

# MONTHLY SECTOR UPDATE

Issue | October 2020



## Technology

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*“The great growling engine of change – technology.”*

**Alvin Toffler**

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 Primus Partners India

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# Our Take

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## Top 3 takeaways of the month

Voice interfaces and chatbots to be the preferred digital interface with customers for future businesses

With increase in computing power of end-terminals like smartphones and IoT devices, edge computing is fast gaining traction

With the global pandemic, forcing companies to pivot to remote work, SaaS industry is set to register consistent growth throughout Q3 2020

## Sector performance

### HCL Tech's earnings update give hope to Indian investors

Shares of HCL Tech surged as much as 7.5% to a record high of ₹776.55 after the IT major raised its outlook for the September quarter in a mid-quarter update. HCL Tech has seen 'strong execution' during the quarter to date, and its revenue is expected to increase more than 3.5 per cent on a quarter-on-quarter basis in the July-September period. The revenue growth will be enabled by momentum across all service lines, verticals and geographies.

### Cloud boosting the growth of digital revenue for IT firms

IT services companies are enhancing their cloud portfolio, through organic and inorganic investments, as digital revenues witness fast growth, especially in the post-pandemic business environment. Cloud has been gaining traction in the last 2-3 years as it helps bring agility to business and reduce costs. However, the pandemic has further accelerated the demand. Infosys Ltd is doubling its investment in the cloud as more clients opt for remote working solutions, new business models, and business continuity plans.

### BPM sector transitions to a remote delivery

Business process management (BPM) firms are all set to transition to a remote delivery model and will work-from-home (WFH) till year-end, aided by technology and relaxed regulatory norms. In March 2020, Department of Telecom (DoT) had permitted certain relaxations such as exemptions on the requirement of a security deposit, signed agreements to allow WFH and procurement of virtual private networks (VPNs) from authorized service providers which have allowed BPM firms to work from home. BPM firm WNS deployed WFH solutions across its offices in 12 countries. As on date, 90% of its workforce is working remotely despite many states allowing up to 50% staff in offices.

# Focus of the month: Cyber security

Cybercrime and cyber warfare is one of the biggest challenges that we face today, and the situation would become more alarming in the days to come. Cybersecurity Ventures predicts that cybercrime will cost the world \$6 trillion annually by 2021, up from \$3 trillion in 2015. While the present global pandemic has accelerated the adoption of technology and internet, it has also increased the scope of cybercrime and cyber warfare.

India is one of the least cyber secure countries in the world. India was the 15th worst country in a recent cybersecurity ranking of 60 nations by consumer tech review firm Comparitech. The report also stated that India is the 6th worst country in terms of mobile phones impacted by malwares and 11th worst country in terms of desktops impacted by malwares. The complexity in India would further increase as the Indian economy moves the e-way, driven more so by the current pandemic. India has the 3rd highest number of internet users in the world after USA and China. The number has grown 6-fold between 2012-2017 with a compound annual growth rate of 44% and by 2020, India is expected to have 730 million internet users with 75% new users from the rural areas. (Source: Niti Aayog)

Recently, couple of news articles caught the attention of the world highlighting the criticality of cybercrime and cyber warfare –

- The US Justice Department charged five Chinese citizens with hacking over a 100 companies and institutions in America and abroad, including the Indian government's networks: [Read more](#)
- US based China Aerospace Studies Institute published a report which said China had been carrying out cyber attacks since 2007, including a "Computer network attack against Indian satellite communication in 2017": [Read more](#)
- As per an Indian Express investigation, a Chinese company with links to Beijing and a pioneer for using big data for "hybrid warfare" has mined personal information of more than 10,000 Indians. [Read more](#)

India witnessed the second-highest number of cyber-attacks in 2016-2018, according to a DSCI report in May 2019. According to Inc42, the average cost for a data breach in India increased by 7.9% since 2017 and the average cost per breached record reached INR4,552 (US\$64). Cybercrime is today not just simple acts by young techies, but it has become an advance weapon for countries. Cybercrime and cyber warfare activity is becoming more sophisticated, more targeted and more serious as can also be seen from the above two examples related to acts of China.

