Near 7 Million and more than 200,000
  - Death count

<u>India</u> 1<sup>st</sup> case (Mar 13), crossed 100 (6 Apr), 1,000 (29 Apr), 10,000 (16 Jun), 20,000 (6 Jul), 40,000 (6 Aug), 96,318 (29 Sep)

<u>USA</u> 1<sup>st</sup> 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, 200,00 (25 Sep)

Global 1sr 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)

## **Markets**

- **NVIDIA** acquiring **ARM** (that was earlier acquired by **SoftBank**) for \$ 40 Billion creates waves in global semiconductor industry (17 Sep 2020)
- Other acquisitions in Sep 2020 include
  - Microsoft buying Zenimax, owner of the popular video game Bethesda, for \$ 7.5 Billion (23 Sep 2020)
  - HCL (3<sup>rd</sup> Indian IT Services company) acquiring Australia-based IT Services company DWS for \$ 115 Million (21 Sep 2020)
  - Confusion around Oracle acquisition of Tik-Tok US assets (17 Sep 2020)
- IPO scene on Indian stock markets saw lot of traction in Sep 2020
  - Happiest Minds IPO opens on 1 Sep 2020; over-subscribed by 151 times, making founder Ashok Soota twice lucky that too at the age of 77 (his startup Mindtree IPO was oversubscribed more than 100 times in 2007); listed at Rs 351 on BSE at 111% premium over issue price of Rs 166 (16 Sep 2020)
  - service provider for Mutual Funds CAMS IPO garners Rs 666 Cr and oversubscribed by 45 times (18 Sep 2020)
  - Cloud communications service provider Route Mobile IPO generates more than Rs 600 Cr and subscribed 73 times (11 Sep 2020)

#### **Products**

- Google launched Google Pixel 4a 5G (prices \$ 499) & Pixel 5 (priced \$ 699) Android phones, Google TV (\$ 49 including a remote) and Google Nest Audio (30 Sep 2020)
- Samsung launched Galaxy Tablet S7+, Galaxy Fans Edition Phone (26 Sep 2020)
- Apple
  - Launch of Apple Watch Series 6 (\$ 499) and 8<sup>th</sup> Generation iPad (\$ 329) and iPad Air (\$ 599) (Sep 2020)

- o **iOS 14** rolled out to users (18 Sep 2020)
- India's largest watch manufacturer **Titan** and the largest Bank **SBI launch** launch **Titan Pay** a smart watch-based contact-less payment system (15 Sep 2020)
- YouTube launches YouTube Shorts (Tik-Tok clone) (15 Sep 2020)
- Android 11 (18<sup>th</sup> version of Android) released on 8 Sep 2020
- Intel announces its 11<sup>th</sup> generation microprocessor "Tiger Lake" for laptop computers (2 Sep 2020)

### **Indian IT Companies**

- HCL (3<sup>rd</sup> Indian IT Services company) acquires Australia-based DWS for \$ 115 Million (21 Sep 2020)
- CAMS IPO garners Rs 666 Cr (18 Sep 2020); CAMS IPO oversubscribed by 45 times (18 Sep 2020)
- Happiest Minds IPO opens on 1 Sep 2020; over-subscribed by 151 times, making founder Ashok Soota twice lucky that too at the age of 77 (his Startup Mindtree IPO was oversubscribed more than 100 times in 2007); listed at Rs 351 on BSE at 111% premium over issue price of Rs 166 (16 Sep 2020)
- Wipro sets up digital innovation lab in Dusseldorf in Germany to serve European customers (11 Sep 2020)
- Infosys buys Czech-based enterprise software GuideVision for Euro 30 Million (14 Sep 2020); earlier, it bought US-based product design company Kaleidoscope (founded by Matt Kornau) for \$ 42 Million (4 Sep 2020)

### **MNC Companies in India**

- Apple opens its India online stores, sees record footfalls on Day 1 (23 Sep 2020);
- Global leader in rail equipment Wabtec opens Bangalore center (4 Sep 2020); in 2019 it launched its Engineering Center in Bangalore

#### **Telecom**

- Vodafone-Idea is Vi from now onwards (7 Sep 2020); planning to raise Rs 25,000 Crores (7 Sep 2020); wins the case of Rs 22,000 Cr retrospective tax in International Court in The Hague against Indian Government (26 Sep 2020)
- Supreme Court gives 10 year time for Telco's to pay their AGR dues (3 Sep 2020)

### Startup scene

- With SoftBank funding of \$ 150 Million, Bangalore-based Unacademy becomes Unicorn with \$ 1.45 Billion valuation (3 Sep 2020); buys Vimal Singh Rathore founded UPSC Test Preparation company Coursavy (26 Sep 2020)
- Airtel buys Kerala-based start-up Waybeo that focuses on analytics for telcos (26 Sep 2020)
- **Byjus** sees lot of traction; **acquires LabInApp** (17 Sep), gets more funds infusion from Silver Lake and **valuation soars** to \$ 11 Billion (25 Sep 2020)
- Tencent invests \$ 63 Million in FlipKart (17 Sep 2020)
- **DPIIT** announces **start-up ranking of States** of India; Gujarat is in No 1 position, Karnataka and Kerala in the next position (11 Sep 2020)

### **People**

- Yoshihide Suga is the new Japanese Prime Minister (16 Sep 2020)
- India-born statistician Prof CR Rao (of Cramer-Rao inequality fame) turns 100 (10 Sep 2020)
- PD Vaghela to take charge as TRAI (Telecom Regulatory Authority of India) Chairman from R A Sharma who retires on 30 Sep 2020

- Byju founder Raveendran in Fortune "40 under 40" list (Sep 2020)
- Many loss of lives in Sep 2020 include
  - Former Union External Affairs & Finance Minister Jaswant Singh passed away on 26 Sep 2020 after very prolonged illness
  - o Indian musical genius **SPB** after 51 days of hospital stay (25 Sep 2020)
  - Union Minister of State for Railways and a Member of the Parliament Suresh Angadi, succumbs to Covid-19 (23 Sep 2020)
  - Renowned Indian astronomer Dr Govind Swarup famous for Ooty Radio Telescope and GMRT (Giant Meter-wave Radio Telescope) (7 Sep 2020)
  - Swami Kesavananda Bharati famous for his historic case against Kerala Government that was finally decided by Supreme Court in 1973 dealing with the basic structure of India's constitution (6 Sep 2020)

### **Interesting Applications / Apps**

- **SBI's** Mobile App **Yono** becomes independent entity; **other Banks** may use Yono using its API-based services (28 Sep 2020)
- **Uber App** starts integrates real time **public transport info** (Bus & Metro) in Hyderabad in Sep 2020; in Oct 2019, it was implemented in Delhi
- **RelJio Telco** offers in-flight service on select International flights starting Sep 2020; earlier Vistaara Airlines started offering in India-London flights
- EduRide Portal started by IITD Alumni to help JEE (Mains) and JEE (Advanced) aspirants in Sep 2020

### **Interesting numbers**

- US budget deficit crosses \$ 3 Trillion (12 Sep 2020)
- India's **forex reserves** touch all time high of \$ 545 Billion (26 Sep 2020)
- India's GDP contracted by 23.8% over Apr-Jun 2020; it was 21.7% for UK

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