While Government of India has put in place strategies and elaborate measures to counter cyber attacks which could compromise the safety and security of the country. However, we may look at examples of other countries like Israel and put in place a dedicated team of cyber warriors and drive cyber security as one of the topmost priorities. Government should identify key ministries, offices, critical infrastructure installations (e.g. defense locations, power plants, space stations, atomic and nuclear research centers, airports and air traffic control system etc.), projects and assets and have a dedicated and separate Cyber security team in place at each of these locations to secure our country. The role of the private sector is also important here to come forward and support the Government in capacity building. A joint effort can help the country leapfrog in this digital era.

## Elsewhere in the world

- In Singapore, the Cyber Security Agency of Singapore, which is the Government agency that provides oversight of national cyber security functions, is under the Prime Minister's Office (Source: <https://www.csa.gov.sg/who-we-are/our-organisation>)
- Israel has put in place a team of Cyber Warriors as part of the Military

# Project in Focus

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## ICT in Public Health: Andhra Pradesh leading the way

Use of technology can play an important role in addressing challenges in the healthcare system in India. The recent launch of the National Digital Health Mission by Hon. Prime Minister Sri Narendra Modi further highlights the importance of the role of technology in healthcare. Government of Andhra Pradesh has been one of the early movers and is focusing extensively on use of technology in healthcare.

With the aim of leveraging technology for the betterment of the healthcare system, the Department of Health and Family Welfare (DoHFW),

Government of Andhra Pradesh (AP) is implementing the World Bank funded Andhra Pradesh Health System Strengthening Project (APHSSP). The objective of the project is to improve the quality of public health services; increase the utilization of an expanded scope of primary health care services; and build systems to make public health services more responsive to the population. Amongst several key results areas, at least seven areas have an IT focus to enable a monitoring system for quality, supply chain management, patient management and service delivery at primary care level.

### Key Results Areas of APHSSP with focus on usage of ICT in Primary Health Care:

- **Establishing quality tracking dashboard to monitor the maintenance of quality standards at health facilities:** A quality tracking dashboard is being developed to monitor NQAS status across public health facilities. The state is aiming at all public health facilities to meet NQAS and get certified.
- **Improving pharmaceutical stock management:** The project is looking at strengthening e-Aushdhi solution with required features to help Community Health Centers to avoid stock out and over stock situation.
- **Rolling out integrated online patient management system in public health facilities:** An IT solution on patient management will help health facilities to integrate clinical and non-clinical functions for better service delivery as well as provide credible data to track morbidity and mortality, and thus enable policymakers to take corrective and proactive measures
- **Establishing a patient feedback system to assess patients' overall health facility experience:** The state is targeting to establish an IT-based system to capture patient experience (whoever has availed health services at public health facilities).
- **Tele-consultation and non-communicable disease information system at Health and Wellness Centers (HWCs):** APHSSP is incentivizing expansion of Sub-center level HWCs with tele-consultations and NCD services. The state government has recently rolled out an IT application to capture comprehensive screening, examination, treatment and follow-up for non-communicable and communicable diseases.

### Client Speak: Dr. Vinod Kumar V., (IAS), Project Director, AP HSSP

*The AP Health System Strengthening Project is an important initiative of the State Government and would significantly improve quality of care, help build more responsive health systems and services and increase the utilization of PHCs. The work on the project is on full swing and we see the use of technology being core to this project. Once completed, the project would help in further streamlining the healthcare system and associated service delivery and help provide world class health services to the citizens of the State.*

# Latest in Technology

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## iOS v/s Android: The latest OS updates

Apple released its latest operating system, iOS 14 on 16th September 2020. This version brought in a number of much-needed changes to the user interface, privacy settings, and features on the built-in apps. The key features that caught our attention are:

- Custom Widgets stack – The iOS curates the widgets on display based on app usage. It is programmed to bring up the right widget at the right time of the day based on the usage pattern, such as ordering food or listening to a podcast
- Data Privacy and Security – iOS apps will have an indicator of whenever one's microphone or camera is being used. The control centre will log and help track the recent use of a microphone or camera by apps. The existing feature of hidden photo albums has also been enhanced
- Compact Video Calls – Video calls will no longer occupy the entire screen space
- Picture in Picture - YouTube and other apps can be minimized to a corner and still operated while working on something else on the phone

There are other minor updates like new emojis with search functionality, Health checklist app during this pandemic, Redesign of Apple music, Introduction of

digital car key, etc.

Some of these updates are not huge on the innovation front, but rather ones that were long due. While Apple loyalists wait for the eligible devices list, Google also announced the launch of Android 11 on 8th September 2020. The update is focused on fine-tuning the messaging experience and toning down visual clutter. The key updates that caught our attention were:

- Screen Recording – Android users would not need to download an extra app to record screen anymore and it can be enabled easily through the quick setting options
- Voice access – After fingerprint and face recognition, Google has now also integrated its voice access feature to Android devices
- Redesigned notifications – The notifications will be sorted into relevant groups making it easy to navigate and act on them

Other key updates include a new power menu, media widget, updates to app permissions and the mandatory update to the collection of emojis.

### Our take:

Smartphones, in general, have been gaining more apps, and functionalities that are based on an increasing complexity of operating system maintenance. Software updates have also become more intricate, with more feature support required for a larger number of devices, in more markets and languages than ever. As a result, annual updates to operating systems have become a mandate to meet customer expectations and keep up the exponentially growing technology.

The latest OS updates are extensions of continual ongoing efforts by both Apple and Google to give back more control into the hands of the user. Few of these changes may be cumbersome for some OEMs to implement, which customize and offer their own UI based on the Android platform, but this also reflects a larger trend of focus shifting towards increased privacy protection for users and increased transparency for businesses. It would be interesting to explore how marketers and brands can carve out productive and compliant positions in Google and Apple's new privacy-centric universe.

# Policy in Focus

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## Safe and Ethical Artificial Intelligence Policy | Tamil Nadu

The Hon. Chief Minister of Tamil Nadu recently released the Safe and Ethical Artificial Intelligence Policy 2020 for the State. The policy lays down six (6) clear goals and objectives, the key among them being making AI inclusive, fair, equitable, free of bias, ethical and transparent. Highlights of the policy include-

- The policy is looking at ensuring –
  - All usage of AI is fully compatible with human values
  - That the use of this technology is inclusive and does not leave anyone behind.
- The policy recommends a Six-Dimensional **TAM-DEF Framework** to evaluate AI-based systems. Factors such as accountability & legal issues, transparency & audit, misuse protection, ethics and fairness & equity, digital divide & data deficit, ensure that the evaluation is based on democratic values
- The policy recommends the use of the **DEEP-MAX** scorecard, which provides a path to guide the roll-out of AI solutions
- The policy provides guidelines for government agencies for procurement of AI-based solutions that adhere to the AI policy norms
- There will be a focus on Open Data, Data platforms and creating AI Sandbox for startups and individuals
- Effective implementation of the guidelines shall be monitored by Safe & Ethical AI Monitoring committee headed by the Chief Secretary
- Government of Tamil Nadu shall work with leading academic institutions and training arm of the Government to evolve and roll out an AI Education and Awareness Program

**Source:** <https://tneqa.tn.gov.in/assets/pdf/AIPolicy2020.pdf>

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## Blockchain Policy | Tamil Nadu

The Hon. Chief Minister of Tamil Nadu recently released the Blockchain Policy 2020 for the State. The policy lays down the objectives and goals, including the vision to make Tamil Nadu a global leader in blockchain.

Some of the highlights of the policy are –

- The policy recommends building a Blockchain Backbone infrastructure (network) for the State. This infrastructure would be a hybrid blockchain platform with modular architecture.
- Some of the potential use cases include Data integrity and audit trails for government data and documents; Securing academic records, certificates, degrees and diplomas; Creating a portable digital identity; Securing land registration transactions; Tracking agriculture produce etc.
- The policy provides guidelines and SOP for developing blockchain applications for the State
- Policy recommends the formulation of TN Blockchain Policy Implementation Committee and Legal & Regulatory Committee to act as an oversight mechanism for initiatives implemented under the policy

**Source:** <https://tneqa.tn.gov.in/assets/images/pdf/BlockChain2020.pdf>

# Technology & Government

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## India to be a Mobile Phone export hub

The empowered committee has approved applications to export mobile phones worth around \$100 billion from India under the PLI scheme

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## Telemedicine gets a boost

Health Ministry's 'ESanjeevani' Telemedicine Service has recorded more than 3 Lakh Tele-Consultations and has been implemented in 23 states so far.

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## No regulation for communication apps

The Telecom Regular TRAI has recommended that communication apps should not be bound by a regulatory regime

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## Help and support for young Dalit entrepreneurs

Gol plans to launch "Ambedkar Social Innovation Incubation Mission" with the objective of creating 1000 SC start-ups over the next 3 years

[Read More](#)

## MeitY launches Digital Health ID in 6 UTs

Gol has launched Digital Health ID in 6 Union Territories, which will be there PAN India soon for the digitalization of the health sectors in India

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## CISO for Urban Cooperative banks

RBI has asked Urban Cooperative banks to appoint a Chief Information Security Officer (CISO) and also set up committees like IT Strategy & IT Steering Committee

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## Vodafone tax arbitration case

Vodafone Group plc won the arbitration case at an international arbitration tribunal against Govt. of India over a demand of Rs. 22,100 cr. in taxes

[Read More](#)

## Andhra Pradesh to digitize land records

Andhra Pradesh government may do a full-fledged resurvey & digitisation of all the lands in the state using modern technologies like drone, aerial photography

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## Paytm complains to NPCI

Paytm has complained to NPCI regarding Google's sharing of payments data of Indian consumers with affiliate companies and third-party users

[Read More](#)

## Plan to introduce law to ban cryptocurrency trading

Government is planning to bring a bill to ban trading cryptocurrency, which would be placed before the cabinet before sending it to Parliament.

[Read More](#)

# In the Spotlight

#	Accolades & Performance	Published by	Highlights	
1	Top 25 Financial Technology CEOs of Asia for 2020	Financial Technology Report	<ul style="list-style-type: none"> <li>6 Indians in the list, which the highest among all countries</li> <li>Abhimanyu Munjal, MD &amp; CEO of Hero FinCorp is the highest ranked Indian at No. 2</li> </ul>	<a href="#">Read More</a>
2	Top 25 Global Women Leaders in IT	IT Services Report	<ul style="list-style-type: none"> <li>5 women from Indian IT firms make it to the list</li> <li>Aarthi Subramanian, Group Digital Officer at Tata Sons, and previously an Executive Director at TCS is the highest ranked women leader from an Indian firm at No. 3</li> </ul>	<a href="#">Read More</a>
3	India's Best Workplaces for Women 2020	Great Place to Work® Institute	<ul style="list-style-type: none"> <li>IT companies dominate the list with 5 IT Companies in Top 10.</li> <li>The IT and Technology companies in Top 10 are Cisco Systems India Pvt. Ltd., HERE Technologies Pvt. Ltd., HP, Intuit India and PayPal India Pvt. Ltd.</li> </ul>	<a href="#">Read More</a>
4	The Top 100 Digital Health Companies	The Medical Futurist	<ul style="list-style-type: none"> <li>BeatO is the only Indian firm in the list</li> </ul>	<a href="#">Read More</a>
5	LinkedIn Top Start-ups 2020	LinkedIn	<ul style="list-style-type: none"> <li>EdTech start-ups dominate with Mumbai based upGrad at the top</li> <li>Top 5 has 3 EdTech start-ups including upGrad, Unschool and Unacademy</li> </ul>	<a href="#">Read More</a>



# Reports in Review

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## Harnessing Technology for Global Goals | World Economic Forum

- Provides leadership can drive and harness the uptake of advanced technologies to accelerate action on the Sustainability Development Goals (SDGs).
- It outlines the critical conversations that must occur in companies before technological advances can effectively deliver progress towards the SDGs in seven key areas:
  - Clear board-led corporate **commitment** to harness technology to deliver on SDGs.
  - Consideration of SDGs into **Strategy Models** & digital transformation efforts.
  - **Accountability** throughout the organization for responsible use of technology & corporate contribution to SDGs
  - Develop technology-enabled **products and services** to support customers' and clients' abilities to deliver on SDG outcomes
  - Align **R&D strategy** & funding focused on tackling big societal challenges.
  - Enhance the size and diversity of the **talent pool** that is equipped to advance the technology for the SDG agenda by upskilling & reskilling
  - Engage with policy-makers to promote **policy and regulation** which maximizes innovation and the scaling of technology solutions that deliver positive social and environmental outcomes.
  - Establish **multi-stakeholder partnerships** to encourage technology solutions for SDG challenges

### Conclusions:

The new reality of COVID-19 – and our reliance on technology to manage us through the crisis has further increased our dependence on technology. This framework aims to provide a starting point for business leaders to steer the capability, resources and talent in their organizations to actively manage unforeseen consequences and best serve society as a whole.

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## IBM's Roadmap For Scaling Quantum Technology | IBM

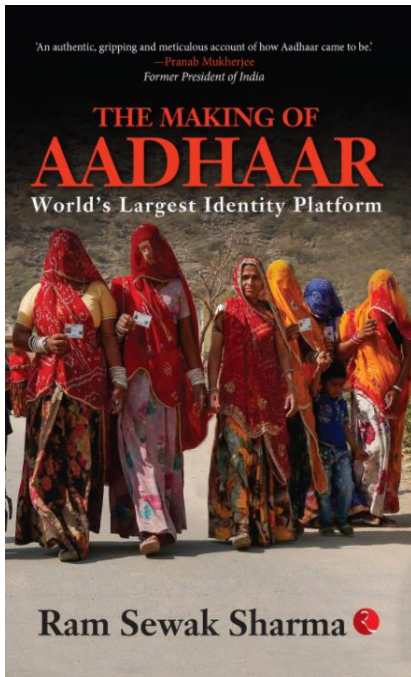
- The report lays down the roadmap or the future of its quantum computing hardware with a target of building a device with more than 1,000 qubits, called IBM Quantum Condor, by the end of 2023.
- As part of the roadmap, IBM released its 65-qubit Quantum Hummingbird processor in September 2020 with a plan to debut 127-qubit Quantum Eagle processor next year and a 433-qubit Quantum Osprey in 2022.
- The biggest challenge is figuring out how to control large systems of qubits for long enough, and with few enough errors, to run the complex quantum circuits required by future quantum applications.
- Also, today's commercial dilution refrigerators will no longer be capable of effectively cooling and isolating such potentially large, complex devices. Hence, IBM is on its way to build a 10-foot-tall and 6-foot-wide "super-fridge," which is larger than any commercially available today.

### Conclusion:

In formulating a 1000+-qubit quantum processor, IBM faces some of the biggest challenges in the history of technological progress. They plan to mitigate these challenges by adopting an Agile approach wherein they plan to deliver what is achievable today, garner user feedback and continue to build upon the learnings of the delivered system

# Book Review

## The Making of Aadhaar - World's Largest Identity Platform



Aadhaar has been a subject of intense discussion and debate, not only in India but even elsewhere. Probably, never before has any project of public importance been so closely watched and been under such intense scrutiny, including concerns on privacy.

However, Aadhaar has been one of the success stories in the execution of a public project of such complexity and magnitude with more than 126 Cr. Aadhaar generated for residents of the country and more than 4682 Cr authentication done till date.

**Ram Sewak Sharma** provides a fascinating, first-hand account of the journey of Aadhaar. Being the first DG of UIDAI, he played a crucial role in driving the project. The book provides an honest and sincere account of the project, including challenges faced and how they overcame it, without trying to preach. The added incentive to read this book is to know about his journey from IIT to becoming an IAS officer in the then undivided Bihar and later on with Government of India as well as his fascinating and successful attempts at computerization during the time when it was a new and novel thing, and the term e-Governance was not in vogue. It also shows some of the challenges that officers face while implementing projects.

The book stands out for its simple, easy to understand language and a logical flow of events. The reader feels that she has been taken on a journey by the author and can almost visualise the events and discussions taking place. It touches upon all aspects of the project including setting up the team, the initial days, the complex technological aspects of the project, project execution (including the challenges faced and how they were overcome). The good part is that the book doesn't shy away from controversial topics like privacy, data security and objectively handles all of them.

Having a diverse team from both the public and private sector has led to the success of the project. However, a diverse team with a different background also comes with its share of challenges, and people tend to take positions either way. Ram Sewak Sharma lays down a broad guideline on how to channelise them and gain maximum from such teams.

For anyone dealing with large complex projects, the book provides important lessons – start with a passionate team, have a lean structure, bring in a diverse team and channelise their focus on the project, handle naysayers professionally and with a data-driven approach and so on.

### Final take:

The book provides a detailed account of the journey of Aadhaar and an effective account of project management and execution. It is a definite, must read book for technology enthusiasts, leaders driving large scale public projects and people in general interested in understanding the nuances and finer aspects of successful project execution. So, **go for it...**

*Photo Source: Publisher - Rupa Publications India*

# News & Announcements

## Top 5 News on the sector



### Drone tech used in plant protection solutions

Use of Drone and artificial intelligence technologies as part of plant protection solutions on rice crop were demonstrated in an Agriculture University in Hyderabad

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### Facebook launches programs for Indian small businesses

As part of Facebook's \$100 million global grant for small businesses, it will grant Rs. 32 Crore to more than 3,000 SMBs across Delhi, Gurugram, Mumbai, Hyderabad and Bengaluru. [Read More](#)



### Banned Chinese apps re-enter India in new avatars

Scores of new Chinese apps have flooded Indian app stores in the last few months including several rebranded versions of applications banned by the government in recent months. [Read More](#)



### Walmart piloting on-demand drone delivery with Flytrex

The pilot focuses on delivering select grocery and household essential items from Walmart stores using Flytrex's automated drones which shall be controlled over cloud [Read More](#)



### Google maps to add a new layer on Maps to show critical info on COVID 19 cases

The layer shall showcase critical information about COVID-19 cases in an area based on a 7-day average of new cases reported in the area. It shall source this data from multiple sources like John Hopkins, The New York Times and Wikipedia.

[Read More](#)

## Top 5 sector player news

### Tech Mahindra launches dedicated 'Microsoft business unit'

The business shall focus on developing enterprise cloud solutions leveraging Microsoft platforms and technologies to meet the dynamic needs of customers and pursue their growth agenda. [Read More](#)

### Infosys's data and analytics business is now \$3 billion

The business started five years ago has grown to nearly \$3 billion employing over 20,000 employees & contributing almost a quarter of the company's total business. [Read More](#)

### Accenture offers 7-month severance payout to staff

Accenture is offering a 7-month severance payout to employees impacted by its layoffs which is considerable higher than 2-3 month payout being offered by most companies. [Read More](#)

### Google settles \$310 million lawsuit over its treatment of executives with sexual misconduct charges

Alphabet Inc said that it will prohibit severance package for anyone fired for misconduct or is the subject of a sexual misconduct investigation. [Read More](#)

### RJIO plans to manufacture an Android based phone in the price range of INR 4,000

RJIO is in talks with domestic assemblers to make a version of its Jio phone that would run on Android. The phones are planned to be marketed with low-cost wireless plans from Jio. [Read More](#)

# Industry Activities

## Key movements in the Industry

#	Name	From	To	
1	Steve Fieler	CFO, <b>HP Inc.</b>	Business Finance Officer, <b>Google</b>	<a href="#">Read More</a>
2	Chris Fisher	VP Marketing, <b>Tripwire</b>	Chief Marketing Officer, <b>TAC Security</b>	<a href="#">Read More</a>
3	Marc van Zadelhoff	COO and co-founder, <b>LogMeln</b>	CEO, <b>Devo Technology</b>	<a href="#">Read More</a>
4	Paul Saleh	EVP and CFO, <b>DXC Technology</b>	CEO, <b>Gainwell Technology</b>	<a href="#">Read More</a>
5	Jeff Miller	Chief Commercial Officer, <b>Synchronoss Technologies Inc.</b>	Interim President and CEO, <b>Synchronoss Technologies Inc.</b> (in addition to existing role)	<a href="#">Read More</a>
6	Xiaoyun Huang	President and CEO, <b>Huizhong Business Consulting</b>	Chairman and CEO, <b>Hebron Technology</b>	<a href="#">Read More</a>

## Key M&As and IPOs and investment across the Industry

#	Details	
1	Naspers Ltd.-backed cryptocurrency exchange <b>Luno</b> has been acquired by New York-based digital asset investment firm <b>Digital Currency Group</b>	<a href="#">Read More</a>
2	SaaS platform <b>SenseHawk</b> has raised \$5.1 million in Series A1 funding. The investment round was led by <b>Alpha Wave Incubation</b> and existing investor <b>SAIF Partners</b> also participated with a follow-on investment.	<a href="#">Read More</a>
3	IT Services firm <b>Happiest Minds</b> completed its Rs. 702 Crore IPO, which was oversubscribed more than 150 times with the stock getting listed at 111 per cent premium over the issue price.	<a href="#">Read More</a>
4	<b>TikTok</b> has proposed an agreement with <b>Oracle</b> as its US technology partner and <b>Walmart</b> as commercial partner for its US operations	<a href="#">Read More</a>
5	Cloud data warehousing firm <b>Snowflake</b> , backed by Salesforce and Berkshire Hathaway, successfully completed its IPO to raise nearly USD 3.4 billion.	<a href="#">Read More</a>
6	<b>JFrog</b> (makers of continuous software release management (CSRM) for developers) completed its IPO to raise USD 352 million.	<a href="#">Read More</a>

# Industry Activities

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## Key M&As and IPOs across the Industry

#	Details	
7	<b>Microsoft</b> announced the acquisition of <b>ZeniMax Media</b> for USD 7.5 billion	<a href="#">Read More</a>
8	<b>HCL Technologies</b> has announced that it will acquire Australian IT, business and management consulting company <b>DWS</b> for USD 158.2 million	<a href="#">Read More</a>
9	<b>Infosys</b> is set to acquire US-based product design and development firm <b>Kaleidoscope</b> for USD 42 million	<a href="#">Read More</a>
10	Mobile Telephone operator <b>Vodafone</b> is said to be in talks to buy its Spanish rival <b>MasMovil</b>	<a href="#">Read More</a>

## Key Investment & Launches

#	Details	
1	<b>Tesla</b> is said to be in talks with Karnataka Government to set up a R&D centre in Bengaluru	<a href="#">Read More</a>
2	<b>Apple</b> brings Apple Store Online to India	<a href="#">Read More</a>
3	<b>NTT</b> opens Data Centre in Mumbai	<a href="#">Read More</a>

# Looking Forward

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Listed below are the trends and opportunities which we feel shall define the Indian technology sector going forward.

## **Moving from Apps to Progressive Web Apps**

Having to find and download apps could be the next problem to solve for companies bemused by the investment they've put into apps and the competitive nature of the various app stores. We believe that Progressive Web Apps (PWAs), apps delivered through web using common web technologies, might be more useful and cost-effective alternative. PWAs have already proven beneficial for various businesses in terms of conversion, engagement, and search engine visibility.

## **Emergence of Edge Computing**

We are connecting more and more devices and crunching huge amounts of data more quickly than ever before. Hence, the latency of hosted solutions demands a new approach, especially for time-critical processing. As a result, vendors have initiated huge investments in edge computing services, which move processing and intelligence closer to the point of need. The rise of intelligent IoT devices has further ushered the adoption of edge computing networks.

## **Increased use of voice interfaces & Chatbots**

It is expected that businesses would increasingly start interacting with their customers using voice interfaces and chatbots, changing the customer experience significantly. Likewise, with a voice interface, it will be much easier to carry out various tasks. Voice search will be a crucial component of customer experience owing to its simplicity and it shall help marketers create a more authentic digital communication experience. Chatbots shall be the next preferred digital interface with their advanced contextual capabilities which utilizes deep learning to personalize any experience

## About Primus Partners

Primus Partners has been set up to partner with clients in 'navigating' India, by experts with decades of experience in doing so for large global firms. Set up on the principle of 'Idea Realization', it brings to bear 'experience in action'.

'Idea Realization'— a unique approach to examine futuristic ideas required for the growth of an organization or a sector or geography, from the perspective of assured on ground implementability.

India is and will continue to be a complex opportunity. Private and Public sector need trusted advisory partners in order to tap into this opportunity. Primus Partners is your go-to trusted Advisory for both public and private sector organizations involved intricately with nation building, and the creation and growth of robust corporations as engines of progress.

Our core strength comes from our founding partners, who are goal-oriented, with extensive hands-on experience and subject-matter expertise, which is well recognized in the industry. Our core founders form a diverse cohort of leaders from both genders with experience across industries (Public Sector, Healthcare, Transport, Education, etc), and with varied specialization (engineers, lawyers, tax professionals, management, etc).

Primus Partners brings experience of working in more than 30 countries with private and public sector, including working with Government of India, building and leading large consulting teams at the leadership level, and creating one of the largest public sector consulting practice in India. They also represent 200 person years of experience in leading global and Indian consulting firms and the public sector.

The founding team is supported by a distinguished advisory board that includes experts with leadership experience across government, large corporate and notable civil society organisations.

### Primus Partners Contacts



**Nilaya Varma**  
Co-Founder & CEO



**Devroop Dhar**  
Co-founder & MD – Technology  
Impact Realisation



**Pooja Ahluwalia**  
Vice President, Head of  
Research



**Prateek Gupta**  
Vice President, Technology  
Impact Realisation



**Ayush Kachru**  
Manager. Technology  
Impact Realisation

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